

**HUERFANO COUNTY
 FLOOD DAMAGE
 PREVENTION REGULATIONS
 SECTION 4.00**



TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
4.01	STATUTORY AUTHORIZATION, FINDINGS OF FACT PURPOSE AND OBJECTIONS	4-1
4.01.01	Statutory Authorization	4-1
4.01.02	Findings of Fact.....	4-1
4.01.03	Statement of Purpose.....	4-1
4.01.04	Abrogation and Greater Restrictions	4-1
4.02	DEFINITIONS	4-2
4.03	GENERAL PROVISIONS	4-5
4.03.01	Lands to Which This Ordinance Applies	4-5
4.03.02	Basis for Establishing the Special Flood Hazard Area.....	4-6
4.03.03	Compliance.....	4-6
4.03.04	Abrogation and Greater Restrictions	4-6
4.03.05	Interpretation	4-6
4.03.06	Warning and Disclaimer of Liability.....	4-6
4.03.07	Severability.....	4-6
4.04	ADMINISTRATION.....	4-7
4.04.01	Designation of the Floodplain Administrator.....	4-7
4.04.02	Duties & Responsibilities of the Floodplain Administrator	4-7
4.04.03	Permit Procedures	4-7
4.04.04	Variance Procedures.....	4-8
4.04.05	Penalties for Non-Compliance	4-8
4.05	PROVISIONS FOR FLOOD HAZARD REDUCTION	4-9
4.05.01	General Standards	4-9
4.05.02	Specific Standards	4-9
4.05.03	Floodway	4-10
4.05.04	Alteration of Watercourse	4-11
4.05.05	Properties Removed from the Floodplain by Fill	4-11

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HUERFANO COUNTY FLOOD DAMAGE PREVENTION REGULATIONS SECTION 4.00



TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
4.05.06	Standards for Subdivision Proposals	4-12
4.05.07	Standards for Critical Facilities	4-12
4.05.07.01	Protection for Critical Facilities	4-15

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



4.01 STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIONS

4.01.01 Statutory Authorization

The Legislature of the State of Colorado has, in Title 30, Article 28 of the Colorado Revised Statutes, delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the Huerfano County Board of County Commissioner, Huerfano County Colorado, does hereby adopt the following floodplain management regulations:

4.01.02 Findings of Fact

(1) The flood hazard areas of the unincorporated portion of Huerfano County are subject to periodic inundation, which can result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the health, safety and general welfare of the public.

(2) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood proofed or otherwise protected from flood damage.

4.01.03 Statement of Purpose

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

1. Protect human life and health;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to critical facilities, infrastructure and other public facilities such as water, sewer and gas mains; electric and communications stations; and streets and bridges located in floodplains;
6. Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
7. Insure that potential buyers are notified that property is located in a flood hazard area.
8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

4.01.04 Methods of Reducing Flood Loss

In order to accomplish its purposes, this ordinance uses the following methods:

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
4. Control filling, grading, dredging and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

4.02 DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted to give them the meaning they have in common usage and to give this ordinance it's most reasonable application.

100-YEAR FLOOD - A flood having a recurrence interval that has a one-percent chance of being equaled or exceeded during any given year (1-percent-annual-chance flood). The terms "one-hundred-year flood" and "one percent chance flood" are synonymous with the term "100-year flood." The term does not imply that the flood will necessarily happen once every one hundred years.

100-YEAR FLOODPLAIN - The area of land susceptible to being inundated as a result of the occurrence of a one-hundred-year flood.

ADDITION - Any activity that expands the enclosed footprint or increases the square footage of an existing structure.

BASE FLOOD ELEVATION (BFE) - 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.

BASEMENT - Any area of a building having its floor sub-grade (below ground level) on all sides.

CHANNEL - The physical confine of stream or waterway consisting of a bed and stream banks, existing in a variety of geometries.

COMMUNITY - Any political subdivision in the state of Colorado that has authority to adopt and enforce floodplain management regulations through zoning, including, but not limited to, cities, towns, unincorporated areas in the counties, Indian tribes and drainage and flood control districts.

CONDITIONAL LETTER OF MAP REVISION (CLOMR) - 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 – A structure or related infrastructure, but not the land on which it is situated, as specified in Section 4.05.07, 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.

