

EL DORADO COUNTY PLANNING DEPARTMENT

Chapter 17.25

FLOOD DAMAGE PREVENTION ORDINANCE

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17.25.010 Statutory authorization, findings of fact, purpose and objectives.

- A. Statutory Authorization. The legislature of the state has in Government Code, Sections 65302 and 65800, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the board of supervisors of El Dorado County, state of California, does ordain as set forth in this chapter.
- B. Findings of Fact.
 - 1. The flood hazard areas of El Dorado County are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
 - 2. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss.
- C. Statement of Purpose. It is the purpose of the ordinance codified in this chapter 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:
 - 1. To protect human life and health;
 - 2. To minimize expenditure of public money for costly flood-control projects;
 - 3. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
 - 4. To minimize prolonged business interruptions;
 - 5. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
 - 6. To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future blight areas;

7. To insure that potential buyers are notified that property is in an area of special flood hazard;
 8. To insure that those who occupy the areas of special flood hazard assume responsibility for their actions; and
 9. To provide property owners the opportunity of purchasing flood insurance through the National Flood Insurance Program.
- D. Methods of Reducing Flood Losses. In order to accomplish its purposes, this chapter includes methods and provisions for:
1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
 3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
 4. Controlling, filling, grading, dredging, and other development which may increase flood damage; and
 5. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas. (Ord. 3627 §1(part), 1986)

17.25.020 Definitions. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

1. "Appeal" means a request for a review of the community development director's or authorized representative's interpretation of any provision of the ordinance codified in this chapter or a request for a variance.
2. "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year.
3. "Development" means any manmade change to improved or unimproved real estate, including, but not limited to: filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.
4. "Existing mobile home park or mobile home subdivision" means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the construction of facilities for servicing the lots on which the mobile home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of the ordinance codified in this chapter.
5. "Expansion to an existing mobile home park or mobile home subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).
6. "Flood or flooding" means a general and temporary condition of partial or complete flooding of normally dry land areas from:
 - a. The overflow of lake or stream waters; and/or
 - b. The unusual and rapid accumulation of runoff of surface waters from any source.

7. "Flood boundary floodway map" means the official map on which the Federal Insurance Administration has delineated both the areas of flood hazard and the floodway.
8. "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
9. "Flood insurance study" means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the flood insurance rate map (FIRM), the flood boundary floodway map and the water surface elevation of the base flood.
10. "Floodproofing" means any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved property.
11. "Flood-related erosion" means a condition that exists in conjunction with a flooding event that alters the composition of the shoreline or bank of a watercourse. One that increases the possibility of loss due to the erosion of the land area adjacent to the shoreline or watercourse.
12. "Floodway" means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. The floodway is delineated on the flood boundary floodway map.
13. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, useable 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; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements.
14. "Highest grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
15. "Manufactured home" means 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. For floodplain management purposes, the term "manufactured home" also includes mobile homes, park trailers, travel trailers and other similar vehicles placed on a site for greater than one hundred eighty consecutive days.
16. "New construction" means structures for which the building permit application was approved on or after the effective date of the ordinance codified in this chapter.
17. "New mobile home park or mobile home subdivision" means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the construction of facilities or servicing the lot (including, at the minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of the ordinance codified in this chapter.
18. "Special flood hazard area (SFHA)" means an area having special flood or flood-related erosion hazards, as shown on the FHBM or FIRM as Zone A, AD, A-30, AE, A99, AH, VO, V1-V30, VE or V.

19. "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty 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 street and/or walkways; nor does it include excavation for a basement, footing, 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.
20. "Structure" means a walled and roofed building or manufactured home that is principally above ground.
21. "Substantial improvement" means any repair, reconstruction, or improvement to a structure, the cost of which exceeds fifty percent 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 alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.This term does not, however, include either:
 - 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 a state or local inventory of historic places.
22. "Variance" means a grant of relief from the requirements of the ordinance codified in this chapter which permits construction in a manner that would otherwise be prohibited by the ordinance codified in this chapter. (Ord. 3793 §1, 1987: 3627 §1(part), 1986)

17.25.030 Provisions.

- A. Lands to Which this Chapter Applies, Zones A and A1–30 of the FIRM Dated October 18, 1983, and the subsequent maps modified by FEMA and approved by the county board of supervisors. This chapter shall apply to all areas of special flood hazards within the jurisdiction of the county.
- B. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration, through the Federal Emergency Management Agency in a report entitled "The Flood Insurance Study for the County of El Dorado" along with the accompanying flood insurance rate maps, dated October 18, 1983, and the subsequent maps as modified by FEMA and approved by the board of supervisors, are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at the community development department, planning division, 360 Fair Lane, Placerville, California 95667.

