

Ventura County Flood Plain Management Ordinance

Originally Enacted as Ordinance No. 3841 as Amended by
Ordinance Nos. 3890, 3902, 3954, and 4465

CHAPTER 1: PURPOSE AND OBJECTIVES

Section 1.1 PURPOSE

The purpose of this ordinance is 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 for:

- 1.1.1 Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion or flood heights or velocities;
- 1.1.2 Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- 1.1.3 Controlling the alteration of natural floodplain, stream channels and natural protective barriers which help accommodate or channel flood waters;
- 1.1.4 Controlling filling, grading, dredging, and other development which may increase flood damage; and
- 1.1.5 Preventing or regulating the construction of flood barriers which shall unnaturally divert flood waters or which may increase flood hazards in other areas.
- 1.1.6 Prohibiting man-made alteration of sand dunes which would increase potential flood damage.

Section 1.2 METHODS OF REDUCING FLOOD LOSSES

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

- 1.2.1 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;
- 1.2.2 Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damages at the time of initial construction;
- 1.2.3 Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- 1.2.4 Controlling filling, grading, dredging, and other development which may increase flood damage; and

- 1.2.5 Preventing or regulating the construction of flood barriers which shall unnaturally divert flood waters or which may increase flood hazards in other areas.
- 1.2.6 Prohibiting man-made alteration of sand dunes which would increase potential flood damage.

Section 1.3 NAME

This ordinance shall be known as the Ventura County Flood Plain Management Ordinance.

CHAPTER 2: DEFINITIONS

Section 2.1 DEFINITIONS

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

- 2.1.1 "Alluvial Fan" is an area subject to flooding when the floodplain is comprised of low flow channels where sediment accompanies the shallow flooding and the unstable soils scour and erode during a flooding event.
- 2.1.2 "Alluvial Fan Flooding" means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high velocity flows; active processes of erosion, sediment transport, and deposition; and, unpredictable flow paths.
- 2.1.3 "Appeal" is a request for a review of the Director of Public Works' interpretation of any provision of this ordinance or a request for a variance.
- 2.1.4 "Apex" means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.
- 2.1.5 "Area of Shallow Flooding" is a designated AO, VO, 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 of the flow may be evident.
- 2.1.6 "Base Flood" is the flood having a one percent chance of being equaled or exceeded any given year.
- 2.1.7 "Basement" means any area of a building having its floor below ground level on all sides.
- 2.1.8 "Breakaway Walls" are any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic or any other suitable building material which are not part of the structural support of the building, and which are so designed as to breakaway under abnormally high tides or wave action without damage to the

- structural integrity of the building on which they are used or any buildings to which they might be carried by flood waters.
- 2.1.9 "Coastal High Hazard Area" is the area subject to high velocity waters, including coastal and tidal inundation or tsunamis. The area is designated on a Flood Insurance Rate Map (FIRM) as Zone V1-30, VE or V.
- 2.1.10 "Development" is any man-made 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 and materials located within the area of special flood hazard.
- 2.1.11 "Director of Public Works" means the Director of Public Works of the County of Ventura or his designated representative.
- 2.1.12 "Existing manufactured home park or subdivision" means a manufactured home park for which the construction of facilities for servicing the lot on which the manufactured homes are 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) are completed before September 3, 1985.
- 2.1.13 "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, either final site grading or pouring of concrete pads, or the construction of streets).
- 2.1.14 "Final Map" shall be the map referred to in the State of California's Subdivision Map Act, Government Code Section 66434 et. seq. Final Maps.
- 2.1.15 "Flood or Flooding" is a general and temporary condition of partial or complete inundation of normally dry land areas from:
- (1) The overflow of inland or tidal waters and/or
 - (2) The unusual and rapid accumulation of runoff of surface waters from any source.
 - (3) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.
- 2.1.16 "Flood Boundary and Floodway Map" is the official map on which the Federal Insurance Administration has delineated both the areas of flood hazard and the floodway.

