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The Honorable Deanne Criswell  
Administrator  
Federal Emergency Management Agency  
500 C St., SW  
Washington, DC 20472

*Submitted via Federal eRulemaking Portal*

**Re: Comments in response to the Request for Information on the National Flood Insurance Program's Floodplain Management Standards for Land Management and Use, and an Assessment of the Program's Impact on Threatened and Endangered Species and their Habitats; Docket ID: FEMA-2021-0024**

*Comments submitted via <https://www.federalregister.gov/documents/2021/10/12/2021-22152/request-for-information-on-the-national-flood-insurance-programs-floodplain-management-standards-for#open-comment>*

Dear Administrator Criswell:

[Organization/ individual name] is pleased to respond to the Federal Emergency Management Agency's (FEMA) Request for Information ("FEMA RFI") on reforming the National Flood Insurance Program's (NFIP) floodplain management standards for building and land use. Due to the increasing risk of flooding from climate change and growing population density in coastal and other flood-prone areas, the nation can no longer rely on the NFIP's outdated building and land-use standards. The NFIP must be revised to be the future-oriented, climate-informed program the nation requires to address this threat.

[Background information on commenting organization or individual:

Organization example: NRDC is an international, non-profit environmental and public health membership organization with more than three million members and online activists. NRDC advocates to reduce greenhouse gas emissions that cause climate change, increase the resilience of communities to the unavoidable impacts of climate change, safeguard human health, and ensure safe drinking water for all.

Individual example: I am a flood survivor. (add information about flood experiences, feel free to include photos of flood damages)]

Smart policy and the law both require that FEMA revise the NFIP floodplain management standards to adequately account for the increasing risk of flooding. Safer and stronger construction and land-use standards—and adequately mapping future conditions—provide communities the opportunity to anticipate and reduce flood risk, saving lives and protecting property.

Please find below [our/my] comments and responses to questions posed in the FEMA RFI.

[Below are examples of questions and possible responses]

## Question 1 – “cumulative substantial damage”

Communities can help break the “flood-rebuild-repeat” cycle by changing the triggers that require buildings to come into compliance with floodplain regulations. The NFIP includes a substantial improvement/damage (“SI/SD”) standard, which requires property owners rebuilding or making significant repairs to structures in the SFHA to take actions like elevating the home above the base flood elevation level to reduce their exposure to future flood damages.

Currently, many communities adopt FEMA’s standard definition of “substantial damage,” which is damage from any source, for which the cost of restoring the structure would equal or exceed 50% of the market value of the structure before the damage occurred. FEMA’s “substantial improvement” standard similarly applies for repair work to a structure. When the costs of an improvement or repair to a structure surpass this threshold, the structure must be brought into compliance with current community floodplain management requirements.

Many NFIP-participating communities have gone beyond FEMA’s minimum SI/SD standard. Among the 1,444 communities participating in the CRS program, roughly 1/3 receive points for taking some action toward instituting a more rigorous cumulative or lower threshold SI or SD standard. One option is a “cumulative substantial improvement” (CSI) standard, under which all improvements or repairs during a certain period of time are counted cumulatively toward the substantial improvement requirement. The second option is a “lower substantial improvement” (LSI) standard which uses a threshold lower than 50% of the building’s value to determine when the substantial improvement requirement takes effect (e.g., damage or repair greater than 25% instead of 50%).

### *Recommendation*

FEMA should adopt a cumulative substantial damage standard for flooding. For example, FEMA should add a provision that specifies cumulative substantial damage means flood related damage sustained by a structure on two (2) separate occasions during a 10-year period for which the costs of repairs at the time of each such flood event, on average, equals or exceeds 20 percent of the market value of the structure before the damage occurred.