- C. Compliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. (Ord. 3793 §2, 1987: Ord. 3627 §1(part), 1986)

17.25.040 Administration

- A. Establishment of Development Permit. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 17.25.030(B). Application for a development permit shall be made on forms furnished by the community development department and may include, but not be limited to: two sets of plans to scale showing the nature, location, dimensions, and elevation of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:
1. Proposed elevation in relation to mean sea level, of the lowest floor, as defined in Section 17.25.020 (13), of all structures, or other base flood data as provided in subsection C2 of this section;
 2. Proposed elevation in relation to mean sea level or other base flood data as provided in subsection C2 of this section to which any nonresidential structure will be floodproofed;
 3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 17.25.050(A)(3)(b);
 4. Description of the extent to which any water-course will be altered or relocated as a result of proposed development.
- B. Designation of the Administrator. The community development director or authorized representative is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.
- C. Duties and Responsibilities of the Administrator. The duties and responsibilities of the administrator shall include, but not be limited to:
1. Permit Review of Mapped Areas Showing Zones A and A1-30 as Shown on the currently county-adopted Flood Insurance Rate Map (FIRM):
 - a. Review of all development permits to determine that the permit requirements of this chapter have been satisfied;
 - b. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding;
 - c. Review of all development permits to determine if the proposed development adversely affects the flood-carrying capacity of the area of special flood hazard. For purposes of this chapter, "adversely affected" means 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 foot at any point.

2. Use of Other Base Flood Data. When base flood elevation data has been provided in accordance with Section 17.25.030(B), Basis for Establishing the Areas of Special Flood Hazard, the community development director or authorized representative shall obtain from the applicant, review, and reasonably utilize the best base flood data available from any source: federal, state, or other, such as high water mark(s), floods of record, or private engineering reports, in order to administer Section 17.25.050.
3. Information to be Obtained and Maintained. The community development director shall obtain and maintain for public inspection and make available as needed for flood insurance policies:
 - a. The certification required in Section 17.25.050(A)(3)(b); and
 - b. If fill is used to elevate a structure above the base flood elevation, a certification from a registered engineer per Section 17.25.050(A)(3)(a) is required.
4. Alteration of Watercourses. It is the responsibility of the community development director or authorized representative to:
 - a. Notify adjacent communities and the California Department of Water Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency;
 - b. It is required that the flood-carrying capacity of the altered or relocated portion of the watercourse be maintained by the developer, community service district or other agreed-upon responsible agency.
5. Interpretation of Flood Insurance Rate Map (FIRM) Boundaries. The community development director will provide interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard. (Ord. 3793 §3, 1987; Ord. 3627 §1(part), 1986)

17.25.050 Provisions for flood hazard reduction.

- A. Standards of Construction. In all areas of special flood hazard, zones A and A1-30, the following standards are required:
 1. Anchoring.
 - a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic hydrostatic loads, including the effects of buoyancy.
 - b. All manufactured homes shall meet the anchoring standards of Section 17.25.050(E).
 2. Construction Materials and Methods.
 - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - b. All new construction and substantial improvements shall use methods and practices that minimize flood damage.
 - c. All elements that function as a part of the structure, such as furnace, hot water heater, air conditioner, etc., shall be elevated to or above the base flood elevation or depth number in feet specified on the flood insurance rate map (FIRM), above the highest adjacent grade.

3. Elevation and Floodproofing.
 - a. New construction and substantial improvement of any structure shall have the bottom of the lowest floor, as defined in Section 17.25.020(13) elevated to or above the base flood elevation. Nonresidential structures will meet the standards in subsection A3c of this section. Prior to the foundation inspection approval, the elevation of the lowest floor, as defined in Section 17.25.020(13), shall be certified by a registered professional engineer or surveyor and certified that the elevation requirements have been met. Failure to submit elevation certification shall be cause to issue a stop work order for the project. As-built plans certifying the elevation of the lowest adjacent grade is also required. Notification of compliance shall be recorded as set forth in Section 17.25.040(C)(3).
 - b. Nonresidential construction shall either be elevated in conformance with subparagraph a of this subdivision or together with attendant utility and sanitary facilities, be floodproofed to the base flood elevation. Examples of floodproofing include, but are not limited to:
 - i. Installation of watertight doors, bulk heads, and shutters;
 - ii. Reinforcement of walls to resist water pressure;
 - iii. Use of paints, membranes, or mortars to reduce seepage through walls;
 - iv. Addition of mass or weight to structure to resist flotation;
 - v. Armour protection of all fill materials from scour and/or erosion;
 - vi. Certification by a registered professional engineer or architect that the floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood. Such certification shall be provided to the community development director or authorized representative as set forth in Section 17.25.040(C)(3)(a).
 - c. Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor as defined by Section 17.25.020(13) 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 architect or meet or exceed the following minimum criteria:
 - i. Either a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed areas subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters; or
 - ii. Be certified to comply with subsection (A)(3)(b) of this section, local floodproofing standard approved by the Federal Insurance Administration.