- 2.1.16.1 The term "Flood Insurance Study" also includes the report presenting base flood elevation data, flood profiles, and floodway maps prepared by Hawks and Associates, 2323 Portola Road, Suite 150, Ventura, California 93003 dated November 1988, and entitled "Freeman Diversion Project, Proposed Floodway Revision."
- 2.1.17 "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.
- 2.1.18 "Flood Insurance Study" means the official report provided by the Federal Insurance Administration that includes flood profiles, Flood Insurance Rate Map, the Flood Boundary and Floodway Map and the water surface elevations of the base flood and shall include any adopted amendments.
- 2.1.19 "Flood proofing" means any combination of structural and non-structural 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. For guidelines on dry and wet flood proofing, refer to FEMA Technical Bulletins TB1-93, TB3-93, and TB7-93.
- 2.1.20 "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 above the elevation of the water surface prior to encroachment into the floodplain.
- 2.1.21 "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, but does not include long-term storage or related manufacturing facilities.
- 2.1.22 "Highest Grade" means the highest natural elevation of the ground surface next to the proposed walls of a structure prior to construction.
- 2.1.23 "Historic Structure" means any structure that is:
- (1) 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;
 - (2) 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;
 - (3) Individually listed on a state inventory of historic places in states with historic preservation programs that have been approved by the Secretary of the Interior; or

- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (a) By an approved state program as determined by the Secretary of the Interior or
 - (b) Directly by the Secretary of the Interior in states without approved programs.
- 2.1.24 "Lowest Floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, 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 that such enclosure is not built so as to render that structure in violation of the applicable non-elevation design requirements of this Ordinance.
- 2.1.25 "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. The term "manufactured home" does not include a "recreational vehicle."
- 2.1.26 "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.
- 2.1.27 "Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929.
- 2.1.28 "New Construction" means structures for which plans and an application for a Development Permit, as specified in Section 4.1, are accepted for processing by the Director of Public Works on or after September 3, 1985, and includes any subsequent improvements to such structures.
- 2.1.29 "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 the utilities, the construction of streets, and either final site-grading or the pouring of concrete pads) is completed on or after September 3, 1985.
- 2.1.30 "Person" means any natural person, firm, corporation, organization, company, association, business, trust, joint stock organization, partnership, joint venture, club or the agent, servant, manager, officer, employee or lessee of any of them.
- 2.1.31 "Recreational Vehicle" means a vehicle which is:
 - (1) built on a single chassis;
 - (2) 400 square feet or less when measured at the largest horizontal projection;
 - (3) Designed to be self-propelled or permanently towable by a light duty truck; and

- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- 2.1.32 "Sand Dunes" are naturally occurring accumulations of sand in ridges or mounds landward of the beach.
- 2.1.33 "Special Flood Hazard Area (SFHA)" means an area in the floodplain subject to the 1 percent or greater chance of flooding in any given year. It is shown on a FHBM or FIRM as Zone A, AO, A1-A30, AE, A99, AH, V1-V30, VE or V.
- 2.1.34 "Start of Construction" includes substantial improvement, 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 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 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.
- 2.1.35 "Structure" is a walled and roofed building or manufactured home that is principally above ground.
- 2.1.36 "Subdivision" is a dividing of land which creates five (5) or more legal lots from an existing lot.
- 2.1.37 "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.
- 2.1.38 "Substantial Improvement" means any reconstruction, rehabilitation, addition, or other improvement 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 incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include:
- (1) Any project for improvement of a structure to correct existing violations of 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

- (2) Any alteration of a "historic structure" provided that the alteration shall not preclude the structure's continued designation as a "historic structure."

2.1.39 "Variance" means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

2.1.40 "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

CHAPTER 3: GENERAL PROVISIONS

Section 3.1 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of Special Flood Hazard within the unincorporated area of the County of Ventura.

Section 3.2 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 scientific and engineering report entitled "Flood Insurance Study, Ventura County, California", (Unincorporated Areas) dated September 13, 1984, with an accompanying Flood Insurance Rate Map and Flood Boundary and Floodway Map are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file with the Ventura County Public Works Agency, 800 South Victoria Avenue, Ventura, California, 93009.

The Flood Insurance Study, Flood Insurance Rate Map and Flood Boundary and Floodway Map may be revised or amended from time to time by the Federal Insurance Administration and shall be adopted by reference and declared to be a part of this Chapter as of the effective date of said revision or amendment.

Section 3.3 COMPLIANCE

No person shall hereafter construct, locate, extend, or alter any structure or land without full compliance with the terms and conditions of this ordinance and other applicable regulations.

This ordinance shall not apply to structures for which application for building permits have been received by the Ventura County Department of Building and Safety prior to September 3, 1985.

This ordinance shall not apply to grading or construction authorized prior to September 3, 1985, pursuant to the Ventura County Zoning Ordinance, Building Code, or Subdivision Ordinance or to grading or construction for which review of the plans commenced prior to September 3, 1985.

