

BUENA VISTA COUNTY ORDINANCE No. 6.9

FLOODPLAIN MANAGEMENT ORDINANCE

SUMMARY OF BUENA VISTA COUNTY FLOODPLAIN MANAGEMENT ORDINANCE

Summary. This summary of the Buena Vista County Floodplain Management Ordinance is published under the provisions of the Code of Iowa, Chapter 331.302(7) which allows for a summary of a County Ordinance to be published instead of the full text of the ordinance. The complete ordinance is available at the Buena Vista County Auditor's Office, 215 E 5th Street, Storm Lake, Iowa. Office hours of the Courthouse are 8:00 a.m. to 4:30 p.m. Monday-Friday.

Effective date. This Buena Vista County Floodplain Management Ordinance shall be effective May 4, 2011.

Title: The Floodplain Management Ordinance.

Section 1. Statutory Authority, Findings of Fact and Purpose. The section confirms that the county is authorized under Chapter 335, Code of Iowa, to enact regulations to provide flood protection for county residents and their property and that this ordinance is aimed at furthering that purpose.

Section 2. General Provisions.

1. **Lands to Which Ordinance Applies.** This Section identifies the areas of the county to which the ordinance applies, by incorporating by reference the overlay map of the county, where the shaded areas represent the floodplain management area.
2. **Rules for Interpretation of Floodplain (Overlay) District.** Any dispute as to the physical location of a floodplain boundary shall be decided by the Zoning Administrator, with a right to appeal to the Board of Adjustment any requirement, decision, or determination made by the Zoning Administrator.
3. **Compliance.** This section confirms that no land in the floodplain district can be used in violation of the ordinance and that no structure in the floodplain district shall be located, extended, converted or structurally altered without full compliance with the terms of the ordinance
4. **Abrogation and Greater Restrictions.** This section confirms that the ordinance does not void existing easements, covenants, or deed restrictions, but does impose greater restrictions, and repeal other, inconsistent ordinances.
- 5 **Interpretation, 6 Warning and Disclaimer of Liability, & 7 Severability.** These sections recite standard boilerplate rules for interpreting ordinances and reminds readers that complying with the floodplain ordinance doesn't assure that flood damage to persons or property won't occur.

Section 3. Establishment of Flood Plain District. This section formally designates the areas that correspond to the shaded areas on the Flood Insurance Rate Map (FIRM) for Buena Vista County, dated November 15, 1977 as the Flood Plain District to which this ordinance applies.

Section 4. Standards for Floodplain (overlay) District. This Section describes the Permitted Uses, Conditional Uses and Performance Standards for the Floodplain District and provides:

1. All development within the Floodplain (Overlay) District shall:
 - a. Be consistent with the need to minimize flood damage.
 - b. Use construction methods and practices that will minimize flood damage.
 - c. Use construction materials and utility equipment that are resistant to flood damage.
 - d. Obtain all other necessary permits from federal, state and local governmental agencies including approval when required from the Iowa Department of Natural Resources.
2. Residential buildings - All new or substantially improved residential structures shall have the lowest floor, including basement, elevated a minimum of one (1) foot above the 100-year flood level. Construction shall be upon compacted fill which shall, at all points, be no lower than 1.0 ft. above the 100-year flood level and extend at such elevation at least 18 feet beyond the limits of any structure erected thereon. Alternate methods of elevating (such as piers) may be allowed subject to favorable consideration by the County Board of Adjustment, where existing topography, street grades, or other factors preclude elevating by fill. In such cases, the methods used must be adequate to support the structure as well as withstand the various forces and hazards associated with flooding.

All new residential structures shall be provided with a means of access which will be passable by wheeled vehicles during the 100-year flood.

3. Non-residential buildings - All new or substantially improved non-residential buildings shall have the lowest floor (including basement) elevated a minimum of one (1) foot above the 100-year flood level, or together with attendant utility and sanitary systems, be floodproofed to such a level. When floodproofing is utilized, a professional engineer registered in the State of Iowa shall certify that the floodproofing methods used are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the 100-year flood; and that the structure, below the 100-year flood level is watertight with walls substantially impermeable to the passage of water. A record of the certification indicating the specific elevation (in relation to National Geodetic Vertical Datum) to which any structures are floodproofed shall be maintained by the Administrator.
4. All new and substantially improved structures:
 - a. Fully enclosed areas below the "lowest floor" (not including basements) that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior

walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or meet or exceed the following minimum criteria:

1. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
2. The bottom of all openings shall be no higher than one foot above grade.
3. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

Such areas shall be used solely for parking of vehicles, building access and low damage potential storage.

