On January 19, 2021, FHFA issued a Climate and Natural Disaster Risk Management at the Regulated Entities Request for Input (RFI) seeking public views on approaches to assess climate and natural disaster risks to the national housing finance system and enhance FHFA’s supervisory and regulatory framework in response to such risks. FHFA’s regulated entities must continue to operate in a safe and sound manner and fulfill their statutory missions of fostering liquidity, efficiency, competitiveness, and resiliency in the housing finance markets despite risks they face from climate and natural disaster risks.

Overview of Responses Received

FHFA received more than 60 responses from stakeholders, including the regulated entities, climate scientists, policy advocates, insurers, trade groups, data and modeling vendors, researchers, and other nonprofit organizations.1 This document provides a summary of the RFI responses that are available for review on the FHFA website.2 The responses presented a range of views, from which several themes emerged.

Respondents urged FHFA to be a leader on climate risk and natural disaster issues in the housing finance market, develop a comprehensive understanding of the risks, and work with other federal agencies and stakeholders to develop coordinated approaches and mitigation strategies.

Many respondents agreed that climate change and natural disasters pose significant risks that are not well-understood nor well-managed under current regulatory and supervisory frameworks. Respondents also stated that data gaps exist and there is a need for better data linkages between climate and financial data. Some respondents addressed the increased availability of climate and catastrophe models, while others voiced concerns about the accuracy of forward projections beyond a short period of time, inadequate validations, and the lack of transparency in the development and implementation of these models.

FHFA received numerous responses that recognized communities of color and low- and moderate-income borrowers as particularly vulnerable to climate change and natural disaster risks. Respondents voiced concerns that climate change could be used to justify modern-day redlining and urged FHFA to be aware of possible bias in new technology that may exacerbate existing valuation inequities or create a new form of “climate redlining.” Some respondents raised the concern that acting too quickly or not acting at all would have an oversized adverse impact on the most vulnerable communities.

Most respondents agreed that there is a need for more transparent risk disclosures, especially to entities and consumers less informed about climate risk. Some urged FHFA to balance the need to manage the risks with the regulated entities’ need to fulfill their charter mandates. Another

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1 Publicly available responses can be found here: https://www.fhfa.gov/AboutUs/Contact/Pages/input-submissions.aspx. Several respondents requested that their submissions not be published.

2 To view responses related to the Climate and Natural Disaster Risk Management at the Regulated Entities Request for Input (RFI), select “Climate and Natural Disaster Risk” using the dropdown menu.
recurring theme from respondents was for FHFA to take appropriate steps to protect and promote
the Duty to Serve program as part of any response to climate and natural disaster risks.

Responses were broken down into the following six major topic areas for further analysis:

1. Defining, identifying, and measuring risk
2. Risk mitigation and supervision
3. Financial disclosure
4. Built environment and valuation
5. Equity and fairness
6. Statutory, legal, and organizational structure

1. Defining, Identifying, and Measuring Risk

In the RFI, FHFA asked several questions on defining, identifying, and measuring risks from
climate change and natural disasters. Most respondents agreed that flood was a primary concern.
They emphasized the need to think of natural disaster risks in a broader and systemic way.
Respondents also noted that FHFA should consider the effects on the broader housing market in
terms of the impact on house prices, housing affordability, equity, fairness, and risk mitigation
solutions. They also expressed the need to align definitions and data standards and to the extent
possible, to partner with other financial regulators (domestic and international), to tackle the
challenges ahead (e.g., establish data standards, definitions, and frameworks) in the face of
climate change and natural disaster risks.

Respondents recognized that climate-related financial risks can generally be divided into
physical and transition risks. The former is defined as physical damages and the resulting
consequences from both short-term and long-term changes in climate. The latter represent
policy, technology, and societal changes arising from a transition to a low-carbon economy.

Recognized physical risks include:

- Harm to people and property arising from severe climate-related events such as wildfires,
  heat waves, floods, and severe storms;
- Chronic conditions such as droughts, landslides, sea-level rise, and changes in
  precipitation frequency and magnitude;
- Downstream impacts, including property damage and loss in asset value or collateral risk;
  and
- Heightened potential for financial risks, including credit, market, liquidity, counterparty,
  and operational risks.

Recognized transition risks include the effects from:
Synopsis of Climate and Natural Disaster Risk Management
RFI Responses

- Changes in policy at the international, federal, state, and local levels (e.g., net zero policies);
- Changes in technology to reduce greenhouse gas (GHG) emissions; and
- Changes in investor demand (e.g., environmental, social, and governance (ESG) investment) and consumer sentiment (e.g., borrower behavior).

The impacts of transition risks can increase financial risks in many different forms and layers: credit, market, liquidity, and counterparty risks, as well as operational, compliance, and reputational risks.

Most agreed that measuring physical risk is of key importance and requires not only better data coverage, quality (e.g., property-level estimates of physical damage, elevation data), and linkage (i.e., between climate and financial data), but also an improved understanding of such data, including its limitations. Some also encouraged the collection of climate and environmental justice data to assess risks to the entire housing market but especially to underserved and vulnerable communities.

