Bluelining: Climate Financial Discrimination on the Horizon

THE GREENLINING INSTITUTE

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The Greenlining Institute

Founded in 1993, Greenlining is committed to building a just economy that is inclusive, cooperative, sustainable, participatory, fair, and healthy. We work towards a future where communities of color can build wealth, live in healthy places filled with economic opportunity, and are ready to meet the challenges posed by climate change. Our multifaceted advocacy efforts address the root causes of racial, economic, and environmental inequities in order to meaningfully transform the material conditions of communities of color in California and across the country.

Climate Finance

Greenlining's climate finance team holds private entities, with an emphasis on financial institutions, accountable for their impacts on climate and the economy. We work to ensure low-income communities and communities of color across California and the country will be better equipped to face the impacts of climate change in a way that promotes self-determination and economic opportunity.

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Executive Summary

Bluelining is an emerging practice in which financial institutions increase prices or withdraw services altogether from regions they perceive to be at high environmental risk, most commonly insurance, credit, and banking services.[1] Early signs of bluelining appear to overlap with the same patterns of disinvestment established by redlining. As financial institutions increasingly factor climate risk mitigation into their business strategies, low-income communities and communities of color may face a resurgence of racial and economic financial exclusion that mimics redlining practices, with increasingly debilitating consequences as the climate crisis intensifies.

Concrete evidence of the prevalence and institutionalization of the practice of bluelining is still limited. However, early warning signs of engagement in bluelining from financial actors have emerged within the credit, mortgage, and insurance markets. In the past, credit rationing has disproportionately affected communities of color and impaired their ability to withstand the financial strain of climate disasters. Diminishing access to homeowners insurance in areas with high climate risk represents the early harbinger of bluelining, as low-income communities and communities of color are disproportionately represented in high climate risk areas due to a history of systemic factors, including decades of redlining. As a result, bluelining has an outsized financial impact on these communities that increasingly find themselves unable to access critical resources such as mortgage capital.

Ensuring that policymakers and regulators closely monitor and take action on emerging bluelining trends is essential to building a safe and sound financial system. Inaction could result in severe consequences for the mortgage industry in particular, especially as Fannie Mae and Freddie Mac's mortgage portfolios include homes exposed to significant climate risk. Bluelining may also lead to societal ramifications as more affluent communities migrate to safer areas, coined “climate gentrification,” while leaving low-income communities and communities of color to weather worsening climate impacts with even fewer resources.

State and national policymakers and regulators must take action to protect low-income communities and communities of color from further financial harm. We offer nine policy recommendations as initial, concrete steps to promote economic and racial equity and prevent systemic financial risk and societal harm to climate-vulnerable communities.

1. **Lawmakers and regulators need more in-depth research and analysis to understand how bluelining is unfolding across credit, mortgage, and insurance markets.** While this paper compiles evidence and information on the warning signs of bluelining across existing literature and media, a more rigorous and granular analysis is needed to understand if there are emerging geographic trends in the allocation of credit and capital and how that may disproportionately impact low-income communities and communities of color.

2. **Financial institutions should leverage the Community Reinvestment Act (CRA) and the Inflation Reduction Act's Greenhouse Gas Reduction Fund (GGRF) to the maximum extent possible to maintain proactive investment in climate resilience measures in low-income communities and communities of color vulnerable to climate change impacts.** Given financial institutions' need to balance climate-related financial risk with obligations to fair lending practices and preventing discrimination, we urge these institutions to proactively invest in infrastructure projects to provide safety and resilience to communities facing potential impacts from climate change.
3. **Regulators should provide specific guidance to smaller financial institutions and Minority Depository Institutions (MDIs) in order to balance climate-related financial risk and harms from intentional or unintentional bluelining practices.** Due to the localized nature of smaller banks, credit unions, and MDIs, regulators must provide guidance on effectively accounting for climate-related financial risk, given the likelihood that their portfolios could include significant concentrations of capital in vulnerable areas.
4. **Financial institutions should financially support and actively participate in community engagement efforts related to climate risk, community impact, and the creation of just solutions.** Financial institutions should provide funding for community-driven engagement processes where difficult and essential conversations related to climate resilience can occur proactively so that communities can decide for themselves how best to proceed.
5. **In theory, issues related to climate change impacts and how they may affect communities' ability to access financial services could be incorporated into these plans.** Additionally, low-income communities and communities of color should be offered access to housing opportunities that would facilitate a move to areas of higher opportunity."
6. **Regulators should utilize the Equal Credit Opportunity Act (ECOA) and the Community Reinvestment Act (CRA) examination process as an enforcement mechanism to hold financial institutions accountable for bluelining.** Financial regulators must demonstrate a willingness to enforce fair lending laws arising from climate-related implications. ECOA and the CRA are complementary legal tools that aim to extend access to credit and capital and prevent discrimination by creditors. While neither ECOA nor the CRA statutes name "climate" or "climate-vulnerable" as a protected class or communities prioritized for investment, there are opportunities to bring action against institutions for fair lending violations that may be climate-driven.
7. **Financial institutions should offer opportunities to safeguard homes in exchange for more affordable access to products and services, including premium and/or interest rate relief.** Institutions across the broader mortgage and credit industries should consider offerings with similar models to California's Safer From Wildfires program to ensure vulnerable communities have an opportunity to access affordable financial services to help protect themselves and their communities.

