

# Kentucky Model Flood Damage Prevention Ordinance

2015 KAMM Annual Conference  
Carey Johnson  
Kentucky Division of Water



# Flood Damage Prevention Ordinance

- Also referred to as “Floodplain Management Ordinance”
- Based on 44 CFR 59, 60.3 and 401 KAR 4:060
- Foundation of local Floodplain Management programs
- Kentucky Division of Water may provide state model ordinance
- Ordinance may be adjusted as needed to accommodate local priorities
  - Freeboard
  - Substantial damage/improvement
  - Floodway – local conveyance zones
  - Local flood “hot spots” not indicated on Flood Insurance Rate Maps (FIRMs)



# Article 1- Statutory Authorization, Findings of Fact, Purpose, and Objectives

- Section A
  - Derived from authority in Kentucky Revised Statutes (KRS)
  - KRS 100 - Cities and counties which have enacted either independent or joint planning operations
  - KRS 82.082 - Cities without planning and zoning
  - KRS 67.084 - Gives counties specific authority for enactment of a floodplain ordinance (counties without planning and zoning)



# Article 1- Statutory Authorization, Findings of Fact, Purpose, and Objectives

- Section B – Findings of Fact
  - Defines that each community or municipality contains flood hazard areas
- Section C – Statement of Purpose
  - To promote public health, safety, and general welfare
  - To minimize public and private losses to flooding

# Article 1- Statutory Authorization, Findings of Fact, Purpose, and Objectives

- Section D – Objectives

- 1) Protect human life and health;
- 2) Minimize expenditure of public money for costly flood control projects;
- 3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 4) Minimize prolonged business interruptions;
- 5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines; streets and bridges located in areas of special flood hazard;
- 6) Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard or other flood-prone areas in such a manner as to minimize future flood blighted areas caused by flooding;
- 7) Ensure that potential homebuyers are on notice that property is in a Special Flood Hazard Area; and,
- 8) Ensure that those who occupy a Special Flood Hazard Area assume responsibility for their actions.



# Article 2 - Definitions

- Derived from 44 CFR Part 59
  - Definitions to note
    - **Community Flood Hazard Area (CFHA)** - An area that has been determined by the Floodplain Administrator (or other delegated, designated, or qualified community official) from available technical studies, historical information, and other available and reliable sources, which may be subject to periodic inundation by floodwaters that can adversely affect the public health, safety and general welfare. This includes areas downstream from dams.
    - **Development** - Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of equipment or materials.
    - **Floodplain or flood-prone area** - Any land area susceptible to being inundated by flood waters from any source.
    - **Floodplain Administrator** - The individual appointed by the community to administer and enforce the floodplain management ordinances.



# Article 2 - Definitions

- **Freeboard** - A factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood. Freeboard must be applied not just to the elevation of the lowest floor or floodproofing level, but also to the level of protection provided to all components of the structure, such as building utilities, HVAC components, etc.
- **Increased Cost of Compliance (ICC)** – Increased cost of compliance coverage means under the standard flood insurance policy the cost to repair a substantially flood damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. Acceptable mitigation measures are floodproofing (nonresidential), relocation, elevation, demolition, or any combination thereof.
- **Lowest Floor** - The lowest floor of the lowest enclosed area **including basement**. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, structure access, or storage in an area **other than a basement area** is not considered a structure's lowest floor, **provided** that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.



# Article 2 - Definitions

- **Repetitive Loss Property** - Any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978. At least two of the claims must be more than ten days apart but, within ten years of each other. A RL property may or may not be currently insured by the NFIP.
- **Severe Repetitive Loss Structure** - Any insured property that has met at least one of the following paid flood loss criteria since 1978, regardless of ownership:
  1. Four or more separate claim payments of more than \$5,000 each (including building and contents payments); or
  2. Two or more separate claim payments (building payments only) where the total of the payments exceeds the current market value of the property.
- **Substantial Damage** - 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 Improvement** - Any reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during a 1-year period in which the cumulative percentage of improvements 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.



# Article 3 – General Provisions

- Section A – Lands to which the Ordinance Applies
  - All Special Flood Hazard Areas (SFHA), areas applicable to KRS 151.250 and, as determined by the Floodplain Administrator or other delegated, designated, or qualified community official within the community
- Section B – Basis for Establishing the Special Flood Hazard Areas
  - References a community's effective FIRM/FIS date

# Article 3 – General Provisions

- Section C – Establishment of Development Permit
  - A Development (Floodplain) Permit shall be required in conformance with the provision of this ordinance prior to the commencement of any development activities in the special flood hazard areas (SFHA).
  - This does not allow for “rubber stamping” state floodplain permits
    - Local permits should be issued according to the provisions of the local ordinance



# Article 3 – General Provisions

- Section D – Compliance
  - No structure or land shall hereafter be constructed, located, extended, converted or structurally altered without full compliance with the terms of this ordinance and other applicable state regulations.
  - Allows for governing bodies to take lawful actions to prevent or remedy violations
- Section E – Abrogation and Greater Restrictions
  - The ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.



# Article 3 – General Provisions

- Section F – Interpretation
  - In the interpretation and application of this ordinance, all provisions shall be:
    - 1) Considered 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.

# Article 3 – General Provisions

- Section G – Warning and Disclaimer of Liability
  - The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations.
  - Larger floods can and will occur
  - This ordinance shall not create liability on the part of the governing body any officer or employee, thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.



