

**TITLE 12**  
**FLOOD CONTROL**

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## CHAPTER 1

**AUTHORITY, FINDINGS, PURPOSE AND OBJECTIVES**

## SECTION:

- 12-1-1: Statutory Authorization
- 12-1-2: Findings Of Fact
- 12-1-3: Statement Of Purpose
- 12-1-4: Methods Of Reducing Flood Losses

12-1-1: **STATUTORY AUTHORIZATION:** The legislature of the state has, in state statutes, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. (Ord. 89-01, 6-12-1989)

12-1-2: **FINDINGS OF FACT:**

- A. **Periodic Inundation:** The flood hazard areas of the city are subject to periodic inundation which result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- B. **Cumulative Effect Of Obstructions:** These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazard which increase flood heights and velocities and, when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss. (Ord. 89-01, 6-12-1989)

12-1-3: **STATEMENT OF PURPOSE:** It is the purpose of this title to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions to specific areas by provisions designed to:

- A. Protection: Protect human life and health;
- B. Minimize Expenditures: Minimize expenditure of public money for costly flood control projects;
- C. Minimize Need For Rescue Efforts: Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize Interruptions: Minimize prolonged business interruptions;
- E. Minimize Damage: 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;
- F. Maintain Stable Tax Base: Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. Notification To Potential Buyers: Ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. Ensure Responsibility: Ensure that those who occupy the areas of special flood hazards assume responsibility for their actions. (Ord. 89-01, 6-12-1989)

12-1-4:       **METHODS OF REDUCING FLOOD LOSSES:** In order to accomplish its purposes, this title includes methods and provisions for:

- A. Restricting Uses: 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 in flood heights or velocities;
- B. Protection Of Facilities: 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 Alterations: Controlling the alteration of natural floodplains, stream channels and natural protective barriers, which help accommodate or channel floodwaters;

- D. **Development Control:** Controlling filling, grading, dredging and other development which may increase flood damage; and
- E. **Barrier Construction:** Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Ord. 89-01, 6-12-1989)

CHAPTER 2  
**DEFINITIONS**

**SECTION:**

12-2-1: Definitions

12-2-1: **DEFINITIONS:** Unless specifically defined below, words or phrases used in this title shall be interpreted so as to give them the meaning they have in common usage and to give this title its most reasonable application.

**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.

**BASE FLOOD:**

The flood having a one percent (1%) chance of being equalled or exceeded in any given year.

**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):**

An official map of a community on which the federal emergency management agency has delineated areas of special flood hazard designated as zone A.

**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 or runoff of surface waters from any source.

**MANUFACTURED HOME:**

A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. This term also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days.

**STRUCTURE:**

A walled and roofed building or manufactured home that is principally aboveground.

**SUBSTANTIAL IMPROVEMENT:**

A. 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:

1. Before the improvement or repair is started; or

2. If the structure has been damaged and is being restored, before the damage occurred. For the purpose 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.

B. The term does not, however, include either:

1. Any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions; or

2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places. (Ord. 89-01, 6-12-1989)

## CHAPTER 3

**GENERAL PROVISIONS**

## SECTION:

- 12-3-1: Applicable Lands
- 12-3-2: Basis For Establishing Flood Hazard Areas
- 12-3-3: Compliance Required
- 12-3-4: Abrogation And Greater Restrictions
- 12-3-5: Interpretation
- 12-3-6: Warning And Disclaimer Of Liability

12-3-1:       **APPLICABLE LANDS:** This title shall apply to all areas of special flood hazard within the jurisdiction of the city. (Ord. 89-01, 6-12-1989)

12-3-2:       **BASIS FOR ESTABLISHING FLOOD HAZARD AREAS:** The areas of special flood hazard identified by the federal emergency management agency in its flood insurance rate map (FIRM), dated May 1, 1986, is adopted by reference and declared to be a part of this title. The FIRM is on file at 200 Park Place, East Carbon City, Utah. (Ord. 89-01, 6-12-1989)

12-3-3:       **COMPLIANCE REQUIRED:** No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this title and other applicable regulations. (Ord. 89-01, 6-12-1989)

12-3-4:       **ABROGATION AND GREATER RESTRICTIONS:** This title is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this title or another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. 89-01, 6-12-1989)

12-3-5:       **INTERPRETATION:** In the interpretation and application of this title, all provisions shall be:

- A.    Considered as minimum requirements;
- B.    Liberally construed in favor of the city council; and
- C.    Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. 89-01, 6-12-1989)

12-3-6:       **WARNING AND DISCLAIMER OF LIABILITY:** The degree of flood protection required by this title 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 title 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 damage. This title shall not create liability on the part of the city, any officer or employee thereof, or the federal emergency management agency for any flood damage that results from reliance on this title or from any administrative decision lawfully made thereunder. (Ord. 89-01, 6-12-1989)



CHAPTER 4  
**ADMINISTRATION**

**SECTION:**

12-4-1: Development Permit Established

12-4-2: Mayor

12-4-1: **DEVELOPMENT PERMIT ESTABLISHED:** A development permit shall be obtained before construction or development begins within any area of special flood hazard established in section 12-3-2 of this title.

