



Federal Housing Finance Agency  
Office of the Director  
400 7th Street SW, 10th Floor  
Washington, DC 20219

April 19, 2021

**Re: Climate and Natural Disaster Risk Management Request for Input**

**To: Marc A. Calabria**, Director of the Federal Housing Finance Agency

The Center for American Progress (“CAP”) welcomes the opportunity to submit comments in response to the Federal Housing Finance Agency (FHFA)’s Climate and Natural Disaster Risk Management Request for Input (RFI). CAP is an independent, nonpartisan policy institute dedicated to improving the lives of Americans through bold, progressive ideas and action. As part of its core mission, CAP conducts research and develops policy ideas that help enhance the economic security of all Americans, boost their opportunities for advancement, and promote equality.

Climate change represents an increasing threat and major risk to the stability of financial markets and the overall economy. At the same time, systemic racism continues to combine with climate-related disasters to disproportionately affect low-income communities of color.<sup>1</sup> As the FHFA’s RFI indicates, natural disasters represent a critical threat to the national housing finance market as they can lead to an increase in delinquencies and defaults which can impact the ability of the GSEs to provide liquidity.

CAP commends the FHFA's commitment to addressing climate change and encourages the FHFA to give more weight to the systemic risks of climate change and recognize systemic environmental racism in order to promote equitable community investment, access to credit, and climate resilience.<sup>2</sup>

**Climate change poses a critical threat to the national financial market and the overall economy.**

Severe weather events, a byproduct of climate change, have been on the rise. A series of hurricanes, wildfires and floods have resulted in billions of dollars in climate-related property losses, including homes built in areas that are prone to floods, fires and extreme weather.<sup>3</sup> According to the National Oceanic and Atmospheric Administration's (NOAA)'s National Centers for Environmental Information (NCEI), the U.S. has experienced 285 weather and climate disasters with damage costs reaching or exceeding \$1 billion from 1980 to 2020. In 2020 alone, 22 severe disasters -- wildfires, floods and storms -- cost the nation a total of \$95 billion in damages.<sup>4</sup> The threat that climate change-related events pose on the housing market has been particularly critical during the global pandemic. In 2020, CoreLogic estimated that nearly 7.4 million single- and multifamily homes with more than \$1.8 trillion in reconstruction cost value were at risk of storm surge and possible mandatory evacuation.<sup>5</sup> Further, a 2020 NBER analysis notes that homes in floodplains are overvalued by \$34 billion, posing important challenges to the stability of real estate markets as climate risks worsen.<sup>6</sup>

Natural disasters that damage or destroy homes securing mortgage loans held by the Enterprises jeopardize the ability of borrowers to make principal and interest payments on mortgage loans, often leading to an increase in delinquency and default rates and loan loss severity in the Enterprises' book of business. In addition, major natural disasters can discourage housing activity, such as housing construction and purchases, and can result in the deterioration of housing conditions in the affected areas and adjacent areas, with ripple negative effects on the volume of originations, home prices, and property values.<sup>7</sup> As property values decrease, the

mortgage obligations of homeowners residing in vulnerable areas remain fixed, potentially leading to homes being worth less money than what was owed on them and, thus, to an increase in negative equity rates and foreclosures.

As a significant number of home mortgages are backed by the Federal Government, climate-related disasters represent a serious concern for U.S. taxpayers. The taxpayer-backed Government Sponsored Enterprises (GSEs) guarantee about half of the nation's residential mortgages, a large portion of which are tied to homes built in floodplains and areas susceptible to natural disasters. More homes are being built, mortgage originations have increased, and a large portion of mortgages are backed in or adjacent to floodplains.<sup>8</sup> The National Flood Insurance Program, however, is inadequate to cover the potential exposure to flooding-related risk. The program is insolvent after having paid out more than it collected for several years.<sup>9</sup> In addition, several climate-induced damages may not be insurable.<sup>10</sup> The Enterprises hold more than 60 percent of mortgages on homes in areas outside the 100-year floodplain, where fewer homeowners are purchasing federally-backed flood insurance.<sup>11</sup> When homes in these areas are severely damaged, and homeowners are not current on flood insurance, cannot sustain repair costs, and are forced to abandon them, the Enterprises ultimately remain responsible for the damaged homes and taxpayers are left on the hook for mortgage defaults.

According to the U.S. Commodity Futures Trading Commission, the GSEs may have insufficient discretion to screen and price mortgages based on climate risk, as they are limited by regulations guiding their underwriting activities.<sup>12</sup> Also, it is difficult to assess future flood-related risks because of the increasing unpredictability of major natural disasters and because flood maps are outdated.

