TOWN OF BEARCREEK
FLOOD PLAIN MANAGEMENT ORIDINANCE

TITLE 9 Chapter 1

FLOOD CONTROL

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WHEREAS, the Town of Bearcreek's participation in the National Flood Insurance Program (NFIP) is based upon a mutual agreement with FEMA. In return for the local adoption and enforcement of floodplain management regulations that meet the minimum criteria of the NFIP, the Federal Emergency Management Agency (FEMA) provides the availability of flood insurance coverage within the Town of Bearcreek. These floodplain management regulations must meet the minimum criteria of the NFIP and the Town of Bearcreek is responsible for administering and enforcing these local floodplain management requirements pursuant to the Town's own authority and procedures. FEMAperiodically evaluates the administration and enforcement of the floodplain management program in relation to the NFIP regulations and has the authority to impose the penalties of probation and/or suspension for the Town of Bearcreek if the overall floodplain management program is found to be inadequately administered or enforced; and

WHEREAS, the Montana Department of Natural Resources and Conservation (MTDNRC) supports the National Flood Insurance Program and serves as the state liaison with FEMAto coordinate activities and provide support, technical assistance, training, and outreach to City and County officials in the execution of their duties to identify, prevent, and resolve floodplain management issues; and

WHEREAS, it is the intent of this Ordinance to provide for the safety of the residents living or working along the rivers, streams and drainages in the Town of Bearcreek by adopting land uses and common sense building practices. Maps showing the established and/or documented floodplains in the Town of Bearcreek are available in the Bearcreek Town Hall, Carbon County Planning office or at www.fema.gov;

NOW, THEREFORE BE IT ORDAINED by the Town of Bearcreek, as follows:

Section 1: the Town of Bearcreek council hereby adopts this Ordinance as set forth below:

9.1 GENERAL FLOODPLAIN REGULATIONS

9.1.1: **TITLE:** This Ordinance shall be known and cited as the *Town of Bearcreek Floodplain Management Ordinance.* This Ordinance is in accordance with and exercising the authority of laws of the State of Montana, Chapter 5, Floodplain and Floodway Management, 76-5-101 through 76-5-406, Montana Code Annotated 2009, and following the guidance of the Code of Federal Regulations administered by the Federal Emergency Management Agency (FEMA), and the Montana DNRCstandards.

9.1.2: **FINDINGS OF FACT:**

A. The flood hazard areas of Town of Bearcreek are subject to periodic inundation, which results 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 public health, safety and general welfare.

B. 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.

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

A. Protect human life and health;

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

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

D. Minimize prolonged business interruptions;

E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

F. 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

G. Insure that potential buyers are notified that property is in a flood area.

9.1.4: **METHODS OF REDUCING FLOOD LOSSES:** In order to accomplish its purposes, this Ordinance uses the following methods:

A. 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;

B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

C. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;

D. Control filling, grading, dredging and other development which may increase flood damage;

E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

9.1.5: **INTENT:** This Ordinance is passed in order to comply with the Montana Floodplain and Floodway Management Act (Title 76, Chapter 5, MCA) and to ensure compliance with the requirements for the participation by the Town of Bearcreek in the National Flood Insurance Program. Development regulations are hereby adopted are to be applied to all identified Special Flood Hazard Areas within the local jurisdiction.

9.1.6: **STATUTORY AUTHORITY:** Municipalities have authority to adopt ordinances as provided for in Section 7-1-4123, MCA to promote the general public health and welfare. Other authority for municipalities and counties to adopt floodplain management regulations appears in Section 76-5-101 through 406, MCA.

9.2 DEFINITIONS

9.2.1: **DEFINITIONS:** Unless specifically defined below, words or phrases used in these regulations shall be interpreted to give them the meaning they have in common usage and to give these regulations the most reasonable application.

ACCESSORYSTRUCTURE:	A structure that is accessory to, or in addition to, any use that is permitted in these regulations (e.g. - a picnic shelter would be accessory to a campground). An Accessory Structure is secondary to the primary use that is permitted and complies with all other conditions imposed by these regulations and otherwise provided for by law. Accessory structures are also referred to as appurtenant structures. An accessory structure is a structure which is in the same property ownership as a principal structure and the use which is incidental to the use of the principal structure. For example, a residential structure may have a detached garage or storage shed for garden tools as accessory structures. Other examples of accessory structures include gazebos, picnic pavilions, boathouses, small pole barns, storage sheds, and similar buildings. NFIP regulations for new construction generally apply to new and substantially improved accessory structures.
ACT:	The statutes authorizing the National Flood Insurance Program that are incorporated in 42 U.S.C. 4001-4128, or Montana Floodplain and Floodway Management Act, Montana Code Title 76, Chapter 5.
ACTURIAL RATES:	See “Risk Premium Rates”
ALTERATION:	Any change or addition to a structure that either increases it external dimensions or increases its potential flood hazard.
APPEAL:	A request for a review of the Town of Bearcreek’s floodplain administrator’s interpretation of any provisions of these regulations or a request for a variance.
AREA OF FUTURE CONDITIONS OF FLOOD HAZARD:	The land area that would be inundated by the one percent (1%) annual-chance (100-year) flood based on future conditions hydrology.
AREA OF SHALLOW FLOODING:	A designated zone on the Digital Flood Insurance Rate Map (DFIRM) with a 1 percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD: The land in the floodplain within the community subject to inundation by a one percent (1%) or greater chance of flooding in any given year; also commonly referred to as the 100-year floodplain. The area may be designated as Zone A on the DFIRM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, Al-30, AE, A99, AR, AR/Al-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or Vl-30, VE, or V. For purposes of these regulations the term "SPECIAL FLOOD HAZARD AREA" is synonymous in meaning with the phrase "AREAOF SPECIAL FLOODHAZARD."

AREA OF SPECIAL FLOOD-RELATED EROSION HAZARD: The land which is most likely to be subject to severe flood-related erosion losses. The area may be designated as Zone E on the Digital Flood Insurance Rate Maps (DFIRM). After the detailed evaluation of the special flood-related erosion hazard area in preparation for publication of the DFIRM, Zone E may be further refined.

ARTIFICIAL OBSTRUCTION/DEVELOPMENT: Any obstruction which is not natural and includes any 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 Special Flood Hazard Area which may impede, retard or alter the pattern of 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 water would carry the same downstream to the damage or detriment of either life or property.

BASEFLOOD: A flood having a one percent (1%) chance of being equaled or exceeded in any given year. A base flood may also be referred to as a 100-year flood. A 100-year flood has nearly a twenty-three percent (23%) chance of occurring in a 25-year period.

BASE FLOOD ELEVATION (BFE): The elevation above sea level of the base flood in relation to the North American Vertical Datum of 1988 (NAVD 88). Previous FIRMs may have been published in the National Geodetic Vertical Datum of 1929 (NGVD29).

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

BEST MANAGEMENT PRACTICES: (BMPs) A practice or combination of practices considered by the State of Montana to be the most effective means

	(including technological, economic and institutional considerations) of preventing or reducing the amount of pollution by nonpoint sources to a level compatible with water quality goals. More information is available in the Montana Non-point Source Pollution Plan and associated Appendix A. Montana Department of Natural Resources, Forestry Division provides information on BMP for forestry practices. Montana University System Water Center provides information for implementing construction site BMPs.
BUILDING:	Any walled and roofed enclosure. See "STRUCTURE."
CHANNEL:	The geographical area within either the natural or artificial banks of a watercourse or drain way.
CHANNELIZATION PROJECT:	The excavation and/or construction of an artificial channel for the purpose of diverting the entire flow of a stream from its established course.
CHARGEABLE RATES:	The insurance rates established by the Federal Insurance Administrator pursuant to Section 1308 of the Act for first layer limits of flood insurance on existing structures.
COMMUNITY:	Any State or area or political subdivision thereof, or any Indian tribe or authorized tribal organization or Alaska Native village or authorized native organization, which has authority to adopt and enforce flood plain management regulations for the areas within its jurisdiction.
CONTENTS COVERAGE:	The insurance on personal property within an enclosed structure, including the cost of debris removal, and the reasonable cost of removal of contents to minimize damage. Personal property may be household goods usual or incidental to residential occupancy, or merchandise, furniture, fixtures, machinery, equipment and supplies usual to other than residential occupancies.
CRAWLSPACE:	An enclosed area below the BFE. To meet the definition of a crawlspace, an enclosed area must meet ALL of the following criteria: - Interior grade is no more than two feet below the exterior lowest adjacent grade (LAG) AND height of crawlspace foundation wall can be no greater than four feet. - Openings: location/elevation, frequency, square area, automatic floodwater entry/exit design of opening cover. Crawlspaces that have their floors below BFE must have openings to allow the equalization of flood forces.