- B. Standards for Storage of Materials and Equipment, in Zones A and A1-30.
1. The storage or processing of materials that are, in time of flooding, buoyant, flammable, explosive, or could be injurious to human, animal, or plant life, is prohibited.
 2. Storage of other material or equipment may be allowed if not subject to major damage by flood and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.
- C. Standards for Utilities.
1. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from systems into floodwaters.
 2. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
 3. L.P. gas tanks, bottles and dumpsters and other such buoyant hazards shall be anchored according to a design prepared by a licensed professional engineer or architect to resist flotation, collapse or lateral movement.
- D. Standards for Subdivisions, in Zones A, and A1-30.
1. All tentative subdivision major and minor proposals shall identify the flood hazard area and the elevation of the base flood.
 2. All subdivision proposals shall be consistent with the need to minimize flood damage.
 3. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 4. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage as set forth in Section 17.25.040(C)(3)(a). Certification of compliance shall be required of the developer.
- E. Standard for Manufactured Homes and Mobile Home Parks and Subdivisions.
1. All new manufactured homes and additions to manufactured homes shall be set on permanent foundation by anchoring the unit to resist flotation, collapse, or lateral movement and shall be certified by a qualified engineer.
As set forth in Section 17.25.040(C)(3)(a), certification meeting the standards above is required of the installer or state agency responsible for regulating the placement, installation, and anchoring of individual mobile home units.
 2. The following standards are required for (a) manufactured homes not placed in mobile home parks or subdivisions, (b) new mobile home parks or subdivisions, (c) expansions to existing mobile home parks or subdivisions, and (d) repair, reconstruction, or improvements to existing mobile home parks or subdivisions that equal or exceed fifty percent of the value of the streets, utilities, and pads before the repair, reconstruction, or improvement commenced.
 - a. Adequate surface drainage and access for a mobile home hauler shall be provided.
 - b. All manufactured homes shall be placed on pads or lots elevated on engineered compacted fill or on pilings so that the lowest floor of the manufactured home is at or above the base flood level. If elevated on pilings:

- i. The pilings shall be placed in stable soil no more than ten feet apart or as otherwise specified by a registered engineer or architect; and
 - ii. Reinforcement shall be provided for pilings more than six feet above ground level.
 3. No manufactured home shall be placed in a floodway, except in an existing mobile home park or existing mobile home subdivision.
- F. Floodways. Located within areas of special flood hazard established in Section 17.25.030(B) are areas designated as floodways. 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:
 1. Encroachments, including fill, new construction, substantial improvements, and other development shall be prohibited unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. (Ord. 3793 §4, 1987: Ord. 3627 §1(part), 1986)

17.25.060 Variance procedures.

A. Appeal Board.

1. The building division board of appeals as established by Chapter 15.12 of this code shall hear and decide appeals and requests for variances from the requirements of this chapter.
2. The building division board of appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the community development director or authorized representative.
3. In passing upon such applications, the board of appeals shall consider all technical evaluations, all relevant factors, standards, etc., specified in other sections of this chapter, and:
 - a. The danger that materials may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. The importance of the services provided by the proposed facility to the community;
 - e. The necessity to the facility of a waterfront location, where applicable;
 - f. The availability of alternative locations, for the proposed uses that are not subject to flooding or erosion damage;
 - g. The compatibility of the proposed use with existing and anticipated development;
 - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. 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;

- k. The costs 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.
 4. Generally, variances may be issued for new construction and substantial improvements 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 paragraphs a through k in Section 17.25.060(A)(3) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
 5. Upon consideration of the factors of Section 17.25.060(A)(3) and the purpose of this chapter, the board of appeals may attach such conditions to the granting of variances as it deems necessary to further the purpose of this chapter.
 6. The community development director or authorized representative shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.
- B. Conditions for Variances.
1. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places of the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
 2. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
 3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 4. Variances shall only be issued upon:
 - a. A showing of good and sufficient cause such as renovation, rehabilitation, or reconstruction. Variances issued for economic considerations, aesthetics, or because variances have been used in the past, are not good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - 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 to the public, or conflict with existing local laws or ordinances.
 5. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest flood elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced listed floor elevation. (Ord. 3627 §1(part), 1986)