

D. Submit on the anniversary date of the community's initial eligibility an annual report to the administrator on the progress made during the past year within the community in the development and implementation of floodplain management measures;

E. Upon occurrence, notify the administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area. In order that all flood hazard boundary maps and flood insurance rate maps accurately represent the community's boundaries, include within such *the* notification a copy of the map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

F. The building official shall *must* maintain for public inspection and furnish upon request, for the determination of applicable flood insurance risk premium rates within all areas having special flood hazards identified on a flood hazard boundary map or flood insurance rate map, any certificates of flood proofing, and information on the elevation (in relation to mean sea level) of the level of the lowest habitable floor (including basement if habitable) of all new or substantially improved structures, and include whether or not such structures contain a basement, and if the structure has been flood proofed, the elevation (in relation to mean sea level) to which the structure was flood proofed.

15.20.170 Appeal board.

The flood hazard area appeal board as *is* established by Storey County shall *to* hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this chapter. *The board of county commissioners is the flood hazard area appeal board.*

A. ~~In passing upon~~ *When reviewing* requests for variances, the flood hazard appeal board shall *must* consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and;

1. The danger of materials being swept onto other lands and injuring others;
2. The danger to life and property due to the flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the existing individual owner and future owners of the property;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in time of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site;

11. The cost of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water system, and streets and bridges.

B. Any applicant, ~~to whom a variance is granted~~ *a variance must* shall be given written notice ~~over the signature of~~ *signed by the floodplain administrator* a community official that[;].

1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as 25 ~~twenty-five~~ dollars for ~~100 one hundred~~ dollars of insurance coverage[;].

2. Such ~~e~~Construction below the base flood level increases risks to life and property. ~~It is recommended that a~~ A copy of the notice shall *must* be recorded by the floodplain administrator in the office of the Storey County recorder ~~and shall be recorded in a manner so that it appears as an exception on the title of the affected parcel of land.~~

C. The floodplain administrator shall *must* maintain a record of all variance actions, including justification for their issuance, and report ~~such~~ *each* variances issued in its biennial report submitted to the Federal Insurance Administration, Federal Emergency Management Agency.

15.20.175 Nature of variances.

These variance criteria are based on the general principal of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristics must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the board of county commissioners to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level is so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. The variance guidelines provided in this chapter are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

15.20.180 Variance-Conditions.

A. Generally, variances may be issued for new construction, substantial improvements, and other proposed new development to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing that the procedures of this *chapter* ~~article~~ have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

B. Variances may be issued for the repair or rehabilitation of "historic structures" (as defined in ~~S~~section 15.20.040) upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

C. Variances shall ~~may~~ not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result.

D. Variances shall ~~may~~ only be issued upon a determination that the variance is the "minimum necessary" considering the flood hazard, to afford relief. "Minimum necessary" means to afford relief with a minimum of deviation from the requirements of this chapter. For example, in the case of variances to an elevation requirement, this means the ~~board Storey County commission~~ need not grant permission for the applicant to build at grade, or even to whatever elevation the applicant proposed, but only to that elevation which the ~~board Storey County commission~~ believes will both provide relief and preserve the integrity ~~of~~ the local ordinance.

E. Variances shall ~~may~~ only be issued upon a~~[-]~~:

1. A ~~s~~Showing of good and sufficient cause;
2. A determination that failure to grant the variance would result in exceptional "hardship" (as defined in ~~S~~ection 15.20.040) to the applicant; *and*
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create a nuisance (as defined in ~~S~~ection 15.20.040, "~~p~~Public safety/nuisance"), cause fraud or victimization (as defined in ~~S~~ection 15.20.040) of the public, or conflict with existing local laws or ordinances.

F. Variances may be issued for new construction, substantial improvement, and other proposed new development necessary for the conduct of a functionally dependent use provided that the provisions of this ~~chapter Sections 15.20.170(A) through 15.20.180(E)~~ are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and does not result in additional threats to public safety and does not create a public nuisance.

G. Upon consideration of all the factors of ~~S~~ection 15.20.380 and the purposes of this chapter, the ~~board Storey County commission~~ may attach such conditions to the granting of, variances as it deems necessary to further the purposes of this chapter.

15.20.230 Subdivisions.

A. All preliminary subdivision proposals shall ~~must~~ identify the flood hazard area and the elevation of the base flood.

B. All subdivision plans shall ~~must~~ provide the elevation of proposed structures and pads. If the site is filled above the base flood, the final lowest floor and pad elevation shall ~~must~~ be certified by a registered professional engineer or surveyor and provided to the floodplain administrator.

