

DRAFT
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**FLOOD PLAIN HAZARD
MANAGEMENT REGULATIONS**

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
WATER RESOURCED DIVISION
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SECTION 1. GENERAL PROVISIONS

1.1 FLOOD PLAIN HAZARD MANAGEMENT REGULATIONS

These regulations are known and may be cited as the “Flood Plain Hazard Management Regulations;” hereinafter referred to as “these regulations.”

1.2 STATUTORY AUTHORITY

1. Flood Plain and Floodway Management is incorporated in Montana Code Annotated Title 76, Chapter 5 and describes the authority, procedures and minimum standards for local regulations.
2. The authority to regulate development in specifically identified flood hazard areas is granted to communities by state statute 76-5-301, MCA and Municipalities have authority to adopt regulations as provided for in Section 7-1-4123, MCA to promote the general public health, safety, and welfare.

1.3 FINDINGS OF FACT

1. Flood hazard areas specifically adopted herein as Regulated Flood Hazard Areas have been delineated and designated by the Department of Natural Resources and Conservation (DNRC) and/or the Federal Emergency Management Agency (FEMA) pursuant to 76-5-201, MCA.
2. The proposed regulations have been reviewed and approved by the Montana Department of Natural Resources and Conservation and the Federal Emergency Management Agency to meet the prescribed minimum standard for development and procedures.

1.4 PURPOSE

These regulations promote public health, safety and general welfare of the residents and minimize public and private losses due to flood conditions in Regulated Flood Hazard Areas. These Regulations are intended 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 and public service interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges;

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 disruptions; and to
7. Ensure compliance with the minimum standards for the continued participation in the National Flood Insurance Program for the benefit of the residents.

1.5 METHODS TO REDUCE LOSSES

These regulations are intended to reduce flood losses through the following methods:

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flooding or that may cause excessive increases in flood heights or velocities;
2. Require that uses of land vulnerable to floods, including public facilities, be developed or constructed to at least minimum standards or to otherwise minimize flood damage;
3. Regulate the alteration of natural floodplains, stream channels, and natural protective barriers which are needed to accommodate floodwaters;
4. Regulate filling, grading, dredging and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which will impact other land, flood water depth or velocity of floodwaters;
6. Distinguish between the land use regulations applied to the floodway within the Regulated Flood Hazard Area and those applied to that portion of the Regulated Flood Hazard Area not contained in the floodway;
7. Apply more restrictive land use regulations within the floodway of the Regulated Flood Hazard Area; and
8. Ensure that regulations and minimum standards balance the greatest public good with the least private injury.

(MCA 76-5-102)

1.6 JURISDICTIONAL AREA

These regulations apply only to the flood hazard areas specifically adopted herein as Regulated Flood Hazard Areas and are more fully and specifically described in Section 4. The requirements and approvals for alterations to the specific jurisdictional area are in **Section 4** as well. Areas within the Regulated Flood Hazard Area also include areas specifically identified, labeled and illustrated on maps as Floodway, or Flood Fringe that have differing uses allowed and minimum building standards that apply. The jurisdictional areas are those areas of the 100-year floodplain illustrated and depicted in the referenced studies and maps.

The Regulated Flood Hazard Area supporting study and maps illustrating the regulatory area are generally studies and maps completed for the DNRC by FEMA or the Natural Resources and Conservation Service (NRCS) that have been adopted by DNRC pursuant to 76-5-201, MCA, et.seq. The Regulated Flood Hazard Area may include those areas collectively identified as Special Flood Hazard Areas by FEMA on Flood Insurance Rate Maps and are those areas subject to flood hazard caused by the 100-year flood. FEMA also utilizes the maps of Special Flood Hazard Areas and

accompanying Flood Insurance Studies for determining flood risk for National Flood Insurance premiums. The maps and accompanying study becomes the Regulatory Flood Hazard area only when formally adopted by DNRC and community within an ordinance.

1.7 FLOOD PLAIN ADMINISTRATOR

A Flood Plain Administrator is hereby officially appointed and is the responsibility of the office of [REDACTED] and is maintained to serve to administer and implement the provisions of these regulations and meet and maintain the commitments pursuant to 44 CFR 59.22(a) to FEMA when FEMA Flood Insurance was made available in the community. (44CFR59.22(b)(1)) (36.14.204(2)(h))

1.8 COMPLIANCE Development, New Construction, Alteration or Substantial Improvement may not commence without full compliance with the provisions of these regulations.

1.9 ABROGATION AND GREATER RESPONSIBILITY

It is not intended by these regulations to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, or underlying zoning. However, where these regulations impose greater restrictions, the provision of these regulations must prevail. (44 CFR 60.1)

1.10 REGULATION INTERPRETATION

In the interpretation and application of these regulations, all provisions must 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. (44 CFR 60.1)

1.11 WARNING AND DISCLAIMER OF LIABILITY

These regulations do not imply that land outside the Regulated Flood Hazard Areas 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 community or any official or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made hereunder.

1.12 SEVERABILITY

If any section, clause, sentence, or phrase of these regulations is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding will in no way affect the validity of the remaining portions of these regulations.

1.13 DISCLOSURE PROVISION

All property owners or their agents in the Regulated Flood Hazard Areas shall notify potential buyers or their agents that such property is located within the Regulated Flood Hazard Areas and is subject to regulation and any permitted uses that are transferred. Information regarding Regulated Flood Hazard Areas and the repository for Flood Plain maps is available in the Flood Plain Administrator's office.

(ARM 36.15.204(2)(g))

1.14 AMENDMENT OF REGULATIONS

Once adopted, these regulations may be amended after a public hearing and notice and approval of DNRC and FEMA.

1.15 PUBLIC RECORDS

Records including permits and applications, elevation and flood proofing certificates, certificates of compliance, fee receipts, and other matters relating to these regulations must be maintained by the Flood Plain Administrator and are public records and must be made available for inspection and for copies upon reasonable request. A reasonable copying cost for copying documents for members of the public may be charged and may require payments of the costs before providing the copies. (44 CFR 60.3(b)(5)(iii) & 44 CFR 59.22 (a)(9)(iii))

1.16 LAND DIVISIONS AND SUBDIVISION REVIEW

Any land divisions and subdivision approval including new or expansion of existing manufactured home parks within the Regulated Flood Hazard Area must be designed to meet the following criteria:

1. The base flood elevations and boundary of the Regulated Flood Hazard area are determined and considered during lot layout and building location design;
2. Locations for future structures and development are reasonably safe from flooding; (44CFR 60.3)
3. Adequate surface water drainage is provided to reduce exposure to flood hazards; (44 CFR 60.3 (a)(4)(iii))
4. Public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage; and (44 CFR 60.3(a)(4)(ii))
5. For development within the Regulated Flood Hazard Area, permits according to these regulations must be obtained before development occurs. (44CFR 60.3(b))

The NFIP program standard for community Flood Plain management ordinances specifies that the local government is to consider flood hazards when reviewing and approving subdivisions within the special flood hazard area. Flood Plain Administrators should check their subdivision ordinances to ensure flood hazards outside of Regulated Flood Hazard Areas are addressed in development proposals. For example, the Montana Model Subdivision Regulations suggests that any portion of a proposed subdivision is within 2,000 horizontal feet and 20 vertical feet of a stream draining an area of 25 square miles or more, where no official floodplain studies of the stream have been made, the subdivider may be required to conduct a flood hazard evaluation study. The Montana Department of Natural Resources and Conservation may, if requested, review the flood hazard analysis on the merit of its technical adequacy and make a recommendation back to the Flood Plain Administrator.

1.17 DISASTER RECOVERY

Upon completion of structure condition survey within the Regulated Flood Hazard Area, the Flood Plain Administrator shall notify owners that a permit may be necessary before repair or reconstruction commences on structures that:

1. Have sustained 30% or more in flood damages;
2. Where have been swept away;
3. Have one or more collapsed or missing walls;
4. Cannot be reoccupied without major structural work; or
5. Have sustained more than two feet of water over the first floor.

Structures that have suffered substantial damage or will undergo substantial improvements require a flood plain application and permit and must be upgraded to meet the minimum building standards herein during repair or reconstruction.

