

Title 18

FLOODPLAIN MANAGEMENT

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Chapter 18.04**STATUTORY AUTHORIZATION,
FINDINGS OF FACT, PURPOSE AND
METHODS**

Sections:

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18.04.010 Statutory authorization.

The Legislature of the State of California has in Government Code Sections 65302, 65560, and 65800 conferred upon local government units authority to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Calistoga does hereby adopt the following floodplain management regulations. (Ord. 564 § 2, 2000).

18.04.020 Findings of fact.

A. The flood hazard areas of the City of Calistoga 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.

B. These flood losses are caused by uses that are inadequately elevated, floodproofed, or protected from flood damage. The cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities also contribute to the flood loss. (Ord. 564 § 2, 2000).

18.04.030 Statement of purpose.

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

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in areas of special flood hazard;

F. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future blighted areas caused by flood damage;

G. Ensure that potential buyers are notified that property is in an area of special flood hazard; and ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. (Ord. 564 § 2, 2000).

18.04.040 Methods of reducing flood losses.

In order to accomplish its purposes, this title includes methods and provisions to:

A. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;

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

C. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

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

E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. (Ord. 564 § 2, 2000).

Chapter 18.08**DEFINITIONS**

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18.08.010 Generally.

Unless specifically defined below, words or phrases used in this title shall be interpreted so as to give them the meaning they have in common usage and to give this title its most reasonable application. (Ord. 564 § 2, 2000).

18.08.012 Accessory use.

"Accessory use" means a use which is incidental and subordinate to the principal use of the parcel of land on which it is located. (Ord. 564 § 2, 2000).

18.08.014 Alluvial fan.

"Alluvial fan" means a geomorphologic feature characterized by a cone or fan-shaped deposit of boulders, gravel, and fine sediments that have been eroded from mountain slopes, transported by flood flows, and then deposited on the valley floors, and which is subject to flash flooding, high velocity flows, debris flows, erosion, sediment movement and deposition, and channel migration. (Ord. 564 § 2, 2000).

18.08.016 Apex.

"Apex" is the point of highest elevation on an alluvial fan, which on undisturbed fans is generally the point where the major stream that formed the fan emerges from the mountain front. (Ord. 564 § 2, 2000).

18.08.020 Appeal.

"Appeal" means a request for a review of the Floodplain Administrator's interpretation of any provision of this title. (Ord. 564 § 2, 2000).

18.08.025 Area of shallow flooding.

“Area of shallow flooding” means a designated AO or AH zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. (Ord. 564 § 2, 2000).

18.08.030 Area of special flood hazard.

See “Special flood hazard area.” (Ord. 564 § 2, 2000).

18.08.035 Base flood.

“Base flood” means a flood which has a one percent chance of being equalled or exceeded in any given year (also called the “100-year flood”). Base flood is the term used throughout this title. (Ord. 564 § 2, 2000).

18.08.040 Basement.

“Basement” means any area of the building having its floor subgrade, i.e., below ground level, on all sides. (Ord. 564 § 2, 2000).

18.08.050 Building.

See “Structure.” (Ord. 564 § 2, 2000).

18.08.055 City.

“City” means the City of Calistoga. (Ord. 564 § 2, 2000).

18.08.060 Development.

“Development” means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. (Ord. 564 § 2, 2000).

18.08.070 Encroachment.

“Encroachment” means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain which may impede or alter the flow capacity of a floodplain. (Ord. 564 § 2, 2000).

18.08.080 Existing manufactured home park or subdivision.

“Existing manufactured home park or subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes

are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the City of Calistoga. (Ord. 564 § 2, 2000).

18.08.090 Expansion to an existing manufactured home park or subdivision.

“Expansion to an existing manufactured home park or subdivision” means 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). (Ord. 564 § 2, 2000).

18.08.100 Flood, flooding, or flood water.

“Flood, flooding, or flood water” means:

A. A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and/or mudslides (i.e., mudflows); and

B. The condition resulting from flood-related erosion. (Ord. 564 § 2, 2000).

18.08.105 Flood Boundary and Floodway Map (FBFM).

“Flood Boundary and Floodway Map (FBFM)” means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the floodway. (Ord. 564 § 2, 2000).

18.08.110 Flood Hazard Boundary Map.

“Flood Hazard Boundary Map” means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated the areas of flood hazards. (Ord. 564 § 2, 2000).

