# ORDINANCE NO. 32/ , 1988

An ordinance amending the Floodplain Management Code, Clallam County Chapter 32.01. All new material is underlined; deleted material is scored through and is within double parentheses.

SECTION	TITLE
32.01.010 32.01.020 32.01.030	Statutory Authorization Findings of Fact Statement of Purpose
32.01.040	<u>Applicability</u>
32.01.050 32.01.060	<u>Definitions</u> Other Restrictions
32.01.070	Warning & Disclaimer of Liability
32.01.080 32.01.090	Certification by County Officials
32.01.100	<u>Duties of the Responsible Official</u> Board of Appeals & Variance Procedures
32.01.110	Conditions for Variance
32.01.120	Flood Hazard - General Standards
32.01.130 32.01.140	Flood Hazard - Special Standards
32.01.145	Flood Hazard Protection Floodways  Provisions for AO Zones - Shallow Flooding Areas
32.01.150	Coastal High Hazard Area
32.01.160	Permitted Uses in Certain Floodplains
32.01.170	Severability
32.01.180	Enforcement
32.01.190	Repealer
32.01.200	Effective Date

#### BE IT ORDAINED BY THE CLALLAM COUNTY BOARD OF COMMISSIONERS:

Amend Section C.C.C. 32.01.010 STATUTORY AUTHORIZATION.

The Board of Clallam County Commissioners, under the authority of the Constitution of the State of Washington, Article 11, Section 4, and RCW 35.63 ((and-REW-86-16)), does ordain as follows:

## Amend Section C.C.C. 32.01.040 APPLICABILITY

- 1. This ordinance applies to all areas of the floodplain (as defined in Section 32.01.040 (8)) within the jurisdiction of Clallam County, Washington.
- The floodways and special flood hazard areas identified by the Federal Insurance Administration in a scientific and engineering report entitled Flood Insurance Study, Clallam County, Washington, Unincorporated Areas" dated November 5, 1980, and as amended February 16, 1983, and accompanying Flood Insurance Rate Maps (FIRM) and Flood Boundary Floodway Maps (Floodway) are hereby adopted by reference and declared to be a part of this ordinance. These documents are on file in the Planning Division and the Auditor's Office, Courthouse, Port Angeles, Washington.

3. No development within the floodplain shall be implemented except in full compliance with the terms and intent of this ordinance.

4. Compliance with this ordinance does not relieve a development proponent from compliance with all other applicable county, state and federal laws.

Amend Section C.C.C. 32.01.050 DEFINITIONS, Subsections 4 and 5.

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

4. BREAKAWAY WALL means any type of wall, whether solid or lattice, and ((whether)) constructed of material which is so designed as to breakaway under abnormally high tide or wave action without damage to the structural integrity of the building on which it is used or to any building to which it may be carried by the flood waters.

5. COASTAL HIGH HAZARD AREA means the area subject to high velocity waters, including but not limited to storm surge or tsunamis. The areas are designated on FIRM as Zone V1-30 or VE and are located

within Special Flood Hazard Areas.

Amend Section C.C.C. 32.01.090 DUTIES OF THE RESPONSIBLE OFFICIAL.

The responsible official shall, when applicable:

1. In the absence of reliable base flood elevation data being contained in the Flood Insurance Study, obtain, review and utilize any other base flood elevation and floodway data available from other sources including maps prepared by and approved in writing by FEMA subsequent to the adoption of this code, in order to administer this ordinance;

((2: Obtain-and-record-the-actual-elevation-(in-relation-to-mean-sea-level) of-the-bottom-of-the-lowest-structural-member-of-the-lowest-floor-of all-new-or-substantially-improved-structures; -and-whether-or-not-the

structure-contains-a-basement;))

2. Where base flood elevation data is provided through the FEMA Flood Insurance Study or pursuant to C.C.C. 32.01.090(1) 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, whether or not the structure contains a basement).

3. For all new or substantially improved floodproofed structures:

i. Verify and record the actual elevation in relation to mean sea level,

ii. Maintain the floodproofing certifications required in this

chapter.

- 4. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in a V1-30 and VE zone and whether or not such structures contain a basement.
- ((3))5. Maintain the floodproofing certifications required in Section 32.01.130(2);
- ((4))6. Make a good faith effort to determine that all applicable county, state, and federal permits have been issued prior to the start of construction;))

((5))7. Maintain for public inspection all records pertaining to this ordinance;

((6))8. Notify adjacent communities and the Washington
Department of Ecology prior to any alteration or relocation of a
watercourse and submit evidence of such notification to the
Federal Insurance Administration;

((7))9. Require that maintenance is provided within the altered or relocated portion of the watercourse, so that the flood carrying capacity is not diminished and public safety and improved property is not threatened;

((8))10. Make interpretations where needed, as to exact location of the boundaries of the special flood hazard areas (for example, where there appears to be a conflict between 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 32.01.100;

((9))11. Provide information for the Board of Appeals.