Flood Plain Administrators coordinate assistance and provide information to structure owners concerning Hazard Mitigation and Recovery measures with Federal Emergency Management Agency, Montana Department of Natural Resources and Conservation, and other state, local and private emergency service organizations.

SECTION II. DEFINITIONS

There is a large list of definitions of terms and jargon normally used in floodplain hazard management guidelines and explanations. Be aware the same word may mean something different when applied to flood insurance, minimum standards, or a regulatory requirement.

The definitions in 76-5-103, MCA and ARM 36.15.101 where applicable may be considered however several definitions are specifically for describing the role and responsibility of the DNRC in regard to development and adoption of flood hazard studies and map and other responsibilities.

FEMA definitions 44 CFR 59.1 may be considered. Definitions are used to describe the FEMA minimum standards for floodplain management if communities want to join the National Flood Insurance Program so individuals and businesses are eligible for flood insurance in that community.

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted as to give them the meaning they have in common usage and the most reasonable application. For the purpose of this ordinance, the following definitions are adopted:

100-year Flood – see Flood Plain

Alteration – Any change or addition to an artificial obstruction that either increases its external dimensions or increases its potential flood hazard. See also, Substantial Improvement. (ARM 36.15.101(2))

Artificial Obstruction– Any obstruction which is not natural and includes any development, dam, diversion, wall, riprap, embankment, levee, dike, pile, abutment, projection, revetment, excavation, channel rectification, road, bridge, conduit, culvert, building, refuse, automobile body, fill or other analogous structure or matter in, along, across, or projecting into any Regulated Flood Hazard Area that may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by the water, or that is placed where the natural flow of the water would carry the same downstream to the damage or detriment of either life or property. See also Development. (ARM 36.15.101(3) & MCA 76-5-103(1))

Base Flood (Flood of 100 Year Frequency) – A flood having a one percent (1%) chance of being equaled or exceeded in any given year (ARM 36.15.101(4) & (44 CFR 59.1

Base Flood Elevation (BFE) – The elevation above sea level of the base flood in relation to the National Geodetic Vertical Datum of 1929 or the North American Vertical Datum of 1988 or unless otherwise specified. (ARM 36.15.101(5))
Certification – 44 CFR 65.2(b)

Basement – Any area of the building having its lowest floor below ground level on all sides.

Channel – The geographical area within either the natural or artificial banks of a watercourse or drain way. (MCA 76-5-103(2))

Crawl Space – Any area below the ground level and below the lowest floor having an interior dimension of four (4) feet or less measured from the interior ground surface to the top of the stem wall.

DNRC – Montana Department of Natural Resources and Conservation

Development – means any man-made 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 or storage of equipment or materials. See also Artificial Obstruction. (44 CFR59.1)

Encroachment – activities or construction within the **Flood Plain** including fill, new construction, substantial improvements, and other development.

Encroachment Analysis – An analysis performed by an engineer to assess the impacts of the proposed artificial obstruction or nonconforming use to the 100-year floodplain, base flood elevation and velocity.

Establish – To construct, place, insert, or excavate. (MCA 76-5-103(7) (ARM 36.15.101(9))

FEMA – Federal Emergency Management Agency

Flood Plain –the area including and adjoining the watercourse or drainway that would be covered by the floodwater of a flood of a 100-year frequency.

Flood of 100 Year Frequency (Base Flood) – a flood magnitude expected to recur on the average of once every 100-years or a flood magnitude that has a 1% chance of occurring in any given year. (MCA 76-5-103(9)) (44 CFR 59.1)

Flood Fringe – the identified portion of the Regulated Flood Hazard Area outside the limits of the **floodway**. (ARM 36.15.101(10))

Floodway – the identified portion of the Regulated Flood Hazard Area and is the channel and the areas adjoining the channel that are reasonably required to carry the discharge of the base flood without cumulatively increasing the water surface by more than one half foot. (MCA 76-5-103(11)) (MCA 76-5-103(5))

Flood Plain Administrator – community official or representative appointed to administer and implement the provisions of this ordinance.

Flood Proofing – any combination of structural and 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, HVAC systems, structures and their contents. ((44 CFR 59.1)

Lowest Floor – any floor of a building including a basement used for living purposes, storage, or recreation. This includes any floor that could be converted to such a use. (ARM 36-15-101(14))

Manufactured Home Park or Subdivision – includes the construction of facilities for servicing the manufactured home lots and at a minimum includes the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads. (44 CFR 59.1)
Manufactured or Mobile Home – a structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities and includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. (ARM 36.15.101(15))

New Construction – Structures for which the commencement of clearing, grading, filling, or excavating to prepare a site for construction occurs on or after the effective date of these ordinances and includes any subsequent improvements to such structures. (36.15.101(20)) (44 CFR 59.1)

New Manufactured Home Park Or Subdivision – means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads and is completed on or after the effective date of floodplain management regulations adopted by a community. (44 CFR 59.1)

Owner – any person who has dominion over, control of, or title to an artificial obstruction.(76-5-103(13))

Recreational Vehicle – A park trailer, travel trailer, or other similar vehicle which is (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (c) designed to be self-propelled or permanently towable by a truck; and (d) designed primarily for use as temporary living quarters for recreation, camping, travel, or seasonal use, not for use as a permanent dwelling. (44 CFR 59.1)

Regulated Flood Hazard Area – A Flood Plain whose limits have been designated pursuant to Part 2, Chapter 5 of Title 76, MCA, and is determined to be the area adjoining the watercourse that would be covered by the floodwater of a base flood, a flood of a 100-year frequency. The Regulated Flood Hazard Area consists of the **Floodway** and **Flood Fringe** where specifically designated. (MCA-76-5-103(4)), (MCA 76-5-103(10), (ARM 36-15-101(11))

Optional: Communities may include and regulate sheet flood areas if they have been identified and if they wish. Most communities have no identified sheet flooding areas.

Riprap – Stone, rocks, concrete blocks, or analogous material that is placed within the Flood Plain for the purpose of preventing or alleviating erosion. (ARM 36.15.101(18))

Residential – A building for living purposes or place of assembly or permanent use by human beings. All other buildings are **non- residential**.

Scour Depth – The maximum depth of streambed scour caused by erosive forces of the base flood discharge.

Structure – a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home. (44 CFR 59.1) A structure is also, bridge, culvert, dam, diversion, wall, revetment, dike, or other projection that may impede, retard, or alter the pattern of flow of water.

Substantial Damage – damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damage condition would exceed 50 percent of the market value of the structure before the damage occurred. (44 CFR 59.1)

Substantial Improvement – any repair, reconstruction or improvement of a structure where the cost 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 purposes of this definition, substantial improvement considered to occur when the first construction of any wall ceiling, floor or other structural part of the building commences. The term does not include:

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 state inventory of historic places. (ARM 36.15.101(21))

Suitable Fill – fill material which is stable, compacted, well graded, and pervious, not adversely affected by water and frost, devoid of trash or similar foreign matter, tree stumps or other organic material; and is fitting for the purpose of supporting the intended use and/or permanent structure. (ARM 36.15.101(22))

Violation – means a failure of a structure or other development to be fully compliant with these regulations.

SECTION 3. FORMS AND FEES

3.1 Forms The following forms may be required by the Flood Plain Administrator:

1. **Flood Plain Permit Application** – is the “Joint Application for Proposed Work in Montana’s Steams, Wetlands, Regulated Flood Hazard Areas, and Other Water Bodies”, or other designated form.
2. **Flood Plain Permit Compliance Report** – required to be submitted by the Applicant to the Flood Plain Administrator once the permitted project in the Regulated Flood Hazard Area is completed or within the designated time stipulated on the Flood Plain permit. A compliance report including an elevation and or flood proofing certificate may be required where specified.
3. **Flood Plain Variance Application** –submitted by the Applicant to the Flood Plain Administrator for review of the proposed project prior to the initiation of the project requiring a variance.
4. **Flood Plain Appeal** –submitted by the Applicant to the Flood Plain Administrator for review of the proposed project prior to the initiation of the project.
5. **Flood Plain Emergency Notification** – required to be used by persons to notify the Flood Plain Administrator of projects undertaken during an emergency to safeguard life or structures. This is not a permit application and the person must take additional steps, as outlined in Section 11.
6. **Official Complaint Form** – may be used by any person to notify the Flood Plain Administrator of an activity taking place without an official signed Flood Plain permit. Persons may make complaints without use of this form.

