

Section 10

FLOOD HAZARD REGULATIONS

Amended 10.1 STATUTORY AUTHORIZATION
6/5/89

The legislature of the State of Colorado has, in Colorado Revised Statutes, Sections 29-20-104 and 30-28-110, delegated the responsibility to local governmental units to adopt certain regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the Board of County Commissioners of Ouray County Colorado has resolved as follows:

10.2 FINDINGS OF FACT

A. The flood hazard areas of Ouray County are subject to periodic inundation which results 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. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately, anchored, damages uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

10.3 STATEMENT OF PURPOSE

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

A. To protect human life and health;

B. To minimize expenditure of public money for costly flood control projects;

C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

D. To minimize prolonged business interruptions;

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[10.3 E]

- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the sound use and development of special flood hazard so as to minimize future flood blight areas;
- G. To insure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To insure that those who occupy the areas of special flood hazard assume responsibility for their actions.

10.4 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purpose, this regulation includes methods and provisions 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 in 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 flood plains, stream channels and natural protective barriers which help accommodate or channel flood waters;
- 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 flood waters or which may increase flood hazards in other areas.

10.5 GENERAL PROVISIONS

A. Land to Which These Regulations Apply

These regulations shall apply to all areas of special flood hazards within the jurisdiction of Ouray County.

[10.5 B]

B. Basis for Establishing the Areas of Special Flood Hazard

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The areas of special flood hazard identified by the Federal Emergency Management Agency is a scientific and engineering report entitled, "The Flood Insurance Study for the Unincorporated Areas of Ouray County", dated July 3, 1985, with an accompanying Flood Insurance Rate Map (FIRM), is adopted by reference and declared to be part of this regulation. The Flood Insurance Study and FIRM are on file at the Ouray County Courthouse, 541 Fourth Street, Ouray, Colorado.

C. Compliance

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this regulation and other, applicable regulations.

D. Abrogation and Greater Restrictions

This regulation is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this regulation and another regulation, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

E. Interpretation

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In the interpretation and application of this regulation, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

[10.5 F]

F. Warning and Disclaimer of Liability

The degree of flood protection required by this regulation 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 man-made or natural causes. This regulation does not imply that land outside the areas of special flood hazards or uses permitted within such areas of special flood hazards will be free from flooding or flood damages. This regulation shall not create liability on the part of Ouray County, any officer or employee thereof or the Federal Emergency Management Agency for any flood damages that result from reliance on this regulation or any administrative decision lawfully made thereunder.

10.6 ADMINISTRATION

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 10.5(B). Application for a Development Permit shall be made on forms furnished by the Building Official 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 of 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 non-residential structure meet the floodproofing criteria in Section 10.8; and
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

B. Building Official to Administer Regulations

The Building Official is hereby appointed to administer and implement this regulation by granting or denying development permit applications in accordance with its provisions.

[10.6 C]

C. Duties and Responsibilities of Building Official

Duties of the 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 regulation have been satisfied.

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

(c) Review all development permits to determine if the proposed development adversely affects the flood carrying capacity of the area of special flood hazard. For the purposes of this regulation, "adversely affects" means that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point.

(2) Use of Other Base Flood Data:

When base flood elevation data has not been provided in accordance with Section 10.5(B), Basis for Establishing the Areas of Special Flood Hazard, the Building Official shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source as criteria for requiring that new construction, substantial improvements or other development in a Flood Hazard Zone are administered in accordance with Section 10.8(B), Specific Standards.

(3) Information to be Obtained and Maintained:

(a) Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) for all new or substantially improved structures, and whether or not the structure contains a basement.

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[10.6(C)(3)(b)]

(b) For all new or substantially improved floodproofed structures:

(i) Verify and record the actual elevation (in relation to mean sea level) to which the structure has been floodproofed.

(ii) Maintain the floodproofing certifications required in Section 10.6(A)(3).

(c) Maintain for public inspection all records pertaining to the provision of this regulation.

(4) Alteration of Watercourses:

(a) Notify adjacent communities and the Colorado Water Conservation Board 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 hazards. (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 as provided in Section 10.7.

10.7 VARIANCE PROCEDURES

A. Appeal Board

(1) The Board of Zoning Adjustment, as established by Ouray County, shall hear and decide appeals and requests for variances from the requirements of this regulation.

[10.7 A 2]

(2) The Board of Zoning Adjustment shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Building Official in the enforcement or administration of this requirement.

(3) Those aggrieved by the decision of the Board of Zoning Adjustment, or any taxpayer, may appeal such decision to the District Court, as provided in Colorado Revised Statutes, 30-28-118.

