FEMA Flood Standard A Step In Right Direction, Experts Say

By Eli Flesch

Law360 (July 18, 2024, 6:46 PM EDT) -- The Biden Administration's decision last week to continue implementing a stronger flood protection standard is being welcomed by experts as a way to improve resiliency, even though the rule likely won't have a significant direct effect on flood insurance.

The Federal Emergency Management Agency issued the Federal Flood Risk Management Standard to encourage rebuilding stronger standards in high-risk flood areas by expanding the size of floodplains to prepare for greater flood risk. (Graeme Sloan/Sipa via AP Images)

The final rule, known as the Federal Flood Risk Management Standard, is meant to encourage rebuilding to stronger standards in high-risk areas by expanding the size of floodplains to better account for future flood risks. Issued by the Federal Emergency Management Agency on July 11, parts of the rule have been implemented since 2021 after first being proposed in 2016 but were later sidelined under the Trump administration.

Experts said while the rule won't meaningfully affect the National Flood Insurance Program, through which most Americans buy flood insurance, it could still offer insurance benefits by helping communities understand flood risk. That's if potential insurance buyers perceive a greater need for coverage, although experts noted the decision to buy or keep flood insurance is complex.

The rule will set new standards for infrastructure that FEMA funds, including projects supported by the...
agency's Hazard Mitigation Assistance Grant Program.

"I think it's a really positive step for climate resilience that the federal government is using its reach to encourage local governments and residents to think about not just what their risk is now, but what their risk is in the future," said Miyuki Hino, an assistant professor studying climate adaptation at the University of North Carolina at Chapel Hill.

In an ideal world, Hino said, more could be done to address the resiliency of existing housing stock. There's a lot of legacy housing and infrastructure that's close to the ground, so finding a way to improve the resiliency of those structures would help to speed up the transition to a stronger built environment, she told Law360.

Hino also said there should be an ambitious effort to develop in safer areas and more affordable options for people living in risky areas to relocate or fortify their homes.

While the rule applies to federally funded mitigation efforts, comments received by FEMA as part of its rulemaking process demonstrated a desire among some interested parties for the NFIP to also adopt a more forward-looking risk approach to flooding.

The program currently relies on out-of-date maps to help determine coverage mandates, and experts say even those requirements are poorly enforced.

In response to comments, FEMA said integrating the FFRMS into the NFIP is beyond the scope of its current rulemaking, and changing the program's floodplain management criteria to account for something like future risk would require additional rulemaking.

June Choi, a Stanford University researcher who recently published a study investigating how flood exposure affects insurance uptake, told Law360 that the FFRMS could still help to communicate to vulnerable communities that they have some risk if, for example, members of a community observed different building approaches.

She said similar communication benefits could be attributed to Risk Rating 2.0, the method of pricing insurance policies the NFIP implemented to better match price to risk.

But Choi noted that the rule "doesn't really touch on the insurance mandate."

In a press call with reporters last week, FEMA administrator Deanne Criswell said fully implementing the risk management standard would offer particular help in reducing the cost of repetitive flood loss cycles and flooding associated with sea-level rise.

"In practice, what this new standard will do is it increases the number of feet that we can elevate and flood-proof our infrastructure, which means protecting hospitals and homes from future flood risk," she said. "It also allows us to look at future risk using climate science instead of only considering current risk, which means we can build true, long-lasting resilience for our flood-prone communities, something that we really need to do."

Jacob T. Bradt, an assistant professor at the University of Texas at Austin, also praised the final rule. He told Law360 that old flood risk assessment methods — those that take a snapshot of localized floodplains and use that for planning — are insufficient today.

In addition to a rapidly changing climate, floodplain managers have also said that changes in the built environment — the construction of a surface-level parking lot, for example — can alter flood risk in a way that old FEMA flood maps fail to capture.

"Oftentimes, those assessments — those flood maps — were out of date, just because they're expensive to produce," he said. "You could see these assessments being many decades old. And I think we all recognize we're very much in a world in which these types of risk — flood risks in particular — are evolving on an annual basis almost."

Experts have said a lack of up-to-date flood maps is a problem that extends well beyond the shorelines of coastal cities, threatening communities outside official floodplains and others that may never have access to another updated flood map.
Bradt also said he's heard some questions about what kinds of federally funded initiatives will be subject to the new rule and anticipated further FEMA guidance.

Farshid Vahedifard, a Tufts University professor who studies infrastructure resiliency and climate adaptation, told Law360 that another key aspect of the FFRMS' full implementation is a requirement to consider nature-based flood risk reduction methods.

"This new FEMA regulation can speed up the progress to explore nature-based solutions to mitigate flood risk under current and future climates," Vahedifard said.

Vahedifard also said it's important that FEMA prioritize disadvantaged communities in addressing flood risk. Experts say discriminatory housing practices and disinvestment in low-income communities put people of color, and Black people especially, at high risk.

He said he knows FEMA is "trying to address the equity issue more and more, but I'm still hoping to see more practical frameworks that enable us to bring it down to practice."

Kathleen Schaefer, a flood risk researcher at UC Davis, said the FFRMS still posed important unanswered questions, especially with regard to the types of flooding possible under different circumstances and in different regions. She said in areas like the Sacramento Valley, it would be extremely difficult to manage the risk of a 500-year flood, even though FEMA will require such protections as one way to meet the FFRMS.

The probability of such a major flood comes to 0.2% annually. FEMA requires building to the risk of a 100-year flood — those with a 1% chance of occurring annually — for certain noncritical infrastructure. Climate experts say more frequent flooding and heavy rainfall necessitate measures like raising buildings or building out of floodplains.

"What's the 500-year for a flash flood? What's the 500-year for an alluvial fan?" said Schaefer, a former FEMA engineer, in an interview with Law360. "We don't know, because we don't have the data or the records to be able to really look at that."

Whether for the purposes of the FFRMS or insurance, experts say it's important to consider local communities' input when understanding flood risk. Especially when it comes to the future effects of climate change, understanding the capacity different communities have for adaptation is critical to coming up with a proper response.

Lunch or dinner events are one way to bring folks together, Schaefer offered. Tufts' Vahedifard said the best flood risk infrastructure demands an involved community.

"They have to share what they know, and we'll share what we know," he told Law360. "And then we'll come up with optimal adaptation strategies for that particular community, which are technically sound, socially just, and practically feasible."

--Editing by Emma Brauer.