- Ductwork and building utilities must be two feet above BFE or flood proofed.

Buildings that have below-grade crawlspaces will have higher flood insurance premiums than buildings that have the interior elevation of the crawlspace at or above the lowest adjacent exterior grade.

CRITICAL FACILITY: An activity or facility where, even a slight chance of flooding is too great a threat. Typical critical facilities include hospitals, retirement facilities, nursing homes, fire stations, police stations, storage of critical records, and similar facilities.

CURVILINEAR LINE: The border on either a FHBM, DFIRM or FIRM that delineates the special flood, mudslide (i.e., mudflow) and/or f1oodrelated erosion hazard areas and consists of a curved or contour line that follows the topography.

DEDUCTIBLE: The fixed amount or percentage of any loss covered by insurance which is borne by the insured prior to the insurer's liability.

DESIGNATED FLOODPLAIN: A floodplain whose limits have been designated and established by order of the Department of Natural Resources and Conservation, State of Montana.

DESIGNATED FLOODWAY: A floodway whose limits have been designated and established by order of the Department of Natural Resources and Conservation, State of Montana.

DEVELOPED AREA: An area of a community that is:

(a) A primarily urbanized, built-up area that is a minimum of 20 contiguous acres, has basic urban infrastructure, including roads, utilities, communications, and public facilities, to sustain industrial, residential, and commercial activities, and

(1) Within which 75 percent or more of the parcels, tracts, or lots contain commercial, industrial, or residential structures or uses; or
(2) Is a single parcel, tract, or lot in which 75 percent of the area contains existing commercial or industrial structures or uses; or
(3) Is a subdivision developed at a density of at least two residential structures per acre within

which 75 percent or more of the lots contain existing residential structures at the time the designation is adopted.

(b) Undeveloped parcels, tracts, or lots, the combination of which is less than 20 acres and contiguous on at least 3 sides to areas meeting the criteria of paragraph (a) at the time the designation is adopted.

(c) A subdivision that is a minimum of 20 contiguous acres that has obtained all necessary government approvals, provided that the actual "START OF CONSTRUCTION" of structures has occurred on at least ten percent (10%) of the lots or remaining lots of a subdivision or ten percent (10%) of the maximum building coverage or remaining building coverage allowed for a single lot subdivision at the time the designation is adopted and construction of structures is underway. Residential subdivisions must meet the density criteria in paragraph (a) (3).

DEVELOPMENT: 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. A community without a DFIRM or FHBM must require a permit for all proposed construction or other development in the community, so that it can determine whether the construction or other development is proposed within a flood-prone area. Once a DFIRM or FHBM has been issued for the community, it must require permits within the special flood hazard area.

DIGITAL FLOOD INSURANCE RATE MAP (DFIRM): The map on which FEMA has delineated the Special Flood Hazard Areas, the Base Flood Elevations (BFE) and the risk premium zones.

DWELLING: A permanent building for human habitation, a place for living purposes.

DRAIN WAY: Any depression two feet or more below the surrounding land serving to give direction to a current of water less than nine months of the year and having a bed and well-defined banks.

ELIGIBLE COMMUNITY OR PARTICIPATING COMMUNITY: A community for which the Federal Insurance Administrator has authorized the sale of flood insurance under the National Flood Insurance Program.

ELEVATED BUILDING: For insurance purposes, a no basement building which has its lowest elevated floor raised above ground level by

foundation walls, shear walls, posts, piers, pilings, or columns.

ENCLOSURE: That portion of an elevated building below the lowest elevated floor that is either partially or fully shut in by rigid walls.

EROSION: The process of the gradual wearing away of land masses. This peril is not per se covered under the Flood Insurance Program.

ESTABLISH: To construct, place, insert or excavate.

EXISTING CONSTRUCTION: For the purposes of determining rates, structures for which the "START OF CONSTRUCTION “commenced on or before the effective date of the floodplain management regulations. "EXISTING CONSTRUCTION" may also be referred to as "EXISTINGSTRUCTURES."

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION: A manufactured home park or subdivision where the construction of facilities for servicing the manufactured home lots is completed before the effective date of the floodplain management regulations. This includes, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

EXISTING STRUCTURES: See "EXISTINGCONSTRUCTION."

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION: The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEDERAL AGENCY: Any department, agency, corporation, or other entity or instrumentality of the executive branch of the Federal Government, and includes the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation.

FEMA (THE FEDERAL EMERGENCY MANAGEMENT AGENCY): The agency that manages compliance with the National Flood Insurance Program (NFIP) and provides flood hazard studies and maps.

FINISHED (HABITABLE) AREA: An enclosed area having more than 20 linear feet of finished walls (paneling, etc.) or used for any purpose other than solely for parking of vehicles, building access, or storage.

FLOOD INSURANCE: The insurance coverage provided under the National Flood Insurance Program.

FLOOD INSURANCE RATE MAP (FIRM): See "DFIRM."

FLOOD INSURANCE STUDY: The report in which FEMA has provided flood profiles, as well as the flood boundary/floodway map and the water surface profiles.

FLOOD OF 100-YEAR FREQUENCY: A flood magnitude that has a one percent (1%) chance of occurring in any given year commonly referred to as the base flood.

FLOOD OR FLOODING:

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

(3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a) (2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a) (l) of this definition.

FLOODPLAIN: The areas subject to these regulations, generally the channel of a river or stream and the area adjoining a river or stream, which would be covered by floodwater of a base flood except for designated shallow flooding areas that receive less than one foot (1') of water per occurrence. The floodplain consists of a floodway and flood fringe.

FLOODPLAIN DEVELOPMENTPERMIT: A permit that is 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 the community's floodplain management ordinance.

The community must also review all proposed developments to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law.

FLOOD PLAIN OR FLOOD-PRONE AREA: Any land area susceptible to being inundated by water from any source (see "FLOODING"). The floodplain consists of a floodway and a flood fringe.

FLOODPLAIN MANAGEMENT: The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and flood plain management regulations.

FLOODPLAIN MANAGEMENT REGULATIONS: Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a flood plain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOOD PRONE AREA: Zone A on the FEMA DFIRM

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 (e.g. elevating a furnace and/or electrical outlets within a structure two feet or more above the BFE).

FLOOD PROTECTION SYSTEM: Those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within a community subject to a "SPECIAL FLOOD HAZARD" and the extent of the depths of associated flooding. Such a system typically includes tidal barriers, dams, reservoirs, levees or dikes. These specialized

flood modifying works are those constructed in conformance with sound engineering standards.

FLOOD-RELATED EROSION: The collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

FLOOD-RELATED EROSION AREA OR FLOOD-RELATED EROSION PRONE AREA: A land area adjoining the shore of a lake or other body of water, which due to the composition of the shoreline or bank and high water levels or wind-driven currents, is likely to suffer flood related erosion damage.

FLOOD-RELATED EROSION AREA MANAGEMENT: The operation of an overall program of corrective and preventive measures for reducing flood-related erosion damage, including but not limited to emergency preparedness plans, flood-related erosion control works, and flood plain management regulations.

FLOODWAY: See "REGULATORYFLOODWAY."

FLOODWAY ENCROACHMENT LINES: The lines marking the limits of floodways on Federal, State and local flood plain maps.

FLOOD FRINGE: That portion of the floodplain outside the limits of the floodway.

FREEBOARD: A factor of safety usually expressed in feet above a flood level for purposes of flood plain management. "FREEBOARD" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

FUTURE-CONDITIONS FLOOD HAZARD AREA OR FUTURE-CONDITIONS FLOODPLAIN: See "AREA OF FUTURE-CONDITIONS FLOOD HAZARD."

FUTURE-CONDITIONS HYDROLOGY: The flood discharges associated with projected land-use conditions based on a community's zoning maps and/or comprehensive land-use plans and without consideration of projected future construction of flood detention structures or projected future hydraulic modifications within a stream or other waterways, such as bridge and culvert construction, fill, and excavation.

