

## Interfaces between Building Codes and Floodplain Management

**Permits.** The building code is a built-in measure to assure that permits are obtained for structures. The codes can also extend to permits for “other development,” such as requiring permits for filling, grading, paving, and excavation. In the absence of an “automatic” building permit requirement, it is often difficult for people to know if their property is within a Special Flood Hazard Area (SFHA), thereby triggering a Floodplain Development Permit. The codes requirement process especially helps capture any rehabilitation, addition, or other improvement, especially in the case of older buildings, as it relates to Substantial Improvement requirements to elevate.

**Inspections.** A separate Floodplain Management Ordinance may specify a staff or floodplain inspectors. However, experience has shown this kind of staff, unless specially trained, would not necessarily be qualified to assess building practices. A building code usually require certain mandatory kinds of inspections that dovetail with inspections for Flood Management purposes (e.g., at the time of a foundation inspection, which is routine per our Building Code, Elevation Certifications are required before further construction proceeds). The trained eyes of a Building Inspector are a definite advantage when looking for construction methods and materials to reduce flood losses, as is required in the National Flood Insurance Program (NFIP).

**Permits for Other Development and Inspector Observations.** Although building codes do not necessarily regulate “other development,” such as filling, grading, paving, or excavation that can result in increased flood losses, the presence of trained Building Inspectors in the field, who can observe all development, is effective in identifying such activities so that action can be taken if needed. A Floodplain Management Ordinance states the regulations for development and construction methods.

**Post-Flood Inspections.** After a flood, there is strong desire to rebuild. Communities with a building code and inspectors are generally better able to enforce the Permit Requirement for damaged buildings in the floodplain.

**Floodplain Management Requirements.** A number of NFIP Floodplain Management Requirements relate to how a building is constructed and what materials are to be used. These areas of construction are normally governed by building codes. Examples include constructing buildings with foundations that are anchored to resist flotation, collapse, or lateral movement; use of flood-resistant material; placement of utilities and mechanical equipment; and special construction requirements in V zones. Having a building code in place help will ensure that these requirements are properly implemented.

**Special Certifications.** Without the expertise of Building Inspectors, it is much more difficult for us to review special construction-related certifications that are required in the NFIP. These include Floodproofing Certifications, certifications of lowest floor elevations (or lowest horizontal structural members in V zones), certifications for openings that are designed differently from minimum NFIP criteria, design and methods of construction of pile and column foundation elements and breakaway walls in V zones when the design strength exceeds minimum criteria.

**Construction Quality.** In the absence of a building code, there is no assurance that buildings placed in SFHAs, even though elevated, will survive. Buildings that are improperly constructed in SFHAs can be subjected to significantly more damage than those built to code. Use of improper materials, unsafe foundations, and inadequate connections are examples of causes for possible failures. The increased damage will often be paid for either through insurance or disaster aid, thereby working contrary to good Mitigation practices and to Community Rating System (CRS) principles.

**Existing Buildings.** Building departments routinely handle permits for existing buildings, yet planning and zoning departments, which are often responsible for administering community Floodplain Management Ordinances, rarely deal with proposals to modify sites that are already developed. This has been known to lead to gaps in enforcement of the substantial improvement and substantial damage requirements of the NFIP.

**NOTE:** To ensure that accurate information is received when contacting **YOUR Community**, please be prepared to provide the lot and block number, parcel number, legal description, or other identifying information when making your inquiry.