C. All subdivision proposals shall ~~must~~ be consistent with the need to minimize flood damage.

D. All subdivision proposals shall ~~must~~ have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

E. All subdivisions shall ~~must~~ provide adequate drainage to reduce exposure to flood hazards.

F. Additionally all subdivision proposals shall ~~must~~ demonstrate, by providing a detailed hydrologic and hydraulic analysis, that 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 foot at any point within the community.

15.20.240 Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Ssection 15.20.070 or 15.20.150 (B), the provisions set out in this article are required *to be met*.

15.20.250 Residential construction.

Residential construction, new or substantial improvements, shall *must* have the lowest floor, including basement:

A. In zone AO, elevated above the highest adjacent grade to a height equal to or exceeding the depth number specified in feet on the FIRM, or elevated at least ~~two~~ 2 feet above the highest adjacent grade if no depth number is specified.

B. In zone A, elevated to or above the base flood elevation, as determined by the community.

C. In all other zones, elevated to or above the base flood elevation.

Upon completion of the structure, the elevation of the lowest floor including basement *must* shall be certified by a registered professional engineer or surveyor and verified by the community-building inspector to be properly elevated. The certification shall *must* be provided to the floodplain administrator using the current FEMA Elevation Certificate.

D. When constructing a crawlspace in a building within special flood zone areas, ~~you~~ *it* must ~~meet~~ abide by the National Flood Insurance Program's minimum requirements defined in FEMA Technical Bulletin 11-01.

E. Fully enclosed areas below the lowest floor, which are subject to flooding are prohibited or shall *must* be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect to meet or exceed the following minimum criteria:

1. Must have a minimum of ~~two~~ 2 openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

2. The bottom of all such openings will be no higher than one foot above the lowest adjacent finished grade.

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

15.20.260 Nonresidential construction.

Nonresidential construction shall *must* either be elevated to conform with Ssection 15.20.250 or together with attendant utility and sanitary facilities; *must*:

A. ~~Will B~~ be flood proofed below the elevation recommended under Ssection 15.20.250 so that the structure is watertight with walls substantially impermeable to the passage of water;

B. ~~Will H~~ have the structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

C. ~~Will B~~ be certified by a registered professional engineer or architect that the standards of Ssection 15.20.250 are satisfied. The certification shall *must* be provided to the floodplain administrator.

15.20.270 Manufactured homes.

A. All manufactured homes that are placed or *that are* substantially improved, within zones A, AH, AE, and on the community's flood insurance rate map, on sites located:

1. Outside of a manufactured home park or subdivision;
2. In a new manufactured home park or subdivision;
3. In an expansion to an existing manufactured home park or subdivision; or
4. In an existing manufactured home park or subdivision on a site upon which a

manufactured home has incurred "substantial damage" as a result of a flood;

a. Shall

Must be elevated on a permanent foundation so that the ~~lowest floor~~ *bottom of the structural frame or the lowest point of the manufactured home* will be elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

B. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within zones A, AH, and AE on the community's flood insurance rate map that are not subject to the provisions of will be elevated so that either:

1. The bottom of structural frame or the lowest point of the manufactured home is at or above the base flood elevation; or

2. The manufactured home chassis is supported by reinforced piers or other foundation elements, of at least equivalent strength, that are no less than thirty-six inches in height above grade and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

C. Within zone A, when no base flood elevation data is available, new and substantially improved manufactured homes shall *must* have the floor elevated at least ~~three~~ 3 feet above the highest adjacent grade.

D. Within zone AO, the floor for all new and substantially improved manufactured homes will *must* be elevated above the highest adjacent grade at least as high as the depth number specified on the flood insurance rate map, or at least two feet if no depth number is specified. Upon completion of the structure, a registered professional shall *must* certify the elevation of the lowest floor, including basement.

15.20.280 Floodways.

Designated floodways are located within the special flood hazard areas established in Section 15.20.070. Since the floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles, and erosion potential, the following provisions apply:

A. Encroachment ~~shall be~~ *are* prohibited, including fill, new construction, substantial improvements, storage of equipment or supplies, and any other development within the adopted regulatory floodway; unless it has been demonstrated through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge and ~~FEMA the Federal Emergency Management Agency~~ has issued a conditional letter of map revision (CLOMR).

B. If subsection A has been satisfied; all proposed new development and substantial improvements will *must* comply with all other applicable flood hazard reduction provisions of this article.