- b. New and substantially improved structures must 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.
- c. New and substantially improved structures must be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

5. Factory-built homes:

- a. All factory-built homes, including those placed in existing factory-built home parks or subdivisions, shall be elevated on a permanent foundation such that the lowest floor of the structure is a minimum of one (1) foot above the 100-year flood level.
- b. All factory-built homes, including those placed in existing factory-built home parks or subdivisions, shall be anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

6. Utility and Sanitary Systems:

- a. On-site waste disposal and water supply systems shall be located or designed to avoid impairment to the system or contamination from the system during flooding.
- b. All new and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system as well as the discharge of effluent into flood waters. Wastewater treatment facilities (other than on-site systems) shall be provided with a level of flood protection equal to or greater than one (1) foot above the 100-year flood elevation.

- c. New or replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system. Water supply treatment facilities (other than on-site systems) shall be provided with a level of protection equal to or greater than one (1) foot above the 100-year flood elevation.
 - d. Utilities such as gas or electrical systems shall be located and constructed to minimize or eliminate flood damage to the system and the risk associated with such flood damaged or impaired systems.
7. Storage of materials and equipment that are flammable, explosive or injurious to human, animal or plant life is prohibited unless elevated a minimum of one (1) foot above the 100-year flood level. Other material and equipment must either be similarly elevated or (i) not be subject to major flood damage and be anchored to prevent movement due to flood waters or (ii) be readily removable from the area within the time available after flood warning.
8. Flood control structural works such as levees, flood walls, etc. shall provide, at a minimum, protection from a 100-year flood with a minimum of 3 ft. of design freeboard and shall provide for adequate interior drainage. In addition, structural flood control works shall be approved by the Department of Natural Resources.
9. Watercourse alterations or relocations must be designed to maintain the flood carrying capacity within the altered or relocated portion. In addition, such alterations or relocations must be approved by the Department of Natural Resources.
10. Subdivisions (including factory-built home parks and subdivisions) shall be consistent with the need to minimize flood damages and shall have adequate drainage provided to reduce exposure to flood damage. Development associated with subdivision proposals (including the installation of public utilities) shall meet the applicable performance standards of this Ordinance. Subdivision proposals intended for residential use shall provide all lots with a means of access which will be passable by wheeled vehicles during the 100-year flood. Proposals for subdivisions greater than five (5) acres or fifty (50) lots (whichever is less) shall include 100-year flood elevation data for those areas located within the Floodplain (Overlay) District.

11. Accessory Structures

- a. Detached garages, sheds, and similar structures accessory to a residential use are exempt from the 100-year flood elevation requirements where the following criteria are satisfied.
 - 1. The structure shall not be used for human habitation.
 - 2. The structure shall be designed to have low flood damage potential.
 - 3. The structure shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters.

4. The structure shall be firmly anchored to prevent flotation which may result in damage to other structures.
 5. The structure's service facilities such as electrical and heating equipment shall be elevated or floodproofed to at least one foot above the 100-year flood level.
- b. Exemption from the 100-year flood elevation requirements for such a structure may result in increased premium rates for flood insurance coverage of the structure and its contents.

12. Recreational Vehicles

- a. Recreational vehicles are exempt from the requirements of SECTION 4(5) of this Ordinance regarding anchoring and elevation of factory-built homes when the following criteria are satisfied.
1. The recreational vehicle shall be located on the site for less than 180 consecutive days, and,
 2. The recreational vehicle must 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 and is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.
- b. Recreational vehicles that are located on the site for more than 180 consecutive days or are not ready for highway use must satisfy requirements of SECTION 4(5) of this Ordinance regarding anchoring and elevation of factory-built homes.

13. Pipeline river and stream crossings shall be buried in the streambed and banks, or otherwise sufficiently protected to prevent rupture due to channel degradation and meandering.

Section 5. Administration. This Section provides for administration of the Floodplain Management Ordinance including the appointment of the Buena Vista County Zoning Administrator as Floodplain Administrator and establishes the duties of the administrator. It also establishes requirements of application for Floodplain Development Permits, Conditional Uses, Appeals and Variances as follows:

2. Floodplain Development Permit

- a. Permit Required - A Floodplain Development Permit issued by the Administrator shall be secured prior to any floodplain development (any man-made change to improved and unimproved real estate, including but not limited to buildings or other structures, mining, filling, grading, paving, excavation or drilling operations), including the placement of factory-built homes.
- b. Application for Permit - Application shall be made on forms furnished by the Administrator and shall include the following:

