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February 8, 2013

TO: **Planning Commission**

FROM: **Neal Starkebaum**
Assistant Director

SUBJECT: ***Land Use Resolution* amendments - Floodplain**

Please find the attached proposed amendments to the *Land Use Resolution* which are necessary to comply with regulatory changes in the Department of Homeland Security FEMA - National Flood Insurance Program (NFIP) and State of Colorado – Colorado Water Conservation Board (CWCB) requirements; including language for adoption of the 2013 Gunnison County Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRM).

Proposed Amendments to Article 2: Definitions:
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Article 2: Definitions.

FLOODPLAIN (100-YEAR) means land area subject to inundation because of the base flood. The 100-year floodplain is made up of three parts: the stream channel, the floodway and the ~~flood fringe~~ floodplain. The physical location of the floodplain on flood hazard maps is representative of existing ground conditions and may be based, among other things, on historical flood records or other readily available data. Floodplain-related elements include

- **BASEMENT** means any area of the building having its floor below ground level (subgrade) on all sides.
- **CONDITIONAL LETTER OF MAP AMENDMENT (CLOMR)** means a conditional letter of map amendment. (See LOMR)
- **CRITICAL FACILITY** includes:
  Structures or facilities that produce, use, or store highly volatile, flammable, explosive, toxic and/or water-reactive materials;
  Hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood;
  Police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers that are needed for flood response activities before, during, and after a flood; and
  Public and private utility facilities that are vital to maintaining or restoring normal services to flooded areas before, during, and after a flood.
- **DIGITAL FLOOD INSURANCE RATE MAP (DFIRM)** FEMA digital floodplain map. Digital maps that serve as "regulatory floodplain maps" for insurance and floodplain management purposes.
- **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 manufactured 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).
- ~~**FLOOD ELEVATION INFORMATION** means the elevation in relation to sea level and depth of flooding which is determined for specific locations in the floodplain.~~
- ~~***FLOOD ELEVATION STUDY** See "Flood Insurance Study."~~
- ~~**FLOOD FRINGE** means the area, other than the stream channel and floodway, subject to inundation, that occupies the remainder of the 100-year floodplain, and is subject to shallower water and slower vehicles during a flood event.~~
- **FLOOD INSURANCE STUDY** means the official report provided by the Federal Emergency Management Agency (FEMA) that includes flood profiles, the ~~Flood Boundary/Floodway Map~~ Flood Insurance Rate Mate (FIRM), and the water surface elevation of the base flood.
- ~~**FLOODWAY** means that portion of the 100-year floodplain, consisting of the stream channel and adjoining lands, including from stream bank to stream bank, which is subject to the deepest water and highest velocities during a flood event.~~
  FLOODWAY (REGULATORY FLOODWAY) - The channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The Colorado statewide standard for the designated height to be used for all newly studied reaches shall be one-half foot (six inches). Letters of Map Revision to existing floodway delineations may continue to use the floodway criteria in place at the time of the existing floodway delineation.
- **LETTER OF MAP REVISION (LOMR)** - FEMA's official revision of an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA).
- **LETTER OF MAP REVISION BASED ON FILL (LOMR-F)** – FEMA's modification of the Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM) based on the placement of fill outside the existing regulatory floodway.

- **MANUFACTURED HOME** - A structure transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle".
- **MANUFACTURED HOME PARK OR SUBDIVISION** - A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
- **NEW MANUFACTURED HOME PARK OR SUBDIVISION** - 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 regulations adopted by a community.
- **RECREATIONAL VEHICLE** - means a vehicle which is:
  1. Built on a single chassis;
  2. 400 square feet or less when measured at the largest horizontal projections;
  3. Designed to be self-propelled or permanently towable by a light duty truck; and
  4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- **SPECIAL FLOOD HAZARD AREA** – The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year, i.e., the 100-year floodplain.
- **VARIANCE** - A grant of relief to a person from the requirement of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this ordinance.
- **VIOLATION** - The failure of a structure or other development to be fully compliant with the floodplain regulations.

