

**CITY OF CORDOVA, ALASKA  
ORDINANCE 1136**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CORDOVA, ALASKA,  
AMENDING CORDOVA MUNICIPAL CODE CHAPTER 19.04 – FLOOD PROTECTION TO  
AMEND SECTIONS 19.04.010, 19.04.100, 19.04.150, 19.04.230, AND 19.04.270 AND ENACT  
SECTIONS 19.04.275, 19.04.276, AND 19.04.277 TO COMPLY MORE FULLY WITH THE  
NATIONAL FLOOD INSURANCE PROGRAM STANDARDS AND TO AMEND SECTION  
19.04.090 TO ADOPT THE DECEMBER 16, 2015 FLOOD INSURANCE STUDY AND FLOOD  
INSURANCE RATE MAP**

**WHEREAS**, the City of Cordova, Alaska (“City”) was advised to change and add definitions and to add sections on floodways and equalizing hydrostatic load to the existing code in order to ensure full compliance with the National Flood Insurance Program standards; and

**WHEREAS**, it is in the City’s best interest to stay in compliance with National Flood Insurance Program requirements in order to protect the public from significant flooding events; and

**WHEREAS**, the City is required to adopt the December 16, 2015 Flood Insurance Study and Maps to continue to participate in the National Flood Insurance Program.

**NOW, THEREFORE, BE IT ORDAINED** by the City Council of the City of Cordova, that:

Section 1. The Cordova Code of Ordinances of Cordova, Alaska is hereby amended to read as follows:

Chapter 19.04 - FLOOD PROTECTION

19.04.010 Definitions.

19.04.020 Statutory authority.

19.04.030 Findings of fact.

19.04.040 Purpose.

19.04.050 Reduction of flood losses.

19.04.060 Interpretation.

19.04.070 Applicability.

19.04.080 Compliance required.

19.04.090 Basis for establishing the areas of special flood hazard.

19.04.100 Development permit.

19.04.110 City manager—Administration.

- 19.04.120 City manager—Duties generally.
- 19.04.130 City manager—Permit review.
- 19.04.140 City manager—Use of other base flood data.
- 19.04.150 City manager—Further information to be obtained.
- 19.04.160 City manager—Alteration of watercourse.
- 19.04.170 City manager—Interpretation of FIRM boundaries.
- 19.04.180 Standards and specifications—Generally.
- 19.04.190 Subdivision proposals.
- 19.04.200 Review of building permits.
- 19.04.210 Anchoring.
- 19.04.220 Construction materials and methods.
- 19.04.230 Utilities.
- 19.04.240 Standards and specifications—Areas of special flood hazard.
- 19.04.250 Residential construction.
- 19.04.260 Nonresidential construction.
- 19.04.270 Manufactured (mobile) homes.
- 19.04.275 Recreational vehicles.**
- 19.04.276 Floodways.**
- 19.04.277 Equalizing hydrostatic load.**
- 19.04.280 Appeals.
- 19.04.290 Variances.
- 19.04.300 Conflict of provisions.
- 19.04.310 Liability.

19.04.010 Definitions.

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

- A. "Appeal" means a request for a review of the city manager's interpretation of any provisions of this chapter or a request for a variance.
- B. "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.
- C. "Area of special flood hazard" means ~~the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.~~ **for regulatory purposes, the areas designated as subject to the "100 year flood," "base flood," and "one percent flood" on the Flood Insurance Rate Maps issued by the National Flood Insurance Program (NFIP) and other Flood Hazard Studies used by the city for similar purposes. Also known as "Special Flood Hazard Area."**
- D. "Base flood" means ~~a the flood that has~~ having a one percent chance of **occurring in any given year as determined by NFIP guidelines. Also known as "One Percent Flood" and "100 year flood."** being equaled or exceeded in any given year.
- E. ~~"Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.~~
- E. **"Base Flood Elevation (BFE)" means the elevation of surface water resulting from a flood that has a one percent chance of occurring in any given year. The elevation of the Base Flood.**
- F. **"Basement" means any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.**
- G. **"Development" means any manmade change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.**
- HF. "Existing **manufactured** (mobile) home park or **manufactured** (mobile) home subdivision" means a parcel (or contiguous parcels) of land **divided into** two or more **manufactured** (mobile) home lots for rent or sale for which the construction of facilities for servicing the lot on which the **manufactured** (mobile) home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of the ordinance codified in this chapter.

