## Repetitive Flood Damage (Substantial Damage) – local technical code amendments (Part 2 building, Part 10 existing building, Part 2.5 residential) and floodplain management ordinance text changes

Submit draft ordinances amending the flood provisions of the building code (in <track changes>) for review well in advance of first reading to DWR\_NFIP@water.ca.gov or FEMA-NFIP-R9@fema.dhs.gov. Please put community name in subject line.

**Before you start:** Review the General Instructions for Amending the California Building Standards Code (CCR Title 24) to Adopt Higher Standards for Buildings and Development Located in Flood Hazard Areas.

**Description****[[1]](#footnote-1):** One objective of the NFIP is to break the cycle of damage, repair, damage again. To achieve this objective, the NFIP requires that existing buildings be brought into compliance when they incur Substantial Damage. A building is determined to have incurred Substantial Damage if it is damaged by any cause and the cost to repair the building to its pre-damage condition equals or exceeds the 50 percent of the market value of the building before the damage occurred. The CBC and CEBC have the same definition for Substantial Damage and the same requirements.

**Repetitive Loss.** The term “repetitive loss” refers to flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. This definition is specified in the federal statute that authorized the NFIP to include Increased Cost of Compliance coverage in flood insurance policies on buildings in SFHAs.

Many buildings have been flooded, repaired or rebuilt, and flooded again. Because of the nature of many flood hazard areas where repetitive flooding occurs, buildings in these areas are unlikely to sustain the level of damage that qualifies as Substantial Damage in a single event (cost to repair equals or exceeds 50 percent of market value before damage occurs).

**NFIP Community Rating System Credits.** Adoption and enforcement of this higher standard may qualify for CRS points (credits). Communities should review the [*CRS Coordinators Manual*](https://www.fema.gov/media-library/assets/documents/8768)and consult with their CRS Resource Specialists. FEMA/ISO determines which provisions qualify for points.

NFIP flood insurance policies on buildings in SFHAs include coverage called [Increased Cost of Compliance](https://www.fema.gov/increased-cost-compliance-coverage) (sometimes called “ICC”). Owners of NFIP-insured buildings in SFHAs that are determined to meet the basic definition of Substantial Damage (50 percent) due to damage by flooding are eligible to file an ICC claim for up to $30,000 (as of October 2019) toward the cost of bringing the building into compliance with the floodplain management requirements for new construction. The actual amount of a claim paid depends on the nature of the work and eligibility of costs. The Increased Cost of Compliance claim payment may also be used as part of the non-federal cost-share for certain federally funded flood mitigation grants. For additional guidance, see FEMA 301, [*Increased Cost of Compliance Coverage: Guidance for State and Local Officials*,](https://www.fema.gov/media-library/assets/documents/1973) and FEMA P-1080, [*Answers to Frequently Asked Questions about Increased Cost of Compliance*](https://www.fema.gov/media-library/assets/documents/142200).

When communities adopt a definition for Substantial Damage that includes “repetitive loss,” owners of NFIP-insured structures that sustain repetitive flood damage may also be eligible to apply for Increased Cost of Compliance claims even if they do not meet the standard 50 percent threshold for Substantial Damage by a single event. To qualify, communities must adopt and enforce the repetitive loss provision on all buildings, not just those that are covered by NFIP flood insurance.

The best way to implement a repetitive loss provision is to modify the definition of Substantial Damage to include both (1) the standard 50 percent threshold and (2) flood-related damage sustained on two separate occasions during a 10-year period for which the cost of repairs at the time of each flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. This is most consistent with the expectation that the community must take action to determine whether a building that is repetitively damaged by flooding meets the modified definition of Substantial Damage.

A good system for recording and accessing records is necessary to administer a repetitive flood damage provision. Each time an owner applies for a permit to make improvements or repairs, the records for that building must be checked. For more guidance, see FEMA P-758,[*Substantial Improvement /Substantial Damage Desk Reference*](https://www.fema.gov/media-library/assets/documents/18562) (2010).