## **Communities of color are on the front lines of climate change**

The GSEs have the mission to serve all markets at all times and don't charge higher fees to guarantee mortgages on homes located in floodplains, despite the risk of property losses. If they were to do so, the Enterprises would disproportionately affect low- and moderate-income communities and communities of color which are particularly vulnerable to the effects of climate change and tend to be located in low-lying areas due to decades of systemic environmental racism.<sup>13</sup> By charging location-based higher fees, the Enterprises would raise the cost of borrowing in underserved communities of color. Higher borrowing costs, in turn, would discourage lending in those communities, depress home prices, and perpetuate patterns of disinvestment.

For decades, legal forms of discrimination, racially biased housing policies, and racist lending practices have played a critical role in segregating people of color, particularly African Americans, into neighborhoods that face chronic disinvestment and higher levels of lead exposure, poorer air quality, and exposure to toxic chemicals due to their close proximity to landfills, hazardous waste sites, and other industrial facilities.<sup>14</sup> Race represents the main determinant of the placement of toxic facilities in the United States.<sup>15</sup> Black and brown communities represent the majority of nearly 2 million Americans who reside within a mile of sites that are vulnerable to flooding.<sup>16</sup> African Americans and Latinos are more exposed to fine particulate matter (PM2.5) air pollution, the largest environmental health risk factor in the United States. Such exposure is disproportionately caused by consumption of goods and services—such as automobiles and electricity—mainly by non-Hispanic whites but disproportionately inhaled by people of color.<sup>17</sup> The disproportionate presence of people with disabilities among communities of color makes their vulnerability to climate change and natural disasters even more critical.<sup>18</sup>

Environmental racism is unquestionably related to climate change because it determines who is most likely to suffer most from the consequences of activities that produce global warming.<sup>19</sup>

Low- and moderate-income communities of color find themselves on the front lines of climate change, as their often outdated housing and infrastructure—including a lack of adequate insulation and air conditioning—is more vulnerable to the adverse effects of extreme weather and climate change.<sup>20</sup> These communities are often located in hazardous areas, such as floodplains and fire zones.<sup>21</sup> As the global sea level rises, African American coastal communities in the South are at great risk of displacement.<sup>22</sup>

Communities of color have the fewest resources with which to prepare for extreme climate events. The impact of Hurricane Katrina on African American New Orleans residents was greatly exacerbated by residential segregation and the barriers that residents faced in preparedness and evacuation, including limited access to personal vehicles and greater dependence on public transportation.<sup>23</sup> In fact, in 2011 and 2012, the majority of communities most harmed by costly natural disasters were LMI families.<sup>24</sup> Moreover, communities of color do not always receive as many federal relief dollars as do wealthier, predominantly non-Hispanic white ones, which exacerbates income inequality and the racial wealth gap.<sup>25</sup>

Numerous studies have documented the disproportionate exposure of people of color to land uses and activities that exacerbate climate change. Historical redlining, the siting of affordable housing, and past uneven disinvestment have greatly shaped the character of urban development and the uneven distribution of ecological benefits, including access to amenities such as greenspace.<sup>26</sup> Federal programs, such as those that provided incentives for major highway construction across low-income neighborhoods of color, have also increased the likelihood of these communities being exposed not only to higher levels of pollution but also to higher levels of heat.<sup>27</sup> Extreme heat is considered one of the most serious threats to human health in urban areas across the United States.<sup>28</sup> Heat accounted for more deaths than flooding and hurricanes combined from 1990 to 2019.<sup>29</sup> Because of climate change, extreme heat events are becoming more common and more intense, and studies of extreme heat point to racial disparities in heat-related mortality.<sup>30</sup> Land cover characteristics in racially segregated areas contribute to heat-related health disparities.<sup>31</sup> Some studies also connect land use planning and zoning to the urban

heat island effect because of the influence that they have on the location, density, mix of buildings and structures, and construction materials of the built environment in cities.<sup>32</sup> Further, areas that have experienced systematic disinvestment driven by racial bias through practices such as redlining are more vulnerable to heat because their built environments often feature heat-retaining materials and limited greenspace.<sup>33</sup>

In order to boost the FHFA's capacity to address climate change-related risks and systemic environmental racism, CAP offers the following broad recommendations.

**Expand and improve data collection to assess climate change-related risks in all communities**

The FHFA should collect climate and environmental justice data to assess the risks climate change and natural disasters pose on the housing finance market as a whole, but especially in the most vulnerable communities – LMI communities and communities of color – in order to enhance mitigation activities and boost investment and climate resilience where it is needed the most.

