

Goal 7

AREAS SUBJECT TO NATURAL DISASTERS AND HAZARDS

Flooding

"The earliest recorded flood in Josephine County occurred in 1861. This flood has been chosen to represent the "100 year flood", meaning a similar sized flood will have a 1% chance of occurring in any one year." Josephine County Comprehensive Plan, page 4-33.

In December of 1981, the Federal Emergency Management Agency established a flood insurance study for the City of Cave Junction, (Exhibit J). The study determined that based on 15 years of records collected at the Kerby gaging station of the Illinois River, it was estimated that a flood of great and actual damaging magnitude would occur once every 150 years.

The study concludes that no flood profiles have been presented for the Illinois River because "the only flooding which would affect Cave Junction is a small area of 500 year over bank ponding at an elevation of 1283 feet, approximately 1700 feet north of the confluence of the Illinois and East Fork Illinois River." (Study, Page 7.)

Therefore, there is a potential for flooding of land along the Illinois River in several areas which are now included in the Immediate Urban Growth Boundary. Because these areas are of a rural nature, the following policies will be adopted.

Flood Hazard Policies

1. The City has adopted by ordinance the minimum requirements established by F.E.M.A. Exhibit "K".

Josephine County maintains an active involvement in the National Flood Insurance Program, thus the City of Cave Junction will have access to this information.

3. The City shall ensure that all new utilities and public facilities that locate within or pass through the 100 year flood plain do not result in unpermitted increases in flood levels. Public water systems shall be designed as required by F.E.M.A. to minimize or eliminate infiltration of flood waters, and public sewer systems shall be designed to minimize or eliminate discharges or infiltrations.

4. The City shall appropriately restrict or prohibit development in areas of stream flooding, erosion, and decomposition, land slides, weak foundation soil, or other hazards unique to the Immediate Urban Growth Boundary.

5. The City has adopted a Uniform Building Code to deal with problems which may arise from building near such areas.

Steep Slopes

The Eastern portion of the planning area rises sharply, causing slopes exceeding 12 percent. While there is nothing which would prevent the construction of homes on these slopes, it is important that foundations be properly designed and grading be planned to avoid erosion instability problems. These can be controlled through the subdivision ordinance and the building code.

Faults

A thrust fault which forms the boundary between two geologic formations originates approximately in the cemetery on Laurel Road and extends in a Northeasterly direction. However, there are no historically recorded earthquakes in Josephine County according to the Josephine County Comprehensive Plan. The lack of any known seismic activity indicates that this fault does not represent a particular hazard.

Fire

Josephine County, in its Comprehensive Plan, has noted the danger of Wildfire in rural areas of the County. Cave Junction is protected on the South and West by the Illinois River and by the upward sloping ridge on the East. Ultimately, of course, the Illinois Valley Rural Fire Protection District provides protection for the City.

Conclusion:

