

**Ordinance No. 515**  
**Series 2013**

**An ordinance amending chapter 17.08 flood damage prevention article II definitions, section 050; article III general provisions, sections 060 and 070; article IV administration, sections 140 I and J and 160 E; article V provisions for flood hazard reduction, sections 170 H and I and 180 A, B and D 2 and 3A and 200 A and B1 and 2, and the addition of section 210 standards for LOMR-F and critical facilities.**

WHEREAS, the Colorado Water Conservation Board (CWCB) adopted revised Rules and Regulations for Floodplains in Colorado (Rules), effective January 14, 2011. The Rules provide higher floodplain management standards that will help the community to reduce the risks to people and property caused by flooding. A three-year transition period was provided and all Colorado communities have until January 14, 2014 to adopt floodplain regulations consistent with the Rules; and

WHEREAS, non-compliance with the Rules may result in either National Flood Insurance Program (NFIP) suspension or probation and a reclassification under the Community Rating System (CRS); and

WHEREAS, the Town of Dolores desires to maintain the health, safety and welfare of the residents within the Town of Dolores.

**Now , therefore, be it resolved by the board of trustees of the Town of Dolores, Colorado that the Dolores Municipal code, Chapter 17.08 flood damage prevention shall be amended as contained herein to clarify and coply with the requirements for floodplain as required by the Colorado Water Conservation Board (CWCB).**

1. Recitals. The foregoing recitals are incorporated herein as findings and determinations of the Town of Dolores Board of Trustees.

2. Amendments.

**Article II.**

**Definitions**

**17.08.050 Definitions.**

“Area of special flood hazard” means the land in the floodplain within the community subject to a one percent or greater chance of flooding in any given year.

“Base flood elevation” (BFE) means the elevation shown on a FEMA Flood Insurance Rate Map for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent chance of equaling or exceeding that level in any given year.

“Conditional letter of map revision” (CLOMR) means FEMA's comment on a proposed project, which does not revise an effective floodplain map, that would, upon construction, affect

the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodplain.

“Critical facility” means a structure or related infrastructure, but not the land on which it is situated, as specified in Article 5, Section H, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood. See Article 5, Section H.

“Letter of map revision” (LOMR) means FEMA's official revision of an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA).

“Letter of map revision based on fill” (LOMR-F) means FEMA’s modification of the Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM) based on the placement of fill outside the existing regulatory floodway.

### **Article III.**

#### **General Provisions**

##### **17.08.060 Lands to which this chapter applies.**

The ordinance codified in this chapter shall apply to all areas of special flood hazard within the jurisdiction of the town of Dolores and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) (Ord. 467 (part), 2006)

##### **17.08.070 Basis for establishing the areas of special flood hazard.**

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, "The Flood Insurance Study for Montezuma County, Colorado and Incorporated Areas," dated September 26, 2008 with accompanying Flood Insurance Rate Maps (FIRM) and any revisions thereto are adopted by reference and declared to be a part of this chapter. (Ord. 467 (part), 2006)

### **Article IV.**

#### **Administration**

##### **17.08.140 Duties and responsibilities of the floodplain administrator**

I. When a regulatory floodway has not been designated, the floodplain administrator must

require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zone AE on the community's FIRM, unless it is demonstrated 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-half foot at any point within the community;

- J. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of other base flood by more than one-half foot, provided that the community first applies for a condition FIRM revision through FEMA (Conditional Letter of Map Revision). (Ord. 467 (part), 2006)

### **17.08.160 Variance procedures**

A. The appeal board as established by the community shall hear and render judgment on requests for variances from the requirements of this chapter.

B. The appeal board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this chapter.

C. Any person or persons aggrieved by the decision of the appeal board may appeal such decision in the courts of competent jurisdiction.

D. The floodplain administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.

E. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section 17.08.150(B) of this article have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

F. Upon consideration of the factors noted above and the intent of this chapter, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this chapter (Article I, Section 17.08.030).

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

H. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

- I. Prerequisites for granting variances:
  1. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  2. Variances shall only be issued upon:
    - a. Showing a 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, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
  3. Any application to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the 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 evaluation.

J. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:

1. The criteria outlined in Article IV, Section 17.08.160(A) through (I) are met; and
2. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

(Ord. 467 (part), 2006)

## **Article V.**

### **Provisions for Flood Hazard Reduction**

H. When a regulatory floodway has not been designated, the floodplain administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones AE and AH on the community's FIRM, unless it is demonstrated 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-half foot at any point within the community; and

I. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones AE and AH on the community's FIRM which increases the water surface elevation of the base flood by

more than one-half foot, provided that the community first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision).  
(Ord. 467 (part), 2006)

**17.08.180 Specific standards.**

A. Residential Construction. New construction and substantial improvement on any residential structure shall have the lowest floor (including basement), elevated to at least one foot above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the floodplain administrator that the standard of this subsection as proposed in Article IV, Section 17.08.150(A)(1), is satisfied.

