

# TITLE 11

## FLOOD CONTROL

### CHAPTER 1

#### FLOOD DAMAGE PREVENTION

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##### **11-1-1: STATEMENT OF PURPOSE:**

It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by methods and provisions designed for:

- A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;
- B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
- D. Controlling filling, grading, dredging, and other development which may increase flood damage; and
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Ord. 87-7, 6-15-1987)

##### **11-1-2: DEFINITIONS:**

Unless specifically defined in this section, words or phrases used in this chapter shall be interpreted so as to give them the meanings they have in common usage and to give this chapter its most reasonable application.

**APPEAL:** A request for a review of the Bingham County building official's interpretation of any provision of this chapter or a request for a variance.

**AREA OF SPECIAL FLOOD HAZARD:** The land in the floodplain within a community subject to a one percent (1%) or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

**BASE FLOOD:** The flood having a one percent (1%) chance of being equalled or exceeded in any given year, also referred to as the "100-year flood". Designation on maps always includes the letters A or V.

**DEVELOPMENT:** Any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

**FLOOD INSURANCE RATE MAP (FIRM):** The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY:** The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surfaces elevation of the base flood.

**FLOOD OR FLOODING:** A general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters; and/or
- B. The unusual and rapid accumulation of runoff of surface waters from any source.

**FLOODWAY:** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot (1').

**LOWEST FLOOR:** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter found at subsection 11-1-7A2 of this chapter.

**NEW CONSTRUCTION:** Structures for which the "start of construction" commenced on or after the effective date hereof.

**RECREATIONAL VEHICLE:** A vehicle, which is:

- A. Built on a single chassis;
- B. Four hundred (400) square feet or less when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable by a light duty truck; and
- D. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

**START OF CONSTRUCTION:** Substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

**STRUCTURE:** A walled and roofed building including a gas or liquid storage tank that is principally aboveground.

**SUBSTANTIAL IMPROVEMENT:** Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure, either:

- A. Before the improvement or repair is started; or
- B. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

**VARIANCE:** A grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter. (Ord. 87-7, 6-15-1987; amd. Ord. 98-08, 8-14-1998)

### **11-1-3: LANDS TO WHICH CHAPTER APPLIES:**

This chapter shall apply to all areas of special flood hazard within the jurisdiction of Bingham County. (Ord. 87-7, 6-15-1987)

### **11-1-4: BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD:**

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Bingham County, Idaho", dated October 20, 1998, and all subsequent revisions thereof, with accompanying flood insurance maps is hereby adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at the Planning and Zoning Office of Bingham County, Idaho, 501 N. Maple, Blackfoot, Idaho. (Ord. 98-08, 8-14-1998)

### **11-1-5: ADMINISTRATION; DEVELOPMENT PERMIT:**

A. Establishment Of Development Permit: A development permit shall be obtained before construction or development begins within any area of special flood hazard established in section 11-1-4 of this chapter. The permit shall be for all structures including manufactured homes, as set forth herein, and for all other development including fill and other activities, also as set forth herein. Application for a development permit shall be made on forms furnished by the local Administrator and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill storage or materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
2. Elevation in relation to mean sea level to which any structure has been floodproofed;
3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in subsection 11-1-7B of this chapter; and
4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

B. Designation Of Local Administrator: The Bingham County building official is hereby appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

C. Duties And Responsibilities Of Local Administrator: Duties of the Bingham County building official shall include, but not be limited to:

1. Permit Review:

a. Review all development permits to determine that the permit requirements of this chapter have been satisfied.

b. Review all development permits to determine that all necessary permits have been obtained from those Federal, State or local government agencies from which prior approval is required.

c. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provision of subsection 11-1-8A of this chapter are met.

2. Use Of Other Base Flood Data: When base flood elevation data has not been provided in accordance with section 11-1-4, "Basis For Establishing Areas Of Special Flood Hazard", of this chapter, the Bingham County building official shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer sections 11-1-7, "Specific Standards For Flood Hazard Protection", and 11-1-8, "Floodways", of this chapter.

3. Information To Be Obtained And Maintained:

a. Where base flood elevation data is provided through the Flood Insurance Study or required as in subsection C2 of this section, obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

b. For all new or substantially improved floodproofed structures:

(1) Verify and record the actual elevation (in relation to mean sea level); and

(2) Maintain the floodproofing certifications required in subsection 11-1-7B3 of this chapter.

c. Maintain for public inspection all records pertaining to the provisions of this chapter.