2. Risk Mitigation and Supervision

The RFI asked multiple questions regarding how FHFA should approach risk mitigation from a supervision perspective for FHFA’s regulated entities. Respondents echoed similar responses from the section above, such as the importance of accurately measuring risks and having standardized data. They recognized that to mitigate disaster risks, more market transparency and more comprehensive disclosures would be required.

Overall, respondents supported the idea of a holistic risk strategy with enhanced underwriting standards to ensure borrower resiliency. Respondents suggested this approach needs to supplement the evaluation of the adequacy of flood insurance coverage for agency loans. Specific risk mitigation methods mentioned by respondents included: (1) the “buy, rent, retreat” model in California; (2) certain preemptive measures to facilitate improvement projects, such as investing in physical resilience like floodproofing and retrofitting, providing incentives associated with improved housing resiliency, and providing clear housing standards for green bond issuance; and (3) partnering with existing governmental resilience programs and developing resiliency plans to mitigate risks, particularly counterparty operational risks.

Respondents recognized the need for public and private institutions to join forces. They expressed hopes for FHFA to: (1) partner with other federal agencies and lead the collaborative efforts by convening forums to accelerate progress and knowledge sharing between industry, regulatory bodies, and academia; (2) consult international regulators and standards setters such

3 For examples of environmental justice indicators, see the Environmental Protection Agency’s Environmental Justice Screening and Mapping Tool.
4 See SB-83 Sea Level Rise Revolving Loan Program.
as the Bank of England, the Task Force on Climate-related Financial Disclosures (TCFD), and the Bank for International Settlements (BIS) to understand the frameworks that already have been established outside of the United States and look to use those as models for FHFA supervisory guidance; (3) enhance research capacity to identify, process, and standardize public and proprietary climate data in order to facilitate risk mitigation and supervision; and (4) ensure that scenario analysis and stress tests not only apply to the regulated entities but also to their counterparties.

3. Financial Disclosure

Financial disclosure includes activities associated with voluntary reporting and mandatory disclosure of the regulated entities’ ESG-related activities. Many respondents reiterated the need for transparent and consistent disclosures to more clearly identify risks resulting from the increasing pace of natural disasters and climate change.

Respondents supported the use of standards — mainly, TCFD and the Sustainability Accounting Standards Board (SASB) — for ESG reporting. Respondents emphasized the recurring theme of coordination across federal agencies, including non-financial regulatory agencies, such as Federal Emergency Management Agency (FEMA), U.S. Environmental Protection Agency (EPA), and U.S. Department of Energy (DOE), as well as the alignment of reporting frameworks with consideration for financial institution size, structure, and risk profiles. Some respondents recognized that ESG is an emerging investment standard and therefore appropriate disclosure to investors is still in the development stage. Some recommended that FHFA leverage the work of other financial regulators and harmonize approaches to the extent possible.

Respondents also supported enhanced ESG transparency and disclosure for the Enterprises by requiring them to measure, disclose, and have a plan to reduce the carbon footprint in their portfolios.

4. Built Environment and Valuation

The built environment and valuation category refers to the physical structure of properties and valuation based on location and associated factors. The factors were defined to be: (1) physical structure building products used or retrofitted for a region (e.g., hurricane resistant roofing, earthquake structural components in framing, grading, and building for flood zones, etc.); and (2) the potential for loss based on historical records.

There were several themes to the responses on physical building structures. Respondents stressed that local building codes are a key factor to consider. Building codes should be improved to withstand natural disasters within communities. This requires encouragement and incentives for communities to enact and enforce stricter building codes (e.g., energy efficient building construction). Several respondents also recognized manufactured housing as an option for affordable housing, which can be built to meet certain energy efficiency standards and weather
certain natural disasters. Relatedly, and echoing responses in the risk mitigation section, some reiterated the importance of retrofitting existing housing and recommended that FHFA consider partnerships and incentives that can lower the costs to perform retrofitting.

In terms of valuation, a recurring theme across many responses was the need to avoid location-based pricing which could disparately affect low-income borrowers and communities of color. However, some respondents did urge the use of loan-level data to combine expected climate or natural disaster risks with property and mortgage information. The expressed goal was to have more transparent or efficient price signals, which might also entail investor disclosures about underlying reference pools or collateral. The two ideas might not necessarily be in conflict if property-specific risks were calculated but losses were addressed by a well-diversified portfolio or security.

Specific recommendations also suggested that the Enterprises incorporate climate readiness into appraisal standards in the Uniform Appraisal Dataset and that FHFA consider reinstating the exemption to the multifamily cap for green multifamily loans.5

5. Equity and Fairness

Equity and fairness are cross-cutting topics that apply to all aspects of climate change and natural disaster risks. Overall, there was a clear recognition by respondents that natural disaster and climate risks disproportionately affect lower-income households and communities of color, which are often harder hit by the fallout from natural disasters and extreme weather and, in many cases, have the fewest resources to prepare for extreme events. These communities are also more likely to be located near other environmental hazards, further adversely affecting health and safety.