3.2 Fees

Reasonable fees may be adopted for permit applications, notices, variances, inspections, certifications or other administrative actions required by these Regulations.

SECTION 4. JURISDICTIONAL AREA

4.1 REGULATED FLOOD HAZARD AREAS

1. The jurisdictional areas referenced herein as the Regulated Flood Hazard Area are the 100-year floodplains illustrated and referenced in:
 1. (specific title and Order date of specific flood study including maps);
 2. (specific title and Order date of specific flood study including maps);and
 3. (Optional: flood areas of less than one foot).
2. The Regulated Flood Hazard Area specifically described or illustrated in the specific study including maps that have been delineated, designated and established by order of the DNRC or FEMA pursuant to 76-5-201, MCA.(in finding of fact)
3. Use allowances, design and construction requirements in these regulations vary by the specific areas identified as Floodway and Flood Fringe.

4.2 INTERPRETATION OF REGULATED FLOOD HAZARD AREA BOUNDARIES

1. The mapped boundaries illustrated in the referenced studies in this Section are a guide for determining whether property is within the Regulated Flood Hazard Area.
2. A determination of the outer limits and boundaries of the Regulated Flood Hazard Area or the Flood Fringe and Floodway within the Regulated Flood Hazard Area includes an evaluation of the maps as well as the particular study data of the referenced study in this Section.
3. Boundary points of the Regulated Flood Hazard Area may be illustrated for guidance on reference maps but the boundary is the actual intersection of the applicable base flood elevation with the natural adjacent terrain of the watercourse or channel.
4. The Floodway boundary is as illustrated on the referenced maps and studies.
5. Any owner or lessee of property who believes his property has been inadvertently included in the Regulated Flood Hazard Area may submit scientific and/or technical information to the Flood Plain Administrator. Changes to the National Flood Insurance Rate Maps for the National Flood Insurance Program through a FEMA Letter of Map Change process are the responsibility of the owner or lessee.

6. The Flood Plain Administrator may require elevation information provided by an engineer or land surveyor or other information as needed for any development that may be considered to be subject to these regulations. The Flood Plain Administrator's interpretation of the boundaries and decision may be appealed as set forth in Section 13.

4.3 ALTERATION OF JURISDICTIONAL AREA

1. An alteration in this paragraph is a change to the existing boundary to the specific maps and data of the referenced studies in this Section that form the basis for the Regulated Flood Hazard Area.
2. An alteration may be the result of new data and information or when technical or scientific flood data show that the base flood elevation has or may be changed or was erroneously established and the boundaries of the Regulated Flood Hazard Area are incorrect.
3. Any alteration must be based on reasonable hydrological certainty.
4. Any alteration or proposed alteration of 0.5 feet or more in the Base Flood Elevation requires approval of the DNRC in addition to an amendment of the adopted jurisdictional.
5. Any additional notices or approvals required by FEMA for the purpose of updating flood insurance rate maps of changes as a result of permitted activity that cause any change in topography by fill or changes in the base flood elevation is the responsibility of the permit applicant. The Flood Plain Administer may represent any necessary approvals or endorsements by the permit authority to FEMA.
6. The Flood Plain Administrator shall maintain a record of all alterations.(ARM 36.15.502 and 36.15.505)
7. An alteration is not required when property located within the Regulated Flood Hazard Area is shown to be naturally above the base flood elevation. (ARM 36.15.505(2))
8. Except in a Flood Fringe, alteration approval from DNRC is required if property is to be raised to a level above the Base Flood Elevation by suitable fill and where the encroachment by the fill causes a rise in the Base Flood Elevation of more than 0.5 feet. No portion of the fill may be within the floodway. ((36.15.505)(1)(b))

9. No alteration of a Regulated Flood Hazard Area is required when property located within the Regulated Flood Hazard Area is elevated with fill to at or above the base flood elevation and is permitted.

When property located within the Regulated Flood Hazard area is naturally above the base flood elevation as proven by a certified elevation survey provided by an engineer or land surveyor, the property owner may be required to submit a Letter of Map Change (LOMA) to FEMA in order to affect the flood risk designation for insurance purposes. Information on the process and requirements are available through FEMA.

Alteration of the Flood Plain usually requires FEMA approval for modification to their FEMA Insurance Rate Maps and may require preapproval by Conditional Letter of Map Revision, and/ or Letter Of Map Revision or other map change approvals in addition to approval from the Flood Plain Administrator and DNRC.

SECTION 5. USES ALLOWED WITHOUT A PERMIT WITHIN THE JURISDICTIONAL AREA

5.1 - GENERAL In addition to existing nonconforming uses and artificial obstructions established before the effective date of Flood Plain Hazard Management Regulations, the following **open space uses** shall be allowed without a permit in the Regulated Flood Hazard Area, provided that such uses are not prohibited by any other resolution or statute, do not require structures, and do not require alteration of the Flood Plain such as fill, grading, excavation or storage of materials or equipment: (ARM 36.15.601) and (ARM 36.15.701)(1))

1. Agricultural uses, not including related structures, such as tilling, farming, irrigation, ranching, harvesting, grazing, etc; (ARM 36.15.601(1)(a))
2. Accessory uses, not including structures, such as loading and parking areas, or emergency landing strips associated with industrial or commercial facilities; (ARM 36.15.601(1)(b))
3. Forestry, including processing of forest products with portable equipment; (ARM 36.15.601(1)(d))
4. Recreational vehicle use provided that the use is on the site for fewer than 180 consecutive days and the vehicle is fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system with wheels intact, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; (44 CFR 60.3(c)(14))
5. Residential uses such as lawns, gardens, parking areas, and play areas; (ARM 36.15.601(1)(e))
6. Maintenance of an existing open space uses or artificial obstructions; (MCA 76-5-404(3)(b))
7. Preventive Maintenance activities such as bridge deck rehabilitation and roadway pavement preservation activities are considered maintenance.
8. Public or private recreational uses not requiring structures such as picnic grounds, swimming areas, parks, campgrounds, golf courses, driving ranges, archery ranges, wildlife management and natural areas, alternative livestock ranches (game farms), fish hatcheries, shooting preserves, target ranges, trap

and skeet ranges, hunting and fishing areas, and hiking and horseback riding trails; (ARM 36.15.601(a)(c))

9. Fences such as those that have a low impact to the flow of water such as barbed wire fences and wood rail fences and shall not include permanent fences crossing channels; (ARM 36.15.601(2)(b))
10. Addition of highway guard rail, signing and utility poles along an existing roadway.
11. Irrigation and livestock supply wells, provided that they are located at least 500 feet from domestic water supply wells and with the top of casing 18" above the Base Flood Elevation. (ARM 36.15.601(2)(a))

SECTION 6. PROHIBITED USES, ACTIVITIES AND STRUCTURES WITHIN THE JURISDICTIONAL AREA

6.1 FLOODWAY The following artificial obstructions and nonconforming uses are prohibited in the Floodway within the Regulated Flood Hazard Area:

1. A building or structure including alterations for living purposes, place of assembly or permanent use by human beings or commercial and industrial buildings, or mobile homes and manufactured homes; (MCA 76-5-403(1), (ARM 36.15.605)(1a)), (ARM 36.15.605(2b)), (ARM 36.15.605(2)(a)).
2. A structure, fill or excavation that would cause water to be diverted from the Floodway, cause erosion, obstruct the natural flow of waters or reduce the carrying capacity of the Floodway. (MCA 76-5-403(2)). Minor excavation or fill where compatible and related and incidental may be allowed with a permitted use;
3. The construction or storage of an object (artificial obstruction) subject to flotation or movement during flood level periods; (MCA 76-5-403(3) and ARM 36.15.605(1)(c))
4. Solid and Hazardous waste disposal and individual and multiple family sewage disposal systems unless otherwise allowed pursuant to ARM 17.36.101-116 and ARM 17.36.309-345; (ARM36-15-605(2c))
5. Storage of toxic, flammable, hazardous or explosive materials; and ARM 36.15.605(2d))
6. Cemeteries, mausoleums, or any other burial grounds. (Higher Standard)