HAG (HIGHEST ADJACENT GRADE): This is required on the Elevation Certificate showing the elevation of the highest grade adjacent to a proposed development for flood insurance purposes.

HIGHEST ADJACENT GRADE: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE: Any structure that is:

(a) 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;

(b) 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;

(c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

(d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

(1) By an approved state program as determined by the Secretary of the Interior; or
(2) Directly by the Secretary of the Interior in states without approved programs.

HVAC: Heating, Ventilating and Air Conditioning.

HYDRAULICS: The depth of water (elevation) in a drainage way, watercourse, river or stream channel.

HYDROLOGY: The discharge in cubic feet per second (CFS) of water in a drainage way, watercourse, river or stream channel.

INDEPENDENT SCIENTIFIC BODY: A non-Federal technical or scientific organization involved in the study of land use planning, flood plain management, hydrology, geology, geography, or any other related field of study concerned with flooding.

LETTER OF MAP AMENDMENT (LOMA): An amendment to the currently effective FEMA map which establishes that a property is not located in a Special Flood Hazard Area. A LOMA is issued only by FEMA. A Letter of Map Amendment (LOMA) is an official amendment, by letter, to an effective NFIP map. A LOMA establishes a property's location in relation to the Special Flood Hazard Area (SFHA). LOMAs are usually issued because a property has been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation.

LETTER OF MAP CHANGE (LOMC): A general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They include Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-F).

LETTER OF MAP REVISION (LOMR): An official amendment to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations and elevations.

LETTER OF MAP REVISION BASEDON FILL (LOMR-F): A Letter of Map Revision Based on Fill (LOMR-F) is FEMA'smodification of the Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (DFIRM) based on the placement of fill outside the existing regulatory floodway. All requests for changes to effective maps, other than those initiated by FEMA, must be made in writing through the Floodplain Administrator of the community.

LEVEE: A manmade embankment, usually earthen, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water to provide protection from temporary flooding. For a levee structure to be reflected on the FEMA DFIRMs as providing flood protection, the levee structure must meet the requirements set forth in 44 CFR65.10.

LEVEESYSTEM: A flood protection system that consists of a levee, or levees, and associated structures, such as drainage and closure devices, which are constructed and operated in accordance with sound engineering practices.

LOWEST ADJACENT GRADE (LAG): Required on the Elevation Certificate showing the elevation of the lowest grade adjacent to an existing or proposed development for flood insurance purposes.

LOWESTFLOOR: 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. (An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor.) The lowest floor is a determinate for the flood insurance premium for a building, home or business.

LOWEST FLOO RELEVATION (LFE): The measured distance of a building's lowest floor above the National Geodetic Vertical Datum (NGVD) or other datum specified on the FIRM for that location.

MANUFACTURED 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. This does not include recreational vehicles.

MANUFACTURED HOME PARK OR SUBDIVISION: A parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

MEAN SEA LEVEL: The North American Vertical Datum of 1988 (NAVD 88) or other datum to which base flood elevations are referenced.

MTDEQ: Montana Department of Environmental Quality.

MTDNRC (MONTANA DEPARTMENTOF NATURAL RESOURCESAND CONSERVATION): The department responsible for the comprehensive program for the delineation of designated floodplains and designated floodways for each water course and drain way in the state.

MUDSLIDE (I.E., MUDFLOW): A condition where there is a river, flow or inundation of liquid mud down a hillside usually as a result of a dual condition of loss of brush cover, and the subsequent accumulation of water on the ground preceded by a period of unusually heavy or sustained rain. A mudslide (i.e., mudflow) may occur as a distinct phenomenon while a landslide is in progress, and will be recognized as such by the Administrator only if the mudflow, and not the landslide, is the proximate cause of damage that occurs.

MUDSLIDE (I.E., MUDFLOW) AREA MANAGEMENT: The operation of an overall program of corrective and preventive measures for reducing mudslide (i.e., mudflow) damage, including but not limited to emergency preparedness plans, mudslide control works, and flood plain management regulations.

MUDSLIDE (I.E., MUDFLOW) PRONE AREA: An area with land surfaces and slopes of unconsolidated material where the history, geology and climate indicates a potential for mudflow.

NATIONAL FLOOD INSURANCEP ROGRAM (NFIP): 44 CFR Chapter I Parts 59-79. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses. This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods.

NAVD 88 (NORTH AMERICAN VERTICAL DATUMOF 1988): The official vertical datum for the United States.

NEW CONSTRUCTION: For the purposes of determining insurance rates, structures for which the "START OF CONSTRUCTION" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures. Structures include new "STICK BUILT," manufactured homes, mobile homes, or "moved onto site" structures.

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) is completed on or after the effective date of floodplain management resolution adopted by the community.

NFIP: National Flood Insurance Program; 44 CFR Chapter I Parts 59-79.

NGVD 29 - NATIONAL GEODETIC VERTICAL DATUM OF 1929: Formerly the official vertical datum for the United States; has been replaced with NAVD 88.

OFFICIAL FLOODPLAIN MAPS: The flood insurance rate maps (DFIRMs) and flood boundary/floodway maps adopted and provided by the federal emergency management agency (FEMA) and/or MT DNRC for the Town of Bearcreek.

ONE HUNDRED (100) YEAR FLOOD: A flood having a one percent (1%) chance of occurring in any given year. 100-year flood has nearly a twenty-three percent (23%) chance of occurring in a 25-year period. A 100-year flood is the same as a base flood.

PARTICIPATING COMMUNITY, ALSO KNOWN AS AN ELIGIBLECOMMUNITY: A community in which the Administrator has authorized the sale of flood insurance.

PERMIT ISSUING AUTHORITY: Town of Bearcreek Floodplain Administrator.

PERSON: Includes any individual or group of individuals, corporation, partnership, association, or any other entity, including State and local governments and agencies.

POLICY: The Standard Flood Insurance Policy.

POST-FIRM BUILDING: A building for which construction or substantial improvement occurred after December 31, 1974, or on or after the effective date of an initial Flood Insurance Rate Map (FIRM), whichever is later.

PRE-FIRMBUILDING: A building for which construction or substantial improvement occurred on or before December 31, 1974, or before the effective date of an initial Flood Insurance Rate Map (FIRM).

PREMIUM: The total premium payable by the insured for the coverage or coverage provided under the policy. The calculation of the premium may be based upon either chargeable rates or risk premium rates, or a combination of both.

PRINCIPALLY ABOVE GROUND: At least fifty-one percent (51%) of the actual cash value of the structure, less land value, is above ground.

PROGRAM: The National Flood Insurance Program authorized by 42 U.S.C. 4001 through 4128.

PROPER OPENINGS- ENCLOSURES: All enclosures below the lowest elevated floor must be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. A minimum of two openings, with positioning.

on at least two walls, having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding must be provided. The bottom of all openings must be no higher than one foot (1') above grade.

REASONABLYSAFE FROM FLOODING: The community must review all permit applications to determine whether the proposed building sites will be reasonably safe from flooding as one of the minimum NFIP floodplain management requirements established by NFIP regulations. If the community determines that a site is not reasonably safe from flooding, it must require mitigation actions be undertaken to reduce the structures flood damage potential.

When an individual applies for a Letter of Map Revision Based on Fill (LOMR-F), the community will be required to determine that the filled area is reasonably safe from flooding before the LOMR-F will be issued. As indicated in the LOMRF requirement "REASONABLY SAFE FROM FLOODING" means: base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

RECREATIONAL VEHICLE: A vehicle which is: a) built on a single chassis; b) four hundred (400) square feet or less when measured at the largest horizontal projections; c) designed to be self-propelled or permanently towable by a light duty 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.

REGULATORY FLOODWAY: The channel of a river, stream, or other watercourse and the adjacent land areas that must be reserved in order to discharge a base flood without cumulatively increasing the water surface elevation more than one-half foot (0.5').

RESIDENTIAL STRUCTURE TYPES: Non-Residential. (If applicable) Includes, but is not limited to: small business concerns, churches, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, hotels and motels with normal room rentals for less than six (6) months' duration and nursing homes.