# Article 3 – General Provisions

- Section H – Enforcement, Violation Notice and Penalties
  - Development occurring which is not in accordance with the provisions of this ordinance shall constitute a civil offense
  - Notice of Violation
    - Ability to issue stop work orders
  - Penalties
    - Defined by local governing body

# Article 4 - Administration

- Section A – Designation of Local Administrator
  - Appoints local floodplain administrator
  - Appoint by job title, not name
- Section B – Establishment of Development Permit
  - Provides instructions for the information required for a permit
  - Requirements for Elevation Certificates

# Article 4 - Administration

- Section C – Duties and Responsibilities of the Local Administrator
  - Permit Review
  - Review and use other applicable data
  - Notify other agencies
  - Document Floodplain Development
    - Log of permits
    - Elevation Certificates
  - Conduct Map Determinations
  - Right of Entry

# Article 4 - Administration

- Section C – Duties and Responsibilities of the Local Administrator
  - Issue Stop Work Orders
  - Revocation of Permits
  - Liability
    - Floodplain coordinator not personally liable for damages resulting from enacting and enforcing ordinance
  - Expiration of Floodplain Construction Permit
    - Expires if start of construction within 180 of issuance

# Article 5 – Provisions for Flood Hazard Reduction

- Section A – General Construction Standards
  - Apply to SFHAs
  - Anchoring
  - Materials and utilities resistant to flood damage
  - Construction methods and practices applied to minimize flood damage
  - Service facilities (electrical, HVAC, plumbing) designed to prevent water from entering or accumulating

# Article 5 – Provisions for Flood Hazard Reduction

- Section B – Specific Standards
  - Residential construction elevation requirements
    - Freeboard
  - Non-residential construction elevation requirements
    - Freeboard
    - Floodproofing
  - Elevated structures
    - Flood vent requirements
      - Minimum of 2 openings
      - One square inch per square foot enclosed area
      - No higher than one foot above foundation interior grade
      - May be equipped with screens, louvers, etc. that operate automatically



# Article 5 – Provisions for Flood Hazard Reduction

- Section B – Specific Standards
  - Standards for Manufactured Homes and Recreational Vehicles
    - Elevated on a permanent foundation
    - Elevation requirements
      - Freeboard
    - Anchored to resist flotation, collapse and lateral movement
  - In existing manufactured home parks
    - Elevation requirements
    - Or
    - Chassis supports by foundation no less than 36 inches above highest adjacent grade



# Article 5 – Provisions for Flood Hazard Reduction

- Section B – Specific Standards
  - Recreational vehicles must either:
    - 1) Be on the site for fewer than 180 consecutive days,
    - 2) Be fully licensed and ready for highway use, or
    - 3) Meet the permit requirements, including anchoring and elevation requirements for manufactured homes

# Article 5 – Provisions for Flood Hazard Reduction

- Section B – Specific Standards
  - Floodways
    - Extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and has erosion potential.
    - Encroachments prohibited (fill, new construction, substantial improvements, and other development) unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that the encroachments shall not result in any increase in base flood elevation levels

# Article 5 – Provisions for Flood Hazard Reduction

- Section C – Standards for Streams without Established Base Flood Information and/or Floodways (Zone A)
  - Zone A engineering data available from KDOW
  - No encroachments, including fill material or structures shall be located within special flood hazard areas, unless certification by a registered professional engineer is provided demonstrating 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
  - Elevation/floodproofing requirements are the same as other sections of the ordinance



# Article 5 – Provisions for Flood Hazard Reduction

- Section D – Standards for Shallow Flooding Zones
  - Zone AO (1' – 3') of flooding with no defined channel
  - None in KY
  - May be some, particularly in interior drainage areas of levees

# Article 5 – Provisions for Flood Hazard Reduction

- **Section E – Standards for Subdivision Proposals**
  - 1) All subdivision proposals shall identify the flood hazard area and the elevation of the base flood and be consistent with the need to minimize flood damage
  - 2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage
  - 3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards
  - 4) **In areas where base flood elevation and floodway data is not available, base flood elevation and floodway data for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, shall be provided**
  - 5) All subdivision plans will include the elevation of proposed structure(s) and lowest adjacent grade. If the site is filled above the base flood elevation, the lowest floor and lowest adjacent grade elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator



# Article 5 – Provisions for Flood Hazard Reduction

- Section F – Standards for Accessory Structures
  - Detached garages, carports, storage sheds, pole barns, hay sheds, etc.
    - Must be non-habitable
    - Anchored to resist flotation and lateral movement
    - Must have flood vents
    - Must be built of flood resistant materials to or above BFE
    - Must have elevated utilities to or above BFE
    - Can only be used for parking or storage
    - Must not be modified for a different use

# Article 5 – Provisions for Flood Hazard Reduction

- Section G – Critical Facilities
  - Must be, to extent possible, located outside SFHA
  - Not permissible in floodway
  - Elevated 1 foot or more above BFE
  - May be subject to Federal Flood Risk Management Standard (EO 13690)
    - Utilizing best-available, actionable data and methods that integrate current and future changes in flooding based on science,
    - Two or three feet of elevation, depending on the criticality of the building, above the 100-year, or 1%-annual-chance, flood elevation, or
    - 500-year, or 0.2%-annual-chance, flood elevation.

# Article 6 – Appeals and Variance Procedures

- A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of the ordinance would create an exceptional hardship to the applicant or the surrounding property owners
- Applicant must show sufficient cause
- Structures may be subject to high flood insurance costs
- Local government must designate Variance and Appeal Board
  - Generally city commission or fiscal court
- Variances may be issued for historic structures
  - Must not preclude the structure's historic value and designation
- As a general rule, do not grant variances



# Article 7 - Severability

- If any clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall not affect the validity of the ordinance as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid

# Adoption

- Ordinance must be adopted by local governing body
  - First and second reading
  - Certified by county/city clerk

# Questions?

Carey Johnson

CTP Program Manager

Kentucky Division of Water

Email: [carey.johnson@ky.gov](mailto:carey.johnson@ky.gov)

Phone: (502) 564-3410