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



DEVELOPMENT - Any man-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

FEMA - Federal Emergency Management Agency, the agency responsible for administering the National Flood Insurance Program.

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

1. The overflow of water from channels and reservoir spillways;
2. The unusual and rapid accumulation or runoff of surface waters from any source; or
3. Mudslides or mudflows that occur from excess surface water that is combined with mud or other debris that is sufficiently fluid so as to flow over the surface of normally dry land areas (such as earth carried by a current of water and deposited along the path of the current).

FLOOD INSURANCE RATE MAP (FIRM) – An official map of a community, on which the Federal Emergency Management Agency has delineated both the Special Flood Hazard Areas and the risk premium zones applicable to the community.

FLOODPLAIN OR FLOOD-PRONE AREA - Any land area susceptible to being inundated as the result of a flood, including the area of land over which floodwater would flow from the spillway of a reservoir.

FLOODPLAIN DEVELOPMENT PERMIT – A permit required before construction or development begins within any Special Flood Hazard Area (SFHA). If FEMA has not defined the SFHA within a community, the community shall require permits for all proposed construction or other development in the community including the placement of manufactured homes, so that it may determine whether such construction or other development is proposed within flood-prone areas. Permits are required to ensure that proposed development projects meet the requirements of the NFIP and these floodplain management regulations.

FLOOD CONTROL STRUCTURE - A physical structure designed and built expressly or partially for the purpose of reducing, redirecting, or guiding flood flows along a particular waterway. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

FLOODPROOFING - Any combination of structural and/or non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY (REGULATORY FLOODWAY) - The channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The Colorado statewide standard for the designated height to be used for all newly studied reaches shall be one-half foot (six inches). Letters of Map Revision to existing floodway delineations may continue to use the floodway criteria in place at the time of the existing floodway delineation.

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



FREEBOARD - The vertical distance in feet above a predicted water surface elevation intended to provide a margin of safety to compensate for unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood such as debris blockage of bridge openings and the increased runoff due to urbanization of the watershed.

HISTORIC STRUCTURE - Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: a) by an approved state program as determined by the Secretary of the Interior or; b) directly by the Secretary of the Interior in states without approved programs.

LETTER OF MAP REVISION (LOMR) - 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) – 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.

LOWEST FLOOR - The lowest floor of the lowest enclosed area (including basement). Any floor used for living purposes which includes working, storage, sleeping, cooking and eating, or recreation or any combination thereof. This includes any floor that could be converted to such a use such as a basement or crawl space. The lowest floor is a determinate for the flood insurance premium for a building, home or business. An unfinished or flood resistant enclosure, usable solely for parking or 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 non-elevation design requirement of Section 60.3 of the National Flood insurance Program regulations.

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. The term "manufactured home" does not include a "recreational vehicle".

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



NATIONAL FLOOD INSURANCE PROGRAM (NFIP) – FEMA’s program of flood insurance coverage and floodplain management administered in conjunction with the Robert T. Stafford Relief and Emergency Assistance Act. The NFIP has applicable Federal regulations promulgated in Title 44 of the Code of Federal Regulations. The U.S. Congress established the NFIP in 1968 with the passage of the National Flood Insurance Act of 1968.

SPECIAL FLOOD HAZARD AREA – The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year, i.e., the 100-year floodplain.

STRUCTURE - A walled and roofed building, including a gas or liquid storage tank, which is principally above ground, as well as a manufactured home.

SUBSTANTIAL DAMAGE - Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure just prior to when the damage occurred.

SUBSTANTIAL IMPROVEMENT - Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before "Start of Construction" of the improvement. The value of the structure shall be determined by the local jurisdiction having land use authority in the area of interest. This includes structures which have incurred "Substantial Damage", regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions or
2. Any alteration of a "historic structure" provided that the alteration will not preclude the structure's continued designation as a "historic structure."

VARIANCE - A grant of relief to a person from the requirement of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this ordinance. (For full requirements see Section 60.6 of the National Flood Insurance Program regulations).

VIOLATION - The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

4.03 GENERAL PROVISIONS

4.03.01 Lands to Which This Ordinance Applies

These regulations shall apply to all of special flood hazards areas as defined in Section 4.02 above and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) that lay within the unincorporated areas of Huerfano County, Colorado.