18.08.115 Flood Insurance Rate Map (FIRM).

“Flood Insurance Rate Map (FIRM)” means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. (Ord. 564 § 2, 2000).

18.08.120 Flood Insurance Study.

"Flood Insurance Study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood. (Ord. 564 § 2, 2000).

18.08.125 Floodplain or flood-prone area.

"Floodplain" or "flood-prone area" means any land area susceptible to being inundated by water from any source; see "Flood, flooding, or flood water." (Ord. 564 § 2, 2000).

18.08.130 Floodplain Administrator.

"Floodplain Administrator" is the individual appointed to administer and enforce the floodplain management regulations. (Ord. 564 § 2, 2000).

18.08.135 Floodplain management.

"Floodplain management" means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans. (Ord. 564 § 2, 2000).

18.08.140 Floodplain management regulations.

"Floodplain management regulations" means this title and other zoning regulations, subdivision regulations, building codes, health regulations, special purpose ordinances (such as grading and erosion control) and other application of police power which control development in flood-prone areas. This term describes Federal, State or local regulations in any combination thereof which provide standards for preventing and reducing flood loss and damage. (Ord. 564 § 2, 2000).

18.08.145 Floodproofing.

"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 real property, water and sanitary facilities, structures, and their contents. (Refer to FEMA Technical Bulletins TB 1-93, TB 3-93, and TB 7-93 for guidelines on dry and wet floodproofing.) (Ord. 564 § 2, 2000).

18.08.150 Floodway.

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "Regulatory floodway." (Ord. 564 § 2, 2000).

18.08.155 Floodway fringe.

"Floodway fringe" is that area of the floodplain on either side of the regulatory floodway where encroachment may be permitted. (Ord. 564 § 2, 2000).

18.08.160 Fraud and victimization.

"Fraud and victimization" as related to Chapter 18.24 CMC, Variance Procedure, means that the variance granted must not cause fraud on or victimization of the public. In examining this requirement, the City Council will consider the fact that every newly constructed building adds to government responsibilities and remains a part of the community for 50 to 100 years. Buildings that are permitted to be constructed below the base flood elevation are subject during all those years to increased risk of damage from floods, while future owners of the property and the community as a whole are subject to all the costs, inconvenience, danger, and suffering that those increased flood damages bring. In addition, future owners may purchase the property, unaware that it is subject to potential flood damage, and can be insured only at very high flood insurance rates. (Ord. 564 § 2, 2000).

18.08.165 Functionally dependent use.

"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities. (Ord. 564 § 2, 2000).

18.08.170 Governing body.

"Governing body" is the local governing unit, i.e., county or municipality, that is empowered to adopt and implement regulations to provide for the public health, safety and general welfare of its citizenry. The City Council is the governing body of the City of Calistoga. (Ord. 564 § 2, 2000).

18.08.175 Hardship.

"Hardship" as related to Chapter 18.24 CMC, Variance Procedure, means the exceptional hardship that would result from a failure to grant the requested variance. The Council requires that the variance be exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended. (Ord. 564 § 2, 2000).

18.08.180 Highest adjacent grade.

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. (Ord. 564 § 2, 2000).

18.08.185 Historic structure.

"Historic structure" means any structure that is

A. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

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

D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program as determined by the Secretary of the Interior or directly by the Secretary of the Interior in states without approved programs. (Ord. 564 § 2, 2000).

18.08.190 Levee.

"Levee" means a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to

provide protection from temporary flooding. (Ord. 564 § 2, 2000).

18.08.195 Levee system.

"Levee system" means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accord with sound engineering practices. (Ord. 564 § 2, 2000).

18.08.200 Lowest floor.

A. "Lowest floor" means the lowest floor of the lowest enclosed area, including basement (see "Basement" definition).

B. An unfinished or flood resistant enclosure below the lowest floor that is usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor provided it conforms to applicable non-elevation design requirements, including, but not limited to:

1. The wet floodproofing standard in CMC 18.20.010(C)(3);

2. The anchoring standards in CMC 18.20.010(A);

3. The construction materials and methods standards in CMC 18.20.010(B); and

4. The standards for utilities in CMC 18.20.020. (Ord. 564 § 2, 2000).

18.08.205 Manufactured home.

"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 attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle." (Ord. 564 § 2, 2000).

18.08.210 Manufactured home park or subdivision.

"Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale. (Ord. 564 § 2, 2000).