6.2 FLOOD FRINGE OR REGULATED FLOOD HAZARD AREA WITHOUT A FLOODWAY The following artificial obstructions and nonconforming uses are prohibited in the Flood Fringe or Flood Plain without a Floodway of the Regulated Flood Hazard Area:

1. Solid and hazardous waste disposal;(ARM 36-15-703(1))
2. Storage of toxic, flammable, hazardous or explosive materials; (ARM 36-15-703(2))
3. Cemeteries, mausoleums, or any other burial grounds; and (Higher Standard)
4. Critical facilities, including buildings and associated facilities that provide essential community care and emergency operation functions such as schools,

hospitals, and nursing home facilities, fire stations and police stations; (**Higher Standard**) (44CFR 60.22)

SECTION 7. PERMIT REQUIREMENTS

7.1 GENERAL

1. A permit is required within the Regulated Flood Hazard Area for a person to establish or alter an artificial obstruction, nonconforming use or development; (ARM 36.15.101(3) & MCA 76-5-103(1)) (44 CFR 60.1 & MCA 76-5-404(2), ARM 36.15.204), (ARM 36.15.101(2))
2. Artificial obstructions, nonconforming uses and uses not specifically listed in Section 9 and 10 requires a permit except as allowed without a permit in Section 5 or as prohibited as specified in Sections 6;
3. A permit is required to reconstruct or repair an existing structure that has experienced substantial damage or substantial improvement;
4. A permit is not required for existing artificial obstructions or nonconforming uses established in the Flood Plain before the effective date of floodplain management regulations.
5. Artificial obstruction and nonconforming uses in a Regulated Flood Hazard Area not exempt under Section 5 is a public nuisance unless a permit has been obtained.(76-5-404(1)MCA)
6. These regulations do not affect any existing artificial obstruction or nonconforming use in the Regulated Flood Hazard Area before the land use regulations have been adopted. (76-5-404(3) MCA)
7. An alteration that is any change or addition to an artificial obstruction or nonconforming use not exempt under Section 5 that increases the size or increases its potential flood hazard, requires a permit.(76-5-404(3)(b)) (36.15.101(2))
8. Maintenance of an artificial obstruction or nonconforming use is not an alteration. (76-5-404(3)(b) MCA)

7.2 REQUIRED PERMIT APPLICATION INFORMATION

A permit application shall include, but is not limited to the following:

1. A completed and signed Flood Plain Permit Application;
2. The required review fee;
3. Plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed project (i.e.; landscape alterations, existing and proposed structures, including the placement of manufactured homes, etc.) and the location of the foregoing in relation to the Regulated Flood Hazard Areas;
4. A copy of other required applicable permits which may include but is not limited to a 310 permit, SPA 124 permit, Section 404 Permit, a 318 Authorization, 401 Certification or a Navigable Rivers Land Use License or Easement from other permits from federal, state, and local agencies, for the proposed floodplain project and must show that the application is not in conflict with other relevant and applicable permits; and
5. Additional information related to the specific use or activity that demonstrates the design criteria and construction standards are met or exceeded as specified in Section 9 and 10.

SECTION 8. APPLICATION EVALUATION

8.1 APPLICATION REVIEW

1. The Flood Plain Administrator shall review and evaluate the application and shall approve, approve with conditions, or deny the application within 60 days (or a time specified) of receipt of a correct and complete application. (MCA 76-5-405(2))
2. The Flood Plain Administrator shall determine whether the application contains the applicable elements required in these regulations and shall notify the applicant of the Flood Plain Administrator's determination.
3. If the application is found insufficient and if the applicant corrects the identified deficiencies and resubmits the application, the Flood Plain Administrator shall notify the applicant whether the resubmitted application contains all the elements required by these regulations, as applicable.
4. This process shall be repeated until the applicant submits a complete application containing all the elements required by these regulations, or the application is withdrawn.
5. If after a reasonable effort the Flood Plain Administrator determines that the application remains incomplete, the Flood Plain Administrator shall deny the application and notify the applicant of missing elements. No further action shall be taken on the application by the Flood Plain Administrator until the application is resubmitted.
6. A determination that an application contains the appropriate information for review does not ensure that the Flood Plain permit application will be approved or conditionally approved and does not limit the ability of the Flood Plain Administrator in requesting additional information during the review process.

8.2. NOTICE REQUIREMENTS FOR FLOOD PLAIN PERMIT APPLICATIONS:

Upon receipt of a complete application for a permit, the Flood Plain Administrator shall:

1. Prepare a notice containing the facts pertinent to the application and shall publish the notice at least once in a newspaper of general circulation in the area;
2. Serve notice by first-class mail upon adjacent and other impacted property owners.

3. The State National Flood Insurance Program Coordinator located in DNRC shall also receive notice by the most efficient method. Notice to other stream activity permitting agencies shall also be considered;
4. The notice shall provide a reasonable period of time, not less than 15 days, for interested parties to submit comments on the proposed activity; and (ARM 36.15.204(2)(c))
5. Prior to any alteration or relocation of a watercourse in the Regulated Flood Hazard Area, additionally provide notice to FEMA and adjacent communities (44 CFR 60.3 (b)(6))

8.3 PERMIT CRITERIA

Permits shall be granted or denied on the basis of whether the proposed new construction, substantial improvement, or alteration of an artificial obstruction is not a prohibited use and meets the requirements of the minimum standards and criteria in Section 9 and 10.

The Flood Plain Administrator must determine that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendment of 1972, 36 U.S.C. 1334.(44 CFR 60.3(a)(2))

8.4 DECISION

The Flood Plain Administrator shall approve, conditionally approve, or deny the proposed application. The Flood Plain Administrator shall notify the applicant of his action and the reasons thereof within 60 days of receipt of a correct and complete application unless otherwise specified. A copy of the approved permit must be provided to DNRC. (ARM 36.15.204(2)(e))

The granting of a permit does not affect any other type of approval required by any other statute or ordinance of the state, any political subdivision or the United States but is an added requirement. (76-5-108 MCA)

8.5 FLOOD PLAIN PERMIT APPLICATION APPROVAL

Upon approval or conditional approval of the Flood Plain permit application, the Flood Plain Administrator shall provide the applicant with a permit including but not limited to the following requirements and conditions:

1. The Flood Plain permit will become valid when all other necessary permits are in place.(44 CFR 60.3(a)(2))

2. Set forth the time limit of up to one year from the date of permit issuance or as commensurate with the project construction time line for completion of the project or development. The applicant may request an extension for completion for up to an additional year. The request must be made at least 30 days prior to the completion deadline;
3. Notify all subsequent property owners and their agents and potential buyers of the Flood Plain development permit issued on the property and that such property is located within a Regulated Flood Hazard Area; (ARM 36.15.204(2)(g))
4. Maintain the artificial obstruction or use to comply with the conditions and specifications of the permit;
5. Allow the Flood Plain Administrator to perform on site inspections at select intervals during construction or completion.
6. Impose interim reporting to the Flood Plain Administrator of construction data to confirm design elevations and other project design criteria.
7. Submit a certificate of compliance report and elevation certificate where applicable within 30 days of completion or other time as specified; and
8. Require FEMA approval of revisions that affected National Flood Insurance Rate Map.

SECTION 9. DEVELOPMENT REQUIREMENTS IN THE FLOODWAY

9.1 USES REQUIRING PERMITS Uses specifically listed in Section 9 may be allowed by permit within the Floodway, subject to the described requirements.