The FHFA should promote and support collaboration and alignment among different agencies in terms of data collection and distribution, especially with regards to the geographic targets defined for the affordable housing goals and for Duty to Serve purposes. An example on how to align data collection strategies for geographic targeting is presented in CAP's report *A CRA To Meet the Challenge of Climate Change*.<sup>34</sup> No indicators related to environmental justice and climate change are currently included in the criteria adopted for the delineation of underserved areas to guide the GSEs in meeting their location-based affordable housing goals. CAP's report offers a practical example of how race, income, and environmental and climate factors could be incorporated into a set of revised criteria for geographic targeting purposes.<sup>35</sup> The Environmental Protection Agency (EPA) provides several environmental indicators at the census block group level and other geographies through the Environmental Justice Screening and Mapping Tool (EJScreen) and other portals.<sup>36</sup> Indicators at the block group level can be aggregated at the

census tract level for analysis purposes and for merging data coming from other sources, such as U.S. Census Bureau's American Community Survey and Home Mortgage Disclosure Act data.

We encourage collaboration with agencies such as the U.S. Geological Survey (USGS), among others, in order to obtain elevation data across the United States. Elevation data are critical when examining flooding risks, as floods are more likely to affect communities in low-lying areas. Like land surface temperature, elevation data are usually provided in the form of satellite imagery for small geographic areas that necessitate significant data processing and aggregation in order to be later utilized in statistical and Geographic Information Systems (GIS) modeling. It is important to have access to such data at the census tract level for the entire U.S. territory in order to facilitate statistical modeling and GIS analysis. The FHFA should establish a research unit that is responsible for the identification, processing, and standardization of climate data coming from different sources, both public and proprietary.

The collection of climate data from multiple sources and coordination and consulting with other agencies and stakeholders are of paramount importance for the assessment of climate risk in the housing finance market, and for stress testing, scenario analysis, and geographic targeting. In addition, the FHFA should increase transparency and disclosure, especially with regards to prospective buyers. For instance, the FHFA should mandate the GSEs to measure and disclose the carbon footprint of each residential loan backed by the Enterprises and make it available in a public, open-access database.

**Institutionalize climate change as a priority for the GSEs and incentivize the types of investment activities that reverse decades of environmental racism**

The FHFA should institutionalize climate change as a corporate priority for the Enterprises. The FHFA's Strategic Plan and Annual Scorecard Assessments should reflect long-term and short-term climate-related goals and objectives that the Enterprises would be required to meet.

As discussed above, communities of color face critical challenges related to climate change and environmental racism. It is very important for the FHFA to incentivize the types of investment activities that reverse decades of environmental racism and promote economic stability, natural disaster risk mitigation, and climate resilience in underserved communities of color. The FHFA should ensure that the Enterprises comply with fair lending laws and prohibit harmful and problematic products in order to avoid discriminatory outcomes.

Besides specifically targeting low-income communities of color that are vulnerable to climate change and environmental racism, the FHFA should prioritize the types of activities that have the strongest potential to advance community resilience in the most climate-vulnerable communities without placing additional financial burdens on individual homeowners and communities. The FHFA should also spread the risk across the Enterprises' entire portfolio, rather than price it into individual loans. The FHFA should encourage the development of energy-efficient and climate-resilient homes – for example, through electrification, solar power, and other sources of clean energy that reduce greenhouse gas emission – by revising the GSEs' Duty to Serve requirements and by providing incentives to lenders and housing providers while protecting consumers from predatory and costly practices. Coordination between the FHFA and the Consumer Financial Protection Bureau (CFPB) is crucial for borrower protection purposes.

The Multifamily Volume Cap represents one of the levers within the FHFA's statutory and regulatory framework that can be used to incentivize the GSEs to increase their focus on climate change initiatives. Every year, the FHFA sets a volume cap for the amount of business that the Enterprises can conduct in the multifamily housing market. When these caps were first established, loans that met green standards were exempt from the volume cap. In 2019, however, the green exemption was removed. CAP recommends that the green exemption is reinstated in order for the Enterprises to ramp up the production of mortgage products that reward energy and water efficiency.

Thank you for the opportunity to submit comments in response to the Climate and Natural Disaster Risk Management RFI.



Any questions regarding this comment letter or related issues should be directed to Michela Zonta at [mzonta@americanprogress.org](mailto:mzonta@americanprogress.org).

Sincerely,

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<sup>1</sup> Veena Ramani, “Turning Up the Heat: The need for urgent action by US financial regulators in addressing climate risk.” (Ceres, April 2021), available at <file:///C:/Users/mzonta/OneDrive%20-%20Center%20For%20American%20Progress/Climate%20Change/Ceres%20Financial%20Regulators%20Turning%20up%20the%20Heat%20FINAL%204.5.21.pdf>.