In addition, FEMA should only adopt a cumulative substantial damage standard in tandem with a disclosure requirement (question 11). FEMA should introduce disclosure requirements that track expenditures for repairs and damages over time so that new owners are aware of their property’s history. Without such disclosure laws, homeowners could unknowingly purchase a property that is close to the threshold, and then due to a small improvement or repair may cross that threshold and be obligated to bring the entire structure into compliance with the community’s floodplain management requirements. Further, FEMA must provide increased funding under the ICC program (question 5). ICC coverage should be increased so that it will cover more costs that occur when the SI/SD threshold is triggered.

Third, the disproportionate effect of flooding on vulnerable and low-income communities must be acknowledged and addressed. A history of discriminatory policies like redlining and segregation as

well as economic and social disparities have located low-income communities and communities of color in highly vulnerable floodplains in certain states. Any adoption of more stringent SI/SD standards should include financial and other assistance for vulnerable communities and low-income residents.

### **Question 2 – “freeboard”**

Designing and constructing buildings and infrastructure to exceed minimum NFIP requirements can reduce flood risk, increase safety, and prevent property loss. Freeboard for new construction is a sound financial investment, because it provides a factor of safety both for current flood events and future climate change impacts, such as sea level rise, that could make higher flood levels more frequent. Multiple states and NFIP-participating communities have already adopted a freeboard standard requiring structures be elevated 2 feet above the height of the 100-year flood. Some local jurisdictions have already adopted up to 4 feet of freeboard and FEMA has recommended it for maximum insurance savings.

#### *Recommendation:*

For non-critical structures in A zones, FEMA should adopt a higher freeboard standard, requiring, at minimum, **2 feet** of freeboard above the base flood elevation (BFE) for new construction and for substantial damage or improvements to existing structures.

For non-critical structures in V zones, FEMA should require a higher freeboard standard of **4 feet** above the non-sea level rise adjusted BFE for new construction and for substantial damage or improvements to existing structures.

### **Question 3 – “critical infrastructure”**

Unlike other FEMA disaster programs, the NFIP does not require a higher level of flood protection for critical infrastructure. A factory that produces toxic chemicals or a hospital is held to the same flood risk standard as a single-family home: protection from the 1 percent annual chance flood (the 100-year flood). In contrast, the Federal government, including FEMA, has required higher flood protection for federally funded critical infrastructure for decades. In general, federal agencies use the 0.2 percent annual chance flood (the 500-year flood) as the minimum level of protection for critical infrastructure projects in floodplains.

FEMA already encourages NFIP communities to adopt a “critical facilities standard” by providing CRS credit to communities that prohibit construction of critical facilities (like emergency operations centers, nursing homes, or power plants) in the 0.2 percent annual chance floodplain, and partial credit to communities that protect critical facilities to the height of the 500-year flood.

#### *Recommendation:*

For critical infrastructure, FEMA should:

- 1) Prohibit new critical infrastructure, where feasible, from the 0.2 percent annual chance floodplain.
- 2) If location outside of the 0.2 percent annual chance floodplain is not feasible, require redeveloped, substantially improved, or new critical infrastructure to be elevated to the 0.2 percent chance flood elevation, plus freeboard to account for future conditions, or the historical flood of record, whichever is greater.
- 3) Ensure access to and operability of the critical infrastructure during the 0.2 percent annual chance flood event, and where that is not feasible, require a viable continuity of operations plan.

### **Question 5 – “repeatedly flooded properties and managed retreat”**

Floods are occurring with greater frequency and severity due to climate change. Heavier precipitation events and rising seas are increasing the occurrence of floods. Since the NFIP was created, nearly 37,000 properties have met the criteria to become what the program refers to as Severe Repetitive Loss Properties, or SRLPs. These properties, the most flood-prone structures insured under the NFIP, have flooded about five times each, on average.<sup>1</sup> Tens of thousands of more properties have flooded at least twice.