18.08.212 Market value.

"Market value" shall be determined by estimating the cost to replace the structure in new condition and adjusting that cost figure by the amount of depreciation which has accrued since the structure was constructed. The cost of replacement of the structure shall be based on a square foot cost factor

determined by reference to a building cost estimating guide recognized by the building construction industry. The amount of depreciation shall be determined by taking into account the age and physical deterioration of the structure and functional obsolescence as approved by the Floodplain Administrator, but shall not include economic or other forms of external obsolescence. Use of replacement costs or accrued depreciation factors different from those contained in recognized building cost estimating guides may be considered only if such factors are included in a report prepared by an independent professional appraiser and supported by a written explanation of the differences. (Ord. 564 § 2, 2000).

18.08.215 Mean sea level.

“Mean sea level” means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community’s Flood Insurance Rate Map are referenced. (Ord. 564 § 2, 2000).

18.08.220 New construction.

“New construction,” for floodplain management purposes, means structures for which the “start of construction” commenced on or after the effective date of floodplain management regulations adopted by the City of Calistoga and includes any subsequent improvements to such structures. (Ord. 564 § 2, 2000).

18.08.225 New manufactured home park or subdivision.

“New manufactured home park or subdivision” means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by this the City of Calistoga. (Ord. 564 § 2, 2000).

18.08.230 Obstruction.

“Obstruction” includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change

the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream. (Ord. 564 § 2, 2000).

18.08.235 One-hundred-year flood or 100-year flood.

See “Base flood.” (Ord. 564 § 2, 2000).

18.08.245 Public safety and nuisance.

“Public safety and nuisance” as related to Chapter 18.24 CMC, Variance Procedure, means that the granting of a variance must not result in anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin. (Ord. 564 § 2, 2000).

18.08.250 Recreational vehicle.

“Recreational vehicle” means a vehicle which is:

- A. Built on a single chassis;
- B. Four hundred square feet or less when measured at the largest horizontal projection;
- C. Designed to be self-propelled or permanently towable by a light-duty truck; and
- D. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. (Ord. 564 § 2, 2000).

18.08.255 Regulatory floodway.

“Regulatory floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. (Ord. 564 § 2, 2000).

18.08.260 Remedy a violation.

“Remedy a violation” means to bring the structure or other development into compliance with State or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of this title or otherwise deterring future similar violations, or reducing State or Federal financial exposure with

regard to the structure or other development. (Ord. 564 § 2, 2000).

18.08.265 Riverine.

"Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc. (Ord. 564 § 2, 2000).

18.08.270 Sheet flow area.

See "Area of shallow flooding." (Ord. 564 § 2, 2000).

18.08.272 Special flood hazard area (SFHA).

"Special flood hazard area (SFHA)" means an area in the floodplain subject to a one percent or greater chance of flooding in any given year. It is shown on an FHBM or FIRM as Zone A, AO, A1-A30, AE, A99, or AH. (Ord. 564 § 2, 2000).

18.08.275 Start of construction.

"Start of construction" includes substantial improvement and other proposed new development and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building. (Ord. 564 § 2, 2000).

18.08.280 Structure.

"Structure" means a walled and roofed building that is principally above ground; this includes a gas or liquid storage tank or a manufactured home. (Ord. 564 § 2; 2000).

18.08.285 Substantial damage.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. (Ord. 564 § 2, 2000).

18.08.290 Substantial improvement.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other proposed new development of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

A. Any project for improvement of a structure to correct existing violations or state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

B. Any alteration of a "historic structure"; provided, that the alteration will not preclude the structure's continued designation as a "historic structure." (Ord. 564 § 2, 2000).

18.08.300 Variance.

"Variance" means a grant of relief from the requirements of this title which permits construction in a manner that would otherwise be prohibited by this title. (Ord. 564 § 2, 2000).

18.08.310 Violation.

"Violation" means the failure of a structure or other development to be fully compliant with this title. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this title is presumed to be in violation until such time as that documentation is provided. (Ord. 564 § 2, 2000).

18.08.320 Water surface elevation.

"Water surface elevation" means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas. (Ord. 564 § 2, 2000).

18.08.330 Watercourse.

“Watercourse” means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature on or over which waters flow at least periodically. “Watercourse” includes specifically designated areas in which substantial flood damage may occur. (Ord. 564 § 2, 2000).

Chapter 18.12**GENERAL PROVISIONS**

Sections:

- 18.12.010 Lands to which this title applies.
- 18.12.020 Adoption of the areas of special flood hazard.
- 18.12.030 Compliance.
- 18.12.040 Abrogation and greater restrictions.
- 18.12.050 Interpretation.
- 18.12.060 Disclaimer of liability.
- 18.12.070 Severability.