B. Nonresidential Construction. New construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to at least one foot above the base flood level or together with attendant utility and sanitary facilities, be designed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which included the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the floodplain administrator.

D. Manufactured Homes.

2. Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to at least one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

3. Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones AH and AE on the community's FIRM that are not subject to the provisions of subsection D of this section be elevated so that either:

a. The lowest floor of the manufactured home is at least one foot above the base flood elevation, or

E. Recreational Vehicles. Require that recreational vehicles placed on sites within

Zones AH and AE on the community's FIRM either:

**17.08.200 Standards for areas of shallow flooding (AO/AH zones).**

A. All new construction and substantial improvements of residential structures have the lowest floor elevated above the highest adjacent grade at least one foot above the depth number specified in feet on the community's FIRM (at least three feet if no depth number is specified);

1. Have the lowest floor (including basement) elevated above the highest adjacent grade at least one foot above as the depth number specified in feet on the community's FIRM (at least three feet if no depth number is specified), or

2. Together with attendant utility and sanitary facilities be designed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

**17.08.210 Standards for LOMR-F and critical facilities**

Properties removed from the floodplain by fill

A Floodplain Development Permit shall not be issued for the construction of a new structure or addition to an existing structure on a property removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F), unless such new structure or addition complies with the following:

1. Residential construction

The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the Base Flood Elevation that existed prior to the placement of fill.

2. Nonresidential construction

The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the Base Flood Elevation that existed prior to the placement of fill, or together with attendant utility and sanitary facilities be designed so that the structure or addition is watertight to at least one foot above the base flood level that existed prior to the placement of fill with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

Standards for critical facilities

A Critical Facility is a structure or related infrastructure, but not the land on which it is situated, as specified in Rule 6 of the Rules and Regulations for Regulatory Floodplains in Colorado, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood.

#### 1. Classification of critical facilities

It is the responsibility of the town of Dolores to identify and confirm that specific structures in their community meet the following criteria:

Critical Facilities are classified under the following categories: (a) Essential Services; (b) Hazardous Materials; (c) At-risk Populations; and (d) Vital to Restoring Normal Services.

- a. Essential services facilities include public safety, emergency response, emergency medical, designated emergency shelters, communications, public utility plant facilities, and transportation lifelines.

These facilities consist of:

- i. Public safety (police stations, fire and rescue stations, emergency vehicle and equipment storage, and, emergency operation centers);
- ii. Emergency medical (hospitals, ambulance service centers, urgent care centers having emergency treatment functions, and non-ambulatory surgical structures but excluding clinics, doctors offices, and non-urgent care medical structures that do not provide these functions);
- iii. Designated emergency shelters;
- iv. Communications (main hubs for telephone, broadcasting equipment for cable systems, satellite dish systems, cellular systems, television, radio, and other emergency warning systems, but excluding towers, poles, lines, cables, and conduits);
- v. Public utility plant facilities for generation and distribution ( hubs, treatment plants, substations and pumping stations for water, power and gas, but not including towers, poles, power lines, buried pipelines, transmission lines, distribution lines, and service lines); and
- vi. Air Transportation lifelines (airports (municipal and larger), helicopter pads and structures serving emergency functions, and associated infrastructure (aviation control towers, air traffic control centers, and emergency equipment aircraft hangars).

Specific exemptions to this category include wastewater treatment plants (WWTP), non-potable water treatment and distribution systems, and hydroelectric power generating plants and related appurtenances.

Public utility plant facilities may be exempted if it can be demonstrated to the satisfaction of the town of Dolores that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same utility or available through an intergovernmental agreement or other contract) and connected, the alternative facilities are either located outside of the 100-year

floodplain or are compliant with the provisions of this Article, and an operations plan is in effect that states how redundant systems will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the town of Dolores on an as-needed basis upon request.

- b. Hazardous materials facilities include facilities that produce or store highly volatile, flammable, explosive, toxic and/or water-reactive materials.

These facilities may include:

- i. Chemical and pharmaceutical plants (chemical plant, pharmaceutical manufacturing);
- ii. Laboratories containing highly volatile, flammable, explosive, toxic and/or water-reactive materials;
- iii. Refineries;
- iv. Hazardous waste storage and disposal sites; and
- v. Above ground gasoline or propane storage or sales centers.