<sup>2</sup> Climate Justice Working Group, “Advancing Climate Justice in California: Guiding Principles and Recommendations for Policy and Funding Decisions,” (August 2017), available at <https://www.healthyworldforall.org/en/express-img/17081516-3570-img1.pdf>.

<sup>3</sup> Zack Colman and Katy O’Donnell, “Borrowed time: Climate change threatens U.S. mortgage market,” Politico, June 8, 2020, available at <https://www.politico.com/news/2020/06/08/borrowed-time-climate-changemortgage-market-304130>

<sup>4</sup> NOAA, National Centers for Environmental Information, “Billion-Dollar Weather and Climate Disasters: Overview,” available at <https://www.ncdc.noaa.gov/billions/>.

<sup>5</sup> CoreLogic, “2020 Storm Surge Report,” available at <https://www.corelogic.com/downloadable-docs/storm-surge-report-20200528-screen-2.pdf>.

<sup>6</sup> Miyuki Hino and Marshall Burke, “Does Information About Climate Risk Affect Property Values?” National Bureau of Economic Research, Working Paper 26807, February 2020, available at <https://www.nber.org/papers/w26807>.

<sup>7</sup> Fannie Mae, 2019 Form 10-K, available at <https://www.fanniemae.com/sites/g/files/koqyhd191/files/migrated-files/resources/file/ir/pdf/quarterly-annual-results/2019/q42019.pdf>.

<sup>8</sup> Zack Colman and Katy O’Donnell, “Borrowed time: Climate change threatens U.S. mortgage market.”

<sup>9</sup> Ibid.

<sup>10</sup> Freddie Mac, “Life’s A Beach,” Economic & Housing Research Insight, April 2016, available at <http://www.freddiemac.com/fmac-resources/research/pdf/April%20Insight%2004%2026%2016.pdf>.

<sup>11</sup> Zack Colman, “How climate change could spark the next home mortgage disaster,” Politico, November 30, 2020, available at <https://www.politico.com/news/2020/11/30/climate-change-mortgage-housing-environment-433721>.

<sup>12</sup> U.S. Commodity Futures Trading Commission, “Managing Climate Risk in the U.S. Financial System,” available at <https://www.cftc.gov/sites/default/files/2020-09/9-9-20%20Report%20of%20the%20Subcommittee%20on%20Climate-Related%20Market%20Risk%20-%20Managing%20Climate%20Risk%20in%20the%20U.S.%20Financial%20System%20for%20posting.pdf>; Lindsay Owens, “Soaked: A Policy Agenda to Prepare for a Climate-Triggered Housing Crash.” The Great

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Democracy Initiative, July 2020, available at <https://greatdemocracyinitiative.org/wp-content/uploads/2020/07/Climate-and-Housing-Report-Final-Copy.pdf>.

<sup>13</sup> Connor Maxwell, “America’s Sordid Legacy on Race and Disaster Recovery,” Center for American Progress, April 5, 2018, available at <https://www.americanprogress.org/issues/race/news/2018/04/05/448999/americas-sordid-legacy-race-disaster-recovery/>.

<sup>14</sup> Douglas S. Massey and Nancy A. Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, MA: Harvard University Press, 1998). For a brief discussion of pre-Great Depression policies that contributed to racial disparities in homeownership, see Lisa Rice, “Long Before Redlining: Racial Disparities in Homeownership Need Intentional Policies,” Shelterforce, February 15, 2019, available at <https://shelterforce.org/2019/02/15/long-before-redlining-racial-disparities-in-homeownership-need-intentional-policies/>. See also Rachel Morello-Frosch and Bill M. Jesdale, “Separate and unequal: residential segregation and estimated cancer risks associated with ambient air toxics in U.S. metropolitan areas,” *Environmental Health Perspectives* 114 (3) (2006): 386–393, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1392233/pdf/ehp0114-000386.pdf>; Jasmine Bell, “5 Things to Know About Communities of Color and Environmental Justice,” Center for American Progress, April 25, 2016, available at <https://www.americanprogress.org/issues/race/news/2016/04/25/136361/5-things-to-know-about-communities-of-color-and-environmental-justice/>.

<sup>15</sup> NAACP, “Environmental and Climate Justice,” available at <https://www.naacp.org/issues/environmental-justice/> (last accessed November 2020).

<sup>16</sup> Natalie Colarossi, “10 egregious examples of environmental racism in the US,” Insider, August 11, 2020, available at <https://www.insider.com/environmental-racism-examples-united-states-2020-8>.