Proposed Amendments to *Section 1-112: Use of Maps*:
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SECTION 1-112: USE OF MAPS

1. **FLOODPLAIN MAPS**. National Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (~~September 29, 1989, as amended~~ May 16, 2013), and as more specifically adopted in Section 11-103: E: *Official Maps*.

Proposed Amendments to *Section 7-201: Sketch Plan Application for Major Impact Projects*:
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Underlined – Additions

SECTION 7-201: SKETCH PLAN APPLICATION FOR MAJOR IMPACT PROJECTS

L. **FLOOD HAZARD AREAS.** When a land use change is proposed on a parcel located within a floodplain hazard area as delineated on maps described in Section 11-103: D: *Official Maps* or the National Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (~~September 29, 1989, as amended~~ May 16, 2013) the narrative, map and design layout of the Sketch Plan shall be guided by the requirements of Section 11-103: *Development in Areas Subject to Flood Hazards*.

Proposed Amendments to *Section 7-301: Preliminary Plan Application for Major Impact Projects*:
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SECTION 7-301: PRELIMINARY PLAN APPLICATION FOR MAJOR IMPACT PROJECTS

I. **FLOOD HAZARD AREAS.** When a land use change is proposed on a parcel located within a floodplain hazard area as delineated on maps described in Section 11-103: D: *Official Maps* or the National Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (~~September 29, 1989, as amended~~ May 16, 2013) the narrative, map and design layout of the Sketch Plan shall be guided by the requirements of Section 11-103: *Development in Areas Subject to Flood Hazards*.

Proposed Amendments to Index
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Proposed Amendments to *Section 11-103: Development in Areas Subject to Flood Hazards*:
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SECTION 11-103: DEVELOPMENT IN AREAS SUBJECT TO FLOOD HAZARDS

D. **ADOPTED FLOOD INSURANCE STUDY.** The Board hereby affirms Gunnison County's adoption of the Flood Insurance Study of Gunnison County, Colorado, Unincorporated Areas, ~~September 29, 1989~~ May 16, 2013, published by FEMA for purposes of designating flood hazard areas within the unincorporated areas of Gunnison County and implementing floodplain regulations~~, and adopted by reference in the *Gunnison County Flood Damage Prevention Resolution*, approved by the Board in Resolution No. 31 Series 1989~~. This adoption includes all Flood Insurance Rate Maps (FIRM) and flood profiles included or referenced in the Flood Insurance Study.

G. **APPLICABILITY.** The requirements and regulations of this Section shall apply to all lands within the unincorporated area of Gunnison County that are located:

4. **AREAS THAT HAVE BEEN ISSUED A LETTER OF MAP REVISION BASED UPON FILL (LOMR-F).** Areas that have been removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR F).

I. **USES WITHIN THE 100-YEAR FLOODPLAIN.** The floodplain is divided into three areas: the stream channel, the floodway and the ~~flood fringe~~ floodplain (Figure 1: *Areas of the Floodplain*). A site-specific engineering analysis considering flood elevations and ground elevations may be necessary to establish the location of these distinct areas.

~~1. **USES PERMITTED IN THE FLOODWAY.** The following uses shall be permitted within the floodway, provided they do not result in obstruction of the floodway or impair its ability to carry and discharge a 100-year flood, subject to compliance with the applicable requirements this *Resolution*:~~

~~a. **AGRICULTURAL USES.** Agricultural uses, including grazing of livestock, production of hay, diversion structures and irrigation ditches;~~

~~b. **ACCESSORY RESIDENTIAL USES.** Uses accessory to residential uses but not involving structures, including lawns, gardens, play areas, open yard areas and driveways;~~

~~c. **RECREATIONAL USES.** Recreational uses not requiring permanent or temporary structures designed for human habitation including parks, public trails, wildlife and natural preserves, and areas for fishing and hiking;~~