Section 3.4 ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements or covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Section 3.5 INTERPRETATION

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

- (1) Considered as minimum requirements; and be
- (2) Liberally construed in favor of the governing body; and be
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes or county ordinances.

Section 3.6 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based upon engineering and scientific considerations. Larger floods can and shall occur. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that the land outside the areas of special flood hazard or uses permitted within such areas shall be free from flooding or flood damages. This chapter shall not create liability on the part of the County, Watershed Protection District, any officer or employee of either, or the Federal Insurance Administration for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made.

Section 3.7 SEVERABILITY

If any section, subsection, sentence, clause, phrase or other portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portion or portions of this ordinance. The Board of Supervisors of Ventura County declares that it

would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion irrespective of the fact that any one or more sections, subsections, clauses, phrases or other portions might be declared invalid or unconstitutional.

Section 3.8 EFFECT OF HEADINGS

Section headings contained herein shall not be deemed to govern, limit, modify or in any manner affect the scope, meaning or intent of any of the provisions of this ordinance.

CHAPTER 4: ADMINISTRATION

Section 4.1 FLOOD PLAIN DEVELOPMENT PERMIT REQUIRED

A Flood Plain Development Permit shall be obtained before start of construction or development begins within any area of Special Flood Hazard established by this ordinance. Application for a Flood Plain Development Permit shall be made on forms furnished by the Director of Public Works and may include but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations 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:

- 4.1.1 Elevation in relation to mean sea level of the lowest floor (including basement) of all structures; in Zone AO, elevation of existing grade and proposed elevation of lowest floor of all structures.
- 4.1.2 Elevation in relation to mean sea level to which any structure shall be flood proofed;
- 4.1.3 Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria set forth in this ordinance; and
- 4.1.4 Description of the extent to which any watercourse shall be altered or relocated as a result of the proposed development.

Section 4.2 DESIGNATION OF ADMINISTRATOR

The Director of Public Works is appointed to administer and implement this ordinance by granting or denying Flood Plain Development Permit applications in accordance with the provisions of this ordinance.

Section 4.3 DUTIES AND RESPONSIBILITIES OF THE DIRECTOR OF PUBLIC WORKS

The duties and responsibilities of the Director of Public Works shall include, but not be limited to:

- 4.3.1 Permit Review

- 4.3.1.1 Review of all applications for Flood Plain Development Permits to determine that the permit requirements of this ordinance have been satisfied.
- 4.3.1.2 Review all applications for Flood Plain 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 ordinance, "adversely affected" means that the cumulative effect of the proposed development when combined with all other existing and anticipated development shall not increase the water surface elevation of the base flood more than one foot at any point.
- 4.3.1.3 Review of all applications for Flood Plain Development Permits to determine whether proposed building sites shall be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements (including the placement of prefabricated buildings and manufactured homes) shall (i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure, (ii) be constructed with materials and utility equipment resistant to flood damage, and (iii) be constructed by methods and practices that minimize flood damage.
- 4.3.2 Issuance of Flood Plain Development Permits where applications have been found to be in conformance with the terms of this ordinance.
- 4.3.3 Use of other Base Flood Data when base flood elevation data has not been provided in accordance with Section 3.2, Basis for Establishing the Areas of Special Flood Hazard, the Director of Public Works shall obtain, review, and reasonably utilize the best base flood data available from any source such as high water mark(s), floods of record, or private engineering reports in order to administer this ordinance.
- 4.3.4 Obtaining and Maintaining Information
 - 4.3.4.1 The Director of Public Works shall obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures.
 - 4.3.4.2 For all new or substantially improved flood proofed structures, the Director of Public Works shall:
 - (1) Verify and record the actual elevations to which the structures have been flood proofed (in relation to mean sea level); and
 - (2) Maintain the flood proofing certifications required by this ordinance.
 - 4.3.4.3 The Director of Public Works shall maintain for public inspection all records pertaining to this ordinance.
- 4.3.5 Alteration of Watercourse
 - It is the responsibility of the Director of Public Works to:
 - 4.3.5.1 Submit information to the Federal Emergency Management Agency detailing any alterations or relocations of a watercourse that affect the capacity; and

- 4.3.5.2 Insure that the flood carrying capacity of the altered or relocated watercourse is not reduced.
- 4.3.5.3 Notify adjacent communities and the California Department of Water Resources within six months of information becoming available or project completion, whichever comes first, of any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- 4.3.6 Interpretation of Flood Insurance Rate Map (FIRM) Boundaries.
The Director of Public Works shall provide interpretations, where needed, as to the exact location of the boundaries of the areas of Special Flood Hazard and regulatory floodways. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 7.1.
- 4.3.7 Other Permits Required
The Director of Public Works shall review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law.