Facilities shall be determined to be Critical Facilities if they produce or store materials in excess of threshold limits. If the owner of a facility is required by the Occupational Safety and Health Administration (OSHA) to keep a Material Safety Data Sheet (MSDS) on file for any chemicals stored or used in the work place, AND the chemical(s) is stored in quantities equal to or greater than the Threshold Planning Quantity (TPQ) for that chemical, then that facility shall be considered to be a Critical Facility. The TPQ for these chemicals is: either 500 pounds or the TPQ listed (whichever is lower) for the 356 chemicals listed under 40 C.F.R. § 302 (2010), also known as Extremely Hazardous Substances (EHS); or 10,000 pounds for any other chemical. This threshold is consistent with the requirements for reportable chemicals established by the Colorado Department of Health and Environment. OSHA requirements for MSDS can be found in 29 C.F.R. § 1910 (2010). The Environmental Protection Agency (EPA) regulation “Designation, Reportable Quantities, and Notification,” 40 C.F.R. § 302 (2010) and OSHA regulation “Occupational Safety and Health Standards,” 29 C.F.R. § 1910 (2010) are incorporated herein by reference and include the regulations in existence at the time of the promulgation this ordinance, but exclude later amendments to or editions of the regulations

Specific exemptions to this category include:

- i. Finished consumer products within retail centers and households containing hazardous materials intended for household use, and agricultural products intended for agricultural use.
- ii. Buildings and other structures containing hazardous materials for which it can be demonstrated to the satisfaction of the local authority having jurisdiction by hazard assessment and certification by a qualified professional (as determined by the local jurisdiction having land use authority) that a release of the subject hazardous material does not pose a major threat to the public.
- iii. Pharmaceutical sales, use, storage, and distribution centers that do not manufacture pharmaceutical products.



These exemptions shall not apply to buildings or other structures that also function as Critical Facilities under another category outlined in this Article.

- c. At-risk population facilities include medical care, congregate care, and schools.

These facilities consist of:

- i. Elder care ( nursing homes);
- ii. Congregate care serving 12 or more individuals ( day care and assisted living);
- iii. Public and private schools (pre-schools, K-12 schools), before-school and after-school care serving 12 or more children);

- d. Facilities vital to restoring normal services including government operations.

These facilities consist of:

- i. Essential government operations (public records, courts, jails, building permitting and inspection services, community administration and management, maintenance and equipment centers);
- ii. Essential structures for public colleges and universities (dormitories, offices, and classrooms only).

These facilities may be exempted if it is demonstrated to the town of Dolores that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same entity or available through an intergovernmental agreement or other contract), the alternative facilities are either located outside of the 100-year floodplain or are compliant with this ordinance, and an operations plan is in effect that states how redundant facilities will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the town of Dolores on an as-needed basis upon request.

## 2. Protection for critical facilities

All new and substantially improved Critical Facilities and new additions to Critical Facilities located within the Special Flood Hazard Area shall be regulated to a higher standard than structures not determined to be Critical Facilities. For the purposes of this ordinance, protection shall include one of the following:

- a. Location outside the Special Flood Hazard Area; or
- b. Elevation of the lowest floor or floodproofing of the structure, together with attendant utility and sanitary facilities, to at least two feet above the Base Flood Elevation.

## 3. Ingress and egress for new critical facilities

New Critical Facilities shall, when practicable as determined by the town of Dolores, have continuous non-inundated access (ingress and egress for evacuation and emergency services) during a 100-year flood event.

3. Severability. If any part, section, subsection, clause, phrase, or other portion of this Ordinance is invalidated for any reason, such decision shall not affect the validity of the remaining portions of this Ordinance. The Board of Trustees specifically finds and declares that it would have passed this Ordinance, and each part thereof, regardless of the fact that any one or more parts could be declared invalid.

Public Hearing. This ordinance shall be considered for second or final reading on the 10<sup>TH</sup> day of June 2013, at the hour of 6:30 p.m. in the Board of Trustees Chambers in Town Hall, Dolores, Colorado, at which time and place all persons may appear and be heard concerning the same.

Passed, adopted and approved on first reading this 13<sup>th</sup> day of May, 2013.

Town of Dolores

ATTEST:

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DUVALL TRUELSEN, MAYOR

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LANA HANCOCK, TOWN CLERK

Passed, adopted and approved on second and final reading this 12<sup>th</sup> day of July, 2013.

Town of Dolores

ATTEST:

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DUVALL TRUELSEN, MAYOR

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LANA HANCOCK, TOWN CLERK

APPROVED AS TO FORM:

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MICHAEL F. GREEN, Town Attorney