- IG.** "Expansion to an existing **manufactured (mobile)** home park or **manufactured (mobile)** home subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the **manufactured (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).
- JH.** "Flood" or "flooding" means a general and temporary condition of partial or complete inundation **of two or more acres of normally dry land area or of two or more properties (at least one of which is the policyholder's property) from:** ~~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.
- KI.** "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.
- LJ.** "Flood Insurance Study (**FIS**)" 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.
- M.** **"Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitation facilities, or structures with their contents.**
- NK.** "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.
- O.** **"Freeboard" means an additional amount of height above the Base Flood Elevation used as a factor of safety (e.g., 2 feet above the Base Flood) in determining the level at which a structure's lowest floor must be elevated or flood proofed to be in accordance with State or community floodplain management regulations.**
- PL.** "Habitable floor" means any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used only for storage purposes is not a "habitable floor."
- Q.** **"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.**
- R.** **"Historic building" means any building that is listed individually in the National Register of Historic places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; or 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 of the Interior to qualify as a registered historic district; or individually listed in a state inventory of historic places in states with preservation programs that have been approved by the Secretary of the Interior; or 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.

S. "Letter of Map Amendment (LOMA)" means an amendment to the currently effective FEMA map which establishes that a property is not located in a Special Flood Hazard Area. A LOMA is issued only by FEMA.

T. "Letter of Map Revision (LOMR)" means an official amendment to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.

U. "Lowest Floor" means the lowest floor of the lowest enclosed area (including a 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 the structure in violation of any other requirements.

~~M. "Mobile home" means a structure that is transportable in one or more sections, built 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 vehicle or travel trailers.~~

V. "Manufactured (Mobile) Home" means a structure built on a permanent chassis, transported to its site in one or more section, and affixed to a permanent foundation. "Manufactured (mobile) home" does not include recreational vehicles.

W. "Modular Building" means a building that is usually transported to its site on a steel frame or special trailer because it does not have a permanent chassis like a manufactured (mobile) home.

~~NX. "New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.~~

~~ØY. "New manufactured (mobile) home park or manufactured (mobile) home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured (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 the ordinance codified in this chapter.~~

Z. "One-hundred-year flood" means a flood of a magnitude which can be expected to occur on the average of once every one hundred years. It is possible for this size flood to occur during any year. The odds are one to a hundred that this size flood will occur

during a given year, but there is a one percent chance that a flood will occur each year. Also known as the “One Percent Flood”, and the NFIP “Base Flood.”

AA. “Recreational Vehicle” means a vehicular-type unit primarily designed as temporary living quarters for recreational, camping, or travel use, which either has its own motive power or is mounted on or drawn by another vehicle. Also known as camper, and travel trailer.

AB. “Special Flood Hazard Area (SFHA)” means an area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or a Flood Insurance Rate Map. Also the area subject to inundation by the “Base Flood”, “One Percent Flood” and “100 year flood”. Also known as Area of Special Flood Hazard.

PAC. "Start of construction" means the first placement of permanent construction of a structure (other than a manufactured (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 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" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For manufactured (mobile) homes not within a manufactured (mobile) home park or manufactured (mobile) home subdivision, "start of construction" means the affixing of the manufactured (mobile) home to its permanent site. For manufactured (mobile) homes within manufactured (mobile) home parks or manufactured (mobile) home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the manufactured (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.

QAD. "Structure" means a walled and roofed building or mobile home that is principally above ground, and includes mobile homes, manufactured homes, and gas and liquid storage tanks or containers that are principally above ground.

AE. “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. All structures that are determined to be substantially damaged are automatically considered to be substantial improvements, regardless of the actual repair work performed. If the cost necessary to fully repair the structure to its before damage condition is equal to or greater than 50% of the structure's market value before damages, then the structure must be elevated (or floodproofed if it is non-residential) to or above the Base Flood Elevation (BFE), and meet other applicable NFIP requirements.