<sup>17</sup> Christopher W. Tessuma and others, “Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure,” *Proceedings of the National Academy of Sciences of the United States of America* 116 (13) (2019): 6001–6006, available at <https://www.pnas.org/content/pnas/116/13/6001.full.pdf>.

<sup>18</sup> Centers for Disease Control and Prevention, “Adults with Disabilities: Ethnicity and Race,” available at <https://www.cdc.gov/ncbddd/disabilityandhealth/materials/infographic-disabilities-ethnicity-race.html> (last accessed November 2020). See also Rejane Frederick and others, “Serving the Hardest Hit: Centering People with Disabilities in Emergency Planning and Response Efforts” (Washington: Center for American Progress, 2018), available at <https://www.americanprogress.org/issues/disability/reports/2018/09/24/458467/serving-hardest-hit/>.

<sup>19</sup> See Michela Zonta and Zoe Willingham, “A CRA To Meet the Challenge of Climate Change: Advancing the Fight Against Environmental Racism.” (Washington, Center for American Progress, 2019), available at <https://www.americanprogress.org/issues/economy/reports/2020/12/17/493886/cra-meet-challenge-climate-change/>.

<sup>20</sup> Bell, “5 Things to Know About Communities of Color and Environmental Justice”; Laurel Blatchford, “Climate Change Disproportionately Affects Low-Income Communities,” Enterprise, December 7, 2018, available at <https://www.enterprisecommunity.org/blog/climate-change-disproportionately-affects-low-income-communities>.

<sup>21</sup> Laurie Schoeman, “Pre- and Post-Disaster Investments in Housing and Community Development Under the CRA,” Federal Reserve Bank of San Francisco, October 17, 2019, available at <https://www.frbsf.org/community-development/publications/community-development-investment-review/2019/october/pre-and-post-disaster-investments-in-housing-and-community-development-under-the-cra/>.

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- <sup>24</sup> Cathleen Kelly, “State Future Funds” (Washington: Center for American Progress, 2015), available at <https://cdn.americanprogress.org/wp-content/uploads/2015/06/StateFutureFunds-report6.22.pdf>.
- <sup>25</sup> Maggie Astor, “Environmental Justice Was a Climate Forum Theme, Here’s Why.”, *The New York Times*, September 5, 2019, available at <https://www.nytimes.com/2019/09/05/us/politics/environmental-justice-climate-town-hall.html>.
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- <sup>29</sup> National Weather Service, “Weather Related Fatality and Injury Statistics,” available at <https://www.weather.gov/hazstat/> (last accessed November 2020).
- <sup>30</sup> Reinhard Kaiser and others, “The Effect of the 1995 Heat Wave in Chicago on All-Cause and Cause-Specific Mortality,” *American Journal of Public Health* 97 (Supplement 1) (2007): 158–162, available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1854989/pdf/0970158.pdf>.
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- <sup>33</sup> Bev Wilson, “Urban Heat Management and the Legacy of Redlining,” *Journal of the American Planning Association* (2020), available at <https://doi.org/10.1080/01944363.2020.1759127>. For instance, trees, an important heat-mitigating factor, are more likely to be found in parcels of owner-occupied housing. Because of decades of mortgage lending discrimination and limited access to homeownership, low-income communities of color feature fewer trees and greater exposure to heat. See Nik Heynen, Harold A. Perkins, and Parama Roy, “The Political Ecology of Uneven Urban Green Space: The Impact of Political Economy on Race and Ethnicity in Producing Environmental Inequality in Milwaukee,” *Urban Affairs Review* 42 (1) (2006): 3–25, available at <https://journals.sagepub.com/doi/abs/10.1177/1078087406290729>. In addition, the construction of high-speed roadways in low-income communities of color has involved heat-retaining materials such as asphalt. See Raymond A. Mohl, “Stop the road: Freeway revolts in American cities,” *Journal of Urban History* 30 (5) (2004): 674–706, available at <https://journals.sagepub.com/doi/10.1177/0096144204265180>.

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<sup>34</sup> Michela Zonta and Zoe Willingham, “A CRA To Meet the Challenge of Climate Change: Advancing the Fight Against Environmental Racism.”

<sup>35</sup> Ibid.

<sup>36</sup> U.S. Environmental Protection Agency, “Overview of Environmental Indicators in EJSCREEN: EJSCREEN: Environmental Justice Screening and Mapping Tool,” available at <https://www.epa.gov/ejscreen/overview-environmentalindicators-ejscreen>. See also <https://www.epa.gov/climate-indicators>.