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



4.03.02 Basis for Establishing The Special Flood Hazard Area

The Special Flood Hazard Areas for the unincorporated Huerfano County are identified by the Federal Emergency Management Agency in its Flood Insurance Rate Maps (FIRM) H-010-100 community No. 080206B and dated October 1, 1986. Said FIRM and any revisions hereto are adopted by reference and declared to be part of these regulations. The FIRM is on file in the office of the Huerfano County Planner/Code Enforcement Officer, 401 Main Street, Suite 103 Walsenburg, Colorado, 81089.

4.03.03 Compliance

No structure or land shall hereafter be located, altered, or have its use changed within the Special Flood Hazard Area without full compliance with the terms of these regulations and other applicable regulations. Nothing herein shall prevent Huerfano County Government from taking such lawful action as is necessary to prevent or remedy any violation. These regulations meet the minimum requirements as set forth by the Colorado Water Conservation Board and the National Flood Insurance Program.

4.03.04 Abrogation and greater restrictions

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, nor deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

4.03.05 Interpretation

In the interpretation and application of this ordinance, all provisions shall be: (i) Considered as minimum requirements; (ii) Liberally construed in favor of the governing body; and (iii) Deemed neither to limit nor repeal any other powers granted under State statutes.

4.03.06 Warning and Disclaimer of Liability

The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. These regulations do not imply that land outside the Special Flood Hazard Area or uses permitted within such areas will be free from flooding or flood damages. These Regulations shall not create liability on the part of the County Government or any official or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made thereunder.

4.03.07 Severability

This ordinance and the various parts thereof are hereby declared to be severable. Should any section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



4.04 ADMINISTRATION

4.04.01 Designation of the Floodplain administrator

The Huerfano County Planner / Code Enforcement Officer is hereby appointed to administer and implement these regulations by granting or denying development permit applications in accordance with its provisions and any other regulation pertaining to floodplain management.

4.04.02 Duties & Responsibilities of the Floodplain Administrator

Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

1. Maintain for public inspection all records pertaining to the provisions of this ordinance, including the actual elevation of the lowest floor of all new or substantially improved structures and any flood proofing certificate required.
2. Review, approve, or deny all applications for Floodplain Development Permits required by adoption of this ordinance.
3. Review Floodplain Development Permit applications to determine whether a proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
4. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies.
5. Inspect all development at appropriate times during the period of construction to ensure compliance with all provisions of these regulations.
6. Where interpretation is needed as to the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.
7. When Base Flood Elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review and reasonably utilize any Base Flood Elevation data and Floodway data available from a Federal, State, or other source, in order to administer the provisions of Section 4.05.
8. Notify, in riverine situations, adjacent communities and the State Coordinating Agency, which is the Colorado Water Conservation Board, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to FEMA.

4.04.03 Permit Procedures

Application for a Floodplain Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to Special Flood Hazard Area. Additionally, the following information is required:

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



1. Elevation certified by a Colorado Professional Land Surveyor of the lowest floor of all new and substantially improved structures;
2. Elevation certified by a Colorado Professional Land Surveyor to which any nonresidential structure shall be flood proofed;
3. A certificate from a Colorado Professional Engineer or Architect that the nonresidential flood proofed structure shall meet these regulations flood proofing requirements.
4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

Approval or denial of a Floodplain Development Permit by the Floodplain Administrator shall be based on all of the provisions of this ordinance and the following relevant factors:

1. the danger to life and property due to flooding or erosion damage;
2. susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
3. danger that materials may be swept onto other lands to the injury of others;
4. compatibility of the proposed use with existing and anticipated development;
5. safety of access to the property in times of flood for ordinary and emergency vehicles;
6. costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
7. availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

4.04.04 Variance Procedures

The Huerfano County Board of Adjustment shall hear and render judgment on requests for variances from the requirements of these regulations pursuant to Land-use regulation 9.02.04 "Appeal and Application Procedures".

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 ordinance.

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.

4.04.05 Penalties for Noncompliance

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the provisions of this ordinance by failure to comply with any of its shall constitute a misdemeanor. Any person who

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



violates these regulations or fails to comply with any of its requirements shall upon conviction thereof be fined or imprisoned as provided by the Colorado Revised Statutes.