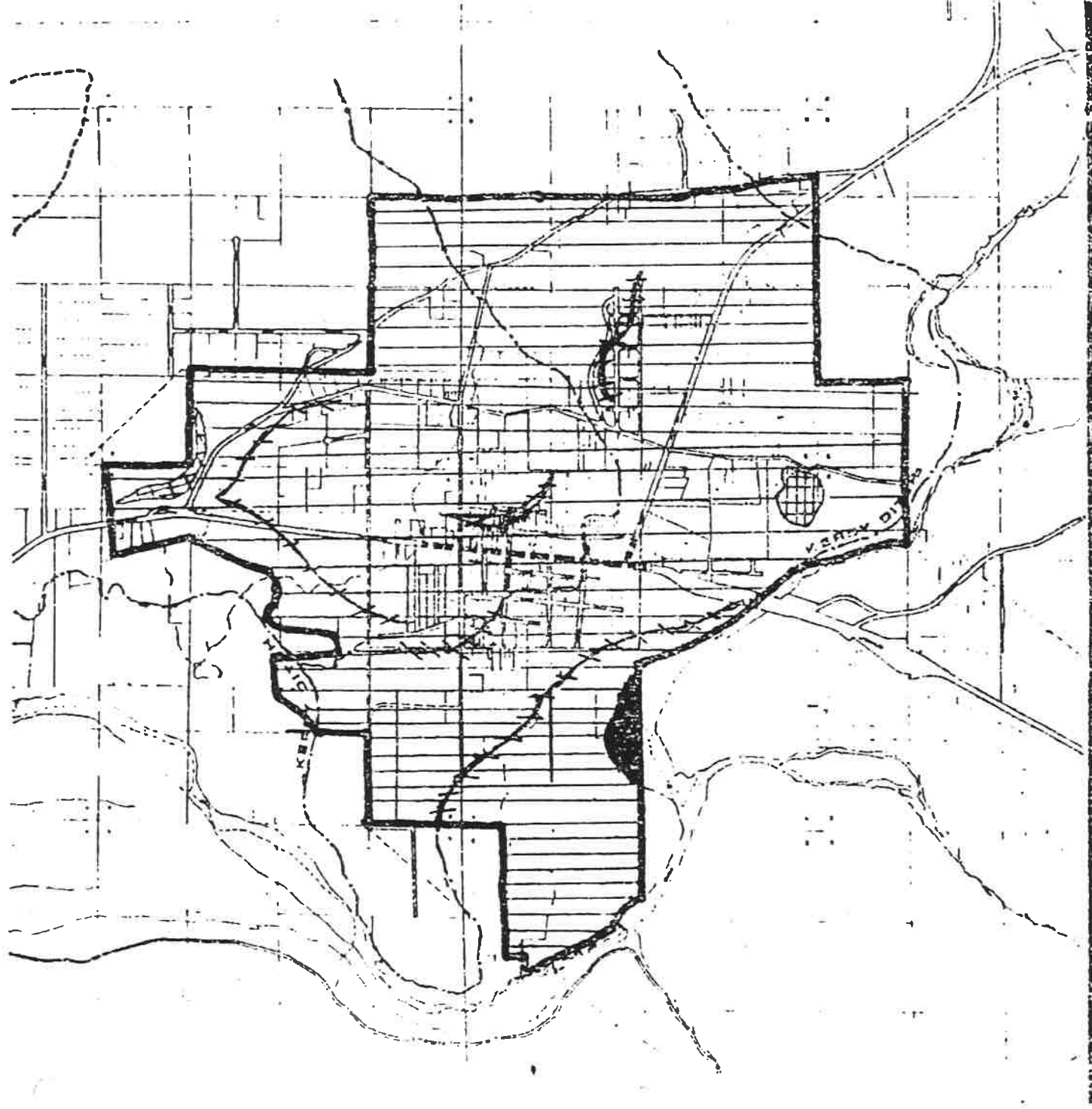
Flooding is not a major hazard due to the limited area affected.

Policy:

Uses which would pose a danger to life or property will not be permitted within the 100 year flood zone, except as allowed in the Uniform Building Code.

Recommendation:

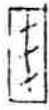
Special attention should be given to review of grading plans and foundation design on slopes greater than twelve percent; plans and drawings should be stamped by a registered professional engineer, architect, landscape architect, or engineering geologist, as appropriate.



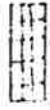
LEGEND



0%



0-7%

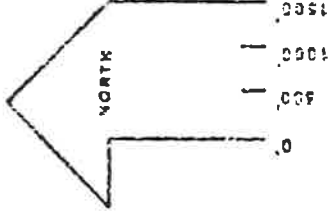


7-12%



Floodway to
100 Year Flood Line

DEVELOPMENT HAZARDS
Slope/Flooding



THE CITY OF
CAVE JUNCTION
COMPREHENSIVE PLAN
100 Year Flood Line

DANIELSON
ARCHITECTS

ONE EAST BROADWAY
MALL WALK
EUGENE, OREGON
97401 484-8737

AN ORDINANCE PROVIDING FOR THE CLASSIFICATION OF LAND IN THE CITY OF CAVE JUNCTION, JOSEPHINE COUNTY, OREGON, SUBJECT TO FLOOD HAZARDS AS IDENTIFIED BY THE FLOOD INSURANCE RATE MAP; PROVIDING STANDARDS FOR CONSTRUCTION WITHIN FLOOD-PRONE AREAS; ~~AND~~ ESTABLISHING PENALTIES FOR VIOLATIONS THEREOF.; AND DECLARING AN EMERGENCY.

THE CITY OF CAVE JUNCTION ORDAINS AS FOLLOWS:

SECTION I. STATUTORY AUTHORIZATION:

The legislature of the State of Oregon has in the Oregon Revised Statutes, Chapter 227, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

SECTION II. DEFINITIONS:

APPEAL means a request for a review of the Planning Commission's interpretation of any provision of this ordinance or a request for a variance.

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.

AREA OF SPECIAL FLOODING HAZARD means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.

BASE FLOOD means the flood having a one percent chance of being equalled or exceeded in any given year.

DEVELOPMENT means 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 located within the area of special flood hazard.

EXISTING MOBILE HOME PARK OR MOBILE HOME SUBDIVISION means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot on which the mobile home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this ordinance.

EXPANSION TO AN EXISTING MOBILE HOME PARK OR MOBILE HOME SUBDIVISION means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

FLOOD or FLOODING means 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.

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.

FLOOD INSURANCE STUDY means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

FLOODWAY means the channel of 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.

MOBILE HOME means a structure that is transportable in one or more sections, build on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers.