9.2 GENERAL REQUIREMENTS An application for a permit must demonstrate the following goals and criteria are considered and incorporated into the design of any use or artificial obstruction in the Floodway requiring a permit:

1. All projects in the Floodway where specifically required herein as requiring an encroachment analysis, must undergo a thorough hydrologic and hydraulic analysis prepared by an engineer to demonstrate their effect on flood flows, velocities and the Base Flood Elevation. (ARM 36.15.604, 44 CFR 60.3(d)(3 and 4))
 1. A conditional approval from FEMA of any proposed increase of more than zero (0.00) feet in the Base Flood Elevation must accompany the application. An application for a FEMA Conditional Letter of Map Revision approval requires a supporting encroachment analysis. (44CFR 65.12(a))
 2. The maximum allowable increase to the Base Flood Elevation is one half foot (0.50), unless approval of an alteration of the Regulated Flood Hazard Area pursuant to Section 4 occurs with approval of the variance pursuant to Section 12. (36.15.505)
2. Projects must assure that the carrying capacity of the altered or relocated watercourse is maintained. (44CFR 60.3(b)(7) (ARM 36.15.605(b))
3. Projects must be designed and constructed to ensure that they do not increase the flood hazard on other properties (cite)and be reasonably safe from flooding.(44 CFR 60.3(a)(3 and4)
4. The danger to life and property due to backwater or diverted flow caused by the obstruction or use; (MCA 76-5-406) (ARM 36.15.216(2)(a))
5. The danger that the obstruction or use may be swept downstream to the injury of others; (MCA 76-5-406) (ARM 36.15.216(2)(b))
6. The availability of alternative locations; (MCA 76-5-406) (ARM 36.15.216(2)(c))

7. The construction or alteration of the obstruction or use in such manner as to lessen the flooding danger; (MCA 76-5-406) (ARM 36.15.216(2)(d))
8. The permanence of the obstruction or use; (MCA 76-5-406) (ARM 36.15.216(2e))
9. The anticipated development in the foreseeable future of the area which may be affected by the obstruction or use; (MCA 76-5-406) (ARM 36.15.216(2f))
10. Relevant and related permits for the project have been obtained;
11. Projects must conform to the additional minimum standards and provisions of this ordinance as specified for the use or artificial obstruction specified herein; and
12. Such other factors as are in harmony with the purposes of these regulations, the Montana Flood Plain and Floodway Management Act, and the accompanying Administrative Rules of Montana. (MCA 76-5-406) (ARM 36.15.216(2)(g))
13. The safety of access to property in times of flooding for ordinary and emergency services; (44CFR 60.22 (c)(7)) (**Higher Standard**)

9.3 MINING OF MATERIAL REQUIRING EXCAVATION FROM PITS OR POOLS provided that:

1. A buffer strip of undisturbed land of sufficient width as determined by an engineer to prevent flood flows from channeling into the excavation is left between the edge of the channel and the edge of the excavation;
2. The excavation meets all applicable laws and regulations of other local and state agencies; and
3. Excavated material may be processed on site but is stockpiled outside the Flood Plain.(ARM 36.15.602(1))

9.4 RAILROAD, HIGHWAY AND STREET STREAM CROSSINGS provided that:

1. Crossings are designed to offer minimal obstructions to the flood flow; (ARM 36.15.602(2))
2. Where failure or interruption of public transportation facilities would result in danger to public health or safety and where practicable and in consideration of FHWA Federal-Aid Policy Guide 23CFR650A:
 1. Bridge lower chords shall have freeboard to at least two (2) feet above the Base Flood Elevation to help pass ice flows, the base flood discharge and any debris associated with the discharge; and

2. Culverts are designed to pass the base flood discharge and maintain at least two (2) feet freeboard on the crossing surface.
3. If possible, normal overflow channels are preserved to allow passage of sediments to prevent aggradations;
4. Mid stream supports for bridges, if necessary, have footings buried below the maximum scour depth; and
5. An encroachment analysis is prepared by an engineer.

9.5 LIMITED FILLING FOR ROAD, AND RAILROAD EMBANKMENTS not associated with stream crossings and bridges provided that:

1. The fill is the suitable fill;
2. Reasonable alternate transportation routes outside the floodway are not available;
3. The encroachment is located as far from the stream channel as possible; (ARM 36.15.602(3))
4. The project includes mitigation of impacts to other property owners in the vicinity of the project and the natural stream function; and
5. An encroachment analysis is prepared by an engineer.

9.6 BURIED OR SUSPENDED UTILITY TRANSMISSION LINES provided that:

1. Suspended utility transmission lines are designed such that the lowest point of the suspended line is at least six (6) feet higher than the Base Flood Elevation;
2. Towers and other appurtenant structures are designed and placed to withstand and offer minimal obstruction to flood flows;
3. When technically feasible, the crossing will not disturb the bed and banks of the stream and alternatives such as alternative routes, directional drilling, and aerial crossings are considered; and
4. Utility transmission lines carrying toxic or flammable materials are buried to a depth of at least twice the calculated maximum scour depth determined by an engineer for the base flood. (ARM 36.15.602(4))

9.7 STORAGE OF MATERIALS AND EQUIPMENT provided that:

1. The material or equipment is not subject to major damage by flooding and is properly anchored to prevent flotation or downstream movement; and
2. The material or equipment is readily removable within the limited time available after flood warning. Storage of flammable, toxic or explosive materials shall not be permitted.(ARM 36.15.602(5))

9.8 DOMESTIC WATER SUPPLY WELLS provided that:

1. They are driven or drilled wells located on ground higher than surrounding ground to assure positive drainage from the well;
2. They require no other structures (e.g. a well house);
3. Well casings are water tight to a distance of at least twenty five (25) feet below the ground surface and the well casing height shall be a minimum of eighteen (18) inches above the base flood elevation;
4. Water supply and electrical lines have a watertight seal where the lines enter the casing;
5. All pumps and electrical lines and equipment are either of the submersible type or are adequately flood proofed; and
6. Check valves are installed on main water lines at wells and at all building entry locations. (44 CFR 60.39(a)(5) & ARM 36.15.(602(6))

9.9 BURIED AND SEALED VAULTS FOR SEWAGE DISPOSAL IN

CAMPGROUNDS AND RECREATIONAL AREAS provided they meet applicable laws and standards administered by Montana Department of Environmental Quality. Only those **wastewater disposal systems** that meet the requirements and separation distances under ARM 17.36.101-116 and ARM 17.36.301-345 are allowed. (44 CFR 60.3(a)(6))

9.10 PUBLIC AND PRIVATE CAMPGROUNDS provided that:

1. Access roads require only limited fill and do not obstruct or divert flood waters; (36.15.602(8))
2. Meet the accessory structures requirements;
3. An encroachment analysis must be prepared by an engineer; (ARM 36.15.602(2))
4. No dwellings or permanent mobile homes are allowed; (36.15.602(8))

5. Recreational vehicles and travel trailers are ready for highway use with wheels intact, with only quick disconnect type utilities and securing devices, and have no permanently attached additions; and (44 CFR 60.3(c)(14)
6. There is no large-scale clearing of riparian vegetation within 50 feet of the mean annual high water mark. (Higher Standard)

9.11 STRUCTURES ACCESSORY OR APPURTENANT to permitted uses such as boat docks, loading and parking areas, marinas, sheds, emergency airstrips, permanent fences crossing channels, picnic shelters and tables and lavatory, provided that:

1. The structures are not intended for human habitation or supportive of human habitation;
2. If the structures are substantial as determined by the permit issuing authority, an encroachment analysis must be prepared by an engineer. (ARM 36.15.602(2));
3. The structures will, insofar as possible, be located on ground higher than the surrounding ground and as far from the channel as possible;
4. Only those wastewater disposal systems that meet the requirements and separation distances under ARM 17.36.101-116 and ARM 17.36.301-345 are allowed;
5. Service facilities within these structures such as electrical, heating and plumbing are flood proofed;
6. Structure are firmly anchored to prevent flotation; (ARM 36.15.602(9))
7. The structures do not require fill and/or substantial excavation;
8. No large scale clearing of riparian vegetation within 50 feet of the mean annual high water mark, and;(ARM 36.15.602(9))
9. The structures or use cannot be changed or altered without permit approval.