4. Alteration Of Watercourses:

a. Notify adjacent communities and the State of Idaho prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

5. Interpretation Of FIRM Boundaries: Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of section 1910.6 of the Rules and Regulations of the National Flood Insurance Program (24 CFR 1909, etc.). (Ord. 87-7, 6-15-1987)

**11-1-6: GENERAL STANDARDS FOR FLOOD HAZARD PROTECTION:**

In all areas of special flood hazard, the following standards are required:

A. Anchoring:

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

2. All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over the top or frame ties to ground anchors (reference FEMA's "Manufactured Homes Installation in Flood Hazard Areas" guidebook for additional techniques).

B. Construction Materials And Methods:

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

3. Electrical, heating ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

C. Utilities:

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters

into the system;

2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and

3. On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

D. Subdivision Proposals:

1. All subdivision proposals shall 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 damage; and

4. Where base flood elevation data has not been provided or is not available from other authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres (whichever is less).

E. Review Of Building Permits: Where elevation data is not available either through flood insurance or from another authoritative source (subsection 11-1-5C2 of this chapter), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgement and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet (2') above grade in these zones may result in higher insurance rates. (Ord. 87-7, 6-15-1987)

**11-1-7: SPECIFIC STANDARDS FOR FLOOD HAZARD PROTECTION:**

In all areas of special flood hazard where base flood elevation data has been provided as set forth in section 11-1-4, "Basis For Establishing Areas Of Special Flood Hazard", or subsection 11-1-5C2, "Use Of Other Base Flood Data", of this chapter, the following provisions are required:

A. Residential Construction:

1. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation; in AO Zones, elevate lowest floor to the number of feet above the highest adjacent ground equal to the AO Zone depth number.

2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

a. A minimum of two (2) openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

b. The bottom of all openings shall be no higher than one foot (1') above grade.

c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.

B. Nonresidential Construction: New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; in AO Zones, elevate lowest floor to the number of feet above the highest adjacent ground equal to the AO Zone depth number; together with attendant utility and sanitary facilities, shall:

1. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

3. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set in subsection 11-1-5C3b of this chapter.

4. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection A2 of this section.

5. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot (1') below the floodproofed level (e.g., a building constructed to the base flood level will be rated as 1 foot below that level).

C. Manufactured Homes: All manufactured homes to be placed or substantially improved within Zones A1-30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation and be securely anchored to an adequate foundation system in accordance with the provisions of subsection 11-1-6A2 of this chapter. (Ord. 87-7, 6-15-1987)

D. Recreational Vehicles: Recreational vehicles placed on sites within Zones A1-A30, AH, and AE on a community FIRM

either must:

1. Be on site for fewer than one hundred eighty (180) consecutive days; or
2. Be fully licensed and ready for highway use, 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; or
3. Meet the requirements of subsection C of this section and the elevation and anchoring requirements for manufactured homes. (Ord. 98-08, 8-14-1998)

**11-1-8: FLOODWAYS:**

Located within areas of special flood hazard established in section 11-1-4 of this chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

B. If subsection A of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of sections 11-1-6 through 11-1-9 of this chapter. (Ord. 87-7, 6-15-1987)

**11-1-9: SHALLOW FLOODING AREAS WITH DEPTH DESIGNATIONS (AO ZONES):**

Shallow flooding zones appear in FIRMs, as AO Zones with depth designations. The base flood depths in these zones range from one foot (1') to three feet (3') where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In those areas, the following provisions apply:

A. New construction and substantial improvements of residential structures within AO Zones shall have the lowest floor (including basement) elevated above the adjacent grade of the building site, to or above the depth number specified on the FIRM (at least 2 feet if no depth number as specified).

B. New construction and substantial improvements of nonresidential structures within AO Zones shall either:

1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least 2 feet if no depth number is specified); or

2. Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability or resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in subsection 11-1-7B3 of this chapter.

C. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures. (Ord. 87-7, 6-15-1987)

**11-1-10: WARNING AND DISCLAIMER OF LIABILITY:**

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of Bingham County, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder. (Ord. 87-7, 6-15-1987)

**11-1-11: VARIANCES:**

In order to secure a variance from the requirements of this chapter to secure a building permit, an applicant for such permit may follow the variance procedure set forth in the Federal Registry, Federal Emergency Management Agency, 44 CFR National Insurance Program, part 60, Criteria for Land Management and Use, section 60.6, "Variances And Exceptions", dated October 1, 1985, copies of which are on file in the Bingham County Planning and Zoning Office, which regulations are hereby adopted by reference, and declared to be a part of this chapter. (Ord. 87-7, 6-15-1987)