Section 4.4 FEES

Before a permit is issued, an applicant shall pay the enforcing officer the fees authorized by this section.

- 4.4.1 Fees – A schedule of fees shall be adopted by resolution of the Board of Supervisors of Ventura County. Such fees shall reimburse the County for costs incurred in the processing, investigation, renewal and modification of Flood Plain Development Permits and for performing other work in the administration of the ordinances.

Section 4.5 COMMENCEMENT OF WORK

The Permittee shall begin the work authorized by the Flood Plain Development Permit within one hundred eight calendar days from the date of issuance of this permit. A permit which has become void by reason of non-commencement of work in 180 days may be renewed one time for a 180-day period within 30 days after such permit becomes void at the discretion of the enforcing officer upon payment of a renewal fee. If the enforcing officer does not consent to such renewal, a permit may be granted only upon following the procedures herein established for the original application. In the event a permit becomes void and such permit is not renewed within the time allowed for renewal, the enforcing officer shall, within 90 days after such permit becomes void, return to the former permittee any part of his permit fee in excess of the total of the Application Fee, Plan Check Fee and any other fees paid not relating to inspection of the work during construction, as well as any surety bond,

cash bond, or instrument of credit the former permittee may have paid to or filed with the enforcing officer under the terms of this ordinance.

CHAPTER 5: PROVISIONS FOR FLOOD HAZARD REDUCTION

Section 5.1 STANDARDS

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

- 5.1.1 Anchoring
 - 5.1.1.1 All new construction and substantial improvements of structures, including manufactured homes, shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- 5.1.2 Construction Materials and Methods
 - 5.1.2.1 All new construction and substantial improvements of structures shall be constructed of materials and utility equipment resistant to flood damage.
 - 5.1.2.2 All new construction and substantial improvements of structures shall use methods and practices that minimize flood damage.
 - 5.1.2.3 Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- 5.1.3 Utilities
 - 5.1.3.1 All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and
 - 5.1.3.2 On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- 5.1.4 Subdivisions
 - 5.1.4.1 All subdivisions shall be consistent with the need to minimize flood damage.
 - 5.1.4.2 All subdivisions shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 - 5.1.4.3 All subdivisions shall have adequate drainage provided to reduce exposure to flood damage; and
 - 5.1.4.4 Base flood elevation data shall be provided for subdivisions or development of single lots of five acres or more. Such data shall be provided to and accepted by the Director of Public Works prior to acceptance of the final map and any public improvements by Ventura County.

Section 5.2 SPECIFIC STANDARDS

In all areas of special flood hazard where base flood elevation data has been provided as set forth in Section 3.2, or Section 4.3.3, the following provisions are required.

- 5.2.1 RESIDENTIAL CONSTRUCTION – New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to one foot above the base flood elevation; and
 - 5.2.1.1 Where average velocities of flow exceed five feet per second, any fill material used to support the structure and its foundations shall be armored to prevent loss of the fill material.
 - 5.2.1.2 Shall have the elevation of the lowest floor certified by a person qualified in the State of California to practice surveying. Such certification shall be provided to the Director of Public Works in a form prescribed by the Director of Public Works. The certification shall be provided prior to occupancy of the structure.
 - 5.2.1.3 When fill is not used and velocities of flow are less than five feet per second, structural components such as piers used to support the structure shall be designed to resist hydrostatic loads.
 - 5.2.1.4 When fill is not used and velocities of flow are equal to or greater than five feet per second and equal to or less than 10 feet per second, the components used to support the structure shall be designed to resist hydrostatic and hydrodynamic loads.
 - 5.2.1.5 When depths of water exceed three feet, structural components used to support the structure shall be designed for impact loads.
 - 5.2.1.6 When fill is not used and velocities of flow exceed 10 feet per second, the use of structural components to support a structure is prohibited.
- 5.2.2 NONRESIDENTIAL CONSTRUCTION – New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to one foot above the base flood elevation and meet the requirements of Section 5.2.1; or together with attendant utility and sanitary facilities, shall:
 - 5.2.2.1 Be flood-proofed so that below a level one foot above the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water;
 - 5.2.2.2 Be certified by a registered professional engineer or architect that the standards of this section are satisfied. Such certification shall be provided to the Director of Public Works in a form prescribed by the Director of Public Works. The certification shall be provided prior to occupancy of the structure.
 - 5.2.2.3 Where velocities of flow are less than five feet per second, structural components of the structure shall be designed to resist hydrostatic loads.