18.12.010 Lands to which this title applies.

This title shall apply to all areas of special flood hazards within the jurisdiction of the City. (Ord. 564 § 2, 2000).

18.12.020 Adoption of the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study (FIS) dated March 1979, and the accompanying Flood Insurance Rate Maps (FIRMs) and Flood Boundary and Floodway Maps (FBFMs), dated September 28, 1979, and all subsequent amendments and/or revisions, are hereby adopted by reference and declared to be a part of this title. This FIS and attendant mapping is the minimum area of applicability of this title and may be supplemented by studies for other areas which allow implementation of this title and which are recommended to the City Council by the Floodplain Administrator. The FIS, FIRMs and FBFMs are on file at City Hall. (Ord. 564 § 2, 2000).

18.12.030 Compliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this title and other applicable regulations. Violation of the requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing herein shall prevent the City from taking such lawful action as is necessary to prevent or remedy any violation. (Ord. 564 § 2, 2000).

18.12.040 Abrogation and greater restrictions.

This title is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this title and another

title, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. 564 § 2, 2000).

18.12.050 Interpretation.

In the interpretation and application of this title, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. 564 § 2, 2000).

18.12.060 Disclaimer of liability.

The degree of flood protection required by this title is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This title does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This title shall not create liability on the part of the City, any officer or employee thereof, the State of California, or the Federal Insurance Administration, Federal Emergency Management Agency, for any flood damages that result from reliance on this title or any administrative decision lawfully made hereunder. (Ord. 564 § 2, 2000).

18.12.070 Severability.

This title and the various parts thereof are hereby declared to be severable. Should any section of this title be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the title as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid. (Ord. 564 § 2, 2000).

Chapter 18.16

ADMINISTRATION

Sections:

- 18.16.010 Establishment of development permit.
- 18.16.020 Permit fees.
- 18.16.030 Designation of the Floodplain Administrator.
- 18.16.040 Duties and responsibilities of the Floodplain Administrator.
- 18.16.050 Appeals.

18.16.010 Establishment of development permit.

A development permit shall be obtained before any construction or other development begins within any area of special flood hazard established in CMC 18.12.020. Application for a development permit shall be made on forms furnished by the Floodplain Administrator and may include, but not be limited to: plans in duplicate drawn 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:

A. Site plan, including but not limited to:

1. For all proposed structures, spot ground elevations at building corners and 20-foot or smaller intervals along the foundation footprint, or one-foot contour elevations throughout the building site; and
2. Proposed locations of water supply, sanitary sewer, and utilities; and
3. If available, the base flood elevation from the Flood Insurance Study and/or Flood Insurance Rate Map; and
4. If applicable, the location of the regulatory floodway; and

B. Foundation design detail, including but not limited to:

1. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
2. For a crawl-space foundation, location and total net area of foundation openings as required in CMC 18.20.010(C)(3) and FEMA Technical Bulletins 1-93 and 7-93; and
3. For foundations placed on fill, the location and height of fill, and compaction requirements (compacted to 95 percent using the Standard Proctor Test method); and

C. Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed, as required in CMC 18.20.010(C)(2) and FEMA Technical Bulletin TB 3-93; and

D. All appropriate certifications listed in CMC 18.16.040(D); and

E. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. (Ord. 564 § 2, 2000).

18.16.020 Permit fees.

A fee shall be charged for obtaining a development permit. The amount of the fee shall be set by the City Council by resolution. Said fee shall be due and payable prior to issuance of any permits pertaining to the application under consideration. (Ord. 564 § 2, 2000).

18.16.030 Designation of the Floodplain Administrator.

The Director of Planning and Building is hereby appointed to administer, implement, and enforce this title by granting or denying development permits in accord with its provisions. (Ord. 564 § 2, 2000).

18.16.040 Duties and responsibilities of the Floodplain Administrator.

The duties and responsibilities of the Floodplain Administrator shall include, but not be limited to the following.

A. Permit Review. Review all development permits to determine that:

1. Permit requirements of this title have been satisfied;
2. All other required State and Federal permits have been obtained;
3. The site is reasonably safe from flooding; and

4. The proposed development does not adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this title, "adversely affects" means that the cumulative effect of the proposed development when combined with all other existing and anticipated development will increase the water surface elevation of the base flood more than one foot at any point.