Respondents recognized the need for the development of fairness and equity principles and a holistic approach to operationalizing these principles. Respondents suggested FHFA actions, including:

- Avoid policies that perpetuate historical and governmental policies that led to discrimination in the housing market and implement policies that further equity;
- Ensure that the regulated entities treat all geographies and communities equally regardless of natural disaster risk;
- Develop future policies in close coordination with affected communities;
- Time actions appropriately – moving either too fast or too slow will hurt underserved communities;
- Develop tools and resources needed to support systemic solutions; and

5 The multifamily cap for 2022 was updated in October 2021. See FACT SHEET: 2022 MULTIFAMILY CAPS FOR FANNIE MAE AND FREDDIE MAC.
• Increase consumer education and disclosures of risks to future homeowners.

Finally, some respondents cautioned that significant credit, pricing, and valuation adjustments to risk designations may disproportionately affect minority communities and lead to cost-of-living increases in the form of increased insurance premiums, higher financing rates for residents, and dramatic drops in valuation and wealth – exacerbating the already wide racial wealth gap. Conversely, if FHFA fails to act, underserved communities will continue to bear the brunt of the worst effects of climate change.

6. Statutory, Legal, and Organizational Structure

The RFI sought responses on statutory, legal, and organizational considerations. No respondents questioned FHFA’s legal authority to act on these issues, and many applauded FHFA’s proactive stance to address these risks and encouraged FHFA to be a leader in the development of methodology and mitigation efforts related to climate change and natural disasters. One respondent stated that the regulations or standards that FHFA sets in relation to climate change and natural disasters will become “industry standard,” and another stated that the Enterprises have a leading role in demonstrating best practices and improved disaster response in relation to these risks.

Respondents urged FHFA to protect and promote the Duty to Serve program and further recognize the disparate impact that climate and natural disaster risks and certain risk mitigation efforts may have on vulnerable communities. Several respondents encouraged FHFA, as well as other financial regulators, to be cognizant of laws such as the Fair Housing Act, Equal Credit Opportunity Act, and Community Reinvestment Act and to assess climate risks and disparate impact on communities of color.

Some legal issues identified by respondents appeared to be disclosure-focused: (1) the need for mandatory disclosures to consumers about flood risk and true utility costs; and (2) better disclosure of hazard insurance processes and procedures to avoid homeowner inability to rebuild or repair. Other legal recommendations appeared to be more governance-related and focused on consistency, including: (1) set uniform standards for post-disaster claims processing, including aligning post disaster home inspections and the paperwork process; (2) set uniform standards for mortgage servicers on reconstruction of damaged properties; (3) enforce a national flood risk disclosure requirement at or before “Point of Sale,” as state disclosure requirements range from mandatory to non-existent; and (4) require consistency in public assistance and forbearance policies across hazard types for short-term- and long-term recovery so as to avoid the inequitable distribution of relief assistance. Separately, one respondent stated that Congressional action would be required to make such national changes. Another respondent cautioned against “over-regulation.”

On organizational structure, echoing responses in the governance section, one respondent urged FHFA to take a comprehensive approach to address climate and natural hazard risks not only to
the Enterprises, but also to individual borrowers. One respondent recommended establishment of a blue-ribbon panel at FHFA to further research goals as to these risks. Other respondents suggested the establishment of climate risk committees at FHFA and the Enterprises, while some suggested that climate risk be incorporated into existing frameworks at the business, management, and board levels at the Enterprises and be tied to compensation. Others recommended leveraging existing enterprise risk categories and allowing sufficient time for implementation.

Repeatedly, respondents referenced the need for collaboration with other agencies (federal, state, and local) and the White House to establish standards that are consistent across the financial services spectrum (e.g., FHFA should coordinate with FHA to avoid unintended consequences of moving all climate risks from the GSEs to FHA programs), as well as the need to collaborate more broadly with civil rights organizations, housing advocates, environmental justice advocates, and local community members to ensure effective understanding of risks and impact on communities, especially in communities of color.

**Conclusion**

The responses received from the RFI represent a range of stakeholders. FHFA appreciates the significant efforts that went into these thoughtful and well-reasoned responses. The responses suggest that significant work is required to fully understand the risks associated with climate change and natural disasters to the housing finance industry at large and how to best respond to those risks. Responses consistently indicated the need for a whole-of-government approach to build consistency and leverage different areas of expertise. Responses also consistently warned of the potential disparate impacts on vulnerable communities and urged FHFA to adequately consider those impacts in decision making. FHFA will continue to build off the ideas presented in these responses as we continue to develop approaches to assess climate and natural disaster risks to the national housing finance system and enhance FHFA’s supervisory and regulatory framework in response to such risks.