The NFIP has a built-in flood risk mitigation program, called Increased Cost of Compliance (ICC), which can help reduce risk from repeated flooding. ICC coverage is a required part of most NFIP policies. For residential structures, ICC provides funds for mitigation measures, which include elevation, relocation, demolition, and certain types of floodproofing. Unfortunately, ICC coverage often does not provide enough funds to cover the required flood mitigation expenses. The maximum payout of \$30,000 is insufficient to cover the cost of measures to elevate flood-damaged structures, which can easily be 3-5 times that amount. Nor does the ICC cover mitigation options, such as property acquisition (buyouts), other than the ones listed above. FEMA should allow ICC coverage to be used towards home buyouts, elevation of utilities, and other flood resilience measures.

#### *Recommendation:*

Increase the ICC payout from \$30,000 to at least \$60,000. Add a new optional ICC coverage option that goes up to at least \$100,000. In addition, expand eligible activities to include buyouts of substantially damaged properties and other residential mitigation activities.

### **Question 7 – “increase resilience to flooding”**

FEMA’s regulatory floodway standard undercuts the objectives of the NFIP to reduce future flood damage and to improve long-range land management. FEMA’s regulatory floodway standard is meant to address the combined, incremental effects of human activity, known as cumulative impacts, in the floodplain by limiting the increase in flood elevations caused by these impacts to one foot above the BFE. In practice, however, the regulatory floodway standard “perpetuates an upward trend of increased flood damages” because the standard:

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<sup>1</sup> NRDC, “Losing Ground: Severe Repetitive Flooding in the United States,” <https://www.nrdc.org/resources/losing-ground-severe-repetitive-flooding-united-states>

- permits new development within the Special Flood Hazard Area that will increase flooding on existing development;
- avoids amending BFEs to avoid new development also being placed at risk; and
- allows encroachments that can be detrimental to the natural and beneficial functions of the floodplain.

### *Recommendation*

Amend the definition of Regulatory Floodway to, “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 (0.00 feet).”

### **Question 9 – “enforcement”**

Even the most protective local floodplain regulations are only as good as their implementation. Academic research, FEMA-commissioned reports, independent investigations, and surveys of state and local floodplain managers have all found compliance and enforcement challenges that undermine the NFIP’s effectiveness. When communities fail to adequately adopt and enforce NFIP building and land use standards, people and property are put at risk. As climate change continues to exacerbate flooding nationwide, ensuring adequate compliance with and enforcement of the NFIP will become increasingly important to minimize unnecessary flood damage.

There are two key parts to this issue. The first concerns compliance—whether local communities adopt and enforce the building, zoning, and other floodplain development regulations to meet the requirements of participating in the NFIP. The second involves FEMA’s willingness to take enforcement action by putting noncompliant communities on probation or suspending them from the NFIP if they fail to correct their violation. FEMA has taken limited probation or suspension enforcement action against noncompliant communities, even when recommended to do so by state coordinating agencies. Even while reserving probation and suspension as tools of last resort, FEMA can provide more financial and training resources for states and local communities and improve monitoring, tracking, and transparency of information regarding community compliance.

Better tracking and transparency of compliance issues can help identify the extent and nature of the most common program violations, allowing FEMA to determine how best to prioritize training and financial resources to help communities achieve compliance. Greater transparency could also discourage violations through community pressure, especially if residents in noncompliant communities knew there was a likelihood that their flood insurance rates could be raised, or worse, that they could be ineligible for certain types of disaster aid if their community came to be suspended.

More human and financial resources would also benefit community compliance. According to FEMA, most program deficiencies and many violations are due to a lack of awareness and full understanding of the NFIP’s floodplain management criteria, a lack of technical skills, and a failure to understand the rationale behind NFIP building and land use requirements. At the local level, floodplain managers often wear “multiple hats,” have a high turnover rate, and may lack appropriate training. Providing local and state managers with greater access to training and improved

recordkeeping and data-sharing could help head off noncompliance issues before they rise to a level requiring FEMA enforcement.

#### *Recommendation*

FEMA must improve monitoring, tracking, and public disclosure of data related to community compliance with NFIP requirements and provide resources to address the reasons that communities are not in compliance with floodplain regulations.