- A. **Application:** Application for a development permit shall be made on forms furnished by the mayor and may include, but not be limited to:
1. Plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question;
  2. Existing or proposed structures, fill, storage of materials and drainage facilities; and
  3. The locations of the foregoing.
- B. **Information Required:** 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 12-5-2C of this title; and

4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. (Ord. 89-01, 6-12-1989)

**12-4-2: MAYOR:**

A. Administration: The mayor is hereby appointed to administer and implement this title by granting or denying development permit applications in accordance with its provisions.

B. Duties: Duties of the mayor shall include, but not be limited to:

1. Permit Review:

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

b. Review of all development permits to determine that all necessary permits have been obtained from federal, state or local governmental agencies from which prior approval is required.

c. Review all development permits to determine if the proposed development adversely effects the flood carrying capacity of the area of special flood hazard. For the purposes of this title, "adversely affects" means damage to adjacent properties because of rises in flood stages attributed to physical changes of the channel and the adjacent overbank areas.

(1) If it is determined that there is no adverse effect and the development is not a building, then the permit shall be granted without further consideration.

(2) If it is determined that there is an adverse effect, then technical justification (i.e., a registered professional engineer's certification) for the proposed development shall be required.

(3) If the proposed development is a building, then the provisions of this title shall apply.

2. Use Of Other Base Flood Data: When base flood elevation data has not been provided in accordance with section 12-3-2 of this title, the mayor shall obtain, review and reasonably utilize any base floodway data available from a federal, state or other source as

criteria for requiring that new construction, substantial improvements or other development in zone A are administered in accordance with section 12-5-2 of this title.

### 3. Information Obtained And Maintained:

a. Obtain and record the actual elevation (in relation to mean sea level) of the lowest 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) to which the structure has been floodproofed.

(2) Maintain the floodproofing certifications required in subsection 12-4-1B3 of this chapter.

(3) Maintain for public inspection all records pertaining to the provisions of this title.

### 4. Alteration Of Watercourses:

a. Notify adjacent communities and the state division of comprehensive emergency management prior to any alteration or relocation of a watercourse and submit evidence of such notification to the federal emergency management agency.

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 the 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). (Ord. 89-01, 6-12-1989)

## CHAPTER 5

**PROVISIONS FOR FLOOD HAZARD REDUCTION**

## SECTION:

- 12-5-1: General Standards  
12-5-2: Specific Standards

12-5-1: **GENERAL STANDARDS:**

A. **Applicability:** In all areas of special flood hazard, the following standards are required. (Ord. 89-01, 6-12-1989)

B. **Anchoring:**

1. **Required:** All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure and capable of resisting the hydrostatic and hydrodynamic loads.

2. **Manufactured Homes:** All manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement and capable of resisting the hydrostatic and hydrodynamic loads. Methods of anchoring may include, but are not limited to, use of over the top or frame ties to ground anchors. This requirement is in addition to applicable state and other local anchoring requirements for resisting wind forces. Specific requirements may be:

a. Over the top ties be provided at each of the four (4) corners of the manufactured home, with two (2) additional ties per side at intermediate locations, with manufactured homes less than fifty feet (50') long requiring one additional tie per side.

b. Frame ties be provided at each corner of the home with five (5) additional ties per side at intermediate points, with manufactured homes less than fifty feet (50') long requiring four (4) additional ties per side.

c. All components of anchoring system be capable of carrying a force of four thousand eight hundred (4,800) pounds.

d. Any additions to the manufactured home be similarly anchored.

C. Construction Materials And Methods:

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

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

3. Service Facilities: All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

D. Utilities:

1. Water System: All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

2. Sewage System: 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.

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

E. Subdivision Proposals:

1. Minimize Flood Damage: All subdivision proposals shall be consistent with the need to minimize flood damage.

2. Public Facilities: 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. Drainage: All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

4. Base Flood Elevation Data: Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty (50) lots or five (5) acres (whichever is less).

- F. Encroachments: Encroachments, including fill, new construction, substantial improvements and other development shall be prohibited in any floodway unless a technical evaluation demonstrates that the encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge. (Ord. 89-01, 6-12-1989)

**12-5-2: SPECIFIC STANDARDS:**

- A. Applicability: In all areas of special flood hazard where base flood elevation data has been provided, as set forth in section 12-3-2 or subsection 12-4-2B2 of this title, the following standards are required.
- B. Residential Construction: New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to or above the base flood elevation.
- C. Nonresidential Construction: New construction and substantial improvement of any commercial, industrial or nonresidential structure shall either have the lowest floor (including basement) elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
1. Be floodproofed so that below the base flood 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.
  3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this subsection. Such certifications shall be provided to the official as set forth in subsection 12-4-1B3 of this title. (Ord. 89-01, 6-12-1989)