Regulations and permitting

The Commonwealth of Kentucky regulates construction and development in floodplains so that structures will be protected from flood damage. The regulations require that a floodplain permit be acquired before the start of any demolition, repair, renovation, development, improvement, or construction of a structure located in a floodplain.

“Development” means any changes to the property, including filling, regrading and excavating. Typically permitted activities may include dams, bridges, culverts, residential and commercial buildings, placement of fill, stream alterations or relocations and impoundments. Water and wastewater treatment plants also require permits.

Activities that may cause physical disturbances to wetlands or streams may also require a Water Quality Certification permit. Many localities may also require a floodplain permit from the local government.

Example of floodplain regulations

- Construction or filling cannot reduce the storage capacity for floodwaters in a floodplain.
- There must be road access above the level of a 100-year flood.
- The first floor of a new building must be at a level at least one foot above the 100-year flood level.
- Changes, improvement and additions must meet the substantial improvement requirement for pre-FIRM structures.

Terms related to floodplain management

100-year (1% chance) flood: The accepted national standard for regulatory purposes is defined as the flood event that has a one percent chance of occurring in any given year or, on the average, occurs once in a 100-year period — even though 100-year floods can and do occur more frequently. For regulatory purposes, the floodplain is divided into two areas based on water velocity: (1) the floodway and (2) the flood fringe.

Floodway — This includes the channel and the portion of the adjacent floodplain required to pass the 10-year flood without increasing flood heights. Typically it is the most hazardous portion of the floodplain where the fastest flow of water occurs. Due to the high degree of hazard, most floodplain regulations require that proposed floodway developments not block the free flow of flood water, as this could dangerously increase that water’s depth and velocity.

Flood fringe — This is the area outside of the floodway that usually contains slow-moving or standing water where development will not normally interfere with the flow of the water. Therefore, floodplain regulations for the fringe typically allow development but require protection from the flood waters through (1) the elevation of buildings above the 100-year flood level, (2) flood proofing, and (3) watershed improvements to assure overall flood elevation does not increase.

Flood Insurance Rate Map (FIRM) — The official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated the areas where flood insurance is required for loans and where communities will administer floodplain regulations.

Special Flood Hazard Area (SFHA) — The base floodplain delineated on a FIRM and considered at high risk for floods.

Post-FIRM building — For insurance rating purposes, one that was constructed or substantially improved after 1978.

Pre-FIRM building — One that was constructed or substantially improved before 1978 (effective date of initial community FIRMs).

Substantial damage — Damage of any origin whereby the cost of restoring the building to before-damage condition would equal or exceed 50 percent of the market value of the pre-damage structure.

Substantial improvement — Any reconstruction, rehabilitation, addition or other improvement, the cost of which equals or exceeds 50 percent of the market value of the building before work began.