9.12 CONSTRUCTION OF OR MODIFICATIONS TO SURFACE WATER DIVERSIONS provided that the design is prepared by an engineer and includes:

1. An encroachment analysis is prepared by an engineer. (ARM 36.15.602(2));
2. Minimize potential erosion from a base flood;

3. Safely withstand up to the base flood; and (ARM 36.15.603)
4. Construction is under the supervision of an engineer.

9.13 FLOOD CONTROL AND BANK PROTECTION MEASURES Must be designed by an engineer and constructed to withstand the flood depths, hydrodynamic and hydrostatic pressures, velocities, impact, buoyancy, and uplift forces associated with the base flood and include an encroachment analysis. The design shall also show compliance with the following additional criteria: (CFR 60.3(a)(3), CFR 60.3(d)(3), ARM 36.15.606)

1. LEVEE AND FLOODWALL construction or alteration:

1. The proposed construction or alteration of a levee or floodwall must be designed and constructed with suitable fill and to safely convey a base flood;
2. Except to protect agricultural land only, are constructed at least 3 feet higher than the elevation of the base flood;
3. Unless to protect only agricultural land, protection of structures of more than one land owner requires engineering and construction to meet state and federal levee standards and be publically owned for the purpose of construction, operation and maintenance; and (36.15.505(1)(c)(ii)and (iii))
4. For any increase in the elevation of the base flood the following information must be provided:
 1. The estimated cumulative effect of other reasonably anticipated future permissible uses;
 2. The type and amount of existing flood prone development in the affected area; and
 3. Impacts to existing or foreseeable development.(ARM 36.15.606(a))

2. BANK STABILIZATION PROJECTS, PIER AND ABUTMENT PROTECTION projects if:

1. The Materials for the project should be the least environmentally damaging and practicable designed to withstand a base flood within 5 years or other time as required by the Flood Plain Administrator and does not require substantial yearly maintenance after that period.
2. Materials for the project may be designed to erode over time but not fail catastrophically and impact others. Erosions and raveling of the materials may be designed to be a least similar in amount and rate to existing natural stream banks during the base flood.
3. The project must not increase erosion upstream, downstream, or adjacent to the site.(ARM 36.15.606(1)(b))

4. Materials for the project may include but not limited to rip rap, root wads, brush mattresses, willow wadding, woody debris or combinations of analogous materials. (36.15.606(b))
5. The stream's biological capacity and habitat potential shall be incorporated in the project design.
6. The project includes compensating efforts by replacing and providing substitute resources or environments through creation, restoration, enhancement or preservation of similar or appropriate resource areas. (Higher Standard)

3. **CHANNELIZATION PROJECTS** where the excavation and/or construction of an artificial channel is for the purpose of diverting the entire flow of a stream from its established course (ARM 36.15.101(7)) and provided the projects do not increase velocity to a level that will cause erosion. (ARM 36.15.606(1)(c))

4. **DAMS** provided:

1. The design and construction is in accordance with the Montana Dam Safety Act and applicable safety standards; and
2. The project will not increase flood hazards downstream either through operational procedures or improper hydrologic/hydraulic design. (ARM 36.15.606(1)(d))

9.14 STREAM AND BANK RESTORATION projects intended to reestablish the terrestrial and aquatic attributes of a natural stream and not for protection of a structure or development provided:

1. The project design is reviewed and approved by an engineer.
2. An encroachment analysis is performed by an engineer.
3. The project will not increase erosion upstream, downstream, or adjacent to the site.
4. Materials may include but are not limited to rip rap, root wads, brush mattresses, willow wadding, woody debris or combinations of analogous materials.
5. Erosions and raveling of the materials are similar in amount and rate to existing natural stream banks during the base flood.
6. The project meets the terrestrial and aquatic resource capabilities of the area.

SECTION 10. DEVELOPMENT REQUIREMENTS IN THE FLOOD FRINGE OR REGULATED FLOOD HAZARD AREA WITH NO FLOODWAY

10.1 USES REQUIRING PERMITS – All uses and the associated requirements allowed by permit in the Floodway shall also be allowed by permit within the Flood Fringe or Regulated Flood Hazard area with no Floodway. Additionally, new construction, substantial improvements, alterations to structures (including, but not limited to residential, commercial, agricultural and industrial, and suitable fill shall be allowed by permit subject to the minimum development requirements in General Requirements, Section 9.2 and this section. (ARM 36.15.701(2)):

10.2. GENERAL REQUIREMENTS are:

1. **Base Flood Elevation** The appropriate base flood elevation(s) shall be determined by appropriate methods and utilized in the design and layout of the project by an engineer demonstrating the appropriate design and construction criteria herein are met. Regulated Flood Hazard Areas that do not have computed and published base flood elevations in the adopted flood hazard study referenced in Section 4, Jurisdictional Area, the Base Flood Elevation must be computed as well, utilizing appropriate engineering methods and analysis;
2. **Flood Damage** Projects must be constructed by methods and practices that minimize flood damage and are reasonably safe from flooding; (44 CFR 60.3(a)(3)(iii))
3. **Materials** Structures are reasonably safe from flooding and constructed with materials resistant to flood damage; and (44 CFR 60.3(a)(3)(ii))
3. **Structures or fill** Structures or fill must not be prohibited by any other statute, regulation, ordinance, or resolution; and must be compatible with subdivision, zoning and any other land use regulations, if any; (ARM 36.15.701(3)(a)) ((ARM 36.15.701(3)(b))
4. **Anchoring** All construction and substantial improvements shall be designed and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;(44CFR 60.3(a)(3))
5. **Certification** Certification by an engineer, architect, or other qualified person must accompany the application as to an encroachment analysis where required, adequacy of structural elevations, determination of the base flood elevation, flood-

proofing, wet proofing, dry proofing, design and construction to withstand the flood depths, hydrodynamic and hydrostatic pressures, velocities, impact, buoyancy, and uplift forces associated with the base flood. A certification is not intended to constitute a warranty or guarantee of performance, expressed or implied;

6. **Access** Structures must have safe access during times of flooding up to the base flood for ordinary and emergency services provided there are no reasonable alternate locations for structures; **(Higher Standard)**

7. **Encroachment Limit** Allowable encroachment for developments in the Regulated Flood Hazard Area without a Floodway must be supported by an encroachment analysis and cannot exceed 0.5 feet increase to the Base Flood Elevation. An encroachment analysis is not required for any development in the Flood Fringe where an accompanying Floodway has been designated within the Regulated Flood Hazard Area;

8. **Electrical Systems**

1. All incoming power service equipment including all metering equipment, control centers, transformers, distribution and lighting panels and all other stationary equipment must be located at least two feet above the Base Flood Elevation.
2. Portable and movable electrical equipment may be placed below the elevation of the Base Flood Elevation, provided that the equipment can be disconnected by a single plug and socket assembly of the submersible type;
3. The main power service lines must have automatically operated electrical disconnect equipment or manually operated electrical disconnect equipment located at an accessible remote location outside the Flood Plain or two feet above the Base Flood Elevation; and
4. All electrical wiring systems installed below the base flood elevation must be suitable for continuous submergence and may not contain fibrous components. (ARM 36.15.901)

9. **Heating and Cooling Systems**

1. Be installed with float operated automatic control valves so that fuel supply is automatically shut off when flood waters reach the floor level where located;
2. Have manually operated gate valves installed in gas supply lines. The gate valves must be operable from a location above the Base Flood Elevation;
3. Be installed in accordance with the provisions of Electrical Systems Flood proofing; and

4. Have furnaces and cooling units and ductwork installed at least two (2) feet above the Base Flood Elevation. (ARM 36.15.902)

10. **Plumbing Systems**

1. Sewer lines, except those to be buried and sealed, must have check valves installed to prevent sewage backup into permitted structures; and
2. All toilets, stools, sinks, urinals, vaults, and drains must be located so the lowest point of possible entry is at least two (2) feet above the Base Flood Elevation. (ARM 36.15.903)

11. **Structural Fill**: Fill used to elevate structures, including but not limited to residential, commercial, and industrial structures must be suitable and meet the following requirements:

1. The filled area is at or above the Base Flood Elevation and extends at least 15 feet beyond the structure in all directions;
2. The fill is compacted to minimize settlement and compacted to 95 percent of the maximum density. Compaction of earthen fill must be certified by a registered professional engineer;
3. No portion of the fill is within the floodway;
4. The fill slope must not be steeper than 1 ½ horizontal to 1 vertical unless substantiating data justifying a steeper slope is provided and adequate erosion protection is provided for fill slopes exposed to floodwaters. The erosion protection for fill slopes exposed to velocities of four feet per second and less may consist of vegetative cover consisting of grasses or similar undergrowth as approved by the permit issuing authority. Slopes exposed to velocities greater than four feet per second shall be protected by armoring with stone or rock slope protection; and (ARM 36.15.701&702)
5. The fill must be a minimum of 0.5 feet above the Base Flood Elevation. (Higher Standard);
6. No portion of the fill is in the estimated floodway if none has been designated(Higher Standard)
7. Mitigation may be required for lost natural flood storage due to added fill.(Higher Standard)