4.05 PROVISIONS FOR FLOOD HAZARD REDUCTION

4.05.01 General Standards

In all Special Flood Hazard Areas the following provisions are required for all new construction and substantial improvements:

1. New construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
2. new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
3. new construction or substantial improvements shall be constructed with materials resistant to flood damage;
4. All new construction or 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
5. All manufactured homes shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. 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 local anchoring requirements for resisting wind forces.
6. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
7. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
8. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

4.05.02 Specific Standards

In all Special Flood Hazard Areas where base flood elevation data has been provided as set forth in Sections 4.03.02, 4.04.02 (7), or 4.05.06 the following provisions are required:

RESIDENTIAL CONSTRUCTION

New construction and Substantial Improvement of any residential structure shall have the lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



service facilities (including ductwork), elevated to one foot above the base flood elevation. Upon completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered Colorado Professional Engineer, architect, or land surveyor. Such certification shall be submitted to the Floodplain Administrator.

NONRESIDENTIAL CONSTRUCTION

With the exception of Critical Facilities, new construction and substantial improvements of any commercial, industrial, or other nonresidential structure shall either have the lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), elevated to one foot above the base flood elevation or, together with attendant utility and sanitary facilities, be designed so that at one foot above the base flood elevation 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 Colorado Professional Engineer or Architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice.

ENCLOSURES

New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding 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 Colorado Professional Engineer or architect or meet or exceed the following minimum criteria: (i) A minimum of two 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; (ii) the bottom of all openings shall be no higher than one foot above grade, openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

4.05.03 Floodway

Located within Special Flood Hazard Area established in Section 4.03.02 are areas designated as Floodways as defined in Section 4.02. 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 shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory Floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed by a licensed Colorado Professional Engineer and in accordance with standard engineering practice that the proposed encroachment would not result in

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



any increase (requires a No-Rise Certification) in flood levels within the community during the occurrence of the base flood discharge.

2. If the above provision is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions under this section 5.

4.05.04 Alteration of a Watercourse

For all proposed developments that alter a watercourse within a Special Flood Hazard Area, the following standards apply:

1. Channelization and flow diversion projects shall appropriately consider issues of sediment transport, erosion, deposition, and channel migration and properly mitigate potential problems through the project as well as upstream and downstream of any improvement activity. A detailed analysis of sediment transport and overall channel stability should be considered, when appropriate, to assist in determining the most appropriate design.
2. Channelization and flow diversion projects shall evaluate the residual 100-year floodplain.
3. Any channelization or other stream alteration activity proposed by a project proponent must be evaluated for its impact on the regulatory floodplain and be in compliance with all applicable Federal, State and local floodplain rules, regulations.
4. Any stream alteration activity shall be designed and sealed by a registered Colorado Professional Engineer or Certified Professional Hydrologist.
5. All activities within the regulatory floodplain shall meet all applicable Federal, State and County floodplain requirements and regulations.
6. Within the Regulatory Floodway, stream alteration activities shall not be constructed unless the project proponent demonstrates through a Floodway analysis and report, sealed by a registered Colorado Professional Engineer, that there is not more than a 0.00-foot rise in the proposed conditions compared to existing conditions Floodway resulting from the project, otherwise known as a No-Rise Certification.
7. Maintenance shall be required for any altered or relocated portions of watercourses so that the flood-carrying capacity is not diminished.

4.05.05 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.

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



2. NON-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, 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.

4.05.06 Standards for Subdivision Proposals

In addition to the requirements in Section 2.07.07 “Drainage, Erosion, Sedimentation and Flood Control” of the Huerfano County Subdivision Regulations, the follow shall be address:

1. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be reasonably safe from flooding. If a subdivision or other development proposal is in a flood-prone area, the proposal shall minimize flood damage.
2. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Floodplain Development Permit requirements of these regulations.
3. Base Flood Elevation data shall be generated for subdivision proposals including the placement of manufactured home parks.
4. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
5. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

4.05.07 Standards for Critical Facilities

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. This 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;

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



- 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.

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 Huerfano County Board of County Commissioners 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 Huerfano County Floodplain Administrator 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.
 - 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

**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



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 Huerfano County Board of County Commissioners 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 Huerfano County Floodplain Administrator on an as-needed basis upon request.

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**HUERFANO COUNTY
FLOOD DAMAGE
PREVENTION REGULATIONS
SECTION 4.00**



4.05.07.01 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 these regulations, protection shall include one of the following:

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