### **Question 11 – “disclosure”**

Before moving into a new home or community, people should know about present and future flood risks. Unfortunately, that information is often hard to find. More than one-third of states have no statutory or regulatory requirement that a seller must disclose a property’s flood risks or past flood damages to a potential buyer. The other states have varying degrees of disclosure requirements.<sup>2</sup> This hodgepodge of state and local policies makes it hard for buyers (and especially for renters) to make fully informed decisions.

In fact, many Americans who are about to make one of the biggest financial investments of their lives have zero knowledge of whether a house has flooded and is likely to flood again. This problem could be solved simply by having access to information—information that the seller or lessor of the home may have. Until there is a federal standard, this haphazard approach leaves many people in the dark about their flood risks.

#### *Recommendation:*

In order to participate in the NFIP, states should be required to pass disclosure laws that provide residents with information about flood risk. Sellers and landlords should have to disclose:

- Whether the home has ever been damaged by a flood and the extent of the damage;
- Whether the home is located in a mapped floodplain and, if it is, the flood zone classification (e.g., 100-year or 500-year) of the property and the source and date of this information; and
- Whether the seller and/or previous owners ever received federal disaster aid that would require all future owners to obtain and maintain flood insurance on the property and, if they have, the type of aid and amount received.

### **Question 12 – “accounting for climate change”**

Despite being required to do so by law, FEMA has not developed flood maps that reflect current and future flood risks. Most of the flood hazard maps that are used nationwide to determine minimum building design and other floodplain development standards are, at best, a reflection of the current flood risk—and usually of the flood risk of years in the past. We can no longer use historical risk alone to predict current risk, and we cannot use current risk to make decisions that will put people at risk decades into the future.

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<sup>2</sup> NRDC, “How States Stack up on Flood Disclosure,” <https://www.nrdc.org/flood-disclosure-map>

To meet its duty concerning floodplain mapping, FEMA must incorporate the best available science regarding sea levels, precipitation, and intensity of hurricanes in any revision or update of NFIP flood maps. FEMA must also include multiple future conditions flood elevations as advisory layers on Flood Insurance Rate Maps so they can be used for planning purposes.

#### *Recommendation*

For coastal areas, FEMA should use the National Oceanic and Atmospheric Administration's (NOAA's) most recent sea level rise projections. FEMA should incorporate this data on sea level rise directly into the modeling and calculations it uses for vulnerable areas.

For riverine areas, FEMA should take the impacts of future development and land use change into account when creating and updating maps.

### **Question 17 – “prohibit fill”**

Fill and build is the widespread practice of clearing a flood-prone site, piling up dirt, and putting buildings on top. It slows storm water absorption, deposits dirty runoff from highways, farms and factories on both residential neighborhoods and natural areas, and causes flooding. It should be banned.

Most communities have developable land outside the floodplain, but even if they don't, there are ways to build safely in already developed areas prone to flooding. These include the use of post and pile foundations, tall crawlspaces, and the placement of homes or businesses on top of garages.

#### *Recommendation:*

Include in the NFIP's floodplain management regulations, the following:

*The use of fill is prohibited in all special flood hazard areas (100-year floodplain) shown on Flood Insurance Rate Maps (FIRM). For any stream or body of water not identified by the FIRM, including intermittent streams, the developer shall determine the 100-year flood plain through a certified engineering analysis. These elevations shall be determined in accordance with FEMA's recognized methods and be based on future conditions.*

### **Move forward with reforming the NFIP**

Congress created the NFIP to reduce flood damages nationwide and to ease the federal government's financial burden for providing disaster recovery. However, flood damages and federal spending on flood recovery are rising, meaning that the NFIP is failing to achieve its primary goal. To reduce future flood damage, strengthen minimum standards and improve flood mapping, the NFIP must adequately account for the impact of climate change and increasing development on flood hazards. FEMA must use the information collected from this process to initiate rulemaking as soon as possible. Flood survivors cannot afford to wait any longer.

[Organization/individual] appreciates this opportunity to comment on reforming the NFIP.

Sincerely,

[organization/individual]