12. **Water And Sewage Systems**

All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other services

designed and located so as to prevent waters from entering or accumulating within the components during conditions of flooding or to prevent impairment or contamination during flooding;(44 CFR 60.3 (a)(5 and 6))

10.3. RESIDENTIAL REQUIREMENTS New construction, alterations, and substantial improvements of residential dwellings including manufactured homes and recreational vehicles on site for more than 180 consecutive days must be constructed such that:

1. The lowest floor elevation (including basement) including electrical, heating, duct work, ventilation, plumbing and air conditioning equipment and other services is two (2) feet above the Base Flood Elevation. Elevating may be by either suitable fill, stem walls, pilings or other acceptable means;
2. Crawl spaces must be designed so that the crawl space floor is at or above the Base Flood Elevation. Crawl spaces having an inside dimension of more than five (5) feet from the ground to the living floor level must meet the requirements in this section for a basement;
3. Where existing streets, utilities, lot dimensions, or additions onto existing structures make strict compliance with these provisions impossible, a lesser amount of fill or alternative flood proofing measures may be permitted only by variance approval; and (ARM 36.15.702(a))
4. All **manufactured homes** for residential use shall:
 1. Use methods and practices which minimize flood damage;
 2. Elevate the lowest floor two (2) feet above the base flood elevation;
 3. Elevate on suitable fill or be raised on a permanent foundation;
 4. Have a foundation consisting of reinforced concrete, reinforced-mortared block, reinforced piers, or other foundation elements of equal strength; and
 5. Secure the chassis, including additions by anchoring to the foundation system so that it will resist flotation, collapse or lateral movement. Anchoring may include, but are not limited to:
 1. Over-the-top ties to ground anchors be provided at each of the four (4) corners of the mobile home, with two additional ties per side at intermediate locations for manufactured homes less than fifty (50) feet long;

2. Frame ties to ground anchors be provided at each corner of the home with five (5) additional ties per side at intermediate points, for manufactured homes more than fifty (50) feet long; and
 3. Components of the anchoring system capable of carrying a force of 4,800 pounds.
6. Adequate surface drainage and access for a hauler. (44 CFR 60.3(c)(6)&(12))

10.4 NON-RESIDENTIAL REQUIREMENTS New construction, alterations, and substantial improvements of commercial and industrial buildings must be constructed on suitable fill, stem walls, pilings or other suitable means such that the lowest floor elevation (including basement) is two (2) feet above the Base Flood Elevation, or if not the building must be adequately dry or wet flood proofed as follows. Manufactured homes proposed for use as commercial or industrial buildings cannot be wet or dry flood proofed. Also, agricultural structures used solely for agricultural purposes and used exclusively in connection with the production, harvesting, storage, drying, or raising agricultural commodities including raising of livestock, not be intended for human habitation, and having low flood damage potential are exempt from dry or wet flood proofing but shall:

1. Be located on higher ground and as far from the channel as possible;
2. Offer minimum obstruction to flood flows;
3. Be adequately anchored to prevent flotation or collapse;
4. Where electrical, heating and plumbing systems are installed, must flood proofing requirements in this Section; and
5. Meet the elevation or dry flood proofing requirements if the structure is an animal confinement facility.

(ARM 36.15.701(3)(e)) (44 CFR 60.3(c)(3)(ii) & 44 CFR 60.3(b)(5)(ii)) (ARM 36.15.702(2) & 44 CFR 60.3(c)(3) & (4)).

1. **Wet Flood proofing:** Building designs to allow internal flooding of the lowest floor must:
 1. Limit uses to parking, loading areas, and storage of equipment or materials not appreciably affected by floodwaters;
 2. Use materials for walls and floors that are resistant to flooding to an elevation two (2) feet or more above the Base Flood Elevation;
 3. Equalize hydrostatic forces on walls by designing for entry and exit of floodwaters that include screens, louvers, valves, and other coverings or devices that:
 1. Automatically allow entry and exit of floodwaters;

2. Have two(2) or more openings with a total net area of not less than one(1) square inch for every one(1)square foot of enclosed area subject to flooding; and
 3. Have the bottom of all openings no higher than one(1) foot above grade. (ARM 36.15.702(2)(a) & 44 CFR 60.3(c)(5))
2. **Dry Flood proofing** Buildings designs that not allow internal flooding of the lowest floors must be:
1. Used for a purpose other than parking, loading, or storage of materials resistant to flooding shall be dry flood proofed;
 2. Flood proofed to an elevation no lower than two (2) feet above the BFE;
 3. Constructed of impermeable membranes or materials for floors and walls and watertight enclosures for all windows, doors and other openings; and
 4. Designed to withstand the hydrostatic pressures and hydrodynamic forces resulting from the base flood.

SECTION 11. EMERGENCIES

11.1 General

Emergency repair and replacement of severely damaged artificial obstructions and development including public transportation facilities, public water and sewer facilities, flood control works, and private projects in the Regulated Flood Hazard Area are subject to the permitting requirements of these regulations.

The provisions of these regulations are not intended to affect other actions that are necessary to safeguard life or structures during periods of emergency.

11.2 Emergency Application Requirements

1. Prior to any action, the property owner and or the person responsible for taking emergency action shall notify the Flood Plain Administrator and follow-up by submitting an Emergency Notification Form within five (5) days of the action taken as a result of an emergency.
2. Unless otherwise specified by the Flood Plain Administrator, within 30 days of initiating the emergency action, a person who has undertaken an emergency action must submit a Flood Plain Permit Application that describes what action has taken place during the emergency and describe any additional work that may be required to bring the project in compliance with these regulations.
(ARM 36.15.217)

11.3 Permit Evaluation

1. A person who has undertaken an emergency action may be required to modify or remove the project in order to meet the permit requirements.

SECTION 12. VARIANCES

12.1 GENERAL - A variance from the minimum development standards of these regulations may be allowed. An approved variance would permit construction in a manner otherwise as required or prohibited by these regulations. (44 CFR 59.1)

12.2 VARIANCE APPLICATION REQUIREMENTS:

1. A completed Flood Plain Permit Application and required supporting material must be submitted.
2. Additionally, a completed Variance Application specific to the variance request including facts and information addressing the criteria in this section must be submitted; and
3. If the Flood Plain permit application and variance application is deemed not correct and complete, the Flood Plain Administrator shall notify the applicant of deficiencies within a reasonable time not to exceed 30 days. Under no circumstances should it be assumed that the variance is automatically granted.

12.3 NOTICE REQUIREMENTS FOR FLOOD PLAIN VARIANCE APPLICATION

Public Notice of the Flood Plain Permit and Variance Application shall be given pursuant to Section 8.2.

12.4 EVALUATION OF VARIANCE APPLICATION

1. A variance shall only be issued upon a determination that the variance is the minimum allowance necessary, considering the flood hazard, to afford relief from these regulations and provided all of the findings are met:
 1. There is a a good and sufficient cause; (44 CFR 60.6(a)(3))
 2. Failure to grant the variance would result in exceptional hardship to the applicant; (44 CFR 60.3(a)(3)) & ARM 36.15.218(b))
 3. There are no basements nor residential dwelling that has the lowest floor elevation below the Base Flood Elevation.
 4. Crawl Spaces floor are no more than two(2) feet below the exterior lowest adjacent grade and must have an inside dimension from interior ground to the bottom of the living floor of less than five (5) feet. The crawl spaces must meet the dry flood proofing requirements in Section 10.4.1.