- 5.2.2.4 Where velocities of flow are equal to or greater than five feet per second and equal to or less than 10 feet per second, the structure shall be designed to resist hydrostatic and hydrodynamic loads.
- 5.2.2.5 When depths of water exceed three feet, the structure shall be designed for impact loads.
- 5.2.2.6 Where velocities of flow exceed 10 feet per second, structures with floors below water surface elevations and the use of structural components to support the structure are prohibited.
- 5.2.3 MANUFACTURED HOMES AND RECREATIONAL VEHICLES – Manufactured homes and recreational vehicles shall meet the following standards:
 - 5.2.3.1 Manufactured homes that are placed or substantially improved within Zone A1-30, AH, or AE on the Ventura County FIRM, but which are:
 - (a) outside of a manufactured home park or subdivision,
 - (b) in a new manufactured home park or home park or subdivision, or
 - (c) in an expansion to an existing manufactured home park or subdivision, or
 - (d) in an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as a result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to an elevation one foot or more above the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - 5.2.3.2 Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are within zones A1-30, AH or AE on the Ventura County FIRM that are not subject to the provisions of Subdivision 5.2.3.1 shall be elevated so that either:
 - (a) the lowest floor of the manufactured home is at or above the base flood elevation, plus one foot, or
 - (b) the 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, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
 - 5.2.3.3 Manufactured homes placed or substantially improved within Zones V1-30, V or VE in the Ventura County FIRM on sites:
 - (a) outside of a manufactured home park or subdivision,
 - (b) in a new manufactured home park or subdivision,
 - (c) in an expansion to an existing mobile home park or subdivision, or

- (d) in an existing mobile home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood shall meet the standards of Subdivision 5.2.6 Coastal Hazard Areas.
- 5.2.3.4 Recreational Vehicles placed on sites within areas of special flood hazard on the Ventura County FIRM must either:
 - (a) be on the site for fewer than 180 consecutive days,
 - (b) be fully licensed and ready for highway use, or
 - (c) within Zones A1-30, AH and AE, meet the requirements of Subdivision 5.2.3.1, or
 - (d) within Zones V1-30, V, and VE, meet the requirements of Subdivision 5.2.6 Coastal Hazard Areas.
- 5.2.3.4.1 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.
- 5.2.4 SHALLOW FLOODING – Located within the Areas of Special Flood Hazard established in Section 3.2, are areas designated as AO and AH zones. These areas have special flood hazard associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore the following provisions apply:
 - 5.2.4.1 All new construction and substantial improvements of residential structures in AO zones shall have the lowest floor, including basement, elevated above the highest grade to the depth number specified on the community's FIRM plus one foot.
 - 5.2.4.2 All new construction and substantial improvements of residential structures in AH zones shall have the lowest floor, including basement, elevated above the base flood elevation plus one foot.
 - 5.2.4.3 All new construction and substantial improvements of nonresidential structures in AO zones shall:
 - (1) Have the lowest floor, including basement, elevated above the highest grade to the depth number specified on the FIRM plus one foot, or
 - (2) Together with attendant utility and sanitary facilities to be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components which have the capability to withstand hydrostatic and hydrodynamic loads and the effects of buoyancy.
 - (a) Where velocities of flow are less than five feet per second, structural components shall be designed to resist hydrostatic loads.
 - (b) Where velocities of flow are equal to or greater than five feet per second and equal to or less than 10 feet per

second, the structural components shall be designed to resist hydrostatic and hydrodynamic loads.

(c) Where velocities of flow exceed 10 feet per second, structures with floors below water surface elevations are prohibited and the use of structural components to support the structure are prohibited.

(d) Adequate drainage paths shall be provided around structures on slopes to guide floodwaters around and away from the proposed structures.

5.2.4.4 All new construction and substantial improvements of non-residential structures in AH zones shall:

(1) Have the lowest floor, including basement, elevated to the base flood elevation specified on the FIRM plus one foot, or

(2) Meet the standards set forth in Section 5.2.4.3.

5.2.5 ALLUVIAL FANS – Areas subject to alluvial fan flooding have irregular flow paths that result in erosion of existing channels and the undermining of the fill material. Those areas are identified on the Flood Insurance Rate Map as AO zones with velocities.