(4) In passing upon such applications, the Board of Zoning Adjustment shall consider all technical evaluations and all relevant factors and standards as specified in other sections of this regulation, and:

(a) The danger that materials may be swept onto other lands to the injury of others;

(b) The danger to life and property due to flooding or erosion damage;

(c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

(d) The importance of the services provided the proposed facility to the community;

(e) The necessity to the facility of a waterfront location, where applicable;

(f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

(g) The compatibility of the proposed use the existing and anticipated development;

(h) The relationship of the proposed use to master plan and flood management program for that area, if any;

(i) The safety of access to the property in times of flood for ordinary and emergency vehicles;

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[10.7 A 4 (j)]

(j) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and

(k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems and streets and bridges.

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(5) Upon consideration of the factors of Section 10.7 (A)(4) and the purposes of the regulation, the Board of Zoning Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this regulation

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(6) The Building Official shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Emergency Management Agency.

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B. Conditions for Variance

(1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size, contiguous to (common boundary) and surrounded by lots with existing structures constructed below the base flood level, providing items (a) through (k) of Section 10.7(A)(4) have been fully considered. As the lot size increases beyond the one-half (1/2) acre, the technical justification required for issuing the variance increases.

(2) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this Section.

(3) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

(4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

[10.7 B 5]

- (5) Variances shall only be issued upon:
 - (a) A showing of good and sufficient cause;
 - (b) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
 - (c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety or extraordinary public expense, or create nuisances, cause fraud on or victimization of the public as identified in Section 10.7(A)(4), or conflict with existing local laws or ordinances.
- (6) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

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10.8 PROVISIONS FOR FLOOD HAZARD REDUCTION

A. General Standards

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

- (1) Anchoring:
 - (a) 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.
 - (b) All mobile 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 not be limited to, the use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces. Specific requirements may be that:

[10.8 A 1(b) (i)]

(i) Over-the-top ties be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, with mobile homes less than fifty (50) feet long requiring one additional tie per side;

(ii) Frame ties be provided at each corner of the home with five (5) additional ties per side at intermediate points, with mobile homes less than fifty (50) feet long requiring four additional ties per side;

(iii) All components of the anchoring system be capable of carrying a force of 4,800 pounds; and

(iv) Any additions to the mobile home be similarly anchored.

(2) Construction Materials and Methods:

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

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

(c) 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.

(3) Utilities:

(a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and

[10.8 A 3(c)]

(c) On-site waste disposal systems shall be located so as to avoid impairment to them or contamination from them during flooding.

(4) Development Proposals:

(a) All PUD proposals shall be consistent with the need to minimize flood damage;

(b) All PUD proposals shall have public utilities and facilities, such as sewer, gas, electrical and water systems, located and constructed to minimize flood damage;

(c) All PUD proposals shall have adequate drainage provided to reduce exposure to flood damage; and

(d) Base flood elevation data shall be provided for PUD proposals and other proposed developments which contain at least fifty (50) lots or five (5) acres, whichever is less.

(5) Encroachments: The cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one (1) foot at any point.

B. Specific Standards

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 10.5(B), "Basis for Establishing the Areas of Special Flood Hazard", or Section 10.6(C)(2), "Use of Other Base Flood Data", the following standards are required:

(1) Residential Construction:

(a) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

[10.8 B 1(b)]

(b) Require within any AO and AH Zone on the County's FIRM that all new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the County's FIRM (at least two feet if no depth number is specified).

(c) Require within Zones AO and AH adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

(2) Non-Residential Construction:

(a) New construction and substantial improvements of any commercial, industrial or other non-residential 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:

(i) Be floodproofed so that, below the base flood level, the structure is watertight, with walls substantially impermeable to the passage of water;

(ii) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects or buoyancy; and

(iii) Be certified by a registered professional engineer or architect that the standards of this subsection are in accordance with accepted standards of practice for meeting the provisions of this paragraph.

(b) Require within any AO and AH Zone on the County's FIRM that all new construction and substantial improvements of non-residential structures (i) have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the County's FIRM at least two feet if no depth number is specified) or (ii) together with attendant utility and sanitary facilities, be completely floodproofed to that level to meet the floodproofing standards specified in Section 10.8(A).

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[10.8 B 2 (c)]

(c) Require within Zones AO and AH adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

(3) Mobile Homes:

(a) Mobile homes shall be anchored in accordance with Section 10.8 (A)(1)(b)

(b) All mobile homes, or those to be substantially improved, shall be elevated on a permanent foundation such that the lowest floor of the mobile home is at or above the base flood elevation and is securely anchored to an adequately anchored foundation system. This paragraph applies to mobile homes to be placed or substantially improved in an existing mobile home park or, PUD.