**How Part 2 and Part 10 address “repetitive loss”:** CCR Title 24 includes the basic, NFIP-consistent definitions for Substantial Improvement and Substantial Damage (i.e., 50% threshold). There are no requirements specific to buildings that sustain repetitive flood damage, unless one of the flood events also triggers the Substantial Damage determination based on costs to repair equaling or exceeding 50% of the before-damage market value of the building.

**INSTRUCTIONS**

Implementing changes to the regulation of repetitively-flooded buildings requires modification of the definition of “substantial damage” that appears in three places: Part 2 (building), Part 10 (existing building), and the floodplain management ordinance. The administrative provisions of Part 2, Part 10, and Part 2.5, and the floodplain management ordinance should also be modified where duties of the floodplain administrator are specified (Model Ordinance Section 103-5 Substantial improvement and substantial damage determinations).

**Step 1.** **Amend Part 2 (all buildings except 1- and 2-family dwellings and townhouses less than three stories).** Add a section to the ordinance that adopts local amendments to Part 2. To make the changes discernable, maintain strikethrough and underlining.

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| *CCR Title 24, Part 2, Section 104.2.1 is hereby amended as follows:***104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine where the proposed work constitutes substantial improvement or repair of substantial damage. The substantial damage determination requires evaluation of previous permits issued for repair of flood damage as specified in the definition of “substantial damage.” Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the building official shall require the building to meet the requirements of Section 1612.*CCR Title 24, Part 2, Section 202 is hereby amended as follows:***SUBSTANTIAL DAMAGE**. 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. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. |

**Step 2.** **Amend the Part 10 (existing buildings).** Add a section to the ordinance that adopts local amendments to Part 10. To make the changes discernable, maintain strikethrough and underlining.

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| *CCR Title 24, Part 10, Section 104.2.1 is hereby amended as follows*:**104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine where the proposed work constitutes substantial improvement or repair of substantial damage. The substantial damage determination requires evaluation of previous permits issued for repair of flood damage as specified in the definition of “substantial damage.” Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the building official shall require the building to meet the requirements of Section 1612 of the *California Building Code*.*CCR Title 24, Part 10, Section 202 is hereby amended as follows:***SUBSTANTIAL DAMAGE**. 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. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. |

**Step 3.** **Amend Part 2.5 (1- and 2-family dwellings and townhouses less than three stories).** Add a section to the ordinance that adopts local amendments to Part 2.5. To make the changes discernable, maintain strikethrough and underlining.

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| *CCR Title 24, Part 2.5, Section R105.3.1.1 is hereby amended as follows:***R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.** For applications for reconstruction, rehabilitation, *addition*, alteration, repair or other improvement of existing buildings or structures located in a flood hazard area as established by Table R301.2(1), the *building official* shall examine or cause to be examined the *construction documents* and shall make a determination with regard to the value of the proposed work. The substantial damage determination requires evaluation of previous permits issued for repair of flood damage as specified in the definition of “substantial damage.” For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its predamaged condition. If the *building official* finds that the value of proposed work equals or exceeds 50 percent of the market value of the building or structure before the damage has occurred or the improvement is started, the proposed work is a substantial improvement or repair of substantial damage and the building official shall require existing portions of the entire building or structure to meet the requirements of Section R322. |

**Step 4.** **Amend local floodplain management regulations.** In the floodplain management regulations, add (or modify) the section specifying how SI/SD determinations are made and modify a definition.

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| **Sec. 103-5. - Substantial improvement and substantial damage determinations.** For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:1. Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made.
2. Compare the cost to perform the improvement, the cost to repair the damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, when applicable, to the market value of the building or structure.
3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; for proposed work to repair damage caused by flooding, the determination requires evaluation of previous permits issued to repair flood-related damage as specified in the definition of “substantial damage”;
4. Notify the applicant when it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood resistant construction requirements of the building code is required and notify the applicant when it is determined that work does not constitute substantial improvement or repair of substantial damage.
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| **“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. The term also includes flood-related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. |

1. Reference: [*Reducing Flood Losses Through the International Codes: Coordinating Building Codes and Floodplain Management Regulations*](http://www.fema.gov/media-library/assets/documents/96634)(5th Edition, 2019), International Code Council and FEMA. [↑](#footnote-ref-1)