~~d. **UTILITY FACILITIES.** Utility facilities including dams, spillways, power plants, transmission lines, and pipelines;~~

~~e. **ROADS.** Roads, highways and bridges;~~

~~f. **FLOOD MITIGATION STRUCTURES.** Flood mitigation structures and stream bank stabilization Projects. No device to be constructed as a barrier against flooding shall be designed in a manner or location that would increase the risk of flood damage to the property or personal safety of others, or would shift the hazard onto another owner's property.~~

~~g. **CONSTRUCTION MATERIALS EXTRACTION.** For each permit for extraction of construction materials issued before the effective date of this *Resolution*, extraction of construction materials shall be permitted no closer than five feet from the nearest ordinary high water mark in average hydrologic years on each side of a water body, but not in the stream channel.~~

~~2. **USES PROHIBITED WITHIN THE FLOODWAY.** The following uses shall be prohibited within the floodway, even if the use would otherwise be permitted by this *Resolution*:~~

~~a. **STRUCTURES.** Human occupation of permanent or temporary structures (including manufactured homes) and other structures, subject to compliance with the applicable requirements of this *Resolution*.~~

~~b. **OVERNIGHT CAMPGROUNDS.** Development or use of overnight campgrounds;~~

~~c. **STORAGE OF MATERIALS THAT MAY CREATE A HAZARD DURING A FLOOD**. Storing or processing of materials that are buoyant, flammable, explosive, or have potential for injuring human, animal or plant life;~~

~~d. **SOLID WASTE DISPOSAL SITES AND WASTEWATER TREATMENT FACILITIES**. Development or operation of solid waste disposal sites and central water or wastewater treatment facilities.~~

~~e. **OTHER USES**. Uses that may jeopardize human life and property by their location within the Floodway.~~

~~3~~ **1. USES PERMITTED IN THE ~~FLOOD FRINGE~~ FLOODPLAIN**. The following uses shall be permitted in the ~~flood fringe~~ floodplain, subject to compliance with the applicable requirements this *Resolution*:

~~4~~ **2. USES PROHIBITED WITHIN THE ~~FLOOD FRINGE~~ FLOODPLAIN.** The following uses shall be prohibited within the ~~flood fringe~~ floodplain, even if the use would otherwise be permitted by this *Resolution*:

G. APPLICABILITY.

3. WITHIN AREAS THAT ARE DETERMINED TO BE "FLOOD PRONE". Within areas that are determined to be "flood prone" on the basis of reliable historical information, topography, vegetation, or other naturally occurring indicators. Flood prone areas may require a detailed hydrologic engineering study in order to define and map the actual 100-year floodplain, to determine site-specific flood elevations and ground elevations, and to distinguish between the floodway and the ~~flood fringe~~ floodplain. Such maps shall include at a minimum the requirements of Section 11-103: L.1. e: *Maps and Plans.*

J. GENERAL STANDARDS FOR FLOOD HAZARD REDUCTION. In all areas of flood hazards, the following standards apply:

1. GENERAL. For waterways with Base Flood Elevations for which a regulatory Floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 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 foot at any point within the community.

~~1~~ **2. ANCHORING.**

~~2~~ **3. CONSTRUCTION MATERIALS AND METHODS**.

~~3~~ **4. UTILITIES.**

~~4~~ **5. SUBDIVISION DESIGN**.

K. SPECIFIC STANDARDS FOR FLOOD HAZARD REDUCTION. In all areas of flood hazards where base flood elevation data has been provided, and areas removed from the flooplain by issuance of a LOMR-F, the following shall apply:

2. COMMERCIAL, INDUSTRIAL OR OTHER NONRESIDENTIAL CONSTRUCTION. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

a. IS FLOOD PROOFED. Be flood proofed so that ~~below~~ one foot above the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water;

7. CRITICAL FACILITY. All new and substantially improved critical facilities and additions to critical facilities shall have the lowest floor elevated to two feet above the base flood elevation; or be flood proofed to two feet above the base flood elevation.