**AF. "Substantial improvement" means any reconstruction, rehabilitation, addition or other improvement of a building, the cost of which equals or exceeds 50 percent of the market value of the building before the "start of construction" of the improvement. Substantial improvement includes buildings that have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either any project for improvement of a building to correct existing state or local code violations or any alteration to a "historic building," provided that the alteration will not preclude the building's continued designation as a "historic building."**

~~R. "Substantial improvement" means any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty 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 purpose 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 the State Inventory of Historic Places.~~

**SAG. "Variance" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter by a participating community from the terms of its floodplain management regulations.**

19.04.090 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 Cordova," dated ~~April 2, 1979~~ **December 16, 2015**, with accompanying Flood Insurance Maps is adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at City Hall.

19.04.100 - Development permit.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 19.04.090. The permit shall be for all structures including **manufactured (mobile) homes**, as set forth in Section 19.04.010, and for all other development including fill and other activities also as set forth in Section 19.04.010. Application for a development permit shall be made on forms furnished by the city 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:

- A. Elevation in relation to ~~mean sea level~~ **the FIS and FIRM**, of the lowest floor (including basement) of all structures;

- B. Elevation in relation to ~~mean-sea-level~~the FIS and FIRM to which any structure has been flood proofed;
- C. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in Section 19.04.260; and
- D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

19.04.150 - City manager—Further information to be obtained.

The city manager shall:

- A. Obtain and record the actual elevation (in relation to ~~mean-sea-level~~the FIS and FIRM) of the lowest ~~habitable flood~~floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
- B. For all new or substantially improved flood-proofed structures:
  - 1. Verify and record the actual elevation (in relation to ~~mean-sea-level~~the FIS and FIRM), and
  - 2. Maintain the flood proofing certifications required in Section 19.04.100C;
- C. Maintain for public inspection all records pertaining to the provisions of this chapter.

19.04.230 - Utilities.

- A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- B. New and replacement 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.
- C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- D. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding.**

19.04.270 - **Manufactured** (mobile) homes.

- A. **Manufactured** (mobile) homes shall be anchored in accordance with Section 19.04.210.
- B. For new **manufactured** (mobile) home parks and **manufactured** (mobile) home subdivisions; for expansions to existing **manufactured** (mobile) home parks and **manufactured** (mobile) home subdivisions; for existing **manufactured** (mobile) home parks and **manufactured** (mobile) home subdivisions where the repair reconstruction or improvement of the streets, utilities and pads equal or exceeds fifty percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and for **manufactured** (mobile) homes not placed in a **manufactured** (mobile) home park or **manufactured** (mobile) home subdivision, require that:
  - 1. Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the **manufactured** (mobile) home **and the bottom of the I-beam** will be at or above the base flood level;
  - 2. Adequate surface drainage and access for a hauler are provided; and,



3. In the instance of elevation on pilings, that:
  - a. Lots are large enough to permit steps,
  - b. Piling foundations are placed in stable soil no more than ten feet apart, and
  - c. Reinforcement is provided for pilings more than six feet above the ground level.
- C. No manufactured (mobile) home shall be placed in a floodway, except in an existing manufactured (mobile) home park or existing mobile home subdivision.

**19.04.275 Recreational vehicles.**

**In A1-30, AH, and AE zones, all recreational vehicles to be placed on a site must:**

- A. Be elevated and anchored; or**
- B. Be on the site for less than 180 consecutive days; and**
- C. Be fully licensed and highway ready.**

**19.04.276 Floodways.**

**Development in floodways shall not increase upstream flood elevations. For streams and other watercourses where FEMA has provided Base Flood Elevations (BFEs), but no floodway has been designated, the community shall review floodplain development on a case-by-case basis to ensure that increases in water surface elevations do not occur and identify the need to designate a floodway if adequate information is available.**

**19.04.277 Equalizing hydrostatic load.**

**For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are used solely for parking of vehicles, building access, or storage in an area other than a basement and which is subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of floodwaters in accordance with the specifications in NFIP.**

Section 2. This ordinance shall be effective thirty (30) days after its passage and publication. This ordinance shall be enacted in accordance with Section 2.13 of the Charter of the City of Cordova, Alaska, and published within ten (10) days after its passage.

1st reading: September 16, 2015  
 2nd reading and public hearing: October 7, 2015

**PASSED AND APPROVED THIS 7<sup>th</sup> DAY OF OCTOBER, 2015**



*[Signature]*  
 \_\_\_\_\_  
 James Kacsh, Mayor

ATTEST: *[Signature]*  
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 Susan Bourgeois, CMC, City Clerk