Amend Section C.C.C. 32.01.130 PROVISIONS FOR FLOOD HAZARD PROTECTION - SPECIAL FLOOD HAZARD AREAS - SPECIAL STANDARDS

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

#### 1. Residential Construction

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

#### 2. Non-residential Construction

New construction and substantial improvement of any commercial, industrial or other non-residential 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:

a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

b. Have structural components capable of resisting ((hydraulie)) 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 are satisfied and that the structure designs, specifications and plans comply with 44 C.F.R. 60.3(c)(3)(ii) or (c)(8)(ii). A record of said certification which includes specific elevation to which such structures are floodproofed shall be maintained with the responsible official.

### 3. Manufactured Homes

All manufactured homes to be placed or substantially improved within Zones AI-30, AH-30, AH and AE shall be evaluated and anchored on a

permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation, except as provided otherwise by 44CFR 60 pertaining to existing mobile home parks.

4. Openings in enclosures below a structure's lowest floor.

For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must 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, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

Add new Section C.C.C. 32.01.145 PROVISIONS FOR AO ZONES - SHALLOW FLOODING AREAS.

In AO Zone areas, the following provisions are required:

My the FIRM has AO zones depicting shallow flooding, the following section must be added in order to address the depth designations in these zones, vs. the base flood elevations that are provided in other areas of detailed study. In the model ordinance, this section will appear as either 5.3, 5 4 or 5.3 depending on whether or not the flood data in a particular community includes floodways and/or coastal high hazard areas.

STANDARDS FOR SHALLOW FLOODING AREAS (AO ZONES)

Shallow flooding areas appear on FIRM'S as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

- 1. New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified).
- 2. New construction and substantial improvements of nonresidential structures with AO zones shall either:
  - a. have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified); or

- b. together with attendant utility and sanitary facilities 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 having the capability of resisting hydrostatic and hydrodynamic loads and effects of bouyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in section 5.2-2(3).
- 3. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

Amend Section C.C.C. 32.01.150 COASTAL HIGH HAZARD AREA

In coastal high hazard areas (V-Zones) which are located within the special flood hazard areas, the following provisions shall apply:

- 1. All new structures shall be located landward of the reach of mean high tide.
- 2. All buildings or structures shall be elevated so that the bottom of the lowest <u>horizontal</u> supporting member <u>of the lowest floor</u> is located no lower than the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water, except for breakaway walls as provided for in Section 32.01.150(8).
- 3. All buildings or structures shall be securely anchored on pilings or columns.
- 4. Pilings or columns used as structural support and structures attached thereto shall be designed and anchored so as to withstand all applied loads caused by wind and the flow of water during a base flood and resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components during conditions of flooding. Wind and water loading values shall each have a one percent chance of having equalled or exceeded in any given year (100 year mean recurrence interval).
- 5. Plans to be in compliance with provisions of Section 32.01.150(2), (3), and (4) shall be certified to by a registered professional engineer or architect. Said certification shall specify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Subsections 3 and 4 immediately above.
- 6. There shall be no fill used for structural support of buildings.
- 7. There shall be no alteration of sand dunes which would increase potential flood damage.
- 8. Breakaway walls, including open wood lattice-work and insect screenings, shall be allowed below the base flood elevation provided they are not a part of the structural support of the building and are designed so as to break away or collapse under abnormally high tides or wave action, without damage to the structural integrity of the supported building and supporting foundation system. They shall have a design safe loading resistance of not less then 10 and no more than 20 pounds per square foot. Design safe loading over 20 pounds per

square foot shall be allowed and must be certified by a registered professional engineer or architect to meet the following conditions:

a. breakaway wall collapse shall result from a water load less than

that which would occur during the base flood; and,

b. the elevated portion of the building shall not be subject to collapse or displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components. Maximum wind and water loading values to be used in this determination shall each have a one per cent chance of being equalled or exceeded in any given year.

9. If breakaway walls are utilized, such enclosed space shall not be

used for human habitation.

 Prior to construction, plans for any structure that will have breakaway walls must be submitted to the Responsible Official for approval.

11. The placement of mobile homes, except in an existing mobile home

park or mobile home subdivision, is prohibited.

12. Any alteration, repair, reconstruction or improvement to a structure started after the enactment of this ordinance shall not enclose the space below the lowest floor unless breakaway walls are used as provided for in Section 32.01.150(8).

C.C.C. 32.01.200 Effective Date. This chapter shall take effect ten days after adoption.

BOARD OF CLALLAM COUNTY COMMISSIONERS

Lawrence Gaydeski, Charrman

Dorothy Duncan

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Dave Cameron

ATTEST:

Kawen Flores Clerk of the Board

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CC: Community Development