B. Review, Use and Development of Other Base Flood Data.

1. When base flood elevation data has not been provided in accordance with CMC 18.12.020, the Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and

floodway data available from a federal or state agency, or other source, in order to administer Chapter 18.20 CMC. Any such information shall be submitted to the City Council for adoption; or

2. If no base flood elevation data is available from a Federal or State agency or other source, then a base flood elevation shall be obtained using one of two methods from the FEMA publication "Managing Floodplain Development in Approximate Zone A Areas – A Guide for Obtaining and Developing Base (100-Year) Flood Elevations" dated July 1995 in order to administer Chapter 18.20 CMC:

- a. Simplified Method.

- i. One hundred (100) year or base flood discharge shall be obtained using the appropriate regression equation found in a U.S. Geological Survey publication, or the discharge-drainage area method; and

- ii. Base flood elevation shall be obtained using the Quick-2 computer program developed by FEMA; or

- b. Detailed Method.

- i. One hundred (100) year or base flood discharge shall be obtained using the U.S. Army Corps of Engineers' HEC-HMS computer program; and

- ii. Base flood elevation shall be obtained using the U.S. Army Corps of Engineers' HEC-RAS computer program.

C. Notification of Other Agencies. Whenever a watercourse is to be altered or relocated:

1. Notify adjacent communities and the California Department of Water Resources prior to alteration or relocation;

2. Submit evidence of such notification to the Federal Insurance Administration, Federal Emergency Management Agency; and

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

D. Documentation of Floodplain Development. Obtain and maintain for public inspection and make available as needed the following:

1. Certification required by CMC 18.20.010 (C)(1) and 18.20.040 (lowest floor elevations);

2. Certification required by CMC 18.20.010 (C)(2) (elevation of floodproofing of nonresidential structures);

3. Certification required by CMC 18.20.010 (C)(3) (wet floodproofing standard);

4. Certification of elevation required by CMC 18.20.030(B) (subdivision standards);

5. Certification required by CMC 18.20.060 (A) (floodway encroachments).

E. Map Determinations. Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazard. Where there appears to be a conflict between a mapped boundary and actual field conditions, grade and base flood elevations shall be used to determine the boundaries of the special flood hazard area. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in CMC 18.16.050.

F. Remedial Action. Take action to remedy violations of this title as specified in CMC 18.12.030. (Ord. 564 § 2, 2000).

18.16.050 Appeals.

The City Council shall 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 title. (Ord. 564 § 2, 2000).

Chapter 18.20

PROVISIONS FOR FLOOD HAZARD REDUCTION

Sections:

- 18.20.010 Standards of construction.
- 18.20.020 Standards for utilities.
- 18.20.030 Standards for subdivisions.
- 18.20.040 Standards for manufactured homes.
- 18.20.050 Standards for recreational vehicles.
- 18.20.060 Floodways.

18.20.010 Standards of construction.

In all areas of special flood hazards the following standards are required:

A. Anchoring.

1. All new construction and substantial improvements shall be adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

2. All manufactured homes shall meet the anchoring standards of CMC 18.20.040.

B. Construction Materials and Methods. All new construction and substantial improvement shall be constructed:

1. With flood resistant materials as specified in FEMA Technical Bulletin TB 2-93, and utility equipment resistant to flood damage;

2. Using methods and practices that minimize flood damage; and

3. 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.

C. Elevation and Floodproofing. (See CMC 18.08.040, 18.08.200, 18.08.220, 18.08.285 and 18.08.290, respectively for definitions of "basement," "lowest floor," "new construction," "substantial damage" and "substantial improvement.")

1. Residential construction, new or substantial improvement, shall have the lowest floor, including basement:

a. In an A zone, elevated two feet above the base flood elevation said base flood elevation shall be determined by one of the methods in CMC 18.16.040(B).

b. In all other zones, elevated two feet above the base flood elevation.

Upon the completion of the structure, the elevation of the lowest floor including basement all be

certified by a registered professional engineer or surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

2. Nonresidential construction, new or substantial improvement, shall either be elevated to conform with subsection (C)(1) of this section or together with attendant utility and sanitary facilities:

a. Be floodproofed below the elevation recommended under subsection (C)(1) of this section so that the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

c. Be certified by a registered professional engineer or architect that the standards of this subsection (C)(2) are satisfied. Such certification shall be provided to the Floodplain Administrator.