~~15.20.290 Declaration of public nuisance.~~

~~— Every new structure, building, fill, excavation or development located or maintained within any area of special flood hazard after date of first FIRM in violation of this ordinance is a public nuisance per se and may be abated, prevented or restrained by action of this political subdivision.~~

~~15.20.300 Abatement of violations.~~

~~— Within thirty days of discovery of a violation of this chapter, the floodplain administrator shall *must* submit a report to the governing body which shall includes all information available to the floodplain administrator which that is pertinent to said *the* violation. Within thirty days of receipt of this report, the governing body shall *may* either:~~

~~— A. Take any necessary action to effect the abatement of such *the* violation; or~~

~~— B. Issue a variance to this ordinance in accordance with the provisions of herein *this chapter*; or~~

~~— C. Order the owner of the property upon which the violation exists to provide whatever additional information may be required for their determination. Such *The* information must be provided to the floodplain administrator within thirty days of such *the* order, and he shall submit an amended report to the floodplain board within twenty days. At their next regularly scheduled public meeting, the governing body shall either order the abatement of said violation or they shall grant a variance in accordance with the provisions of herein.~~

~~— D. Submit to the administrator of Federal Insurance Administration a declaration for denial of insurance, stating that the property is in violation of a cited statute or local law, regulation or ordinance, pursuant to Section 1316 of the National Flood Insurance Act of 1968 as amended.~~

~~15.20.310 Unlawful acts.~~

~~— A. It is unlawful for any person to divert, retard or obstruct the flow of waters in any watercourse whenever it creates a hazard to life or property without securing the written authorization of the Storey County building official. Where the watercourse is a delineated floodplain, it is unlawful to excavate or build any structure affecting the flow of waters without securing written authorization of the floodplain administrator.~~

~~— B. Any person violating the provisions of this section shall be *is* guilty of a class 2 misdemeanor.~~

~~15.20.320 Severability.~~

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

15.20.340 Standards for recreational vehicles.

All recreational vehicles placed on sites within the floodplain on the community's flood insurance rate map will either:

- A. Be on the site for fewer than ~~one hundred eighty~~ 180 consecutive days;
- B. 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, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
- C. Will meet the permit requirements of ~~Section~~ 15.20.130 *Development permit-Application* and the elevation and anchoring requirements for manufactured homes in ~~Section~~ 15.20.270 *Manufactured homes*.

15.20.350 Mudslide (i.e. mudflow) prone areas.

A. All permit applications ~~will~~ *must* be reviewed by the floodplain administrator to determine if the proposed development will be located within a mudslide area.

B. The flood plain administrator ~~reviewing process~~ will determine if the proposed site and improvements will be reasonably safe from mudslide hazards. Factors to be considered in making this determination include but are not limited to the following:

1. Type and quality of soils.
2. Evidence of ground water or surface water problems.
3. Depth and quality of any fill.
4. The overall slope of the site.
5. The weight that any proposed structure will impose on the slope.

C. When a proposed development is located in an area that may have mudslide hazards, the following will be the minimum requirements *to be met by the applicant*:

1. A *report of a site investigation* and further review ~~be~~ made by persons qualified in geology and soils engineering.
2. The proposed grading, excavations, new construction, and substantial improvements are adequately designated and protected against mudslide damages.
3. The proposed grading, excavations, new construction and substantial improvements do not aggravate the existing hazard by creating either on-site or off-site disturbances.
4. Drainage, planting, watering, and maintenance ~~be such as~~ *does* not ~~to~~ endanger slope stability.

D. When a proposed development is determined to be within a mudslide hazard area, ~~time~~ *the* following requirements will *apply*, including but not be limited to:

1. ~~Adopting and enforcing a~~ *Require the proposed development to meet county grading standards ordinance in accordance with data supplied by the Federal Emergency Management Agency.*
2. Regulate the location of foundation systems and utility systems of new construction and substantial improvements.
3. Regulate the location, drainage and maintenance of all excavations, cuts and fills and planted slopes.
4. Provide special requirements for protective measures including but not necessarily limited to retaining walls, buttress fills, subdrains, diverted terraces and benching.
5. Require engineering drawings and specifications to be submitted for all corrective measures, accompanied by supporting soils engineering amid geology reports.

15.20.360 Flood-related erosion-prone areas.

A. All permit applications ~~will be reviewed by~~ *The floodplain administrator must review all permit applications* to determine if the proposed development will be located within a special flood-related erosion hazard zone.

B. The *flood plain administrator reviewing process will* ~~must~~ determine if the proposed site alterations and improvements will be reasonably safe from flood-related erosion and will not cause flood-related erosion hazards or otherwise aggravate the existing flood-related erosion hazard.

C. When the proposed development is found to be in the path of flood-related erosion or to increase the erosion hazard, ~~require~~ the improvement ~~to~~ *must* be relocated or adequate protective measures to be taken which will not aggravate the existing erosion hazard.