1. Description of the work to be covered by the permit for which application is to be made.
 2. Description of the land on which the proposed work is to be done (i.e., lot, block, track, street address or similar description) that will readily identify and locate the work to be done.
 3. Indication of the use or occupancy for which the proposed work is intended.
 4. Elevation of the 100-year flood.
 5. Elevation (in relation to National Geodetic Vertical Datum) of the lowest floor (including basement) of buildings or of the level to which a building is to be floodproofed.
 6. For buildings being improved or rebuilt, the estimated cost of improvements and market value of the building prior to the improvements.
 7. Such other information as the Administrator deems reasonably necessary (e.g., drawings or a site plan) for the purpose of this Ordinance.
- c. Action on Permit Application - The Administrator shall, within 14 days, make a determination as to whether the proposed floodplain development meets the applicable standards of this Ordinance and shall approve or disapprove the application. For disapprovals, the applicant shall be informed, in writing, of the specific reasons therefore. The Administrator shall not issue permits for variances except as directed by the County Board of Adjustment.
- d. Construction and Use to be as provided in Application and Plans - Floodplain Development Permits based on the basis of approved plans and applications authorize only the use, arrangement, and construction set forth in such approved plans and applications and no other use, arrangement or construction. Any use, arrangement, or construction at variance with that authorized shall be deemed a violation of this Ordinance. The applicant shall be required to submit certification by a professional engineer or land surveyor, as appropriate, registered in the State of Iowa, that the finished fill, building floor elevations, floodproofing, or other flood protection measures were accomplished in compliance with the provisions of this Ordinance, prior to the use or occupancy of any structure.

3. Variance

- a. The BOARD OF ADJUSTMENT may authorize upon request in specific cases such variances from the terms of this Ordinance that will not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this Ordinance will result in unnecessary hardship. Variances granted must meet the following applicable standards.

1. Variances shall only be granted upon: (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of the 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 codes or ordinances.
 2. Variances shall only be granted upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 3. In cases where the variance involves a lower level of flood protection for buildings than what is ordinarily required by this Ordinance, the applicant shall be notified in writing over the signature of the Administrator that: (i) the issuance of a variance will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction increases risks to life and property.
- b. Factors Upon Which the Decision of the Board of Adjustment Shall be Based - In passing upon applications for Variances, the Board shall consider all relevant factors specified in other sections of this Ordinance and:
1. The danger to life and property due to increased flood heights or velocities caused by encroachments.
 2. The danger that materials may be swept on to other land or downstream to the injury of others.
 3. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions.
 4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 5. The importance of the services provided by the proposed facility to the County.
 6. The requirements of the facility for a floodplain location.
 7. The availability of alternative locations not subject to flooding for the proposed use.
 8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
 9. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.

10. The safety of access to the property in times of flood for ordinary and emergency vehicles.
 11. The expected heights, velocity, duration, rate of rise and sediment transport of the flood water expected at the site.
 12. The cost of providing governmental services during and after flood conditions, including maintenance and repair of public utilities (sewer, gas, electrical and water systems), facilities, streets and bridges.
 13. Such other factors which are relevant to the purpose of this Ordinance.
- c. Conditions Attached to Variances - Upon consideration of the factors listed above, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purpose of this Ordinance. Such conditions may include, but not necessarily be limited to:
1. Modification of waste disposal and water supply facilities.
 2. Limitation of periods of use and operation.
 3. Imposition of operational controls, sureties, and deed restrictions.
 4. Requirements for construction of channel modifications, dikes, levees, and other protective measures, provided such are approved by the Department of Natural Resources and are deemed the only practical alternative to achieving the purpose of this Ordinance.
 5. Floodproofing measures.

Section 6. Nonconforming Uses. This Section allows for non-conforming uses and structures may continue even though they are do not conform to the requirements of the ordinance unless (1) such use is discontinued for six (6) consecutive months, or (2) the uses or adjuncts thereof that are or become nuisances. In addition If any nonconforming use or structure is destroyed by any means, including flood, it shall not be reconstructed if the cost is more than fifty (50) percent of the market value of the structure before the damage occurred, unless it is reconstructed in conformity with the provisions of this Ordinance. This limitation does not include the cost of any alteration to comply with existing state or local health, sanitary, building or safety codes or regulations or the cost of any alteration of a structure listed on the National Register of Historic Places, provided that the alteration shall not preclude its continued designation.

Section 7. Penalties for Violations. Violations of the provisions of this Ordinance or failure to comply with any of the requirements (including violations of conditions and safeguards established in connection with grants of Conditional Uses or Variances) shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more

than \$500.00 (FIVE HUNDRED) or imprisoned for not more than 30 (THIRTY) days. Each day such violation continues shall be considered a separate offense. Nothing herein contained prevents Buena Vista County from taking such other lawful action as is necessary to prevent or remedy violation.

Section 8. Amendments. The regulations and standards set forth in this Ordinance may from time to time be amended, supplemented, changed, or repealed. No amendment, supplement, change, or modification shall be undertaken without prior approval of the Department of Natural Resources.

Section 9. Definitions. This chapter provides a list of definitions of many of the words used in the ordinance, like “basement”, “development”, “factory-built home”, “historic structure”, “minor projects” and many other words that have meanings in the ordinance that may be different from their ordinary or general meaning. To understand and apply the ordinance, these definitions must be consulted.

PASSED AND ADOPTED this 26th day of October, 2010 by the Board of Supervisors, Buena Vista County, State of Iowa.

/s/ Ken Hach, Chair, Board of Supervisors

/s/ Attest: Susan Lloyd, Auditor