3. All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater.

Designs for meeting this requirement shall follow the guidelines in FEMA Technical Bulletins TB 1-93 and TB 7-93, and must exceed the following minimum criteria:

a. Have 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. 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 floodwater; or

b. Certified by a registered professional engineer or architect.

4. Manufactured homes shall also meet the standards in CMC 18.20.040. (Ord. 564 § 2, 2000).

18.20.020 Standards for utilities.

A. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate:

1. Infiltration of flood waters into the systems, and

2. Discharge from the systems into flood waters.

B. On-site waste disposal systems shall be located to avoid impairment to them, or contamination from them during flooding. (Ord. 564 § 2, 2000).

18.20.030 Standards for subdivisions.

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

B. All subdivision plans will provide the elevation of proposed structure(s) and pad(s). If the site is filled above the base flood elevation, the lowest floor and pad elevations shall be certified by a registered professional engineer or surveyor and provided to the Floodplain Administrator.

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

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

E. All subdivisions shall provide adequate drainage to reduce exposure to flood hazards. (Ord. 564 § 2, 2000).

18.20.040 Standards for manufactured homes.

A. All manufactured homes that are placed or substantially improved, within Zones A1-30, AH, and AE 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 the result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated at least two feet above the base flood elevation and be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

B. All manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH, and AE, on the community's Flood Insurance Rate Map that are not subject to the provisions of subsection (A) of this section will be securely fastened to an adequately anchored foundation system to resist flotation, collapse, and lateral movement, and be elevated so that either the:

1. Lowest floor of the manufactured home is at least two feet above the base flood elevation, or

2. Manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.

Upon the completion of the structure, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the community building inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator. (Ord. 564 § 2, 2000).

18.20.050 Standards for recreational vehicles.

All recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's Flood Insurance Rate Map will either:

A. Be on the site for fewer than 180 consecutive days, and be fully licensed and ready for highway use; a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions; or

B. Meet the permit requirements of Chapter 18.16 CMC and the elevation and anchoring requirements for manufactured homes in CMC 18.20.040(A). (Ord. 564 § 2, 2000).

18.20.060 Floodways.

Located within areas of special flood hazard established in CMC 18.12.020(A) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters, which carry debris, potential projectiles, and erosion potential, the following provisions apply.

A. Prohibit encroachments, including fill, new construction, substantial improvement, and other new development unless certification by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in the base flood elevation during the occurrence of the base flood discharge.

B. If CMC 18.20.060(A) is satisfied, all new construction, substantial improvement, and other proposed new development shall comply with all other applicable flood hazard reduction provisions of this chapter. (Ord. 564 § 2, 2000).

Chapter 18.24

VARIANCE PROCEDURE

Sections:

18.24.010 Nature of variances.

18.24.020 Requests for variances.

18.24.030 Conditions for variances.

18.24.010 Nature of variances.

The variance criteria set forth in this chapter are based on the general principle 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 title 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 characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the City Council 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 title 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. (Ord. 564 § 2, 2000).

18.24.020 Requests for variances.

A. The City Council shall hear all requests for variances.

B. In passing upon requests for variances, the City Council shall consider all technical evaluations, all relevant factors, standards specified in other sections of this title, and the:

1. Danger that materials may be swept onto other lands to the injury of others;

2. Danger of life and property due to flooding or erosion damage;

3. 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. Importance of the services provided by the proposed facility to the community;

5. Necessity to the facility of a waterfront location, where applicable;

6. Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

7. Compatibility of the proposed use with existing and anticipated development;

8. Relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

9. Safety of access to the property in time of flood for ordinary and emergency vehicles;

10. Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and

11. 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.

C. Any applicant to whom a variance is granted shall be given written notice over the signature of 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 \$25.00 for \$100.00 of insurance coverage; and

2. Such construction below the base flood level increases risks to life and property.

3. It is recommended that a copy of the notice shall be recorded by the Floodplain Administrator in the Office of the Napa Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

D. The Floodplain Administrator will maintain a record of all variance actions, including justification for their issuance, and will report such variances issued in its biennial report submitted to the Federal Insurance Administration, Federal Emergency Management Agency. (Ord. 564 § 2, 2000).

18.24.030 Conditions for variances.

A. Generally, variances may be issued for new construction, substantial improvement, 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 Chapters 18.16 and 18.20 CMC have been fully considered. As the lot size increases be-

yond 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 CMC 18.08.185) 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 not be issued within any mapped regulatory floodway if any increase in flood levels during the base flood discharge would result. (Ord. 564 § 2, 2000).