Other Residential: (If applicable) Hotels or motels where the normal occupancy of a guest is six (6) months or more; a tourist home or rooming house which has more than four roomers. A residential building (excluding hotels and motels with normal room rentals for less than six (6) months'

	duration) containing more than four (4) dwelling units. Incidental occupancies such as office, professional private school, or studio occupancy, are permitted if the total area of such incidental occupancies is limited to less than twenty-five percent (25%) of the total floor area within the building. Single-Family Residence. (If applicable) A residential single family dwelling. Incidental office, professional, private school, or studio occupancies, including a small service operation, are permitted if such incidental occupancies are limited to less than fifty percent (50%) of the building's total floor area as per zoning regulations. 2- to 4-Family Residence. (If applicable) A residential building (excluding hotels and motels with normal room rentals for less than six (6) months' duration) containing no more than four dwelling units. Incidental occupancies such as office, professional, private school, or studio space are permitted if the total area of such occupancies is limited to less than twenty-five (25%) of the total floor area within the building per the zoning regulations.
RIPRAP:	Stone, rocks, concrete blocks or analogous material that is placed along the banks or bed of a stream to alleviate erosion.
RISK PREMIUM RATES:	Those rates established by the Administrator pursuant to individual community studies and investigations which are undertaken to provide flood insurance in accordance with Section 1307 of the Act and the accepted actuarial principles. "RISK PREMIUM RATES" include provisions for operating costs and allowances.
RIVERINE:	Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.
SCIENTIFICALLY INCORRECT:	The methodology(ies) and/or assumptions which have been utilized are inappropriate for the physical processes being evaluated or are otherwise erroneous.
SECTION 1316:	Section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that FEMA finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

SET BACK: The amount of distance between the stream bank of the river or stream and the proposed use, where the stream bank is the 100-year flood boundary.

SHEET FLOW AREA: See "AREA OF SHALLOW FLOODING."

SHEET FLOW HAZARD: A type of flood hazard with flooding depths of one to three feet that occurs in areas of sloping land. The sheet flow hazard is represented by the zone designation AO on the FIRM.

SOLID PERIMETER FOUNDATION WALLS: Walls that are used as a means of elevating a building in A Zones and that must contain sufficient openings to allow for the unimpeded flow of floodwaters more than one foot (1') deep.

SPECIAL FLOOD HAZARD AREA: See "AREA OF SPECIAL FLOOD HAZARD."

STARTOF CONSTRUCTION: Commencement of clearing, grading, filling, or excavating to prepare a site for construction. It includes substantial improvement and means the date the building permit was issued provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building. In those jurisdictional areas not requiring a building permit these regulations shall apply as to the date to the actual start of either the first placement of permanent construction or placement of a manufactured home on a foundation as described above.

STRUCTURE: For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure, for insurance purposes, means:

(a) A building with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site;

(b) A manufactured home ("a manufactured home," also known as a mobile home, is a structure: built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or

(c) A travel trailer without wheels built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

For the latter purpose, "STRUCTURE" does not mean a recreational vehicle, or a parked trailer or other similar vehicle, except as described in Paragraph (c) of this definition, or a gas or liquid storage tank.

A walled and roofed building, manufactured home, a gas or liquid storage tank, bridge, culvert, dam, diversion, wall, revetment, dike or other projection that may impede, retard or alter the pattern of flow of water.

SINGLE STRUCTURE (SINGLE BUILDING): A building that is separated from other structures by intervening clear spell or solid, vertical, load-bearing Division walls.

SUBSTANTIALDAMAGE: Damage sustained by a structure where the cost of restoring the structure to its condition before damage would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

SUBSTANTIALIMPROVEMENT: Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either: a) before the improvement or repair is started; or b) if the structure has been damaged, and is being restored, before the damage occurred. For the purposes of this definition, substantial improvement is considered to occur when the first construction to any wall, ceiling, floor or other structural part of the building commences. The term does not include: a) 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 b) any alteration of a structure listed on the national register of historic places or state inventory of historic places.

SUITABLE FILL: Fill material which is stable, compacted, well graded, pervious, generally unaffected by water and frost, devoid of trash or similar foreign matter, devoid of tree stumps, or other organic material; and is fitting for the purpose of supporting the intended use and/or permanent structure.

TECHNICALLY INCORRECT: The methodology(ies) utilized has been erroneously applied due to mathematical or measurement error, changed physical conditions, or insufficient quantity or quality of input data.

USGS (UNITED STATES GEOLOGICAL SURVEY): The agency which developed the maps of the "FLOOD PRONE AREAS."

UTILITIES: If a proposed building site is in a Special Flood Hazard Area (SFHA), the building support utility systems for all new construction and substantial improvements shall:

(1) 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;

(2) Require within flood-prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of flood waters into the systems;

(3) Require within flood-prone areas new and replacement sewage systems be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into flood waters; and

(4) Require onsite water disposal systems be located to avoid impairment to them or contamination from them during flooding.

If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flooding.

VARIANCE: A grant of relief from the requirements of this resolution that would permit construction in a manner otherwise prohibited by this Ordinance.

VIOLATION: The failure of a structure or other development to be fully compliant with these regulations or the floodplain permit issued. A structure or other development without a floodplain permit, an elevation certificate, certification by a

licensed engineer or architect of compliance with these regulations or other evidence of compliance is presumed to be in violation until such time as documentation is provided.

WATER SURFACE ELEVATION: The height, in relation to the North American Vertical Datum of 1988 (NAVD 88), (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of riverine areas.

9.3 GENERAL PROVISIONS

9.3.1: **JURISDICTIONAL AREA:** This Ordinance shall apply to all areas of special flood hazard within the jurisdiction of the Town of Bearcreek.

9.3.2: **BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD:** The areas of special flood hazard identified by the Federal Emergency Management Agency in the current scientific and engineering report and associated DFIRM. Permits are required for all proposed construction and other development within Special Flood Hazard Areas.

9.3.3: **RULES FOR INTERPRETATION OF FLOODPLAIN BOUNDARIES:** The boundaries of the 100-year floodway shall be determined by scaling distances on the Official Floodplain Maps and using the floodway data table contained in the flood insurance study report. The maps may be used as a guide for determining the Special Flood Hazard Area boundary, but the exact location of the floodplain boundary shall be determined where the base flood elevation intersects the natural ground. For unnumbered A Zone and AO Zone floodplains, where there is a conflict between a mapped floodplain boundary and actual field conditions, the Floodplain Administrator may interpret the location of the Special Flood Hazard Area boundary based on field conditions or available historical flood information. Where the surveyed elevation provides greater elevation information than the floodplain map and indicates that the land/structure may be determined to be out of the floodplain, the homeowner/landowner needs to advise the Floodplain Administrator and may submit a Letter of Map Change (LOMC) to FEMA.

9.3.4: **COMPLIANCE:** No land use shall be developed, and no structure shall be located, extended, converted, or structurally altered within the Special Flood Hazard Area without full compliance with the provisions of these regulations and other applicable regulations. These regulations meet the minimum requirements as set forth by the Montana Department of Natural Resources and Conservation, and the National Flood Insurance Program.

9.3.5: **ABROGATION AND GREATER RESPONSIBILITY:** It is not intended by this Ordinance 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 shall prevail.

9.3.6: **REGULATION INTERPRETATION:** In the interpretation and application of this resolution, all provisions shall be: 1) considered as minimum requirements; (2) liberally construed in favor of the governing body; and (3) deemed neither to limit nor repeal any other powers granted under State statutes.

9.3.7: **WARNING AND DISCLAIMER OF LIABILITY:** The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This Ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Ordinance 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 this Ordinance or any administrative decision lawfully made hereunder.

9.3.8: **SEVERABILITY:** If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Ordinance.

9.3.9: **DISCLOSURE PROVISION:** All property owners or realtors and developers representing property owners in a Special Flood Hazard Area or floodway must notify potential buyers or their agents that such property is located within the floodplain or floodway and is subject to regulation. Information regarding floodplain areas or the repository for floodplain maps is available in the Bearcreek Town Hall or the Carbon County Planning Office.

9.3.10: **AUTHORITY TO ENTER AND INVESTIGATE LANDS OR WATERS:** The Floodplain Administrator may make reasonable entry upon any lands and waters in the Town of Bearcreek for the purpose of making an investigation, inspection or survey to verify compliance with these regulations. The Floodplain 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. If none of these persons can be found, the Floodplain Administrator shall affix a copy of the notice to one or more conspicuous places on the property for five (5) days. If the owners do not respond, cannot be located or refuse entry to the Floodplain Administrator, the Floodplain Administrator may only enter the property through a Search Warrant.