NEW CONSTRUCTION means structures for which the "start of construction" commenced on or after the effective date of this ordinance.

NEW MOBILE HOME PARK OR MOBILE HOME SUBDIVISION means a parcel (or contiguous parcels) of land divided into two or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of this ordinance.

START OF CONSTRUCTION means the first placement of permanent construction of a structure (other than a mobile home) on a site such as the pouring of slabs or footings or any work beyond the stage of excavation. 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 as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" included the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivision, "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivision, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

STRUCTURE means a walled and roofed building or mobile home that is principally above ground.

SUBSTANTIAL IMPROVEMENT means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- (1) before the improvement or repair is started, or
- (2) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

- (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
- (2) any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

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.

SECTION III. GENERAL PROVISIONS:

(1) LANDS TO WHICH THIS ORDINANCE APPLIES: This ordinance shall apply to all areas of special flood hazards within the jurisdiction of the City of Cave Junction, Josephine County, Oregon.

(2) BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD: The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Cave Junction," dated June 1, 1982, with accompanying Flood Insurance Maps is hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at City Hall, 222 Lister Street, Cave Junction, Oregon.

(3) COMPLIANCE: No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations.

(4) ABROGATION AND GREATER RESTRICTIONS: This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposed the more stringent restrictions shall prevail.

(5) INTERPRETATION: In the interpretation and application of this ordinance, 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.

(6) WARNING AND DISCLAIMER OF LIABILITY: The degree of flood protection required by this ordinance 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 man-made or natural causes. This ordinance 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 ordinance shall not create liability on the part of the City of Cave Junction, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

SECTION IV. ADMINISTRATION:(1) ESTABLISHMENT OF DEVELOPMENT PERMIT: A

development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section III, Number 2. The permit shall be for all structures including mobile homes, as set forth in the "DEFINITIONS," and for all other development including fill and other activities, also as set forth in the "DEFINITIONS." Application for a development permit shall be made on forms furnished by the Planning Commission and may include but not 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:

- (a) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
- (b) Elevation in relation to mean sea level to which any structure has been floodproofed;
- (c) Certification by a registered professional engineer or architect that the floodproofing methods for any non-residential structure meet the floodproofing criteria in Section V, Number 2b; and
- (d) Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

(2) DESIGNATION OF THE PLANNING COMMISSION:

The Planning Commission is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions. Development permits granted by the Planning Commission where the development is located in the floodway shall also be submitted to the Common Council of the City of Cave Junction for approval.

(3) DUTIES AND RESPONSIBILITIES OF THE PLANNING COMMISSION: Duties of the Planning Commission, which may be delegated to the City Recorder or Planning Commission Secretary, shall include, but not be limited to:

(a) PERMIT REVIEW

- (i) Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
- (ii) Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.

(iii) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section V, Number 3a are met.

(b) USE OF OTHER BASE FLOOD DATA

When base flood elevation data has not been provided in accordance with Section III, Number 2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Planning Commission shall obtain, review, and reasonably utilize any base flood elevation data available from a Federal, State or other source, in order to administer Section V, Number 2a, SPECIFIC STANDARDS, Residential Construction, and Section V, Number 2b, SPECIFIC STANDARDS, Nonresidential Construction.

(c) INFORMATION TO BE OBTAINED AND MAINTAINED

- (i) 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, and whether or not the structure contains a basement.
- (ii) For all new or substantially improved floodproofed structures:
 - (a) verify and record the actual elevation (in relation to mean sea level), and
 - (b) maintain the floodproofing certifications required in Section IV, Number 1c.
- (iii) Maintain for public inspection all records pertaining to the provisions of this ordinance.

(d) ALTERATION OF WATERCOURSES

- (i) Notify adjacent communities and the U.S. Army Corps of Engineers prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
- (ii) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

(e) INTERPRETATION OF "FIRM" BOUNDARIES

Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section IV, Number 4.

(4) VARIANCE PROCEDURE:(a) APPEAL BOARD

- (1) The Common Council of the City of Cave Junction shall hear and decide appeals and requests for variances from the requirements of this ordinance.
- (2) The Common Council of the City of Cave Junction shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Planning Commission in the enforcement or administration of this ordinance.
- (3) Those aggrieved by the decision of the Common Council of the City of Cave Junction, or any taxpayer, may appeal such decision to the courts as provided in the Oregon Revised Statutes, Chapter 772.
- (4) In passing upon such applications, the Common Council of the City of Cave Junction shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
 - (i) the danger that materials may be swept onto other lands to the injury of others;
 - (ii) the danger to life and property due to flooding or erosion damage;
 - (iii) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (iv) the importance of the services provided by the proposed facility to the community;
 - (v) the necessity to the facility of a waterfront location, where applicable;
 - (vi) the availability of alternative locations, for the proposed use which are not subject to flooding or erosion damage;
 - (vii) the compatibility of the proposed use with existing and anticipated development;
 - (viii) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
 - (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (x) 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
 - (xi) 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.