5. Granting of a variance will not result in increased flood heights to existing insurable buildings, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with other existing local laws or ordinances; (44 CFR 60.6 (a)(3) & (ARM 36.15.218(a)).
 6. The proposed use is adequately flood proofed; (ARM 6.15.218(c))
 7. The variance is the minimum necessary, considering the flood hazard, to afford relief; (44CFR 60.6(a)(4)
 8. Reasonable alternative locations are not available; (MCA 76-5-406(3) & ARM 36.15.218(d))
 9. There is no danger to life and property by water that may be backed up or diverted by the obstruction or use; (MCA 76-5-406(1)
 10. There is no danger that the obstruction or use will be swept downstream to the injury of others;(MCA 76-5-406(2)
 11. Incorporates measures in the construction or alteration of the obstruction or use that lessens the danger; (MCA 76-5-406(4))
 12. The permanence of the obstruction or use; (MCA 76-5-406(5)).
 13. There is no adverse affect to anticipated development in the foreseeable future of the area that may be affected by the obstruction or use; (44 CFR 60.6(a)(3), MCA 76-5-406(6) & ARM 36.15.218)).
 14. There is no adverse affect to existing properties or structures; and
 15. Any increase to the Base Flood Elevation in a Floodway has been approved by FEMA for flood insurance purposes and any increase to the Base Flood Elevation in the Floodway or Flood Plain of more than 0.5 feet is an alteration of the Regulated Flood Hazard Area has been duly amended pursuant to Section 4. (44 CFR 60.6(a)(1))
2. Special Considerations for variance approval:
1. If the new construction or substantial improvements on a lot of one-half acres or less is contiguous to and surrounded by lots of existing structures constructed below the base flood elevation, a variance may be approved. However, as lot sizes increase beyond one-half acre additional technical justification may be required; and (44CFR60.6(a).

2. Historic Structures – 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 relief necessary to preserve the historic character and design of the structure. (44 CFR 60.6(a))

12.5 DECISION

1. The {Board of Adjustment, County Commission, or other panel} shall:
 1. Evaluate the application using the criteria and findings in this section, the application requirements and minimum development standards in Section 9 and 10;
 2. Hear, make findings, and approve, conditionally approve or deny a variance within 60 days of a complete application.
 3. Attach conditions to the granting of variance including a project completion date and inspections during and after construction.
 4. Notify the applicant that the issuance of a variance to construct a structure below the base flood level may result in increased premium rates for flood insurance and that flood insurance premiums are determined by actuarial risk and will not be modified by the granting of a variance . (44CFR 60.6(a))
 5. Grant approval only if the jurisdictional area of the Regulated Flood Hazard Area has been approved pursuant to Section 4.3, Alteration of Jurisdictional Area.
2. The Flood Plain Administrator shall maintain a record of all actions involving a variance, including the Board's findings and decision and shall send a copy of each variance granted to DNRC.(44 CFR 60.6(a)(6) & MCA 76-5-405)
3. The Flood Plain Administrator shall report such variances issued in the biennial report submitted to FEMA. (44 CFR 60.6(a)(6))

12.6 JUDICIAL REVIEW

Any person or persons aggrieved by the variance decision may appeal such decision in the courts of competent jurisdiction. (MCA 76-5-209(1))

SECTION 13. APPEALS

13.1 GENERAL An appeal is a formal review by the {Board of Adjustment, County Commission, or other panel} of the Flood Plain Administrator's order, or granting or denial of a flood plain development permit.

13.2 APPEALS REQUIREMENTS - An Appeal to the Board shall include:

1. An appeal shall include the basis of the appeal and supporting information including specific findings and conclusions of the Flood Plain Administrator's decision being appealed;
2. An appeal must be submitted by an applicant or anyone who may be aggrieved by the Flood Plain Administrator's decision or order;
3. Appeals must be received within 30 days of the date of the decision or order of the Flood Plain Administrator; and
4. Additional information specific to the appeal request may be requested.

13.3 NOTICE AND HEARING

1. Notice of the pending appeal and public hearing shall be provided pursuant to Section 8.2. The Flood Plain Administrator may notify DNRC and FEMA of pending appeals.
2. A public hearing must be held within 30 days of the Notice unless set otherwise.

13.4 DECISION

A judgment on an appeal shall be made within 30 days of the hearing unless set otherwise. The decision must grant the permit, modify or deny the permit or remand the application to the Flood Plain Administrator with instructions or directions. A decision on an appeal of a permit cannot grant or issue a variance.

13.5 JUDICIAL REVIEW

Any person or persons aggrieved by the decision may appeal such decision in the courts of competent jurisdiction. (MCA 76-5-209(1))

SECTION 14. ENFORCEMENT

- 14.1. INVESTIGATION REQUEST** An investigation of an artificial obstruction or nonconforming use within the Regulated Flood Hazard Area may be made either on the initiative of the Flood Plain Administrator or on the written request of three titleholders of land which may be affected by the activity within the Regulated Flood Hazard Area. The names and addresses of the persons requesting the investigations shall be released if requested. (MCA 76-5-105)
- 14.2. NOTICE TO ENTER AND INVESTIGATE LANDS OR WATERS** The Flood Plain Administrator may make reasonable entry upon any lands and waters for the purpose of making an investigation, inspection or survey to verify compliance with these regulations.
1. The Flood Plain Administrator shall provide notice of entry by mail, electronic mail, phone call, personal delivery to the owner, owner's agent, lessee, or lessee's agent whose lands will be entered.
 2. If none of these persons can be found, the Flood Plain Administrator shall affix a copy of the notice to one or more conspicuous places on the property for five (5) days.
 3. If the owners do not respond, cannot be located or refuse entry to the Flood Plain Administrator, the Flood Plain Administrator may only enter the property through a Search Warrant.
- 14.3. NOTICE TO RESPOND AND ORDER TO TAKE CORRECTIVE ACTION** When the Flood Plain Administrator determines that a violation may have occurred, the Flood Plain Administrator may issue written notice to the owner or an agent of the owner, either personally or by certified mail. Such notice shall cite the regulatory offense and include an order to take corrective action within a reasonable time or respond requesting an administrative review.
- 14.4. ADMINISTRATIVE REVIEW** The order is final, unless within five (5) working days or any granted extension, after the order is received, the owner submits a written request for an administrative review before the Flood Plain Administrator. A request for an administrative review does not stay the order.
- 14.5. APPEAL OF ADMINISTRATIVE DECISION** Within ten(10) working days or any granted extension of receipt of the Flood Plain Administrator's decision concluding the administrative review, the property owner or owner's agent may appeal the decision to the **Board**.
- 14.6. FAILURE TO COMPLY WITH ORDER TO TAKE CORRECTIVE ACTION** If the owner fails to comply with the order for corrective action, remedies may include administrative or legal actions, or penalties through court.

14.7. JUDICIAL REVIEW Any person aggrieved by the decision may appeal the decision to a court of competent jurisdiction.

14.8. OTHER REMEDIES This section does not prevent efforts to obtain voluntary compliance through warning, conference, or any other appropriate means. Action under this part shall not bar enforcement of these regulations by injunction or other appropriate remedy.

SECTION 15. PENALTIES

15.1 MISDEMEANOR Violation of the provisions of these regulations or failure to comply with any of the requirements, including failure to obtain permit approval prior to development in the Regulated Flood Hazard Area, shall constitute a misdemeanor and may be treated as a public nuisance.

Any person who violates these regulations or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$100 or imprisoned for not more than 10 days or both. Each day's continuance of a violation shall be deemed a separate and distinct offense. (MCA 76-5-110)

15.2 DECLARATION TO THE FEDERAL FLOOD INSURANCE

ADMINISTRATOR Upon finding of a violation and failure of the owner to take corrective action as ordered, the Flood Plain Administrator may submit notice and request a 1316 Violation Declaration to the Federal Insurance Administrator. The Federal Insurance Administrator has the authority to deny new and renewal of flood insurance policies for a structure upon finding a valid violation declaration.

The Flood Plain Administrator shall provide the Federal Insurance Administrator the following declaration:

1. The name(s) of the property owner(s) and address or legal description of the property sufficient to confirm its identity and location;
2. A clear and unequivocal declaration that the property is in violation of a cited State or local law, regulation or ordinance;
3. A clear statement that the public body making the declaration has authority to do so and a citation to that authority;
4. Evidence that the property owner has been provided notice of the violation and the prospective denial of insurance; and
5. A clear statement that the declaration is being submitted pursuant to section 1316 of the National Flood Insurance Act of 1968, as amended.
(44CFR73.3)