An investigation of a natural or artificial obstruction or nonconforming use shall be made by the Floodplain Administrator, either on his own initiative, or at the request of titleholders of land abutting the watercourse or drain way involved, or on the written request of a governing body or permitting agency.

9.4 ADMINISTRATION

9.4.1: **FLOODPLAIN ADMINISTRATOR:** The Supt. of Public Works has been designated to be the Floodplain Administrator to administer and implement the provisions of this Ordinance and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

9.4.2: **DUTIES &. RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR:** Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

A. Maintain and hold open for public inspection all records pertaining to the provisions of this Ordinance and those that may be necessary to document nonconforming uses. Where BFE data are utilized in Zone A, obtain and maintain records of the lowest floor and flood proofing elevations for new and substantially improved construction.

B. Review permit applications to ensure that the proposed building site project, including the placement of manufactured homes, will be reasonably safe from flooding.

C. Review floodplain permits for proposed development to assure that the applicant has acquired all necessary permits have been obtained from those Federal, State or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required. It is the responsibility of the applicant to determine the other necessary permits.

D. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.

E. Notify, in riverine situations, adjacent communities and the State Coordinating Agency, which is Montana Department of Natural Resources and Conservation prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

F. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.

G. When base flood elevation data has not been provided, 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. Where BFE data are utilized in Zone A, obtain and maintain records of the lowest floor and flood proofing elevations for new and substantially improved construction.

H. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones Al-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative *effect* of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one-half (0.5) foot at any point, or significantly increases the base flood velocity, within the community.

I. Under the provisions of 44 CFR Chapter 1, Part 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones Al-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one half (1/2) foot, provided that the community first completes all of the provisions required by Section 65.12.

J. Additional Factors - Floodplain development permits shall be granted or denied by the Floodplain Administrator on the basis of whether the proposed establishment, development, alteration, or substantial improvement of an artificial obstruction meets the requirements of these regulations. Additional factors that shall be considered for every permit application are:

1. The danger to life and property due to increased flood heights, increased floodwater velocities, backwater or alterations in the pattern of flood flow caused by the obstruction or encroachment;

2. The danger that the obstruction or encroachment may be swept onto other lands or downstream to the injury of others;

3. The ability of the proposed water supply and/or sanitation system to prevent disease, contamination, and unsanitary conditions;

4. The susceptibility of the proposed facility and its contents to flood damage and the effects of such damage on the individual owner;

5. The construction or alteration of the obstruction or encroachment in such manner as to lessen the flooding danger;

6. The importance of the services provided by the facility to the community;

7. The requirement of the facility for a waterfront location;

8. The availability of alternative locations not subject to flooding for the proposed use;

9. The compatibility of the proposed use with existing development and anticipated development in the foreseeable future;

10. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area;

11. The safety of access to property in times of flooding for ordinary and emergency services;

12. The request for fill for a residential or commercial building is not followed by a request for a basement for the same residential or commercial building, which would put the finished floor of the building below the BFE, which would negate the purpose of the fill.

13. The proposed use shall comply with the existing zoning designation;

14. For projects involving bank stabilization, channelization, levees, floodwalls and/or diversions, off property impacts including increased flood peaks, flood stage, flood velocity, erosion and sedimentation, should be considered and found to be non-existent, neutral or able to be mitigated; and

15. Such other factors as are in harmony with the purposes of these regulations, the Montana Floodplain and Floodway Management Act, and the National Flood Insurance Program.

K. A floodplain development permit application shall be approved or denied by the Floodplain Administrator. If the application is deemed incomplete, the Floodplain

Administrator will notify the applicant of deficiencies within 10 working days. Under no circumstances should it be assumed that the permit is automatically granted. All approved applications will be signed by the Floodplain Administrator. Denied applications may be resubmitted if additional information is provided to support a change in development.

L. The Floodplain Administrator may deem an application incomplete based on, but not limited to, the following criteria: elevation or flood proofing certificates, a level survey and/or hydraulic and hydrology calculations by a registered land surveyor, engineer, or licensed architect to assess the impact of the volume of water, determine the base flood elevation, water velocities, and ground elevations.

9.4.3: **PERMIT PROCEDURES:**

A. 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, hydraulic calculations assessing the impact on base flood elevations or velocities, level surveyor certification by a registered land surveyor, professional engineer or licensed architect that the requirements of these regulations are satisfied and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

1. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;

2. Elevation in relation to mean sea level to which any nonresidential structure shall be flood proofed;

3. A certificate from a registered professional engineer or architect that the nonresidential flood proofed structure shall meet the flood proofing criteria as set by the State of Montana and/or Carbon County.

4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development; and

5. Maintain a record of all such information.

B. Approval or denial of a Floodplain Development Permit by the Floodplain Administrator shall be based on all of the provisions of this resolution, including, but not limited to, the factors listed, and the following relevant factors:

1. The danger to life and property due to flooding or erosion damage;

2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

3. The danger that materials may be swept onto other lands to the injury of others;

4. The compatibility of the proposed use with existing and anticipated development;

5. The safety of access to the property in times of flood for ordinary and emergency Vehicles;

6. The 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. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site;

8. The necessity to the facility of a waterfront location, where applicable; and

9. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.

9.4.4: **EMERGENCY WAIVER:** Emergency repair and replacement of severely damaged public transportation facilities, public water and sewer facilities, and flood control works may be authorized by the Floodplain Administrator if:

A. Upon notification and prior to the emergency repair and/or replacement, the Floodplain Administrator determines that an emergency condition exists warranting immediate action; and

B. The Floodplain Administrator agrees upon the nature and type of proposed emergency repair and/or replacement.

Authorization to undertake emergency repair and replacement work may be given verbally if the Floodplain Administrator feels that such a written authorization would unduly delay the emergency work. Such verbal authorization must be followed by a written permit describing the emergency condition, the type of emergency work agreed upon, and stating that a verbal authorization had been previously given.

9.4.5: **APPEALS &. VARIANCES:**

A. The Zoning Board of Appeals has been designated to serve as the Floodplain Control Board of Adjustment by the Bearcreek Town Council.

B. The Bearcreek Town Council 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. Appeals must be filed within thirty (30) calendar days from the time the officer charged with enforcement of these regulations has made a written interpretation or determination of this Ordinance.

C. Any person or persons aggrieved by the decision of the Floodplain Control Board of Adjustment may appeal such decision in the court of competent jurisdiction. Provided that the appeal is filed within 30 calendar days of the decision being appealed.

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

E. Variances may be issued for new construction and substantial improvements to be erected on a lot of 1/2 acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors have been fully considered. As the lot size increases beyond the 1/2 acre, the technical justification required for issuing the variance increases.

F. Upon consideration of the factors noted above and the intent of this resolution, the Floodplain Control Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Ordinance.

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

H. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure. All work on historic structures must be approved by the Carbon County Historic Preservation office. This section should not be constructed as to allow for the total replacement of a historic structure with a modern structure with little to no historic value.

I. Prerequisites for granting variances:

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

2. Variances shall only be issued upon:

    a. Showing a good and sufficient cause; and

    b. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

    c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws, resolutions or ordinances; and

    d. The proposed use is adequately flood proofed; and

    e. Reasonable alternative locations outside the designated floodplain are not available.

    f. The variance is not based solely on financial basis.

3. Any application to which a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. It should be noted that variances of this type places the community in violation of the NFIP, and therefore will be carefully considered.

J. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that (i) the criteria outlined in this chapter are met, and (ii) the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

K. Appeals of any decision(s) of the Floodplain Control Board of Adjustment may be taken by an aggrieved person or persons, jointly or separately, to a court of record in Carbon County, provided that the appellant has exhausted all administrative remedies. Provided that the appeals are filed in accordance with 9.4.5 B & C above.

9.4.6: **FEES:** A non-refundable processing fee pursuant to the adopted fee schedule for the Town of Bearcreek shall be submitted with each permit and/or variance application. This fee will cover the administrative cost of processing the permit and/or variance, providing public notice and performing sufficient field inspections to ensure compliance with this resolution.

