

Construction and alterations in the floodplain

The Federal Emergency Management Agency (FEMA) maps 100-year floodplains and sets regulations for alteration, construction and modification in these designated areas. Pikes Peak Regional Floodplain Administration enforces FEMA regulations through investigation and notification to correct violations, public education, evaluation of construction plans to determine if the property is located within a floodplain, and review of applications for Floodplain Development Permits. The permit is required for new construction, alteration to an existing structure and/or modification to property within a floodplain, including designated zones A, AO, AE and AH. For more information call the Floodplain Administration at 719-327-2907 or access the web site www.pprbd.org.

FLOODPLAIN CONSTRUCTION —

Construction is defined, but not limited to, building a new structure, altering or adding to an existing structure, fence installation, septic system, utilities, excavation, fill and bank stabilization. All of these activities require an application and approved Floodplain Development Permit issued by Pikes Peak Regional Floodplain Administration. Construction in a floodplain is regulated to prevent:

- Flotation, collapse or lateral movement during a flood;
- Action that will increase flood depth or make flooding more severe;
- Infiltration of flood water into existing utility systems or discharge from the utility systems into flood water;
- Contamination of flood water by hazardous materials.

GUIDELINES FOR CONSTRUCTION —

Residential

- Plans for construction in a floodway must include certification by a professional engineer, licensed by the state of Colorado, that no increase in flood depths will result from the construction. (Note: Floodway refers to the central path of waters, not the outlying floodplain.
- The lowest floor, including the basement, must be at least 1 foot above the base flood elevation.
- Garage, storage areas, utility systems and structural supports can be placed below the base flood elevation.
- Mechanical and electrical equipment must be situated 1 foot above the base flood elevation.
- Methods of elevating a structure include piers or extended foundation walls.
- Manufactured homes, including mobile units, temporary and permanent set, new or relocated, must be elevated a minimum 3 feet above grade or 1 foot above base flood elevation whichever is greater.
- An approved Elevation Certificate (EC) is required before a Certificate of Occupancy (CO) is issued. (CO is required before a structure can be inhabited.)

Nonresidential

- Plans for construction in a floodway must include certification by a professional engineer, licensed by the state of Colorado, that no increase in flood depths will result from the construction. (Note: Floodway refers to the central path of waters, not the outlying floodplain.
- The structure, including the basement, must be constructed and/or flood proofed to 1 foot above the base elevation.
- Garage, utility systems and structural supports can be placed below the base flood elevation.
- Mechanical and electric equipment must be flood proofed or placed 1 foot above the base flood elevation.
- Certification of flood proofing measures must be provided before occupancy. **Note:** Flood proofed is defined as watertight and structurally resistant to flood damage. Flood proofing measures include, but are not limited to, watertight doors, berms, blocking and protective walls.
- Emergency Operations Procedure Manual must be proved before occupancy.
- An approved Elevation Certificate (EC) is required before a Certificate of Occupancy (CO) is issued. (CO is required before a structure can be occupied.)

GUIDELINES FOR EXCAVATION/FILL IN A FLOODPLAIN —

- Grading plan must be approved prior to construction.
- Provide documented proof that adjacent properties will not be harmed by fill and/or excavation.
- The toe of the fill slope must not be in the floodway.
- Slopes: Grass lined slopes can be no greater than 4:1. Steeper slopes require erosion protection such as riprap.
- Earth fill material must be protected from the effects of flooding that include erosion, sediment deposition, water velocity and hydrostatic pressure.
- Fill must be checked and certified to ensure it conforms to the approved plan. Compaction must meet FEMA requirements.