- (5) Generally, the only condition under which a variance may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (i-ix) in Section IV, Number 4a(4) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (6) Upon consideration of the factors of Section IV, Number 4a(4) and purposes of this ordinance, the Common Council of the City of Cave Junction may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- (7) The Planning Commission shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

(b) CONDITIONS FOR VARIANCES

- (a) Variances may be issued for the reconstruction or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
- (b) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- (c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (d) Variances shall only be issued upon:
 - (i) a showing of good and sufficient cause;
 - (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section IV, Number 4d(4), or conflict with existing local laws or ordinances.
- (e) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

SECTION V. PROVISIONS FOR FLOOD HAZARD PROTECTION:

(1) GENERAL STANDARDS: In all areas of special flood hazards, the following standards are required:

(a) ANCHORING

(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(2) All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:

(i) over-the-top ties be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, with mobile homes less than 50 feet long requiring one additional tie per side;

(ii) frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with mobile homes less than 50 feet long requiring four additional ties per side;

(iii) all components of the anchoring system be capable of carrying a force of 4,000 pounds; and

(iv) any additions to the mobile home be similarly anchored.

(3) An alternative method of anchoring may involve a system designed to withstand a wind force of 90 miles per hour or greater. Certification must be provided to the Planning Commission, that this standard has been met.

(b) CONSTRUCTION MATERIALS AND METHODS

(1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(c) UTILITIES

(1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(2) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system into flood waters; and

(3) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(d) SUBDIVISION PROPOSALS

- (1) All subdivision proposals shall be consistent with need to minimize flood damage;
- (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and,
- (4) Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least 50 lots or 5 acres (whichever is less).

(e) REVIEW OF BUILDING PERMITS

Where elevation data is not available; applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgement and includes use of historical data, high water marks, photographs of past flooding, etc., where available.

(2) SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section III, Number 2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or Section IV, Number 3b, Use of Other Base Flood Data, the following provisions are required:

(a) RESIDENTIAL CONSTRUCTION

New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

(b) NONRESIDENTIAL CONSTRUCTION

New construction and substantial improvement of any commercial, industrial or nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- (1) be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- (2) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

- (3) be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Planning Commission.

(c) MOBILE HOMES

- (1) Mobile homes shall be anchored in accordance with Section V, Number 1a.
- (2) For new mobile home parks and mobile home subdivisions; for existing mobile home parks and mobile home subdivisions; for expansions to existing mobile home parks and mobile home subdivisions where the repair, reconstruction, or improvement of the streets, utilities, and pads before the repair, reconstruction, or improvement has commenced; and for mobile homes not placed in a mobile home park or mobile home subdivision, require that:
 - (i) stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the base flood level;
 - (ii) adequate surface drainage and access for a hauler are provided; and
 - (iii) in the instance of elevation on pilings, that:
 - lots are large enough to permit steps,
 - piling foundations are placed in stable soil no more than ten feet apart, and
 - reinforcement is provided for pilings more than six feet above ground level.
- (3) No mobile home shall be placed in a floodway, except in an existing mobile home park or existing mobile home subdivision.

(3) FLOODWAYS

Located within areas of special flood hazard established in Section III, Number 2 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 improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (b) If Section V, Number 3a is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section V, PROVISIONS FOR FLOOD HAZARD REDUCTION.

SECTION VI. PENALTIES:

(1) FINES

Any person who violates this ordinance or fails to comply with any of its requirements shall be punishable, upon conviction, in a court of law by a fine of not more than \$500.00 for a non-continuing offense and a fine of not more than \$1000.00 for a continuing offense.

(2) OTHER COSTS

In any action or suit authorized by this ordinance, the City of Cave Junction, Oregon, if it prevails, shall recover a reasonable attorney's fee to be set by the court, in addition to its costs and disbursements.

SECTION VII. SEVERABILITY

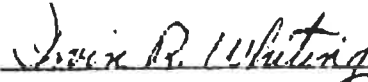
This ordinance is severable, and if any section, subsection, sentence, clause, or portion of this ordinance is for any reason held to be invalid or rendered unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portion thereof.

SECTION VIII. EMERGENCY CLAUSE:


This ordinance is deemed to be necessary for the peace, health and safety of the people of the City of Cave Junction and the surrounding area and an emergency is declared to exist and this ordinance is effective upon its passage by the council.

Passed by the Common Council of the City of Cave Junction this 5th day of November, 1984.

Submitted to and approved by the Mayor of the City of Cave Junction this 5th day of November, 1984.



Irvin R. Whiting, Mayor

Attest: 

Bud Phillipp, Recorder