9.4.7: **VIOLATION NOTICE:** The floodplain administrator shall bring any violation of this Ordinance to the attention of the local governing body, its legal counsel; and the Montana Department of Natural Resources and Conservation.

9.4.8: **COMPLIANCE:** Any use, alteration, or construction not in compliance with that authorized shall be deemed' a violation of this resolution and punishable as provided or enforced as provided in 76-5-109 MCA. An applicant may be required to submit certification by a registered professional engineer, architect, or other qualified person designated by the Floodplain Administrator, that finished fill, building floor elevations, flood proofing, hydraulic design or other flood protection measures be accomplished in compliance with this Ordinance.

9.4.9: **PENALTIES:** Violation of the provisions of this Ordinance or failure to comply with any of the requirements, including failure to obtain permit approval prior to development on the floodplain shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any of its requirements (including the conditions and safeguards established in variances) shall, upon conviction thereof, be fined not more than one hundred ($100) or imprisoned in jail for not more than 10 days or both. Each day's continuance of a violation shall be deemed a separate and distinct offense.

9.5 SPECIFIC STANDARDS

9.5.1: **APPLICATION:** The minimum floodplain development standards listed in this chapter and Title 76, Chapter 5, MCA, apply to all the floodplains referenced on the Flood Insurance Rate Maps or community accepted areas using the best and new information available.

9.5.2: **GENERAL STANDARDS:** In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

A. All 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;

B. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;

C. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;

D. 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;

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

F. 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 no new/replacement septic tanks and drain fields in floodplain.

G. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. No new/replacement septic tanks and drain fields in floodplain.

9.5.3: **FLOODWAY:**

A. USES ALLOWED WITHOUT PERMIT- The following open space uses shall be allowed without a permit anywhere within the floodway, provided that such are not prohibited by any other resolution or statute, do not require structures other than portable structures, do not require alteration of the floodplain such as fill, excavation or permanent storage of materials or equipment, do not require large scale cleaning of the riparian vegetation within seventy five (75) feet of the ordinary high water mark, will not cause flood losses on other land or to the public:

1. Agriculture, grazing land, riparian/wetland areas, urban/storm water practices, provided that all applicable Best Management Practices are adhered to;

2. Private and public recreational uses such as picnic grounds, boat launching ramps, swimming areas, parks, wildlife management and natural areas, game hunting and fishing areas and hiking, bicycling or horseback riding trails;

3. Meadows, woodlands, wetlands, wildlife corridors, game preserves, or similar conservation-oriented areas;

4. Walking, bicycle paths, or other multi-use trails;

5. Forestry, including processing of forest products with portable equipment provided that all applicable Best Management Practices are adhered to;

6. Residential uses such as lawns, gardens, and play areas;

7. Recreational vehicles provided that they be on the site for fewer than ninety (90) consecutive days, and be 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.

B. USES REQUIRING PERMITS - The following nonconforming uses and artificial obstructions may be permitted within the designated floodway, provided that such uses conform to the provisions and are approved for permit issuance by the Floodplain Administrator:

1. Excavation of material from pits or pools provided that:

   a. A buffer strip of undisturbed land of sufficient width to prevent flood flows from channeling into the excavation is left between the edge of the channel and the edge of the excavation;

   b. The excavation meets all applicable laws and regulations of other local and state agencies; and

   c. Excavated material is stockpiled outside the designated floodway. (However, for short term gravel mining operations, the Floodplain Administrator may allow stockpiling in the flood fringe if there is no other alternative and there is no significant (1/2 foot) rise in the BFE. A "No Rise Certification" signed by a licensed engineer shall be required).

2. Railroad, highway, street and stream crossings, provided that:

   a. The crossings are designed to offer minimal obstructions to the flood flow;

   b. The bottom of bridge spans shall have a freeboard of at least two (2) feet above the BFE to pass ice flows, the 100 year flood discharge and any debris associated with the discharge;

   c. If possible, normal overflow channels are preserved to allow passage of sediments to prevent aggradations;

   d. Mid stream supports for bridges, if necessary, must have footings buried below the maximum scour depth; and must be designed, installed and certified by a licensed professional engineer.

   e. Stream crossings shall not increase the elevation of the 100-year flood more than one-half foot nor cause a significant increase in flood velocities. The applicant shall provide a "No-Rise" certification signed by a registered professional engineer.

3. Limited filling for highway, street, and railroad embankments not associated with stream crossings and bridges provided that:

   a. Reasonable alternate transportation routes outside the designated floodway are not available;

   b. The encroachment is located as far from the stream channel as possible;

   c. Measures are provided to mitigate the impact to property owners and the natural stream function; and

d. The encroachment shall not result in a cumulative increase exceeding one half foot in base flood elevation, after the allowable encroachment into the flood way. A "No-Rise" certification signed by a registered professional engineer shall be provided by the applicant.

4. Buried or suspended utility transmission lines, provided that:

a. Suspended utility transmission lines are designed such that the lowest of the suspended line is at least six (6) feet higher than the elevation of the flood of one-hundred (100) year frequency;

b. Towers and other appurtenant structures are designed and placed to withstand and offer minimal obstruction to flood flows;

c. 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

d. Utility transmission lines carrying toxic or flammable materials are buried to a depth of at least twice the calculated maximum depth of scour for a flood of one hundred (100) year frequency. The maximum depth of scour may be determined from any of the accepted hydraulic engineering methods, but the final calculated figures shall prepared by a registered professional engineer be subject to approval by the Floodplain Administrator. FPA may submit the calculations to an independent engineer for confirmation.

5. Storage of materials and equipment provided that:

a. The material or equipment is not subject to major damage by flooding and is properly anchored to prevent flotation or downstream movement; and

b. The material or equipment is readily removable within the limited time available after flood warning. Storage of flammable, toxic or explosive materials shall NOT BEPERMITTED.

6. Irrigation and livestock water supply wells provided that:

a. They are driven or drilled wells located on ground higher than surrounding ground to assure positive drainage from the well;

b. They require no other structures (e.g. a well house);

c. Well casings are water tight to a distance of at least twenty-five (25) feet below the ground surface;

d. Water supply and electrical lines have a watertight seal where the lines enter the casing;

e. All pumps and electrical lines and equipment are either of the submersible type or are adequately flood proofed;

f. Check valves are installed on main water lines at wells and at all building entry locations; and

g. Irrigation and livestock supply wells are located at least 500 feet from domestic water supply wells.

7. 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.

8. Fences crossing channels.

9. Residential uses not requiring buildings such as lawns, gardens, parking areas and play areas.

10. Public or private recreational uses not requiring structures such as campgrounds, archery ranges, wildlife management and natural areas, alternative livestock ranches (game farms), fish hatcheries and shooting preserves provided that:

a. Access roads do not obstruct or divert flood waters; and

b. There are no dwellings or permanent mobile homes; and

c. There is no rise in the BFE; and

d. Off property impacts have been considered and found to be non-existent, neutral or can be mitigated; and

e. There is no clearing of riparian vegetation within 75 feet from the ordinary high water mark along all banks of all perennial and intermittent streams; and

f. Recreational vehicles and travel trailers are licensed and ready for highway use. They are ready for highway use if on wheels or jacking system with wheels intact, are attached to the site with only quick disconnect type utilities and securing devices, and have no permanently attached additions.

11. Structures accessory to the uses permitted in this section, such loading and parking areas and picnic shelters and tables, provided that:

a. The structures are not intended for human habitation or supportive of human habitation; and

b. The structures will have low flood damage potential as certified by a registered professional engineer on a "No-Rise" certificate; and

c. The structures will, insofar as possible, be located on ground higher than the surrounding ground and as far from the channel as possible; and

d. 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;

e. Service facilities within these structures such as electrical, heating and plumbing are flood proofed in accordance with the Town of Bearcreek Floodplain Control Ordinance;

f. The structure will be constructed and placed so as to offer a minimal obstruction to flood flows and is firmly anchored to prevent flotation; and

g. The use does not require fill and/or substantial excavation; and

h. The use does not require the clearing of riparian vegetation within seventy five (75) feet of the ordinary high water mark.

12. Agricultural structures (except buildings, dwellings and fuel storage) that will have low flood damage potential, or be located on higher ground and as far from the channel as possible, and meet the flood proofing requirements.