5.2.5.1 All structures must be securely anchored to minimize the impact of the flood and sediment damage.

5.2.5.2 All new construction and substantial improvements of structures shall have the lowest floor, including basement, elevated to or above the depth number plus one foot.

5.2.5.3 All fill materials must be armored to protect the material from the velocity of the flood flow.

5.2.5.4 All proposals for subdivision development must provide a mitigation plan that identifies the engineering methods used to:

(1) Protect the structures from erosion and scour caused by the velocity of the flood flow.

(2) Capture or transport flood and sediment flow through the subdivision to a safe point of disposition.

5.2.6 COASTAL HAZARD AREAS – Located within the Areas of Special Flood Hazard established in Section 3.2, are areas designated as coastal hazard areas identified as Zones VI-30, VE, and V. These areas have special flood hazards associated with wave run-up and beach erosion in which the following provisions shall apply.

5.2.6.1 All new construction and substantial improvements shall:

(1) Be elevated and secured to adequately anchored pilings and columns so that the lowest portion of structural members of the lowest floor, excluding pilings or columns, is elevated one foot above the base flood level.

(2) Have space below the lowest floor free of obstruction, or constructed with breakaway walls intended to collapse under stress without jeopardizing the structural support.

- (3) Not use any fill for structural support.
 - (4) Have the pile or column foundation and structure attached thereto anchored to resist floatation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values shall be those associated with the base flood. Wind loads shall be those required by the Building Official.
- 5.2.6.2 All new construction shall be located landward of the mean high tide line.
- 5.2.6.3 Compliance with the provisions of Section 5.2.6.1 of Section 5.2 shall be certified by a registered professional engineer or architect and provided to the Director of Public Works. This certification shall be provided to the Director of Public Works prior to occupancy of the structure.
- 5.2.6.4 Any man-made alteration of sand dunes which would increase potential flood damage is prohibited.
- 5.2.7 REGULATORY FLOODWAY – The regulatory floodway shown in the Flood Insurance Study has been selected and adopted on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood without increasing the water surface of that flood more than one foot at any point. In accordance with this principle the following provisions shall apply:
- 5.2.7.1 Encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway that would result in any increase in flood levels for the base flood elevation with floodway as specified in the Flood Insurance Study during the occurrence of the base flood discharge are prohibited.
- 5.2.7.2 The placement of residential structures within the adopted regulatory floodway is prohibited.
- 5.2.8 REGULATORY FLOODWAY NOT DEFINED – Where no floodway is identified, the applicant for a Flood Plain Development Permit shall provide an engineering study for the project area that establishes a setback where no encroachment of any new development shall be allowed that would increase the water surface elevation of the base flood plus one foot; or establish a setback from the stream bank equal to five times the width of the stream at the top of the bank or 20 feet on each side from the top of the bank, whichever is greater.

CHAPTER 6: LOADING

Section 6.1 GENERAL

- 6.1.1 All structures covered by this ordinance shall be capable of resisting all loads required by the Ventura County Building Code and, in addition, all loads prescribed in this Chapter without exceeding allowable stresses.

- 6.1.2 Water loads are loads or pressures on surfaces of structures caused and induced by the presence of flood waters. They are hydrostatic, hydrodynamic or impact loads.

Section 6.2 HYDROSTATIC LOADS

- 6.2.1 Hydrostatic loads are those caused by water above or below the ground surface, free or confined, which is either stagnant or moves at low velocities up to five feet per second.
 - 6.2.1.1 The pressure at any point is equal to the unit weight of water (62.4 pounds per cubic foot) multiplied by the height of water above the point to which confined water would rise if free to do so.
- 6.2.2 Hydrostatic loads consist of vertical loads, lateral loads, and uplift.
 - 6.2.2.1. Vertical Loads: These are loads acting vertically downward on horizontal or inclined surfaces of buildings or structures, such as roofs, decks or floors, and walls, caused by the weight of flood waters above them.
 - 6.2.2.2. Lateral Loads: Lateral hydrostatic loads are those which act in a horizontal direction, against vertical or inclined surfaces, both above and below the ground surface and tend to cause lateral displacement and overturning of the building, structure, or parts thereof.
 - 6.2.2.3. Uplift: Uplift loads are those which act in a vertically upward direction on the underside of horizontal or sloping surfaces of buildings or structures, such as basement slabs, footings, floors, decks, roofs and overhangs. Hydrostatic loads acting on inclined, rounded or irregular surfaces may be resolved into vertical or uplift loads and lateral loads based on the geometry of the surfaces and the distribution of hydrostatic pressures.