D. When *flood plain administrator determines* ~~it has been determined~~ the proposed development is in a special flood-related erosion hazard, as delineated zone E on the community FIRM, *the administrator must* require;

1. A setback for all new development from the lake, bay, riverfront or other body of water, to create a safety buffer consisting of a natural vegetative or contour strip. This buffer will be designated according to the flood-related erosion hazard and erosion rate, in conjunction with the anticipated "useful life" of structures, and depending upon the geologic, hydrologic, topographic and climatic characteristics of the community's land. The buffer may be used for suitable open spaces purposes, such as for agricultural, forestry, outdoor recreation and wildlife habitat areas, and for other activities using temporary and portable structures only.

~~15.20.370 Nature of variances.~~

~~The variance criteria set forth in this section of the chapter are based on the general principal of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristics must pertain to the land itself, not to the structure, its inhabitants, or the property owners.~~

~~It is the duty of the county commission to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below flood level are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this chapter are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.~~

15.20.380 Letters of map revision or amendment.

National Flood Insurance Program regulations provide procedures to remove property from the one hundred year floodplain or from a special flood hazard area. Amendments and revisions to community flood insurance rate maps cannot adversely impact the floodplain or floodway delineation's of the level of the one hundred year flood.

There are several procedures ~~provided whereby~~ *used* by the Federal Insurance Administrator ~~will~~ to review information from the community, an owner, or a lessee of property where it is believed the property should not be included in a special flood hazard area.

Submissions to FEMA for revisions to effective Flood Insurance Studies (FISs) by individual and community requestors will require the signing of application ~~and~~ certification forms *by the applicant*. These forms will provide FEMA with assurance that all pertinent data relating to the revision is included in the submittal. They will also assure that: (a) the data and methodology are based on current conditions; (b) qualified professional have assembled data and performed all necessary computations; and (c) all individuals and organizations impacted by proposed changes are aware of the changes and will have an opportunity to comment on them. FEMA procedures permit the following types of request:

A request for revision to the effective FIS information (FIRM, FBFM, and /or FIS report) is usually a request that FEMA replace the effective floodplain boundaries, flood profiles, floodway boundaries, etc., with those determined by the requestor. Before FEMA will replace the effective FIS information with the revised, the requestor must: (a) provide all of the data used in determining the revised floodplain boundaries, flood profiles, floodway boundaries, etc.; (b) provide all data necessary to demonstrate that the physical modifications to the floodplain have been adequately designed to withstand the impacts of the one percent annual chance flood event and will be adequately maintained; (c) demonstrate that the revised information (e.g., hydrologic and hydraulic analysis and the resulting floodplain and floodway boundaries) are consistent with the effective FIS information.

Requests for amendments or revisions to FEMA maps must be ~~reviewed and~~ submitted to ~~FEMA~~ by the county ~~commission of Storey County~~ for review *on forms acceptable to FEMA*. ~~†~~The applicant for a map amendment or revision *is* required to prepare all the supporting information and appropriate FEMA forms. *If the review of the application requires expertise beyond that of county personnel, the county may hire qualified persons, to be paid by the applicant, to review the application. Once the application is approved by the county as to form and content, and it meets the requirement of this code, the county will send it to FEMA.*

The scientific or technical information to be submitted with these requests may include, but is not limited to the following:

A. An actual copy of the recorded plat map ~~bearing the seal of the appropriate recordation official County clerk or recorder of deeds~~ indicating the official recordation and proper citation, deed or plat book volume and page number, or an equivalent identification where annotation of the deed or plat book is not the practice.

B. A topographical map showing:

1. Ground elevation contours in relation to the NVGD (National Geodetic Vertical Datum).
2. The total area of the property in question.
3. The location of the structure or structures located on the property in question.
4. The elevation of the lowest adjacent grade to a structure or structures.
5. An indication of the curvilinear line, which represents the area subject to inundation by a base flood. The curvilinear line should be based upon information provided by an appropriate authoritative source, such as a federal agency, department of water resources, a county water control district, a county or city engineer, a Federal Emergency Management Agency Flood Insurance Study, or a determination by a registered professional engineer.

- C. A copy of the FHBM or FIRM indicating the location of the property in question.
- D. A certification by a registered professional engineer or licensed land surveyor that the lowest grade adjacent to the structure is above the base flood elevation.
- E. The completion of the appropriate forms in the Federal Emergency Management Agency's Packets, Amendments and Revisions to National Flood Insurance Program Maps (MT-1 FEMA FORM 81-87 Series and MT-2 FEMA form 81-89 Series).

Proposed on _____, 2013.

by Commissioner _____

Passed on _____, 2013.

Vote: Ayes Commissioners _____

Nays Commissioners _____

Absent Commissioners _____

 Bill Sjovangen, Chairman
 Storey County Board of County Commissioners

Attest:

 Vanessa DuFresne
 Clerk & Treasurer, Storey County

This ordinance will become effective on _____, 2013.