13. New surface water diversions and changes in place of diversion for agricultural uses and other uses, with certification by a registered engineer if:

a. The proper permits or documentation have been obtained from DNRC Water Rights Bureau for new surface water diversions and changes in place of diversion;

b. The proposed diversion or change in place of diversion will not increase the upstream elevation of the base flood one-half foot (1/2 foot) or more or to the detriment of a neighboring property;

c. The proposed diversion is designed and constructed to minimize potential erosion from a base flood;

d. For a permanent diversion structure crossing the full width of the stream channel:

i. All other options should be studied and considered first;

ii. The structure is designed and constructed to withstand up to a base flood; and

iii. The diversion is not an obstruction to the passage of water craft or fish.

14. The following flood control measures certified by a registered professional engineer to comply with the conditions set forth (structural flood control works often significantly obstruct and affect floodway flow capacity):

a. Levees and floodwalls (new, reconstruction and/or maintenance) if:

i. The proposed levee or floodwall is designed and constructed to safely convey a 100 year flood; and

ii. The cumulative effect of the levee or floodwall combined with allowable flood fringe encroachments does not increase the unobstructed base flood elevation more than one-half foot (1/2

foot). The Floodplain Administrator may establish either a lower or higher permissible increase in the base flood elevation for individual levee projects only with concurrence from the Montana Department of Natural Resources and Conservation and the Federal Emergency
Management Agency based upon consideration of the following criteria:

- The estimated cumulative effect of any anticipated future permissible uses; and
- The type and amount of existing development in the effected area.

iii. The proposed levee or floodwall, except those to protect agricultural land, is constructed at least three feet (3') higher than the base flood elevation.

iv. For levee structures to be recognized on a FEMA map as providing flood protection, the structure must meet the criteria outlined in 44 CFR 65.10. Without the criteria being met, the area behind the uncertified structure will be shown to be in the floodplain of the flood source (River/stream/creek/ditch).

b. Bank stabilization projects, such as hand placed rip rap, native revetments, weirs, barbs, etc, if:

i. It is designed to withstand a 100-year flood; and

ii. It does not increase the base flood elevation; and

iii. It will not increase erosion upstream, downstream, or adjacent to the site; and

iv. Consideration will be given to accommodate the safe passage of water craft in low flows; and/ or

v. It is preventive maintenance for bridge abutments, roads, industrial uses and public infrastructure.

c. Channelization projects if they do not significantly increase the magnitude, velocity, or base flood elevation in the proximity of the project.

d. Dams provided that:

i. They are designed and constructed in accordance with the Montana Dam Safety Act and applicable safety standards; and

ii. They will not increase flood hazards downstream either through operational procedures or improper hydrologic/hydraulic design.

15. All other artificial obstructions, substantial improvements, or non-conforming uses not specifically listed in or prohibited by this resolution.

C. PROHIBITED USES- The following artificial obstructions and non-conforming uses are prohibited within the floodway:

1. A building, dwelling or structure for living purposes, place of assembly or permanent use by human beings;

2. New construction of any residential dwelling, commercial or industrial building;

3. Encroachments, including fill, new construction, buildings, substantial improvements, excavations and other development that would cause water to be diverted from the established floodway, erosion of embankment, obstruction of the natural flow of waters, reduce the carrying capacity of the floodway or increase flood levels within the community during the occurrence of the 100 year flood;

4. The construction or permanent storage of an object subject to flotation or movement during the 100 year flood;

5. Mobile homes and manufactured homes;

6. Storage and disposal of solid waste, hazardous waste, toxic, flammable, or explosive materials;

7. 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;

8. Cemeteries, mausoleums, or any other places of burial of human remains.

9.5.4: **FLOOD FRINGE**

A. USES ALLOWED WITHOUT PERMITS- All uses allowed in the floodway without permit according to the provisions of these regulations, shall also be allowed without a permit in the flood fringe. .

B. USES REQUIRING PERMITS- All uses allowed in the floodway subject to the issuance of a permit according to the provisions of these regulations shall also be allowed by permit within the designated flood fringe. In addition, new construction, substantial improvements, alterations to structures (including, but not limited to residential, commercial, agricultural and industrial), and suitable fill shall be allowed subject to the following conditions:

1. Such structures or fill must not be prohibited by any other statute, regulation, ordinance, or resolution;

2. Such structures or fill must be compatible with local comprehensive plans, if any;

3. Residential. The new construction, alterations, and substantial improvements of residential dwellings including manufactured homes must be constructed on suitable fill with a permanent foundation such that the lowest floor elevation (including basement) is two (2) feet or more above the BFE (Base Flood Elevation). The suitable fill shall be at an elevation no lower than the elevation of the 100-year flood and shall extend for at least fifteen (15) feet, at that elevation,

beyond the dwelling(s) in all directions. Replacement manufactured and mobile homes in an existing mobile home park or subdivision may, instead of using suitable fill, be elevated on a concrete or mortared block foundation, or other suitable permanent foundation, and anchored to prevent flotation or downstream movement;

4. Non-Residential. The new construction, alteration, and substantial improvement of commercial and industrial buildings must be constructed on suitable fill with a permanent foundation such that the lowest floor elevation (including basement) is two (2) or more feet above the BFE (Base Flood Elevation), OR the building must be adequately flood proofed to an elevation no lower than two (2) feet above the elevation of the l00-year flood. Certification is required by registered professional engineer, architect, or other qualified person that flood-proofing methods are adequate to withstand the flood depths, hydrodynamic and hydrostatic pressures, velocities, impact, buoyancy, and uplift forces associated with the 100year flood:

    a. If the building is designed to allow internal flooding of the lowest floor, use of the lowest floor must be limited to parking, loading areas, and storage of equipment or materials not appreciably affected by floodwaters. The floors and walls shall be designed and constructed of materials resistant to flooding to an elevation no lower than two (2) feet above the BFE. Walls shall be designed to equalize hydrostatic forces by allowing for entry and exit of floodwaters. Openings may be equipped with screens, louvers, valves, and other coverings or devices which permit the automatic entry and exit of floodwaters.

    b. Buildings whose lowest floors are used for a purpose other than parking, loading, or storage of materials resistant to flooding shall be waterproofed to an elevation no lower than two (2) feet above the BFE. Flood proofing shall include impermeable membranes or materials for floors and walls and watertight enclosures for all windows, doors and other openings. These buildings shall be designed to withstand the hydrostatic pressures and hydrodynamic forces resulting from the base flood.

    c. Flood proofing of electrical, heating and plumbing systems shall be accomplished in accordance with Chapter 6.

5. All manufactured homes placed in the flood fringe shall be installed using methods and practices which minimize flood damage and must have the chassis securely anchored to a foundation system that will resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, 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. The following conditions also apply:

    a. When a manufactured home is 1) altered, 2) replaced because of substantial damage as a result of a flood or 3) replaced on an individual site, the lowest floor must be elevated two (2) feet above the base flood elevation. The home can be elevated on fill or raised on a permanent foundation of reinforced concrete, reinforced mortared block, reinforced piers, or other foundation elements of at least equivalent strength.

b. Replacement or substantial improvement of manufactured homes in an existing manufactured home Park, site outside a manufactured home Park or subdivision or subdivision must be raised on a permanent foundation. The lowest floor must be two feet above the base flood elevation. The foundation must consist of reinforced concrete, reinforced mortared block, reinforced piers, or other foundation elements of at least equivalent strength.

c. Manufactured homes proposed for use as commercial or industrial buildings must be elevated and anchored, rather than flood proofed.

6. Fill material placed in the flood fringe must be stable, compacted, well graded, pervious, generally unaffected by water and frost, devoid of trash or similar foreign matter, devoid of tree stumps or other organic material, and appropriate for the purpose of supporting the intended use and/or permanent structure;

7. Roads, streets, highways and rail lines shall be designed to minimize any increase in flood heights. Where failure or interruption of transportation facilities would result in danger to the public health or safety; the facility shall be located two (2) feet above the elevation of the 100-year flood;

8. Agricultural buildings that have a low damage potential, such as sheds, barns, shelters, and hay or grain storage structures must be adequately anchored to prevent flotation or collapse and all electrical facilities shall be placed two (2) feet above the base flood elevation;

9. Recreational Vehicles must meet the following requirements:

a. Be on the site for fewer than 90 consecutive days, and
b. Be fully licensed and ready for highway use, or
c. Meet the permit requirements of Section 5.4.B.5.b, and the elevation and anchoring requirements for "manufactured homes" in paragraph (5) of this section. Recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

10. 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 be certified by a registered professional engineer or architect and must meet or exceed the following minimum criteria:
a. A minimum of two openings on separate walls 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.

b. The bottom of all openings shall be no higher than one foot (1') above grade.