Section 6.3 HYDRODYNAMIC LOADS

- 6.3.1 Hydrodynamic loads, for the purpose of these regulations, are those induced on structures by the flow of flood water moving at moderate or high velocity around the structures or parts thereof, above ground level. Such loads may occur below the ground level when openings or conduits exist which allow free flow of flood waters. Hydrodynamic loads are basically of the lateral type and relate to direct impact loads by the moving mass of water, and to drag forces as the water flows around the obstruction.
 - 6.3.1.1 Conversion to Equivalent Hydrostatic Loads – For the purpose of these regulations, and for cases when water velocities do not exceed 10 feet per second, dynamic effects of the moving water may be converted into equivalent hydrostatic loads by increasing the depth of water by an amount dh , on the upstream side and above the ground level only, equal to:

$$dh = \frac{a V^2}{2g}, \text{ where}$$

V is the average velocity of the water in feet per second;

g is the acceleration of gravity, 32.2 feet per second squared;
a is the coefficient of drag or shape factor. (The value of a, unless otherwise evaluated, shall not be less than 1.25)

The equivalent surcharge depth d_h shall be added to the depth measured between the design level and the regulatory flood and the resultant pressures applied to, and uniformly distributed across, the vertical projected area of the building or structure which is perpendicular to the flow. Surfaces parallel to the flow or surfaces facing downstream shall be considered subject to hydrostatic pressures for depths to the regulatory flood only.

Section 6.4 IMPACT LOADS

6.4.1 Types: For the purpose of these regulations, impact loads are those which result from floating debris, ice and any floatable object or mass carried by flood waters striking against structures or parts thereof. These loads are of two basic types: normal and special.

6.4.1.1 Normal Impact Loads: Normal impact loads are those which relate to isolated occurrences of logs or floatable objects of normally encountered sizes striking buildings or parts thereof.

6.4.1.2 Special Impact Loads: Special impact loads are those which relate to large conglomerates of floatable objects, such as an accumulation of floating debris, either striking or resting against a building or parts thereof.

6.4.2 Applicability: Impact loads shall be considered in the design of structures and parts thereof as stipulated below:

6.4.2.1 Normal Impact Loads: A concentrated load acting horizontally at the regulatory flood level or at any point below it, equal to the impact force, produced by a 1,000-pound mass traveling at the velocity of the flood water and acting on a one square foot surface of the structure.

(1) Deceleration of the mass shall occur over 0.5 seconds.

(2) This load shall be applied to the structure in such a manner that stresses are maximized.

6.4.2.2. Special Impact Loads: Special impact loads are considered in the design of buildings, structures, or parts thereof. Unless a rational and detailed analysis is made and submitted for approval by the Director of Public Works, the intensity of load shall be taken as 100 pounds per foot acting horizontally over a one-foot wide horizontal strip at the regulatory flood level or at any level below it. Where natural or artificial barriers exist which would effectively prevent these special impact loads from occurring, the loads may be ignored in the design.

Section 6.5 PRESSURE EQUALIZATION

6.5.1 All new construction and substantial improvements, that fully enclose areas below the lowest floor that are usable solely for parking of

vehicles, building access, or storage in an area other than a basement 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 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: 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. 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.

- 6.5.2 Pressure equalization shall be appropriate for unfinished or flood resistant enclosures either unused or solely used for parking of vehicles, building access, or storage in areas other than basements. All other structures shall be elevated or flood proofed pursuant to the terms of this ordinance.

Section 6.6 BREAKAWAY WALLS

A breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:

- (1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
- (2) The elevated portion of the building shall not incur any structural damage due to the effects of winds and water loads acting simultaneously during a 100-year event.

CHAPTER 7: APPEALS AND VARIANCES

Section 7.1 APPEAL BOARD

- 7.1.1 The Ventura County Board of Supervisors acting as the appeal board shall hear and decide appeals and requests for variances from the requirements of this chapter. The appeal board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Director of Public Works in the enforcement or administration of this chapter.
- 7.1.2 Those aggrieved by the decision of the appeal board, or any taxpayer, may seek judicial review of such decision in the Superior Court pursuant to Section 1094.5 of the Code of Civil Procedure provided that proceedings are commenced within 30 days after such decision is final.
- 7.1.3 A decision of the appeal board is final and may not be reconsidered on the day following the day on which the decision was rendered.

- 7.1.4 In passing upon such applications, the appeal board shall consider all technical evaluations, all relevant factors, standards specified in other sections or chapters, and:
- (1) The danger that materials may be swept onto other lands to the injury of others;
 - (2) The danger to life and property due to flooding or erosion damage;
 - (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (4) The importance of the services provided by the proposed facility to the community;
 - (5) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (6) The compatibility of the proposed use with existing and anticipated development;
 - (7) The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
 - (8) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (9) The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
 - (10) 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 systems and streets and bridges.
 - (11) The use is a functionally dependent use provided the structure or other development is protected by methods that minimize flood damage during the occurrence of a base flood and creates no additional threats to public safety.
- 7.1.5 Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of ½ acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided the items listed in Section 7.1.4, have been fully considered. As the lot size increases beyond ½ acre, the technical justification required for issuing the variance increases.
- 7.1.6 Upon consideration of the factors of Section 7.1.4 and the purposes of this chapter, the appeal board may attach such conditions to the granting of appeals and variances as deemed necessary to further the purposes of this chapter.
- 7.1.7 The Director of Public Works shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

Section 7.2 CONDITIONS FOR VARIANCES

- 7.2.1 Variances may be issued for repair or rehabilitation of historic structures on a determination that the proposed repair or rehabilitation shall not preclude the structures continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- 7.2.2 Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result except that a variance may be approved if the Administrator of the Federal Insurance Administration has previously given conditional approval.
- 7.2.3 Variances shall only be issued on a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 7.2.4 Variances shall only be issued upon:
 - (1) 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.
 - (2) A determination that failure to grant the variance would result in exceptional hardship to the applicant.
 - (3) A determination that the granting of a variance shall not result in increased flood heights except where the increased flood heights have been given conditional approval of the Administrator of the Federal Insurance Administration, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization to the public, or conflict with existing laws or ordinances.

CHAPTER 8 ENFORCEMENT

Section 8.1 ABATEMENT OF NUISANCE

A violation of Section 3.3, of this ordinance, is declared to be a public nuisance and may be abated. In the event of abatement, the costs of such abatement shall be assessed to the violator. If the violator maintains a nuisance on real property in which he has less than total interest, the assessment shall be a charge on such property to the extent of the violator's interest therein. The assessment shall be collected at the same time and in the same manner as ordinary county taxes are collected, and shall be subject to the same penalties and the same procedure for sale in case of delinquency as provided for ordinary taxes. All laws applicable to the levy, collection and enforcement of county taxes shall be applicable to such assessment, except as otherwise provided in Government Code Section 25845. The procedure established for the repair, rehabilitation,

vacation or demolition of substandard buildings by the Uniform Housing Code, 1982 Edition, commencing with Chapter 11, to the extent it can reasonably be applied to violations of Section 3.3 of this ordinance, is hereby incorporated as though fully set forth at this point and is hereby adopted as the procedure for abatement inspection, abatement, and for assessing the cost of abatement of such nuisances to the violator or against the land involved, provided that for the purposes of the Uniform Housing Code, the "Director of Public Works" is the "Building Official" and the "Board of Supervisors" is the "Board of Appeals."

Section 8.2 EMERGENCY ABATEMENT

If it appears to the Director of Public Works that an emergency exists because of a violation of Section 3.3, then without following the procedure established by Section 8.1, the Director of Public Works may order all work done necessary to remove, abate, or mitigate the condition creating such emergency. The Director may do the work with his own employees or may contract to have the work done; in either event, the Director shall keep a record of the cost of the work and charge the cost of the work to the violator, who shall repay the county for the cost.

Section 8.3 VIOLATIONS/PENALTIES

Any person who:

- (1) Violates any provision of this ordinance; or
- (2) Refuses without lawful excuse to attend any hearing, or to produce material evidence in his possession or under his control as required by any subpoena served on him as provided in the Uniform Housing Code, 1982 Edition; or
- (3) Fails, neglects or refuses to obey any order of the Director of Public Works or the Board of Supervisors made pursuant to the provisions of the Uniform Housing Code, 1982 Edition, and directed to such person, after such order shall have become final; shall be deemed guilty of a misdemeanor and, on conviction, shall be punishable by a fine of not more than one thousand dollars (\$1,000), or by imprisonment in the county jail for not more than six months, or by both the fine and the imprisonment.

CHAPTER 9: REPEAL OF PRIOR FLOOD PLAIN MANAGEMENT ORDINANCE

Section 9.1 Ordinance No. 3741 and Ordinance No. 3750, together known as the Ventura County Flood Plain Management Ordinance, are hereby repealed.