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

11. Proposed development shall not clear vegetation within 75 feet of the ordinary high water mark.

C. PROHIBITED USES- The following artificial obstructions and non-conforming uses are prohibited within the flood fringe:

1. 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;

2. Storage and disposal of solid waste, hazardous waste, toxic, flammable, or explosive materials; and

3. Cemeteries, mausoleums, or any other places of burial of human remains.

9.5.5: **STANDARDS FOR SUBDIVISION PROPOSALS**

A. Review subdivision proposals and other development, including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding. If a subdivision or other development proposal is in a flood-prone area, assure that such proposals minimize flood damage.

B. Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to this Ordinance or the Carbon County Subdivision Regulations.

C. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

D. 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.

9.5.6: **SHALLOW FLOODING (AO ZONES)**

A. Shallow flooding areas are delineated as "AO Zone" floodplains on the Flood Insurance Rate Maps. The provisions of Section 5.4, Flood fringe, of this Ordinance shall apply to any AO Zone floodplains. The depth of the 100-year flood is indicated as the depth number on the Flood Insurance Rate Maps. The 100-year flood depth shall be referenced to the highest adjacent grade or stream flow line in determining which fill or flood-proofing heights to use in applying the provisions. In the absence of depth or elevation information, a minimum 2 foot flood depth shall be used.

B. Floodplain Boundary Interpretation. The Floodplain Administrator shall make

interpretations where needed as to the exact location of an AO Zone floodplain boundary when there is a conflict between a mapped boundary and actual field conditions.

9.6 FLOOD PROOFING REQUIREMENTS

9.6.1: **CERTIFICATION:** If the following flood proofing requirements are to be utilized for a particular structure in accordance with this resolution, the methods used must be certified as adequate by a registered professional engineer, architect, or other qualified person.

9.6.2: **CONFORMANCE:** Permitted flood proofing systems shall conform to the conditions listed below and the flood proofing standards listed in this Ordinance for commercial and industrial buildings:.

A. 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 (2) feet above the elevation of the 100 year flood.

2. Portable and movable electrical equipment may be placed below the elevation of the 100-year flood, provided that the equipment can be disconnected by a single plug and socket assembly of the submersible type.

3. The main power service lines shall automatically operate electrical disconnect equipment of manually operated electrical disconnect equipment located at an accessible remote location outside the designated floodplain and above the elevation of the 100 year flood.

4. All electrical wiring systems installed below the elevation of the 100-year flood shall be suitable for continuous submergence and may not contain fibrous components.

B. Heating Systems:

1. Float operated automatic control valves must be installed in gas furnace supply lines so that fuel supply is automatically shut *off* when flood waters reach the floor level where the furnace is located.

2. Manually operated gate valves must be installed in gas supply lines. The gate valves must be operable from a location above the elevation of the 100-year flood.

3. Electric heating systems must be installed in accordance with the provisions.

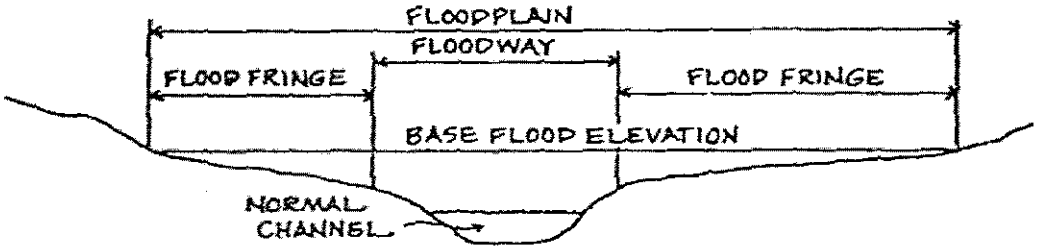
C. Plumbing Systems:

1. Sewer lines, except those to be buried and in sealed vaults, must have check valves installed to prevent sewage backup into permitted structures.

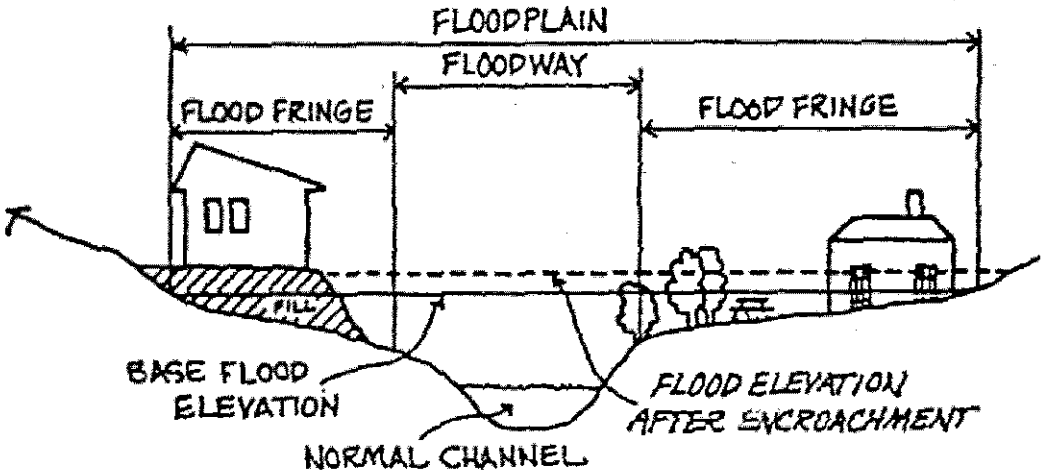
2. All toilets, stools, sinks, urinals, and drains must be located so the lowest point of possible entry is at least two (2) feet above the 100 year flood elevation.

APPENDIX A: SKETCHES OF FLOODPLAIN ZONES.

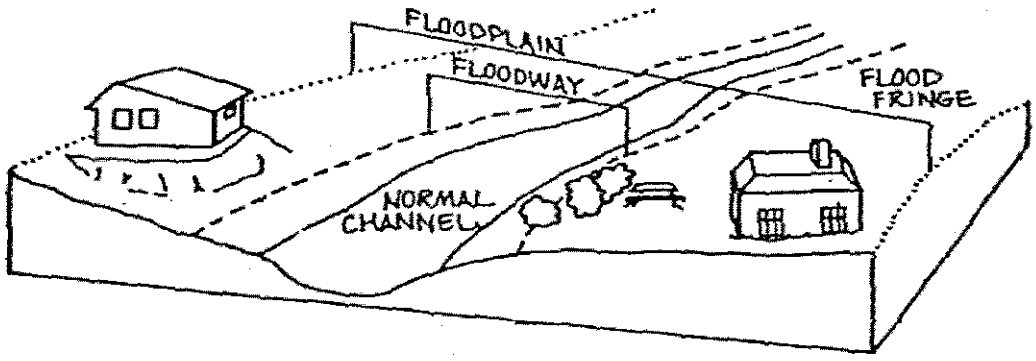
CROSS-SECTIONAL VIEW WITH NO DEVELOPMENT



CROSS-SECTIONAL VIEW WITH EXISTING & NEW DEVELOPMENT



PERSPECTIVE VIEW WITH EXISTING & NEW DEVELOPMENT



In the event any word, phrase, clause, sentence, paragraph, section or other part of the Ordinance set forth herein is found invalid by court or competent jurisdiction, such judgment shall affect only that part held invalid, and the remaining provisions thereof shall continue in full force and effect.

Adopted and approved this 2nd of May, 2013.

Jennifer A Jessen, Mayor

I, Jane Swanson-Webb, Clerk/Treasurer of the Town of Bearcreek, do hereby certify that the above is a true and correct copy of the Ordinance duly passed the Bearcreek Town Council with a vote of aye 4; nay 0 at the regular meeting of the Bearcreek Town Council duly convened on 05-02-13

Attest:
Jane Swanson-Webb, Town Clerk/Treasurer