8. **Lawmakers and regulators should intervene to standardize climate risk modeling practices to avoid greenwashing, maladaptation, and disparate impact on low-income communities and communities of color.** Government intervention should create standardized processes for climate risk analysis to appropriately account for uncertainty and safeguard against disparate impact on low-income communities and communities of color.[2] To facilitate better modeling, strong regulation requiring climate disclosures must be adopted.
9. **Increase transparency into how financial institutions consider climate in their underwriting processes.** Many institutions claim to have "enhanced due diligence" requirements, meaning a more extensive review and approval process, for emissions-heavy or other climate-impacting investments but disclose very little about what is involved in these processes. It is critical to have more transparency in underwriting decision-making such that potential financial discrimination, intentional or otherwise, can be identified.

Car caught in flood waters while an oil refinery sits in the background in Louisiana.
Photo Credit: colinsands via iStock

Introduction: The Writing on the Wall

Week after week, storm after storm, the winter of 2023 in California brought relentless rain to land parched by years-long drought. These atmospheric rivers are not uncommon for the state, but their increased frequency and arrival in quick succession have all of the markings of climate change.[3] With quick swings of the pendulum from severe drought to a deluge of rain within the same year and catastrophic wildfires still in view, California serves as a warning sign of how climate change fuels extreme weather patterns that endanger our societal structures.

Later in the year, State Farm, California's largest provider of homeowners insurance, publicly announced it would no longer be underwriting new homeowners insurance policies in the state, citing the increased risk of fires and high cost of construction in the state as some of the driving forces behind the decision.[4] By then, Allstate, the state's fourth largest insurer, and AIG had already quietly quit writing new home policies in the state.[5] Other states, such as Louisiana and Florida, have seen dozens of insurance companies flee their markets or go bankrupt following catastrophic natural disasters. When private insurance companies pull their coverage from markets, consumers are left to turn to volatile state-run insurance that depends on a fragile tax system.

Insurance companies are in the business of risk and are certainly one of the first industries to be affected when considering the financial impacts of climate crisis. However, insurance is just the harbinger, with the entire financial sector standing to experience similar disruption as climate risk accelerates. These recent headlines serve as the writing on the wall—a rude awakening that climate change is already causing financial havoc on our system, and still, we remain unprepared.

Central to this crisis is that low-income communities and communities of color are most likely to reside in climate-vulnerable areas,[6] yet are deprived of the capital necessary to build protective infrastructure.[7] This is a result of institutional patterns of discrimination throughout our history, including redlining, where financial institutions restricted access to capital from neighborhoods deemed "hazardous" due to a high percentage of Black residents and other residents of color.[8] This had the direct effect of limiting access to mortgage capital for Black households and other communities of color, as well as the subsequent effect of limiting capital for public finance, leading to decades of disinvestment in critical infrastructure and the persistent inequality we still see today.[9] This disinvestment includes a lack of dedicated green space, trees, and flood control mechanisms, among other consequences, that now heighten the physical risks these communities face from climate change.[10]

We must not repeat the injustices of our past as the climate crisis worsens. Access to fair and affordable financial services coupled with strong consumer protections are essential to weather the climate crisis, especially for communities that were historically denied access to such services. When financial institutions, such as banks and insurance companies, begin to reduce access to services and capital in areas most susceptible to chronic or acute climate disasters — a phenomenon known as bluelining — communities are left with even fewer resources to mitigate the worsening impacts

View of San Francisco, California amidst a wildfire-smoke sky on September 9, 2020.
Photo Credit: Patrick Perkins via Unsplash

of climate change.[11] As bluelining becomes more entrenched, vulnerable communities will likely be forced to relocate and seek economic well-being elsewhere or remain trapped in regions no longer suitable for physical safety and economic prosperity.

At the same time, financial institutions and insurance companies continue to pour money into the fossil fuel industry at a record pace, despite making public net-zero and sustainability-related commitments.[12] The financial services industry continues to fight efforts to promote transparency, such as the Securities and Exchange Commission's (SEC) proposed rule on climate-related disclosures that would require releasing information related to emissions.[13] Several other financial regulators, including the Federal Reserve and the Federal Deposit Insurance Corporation (FDIC), have proposed principles for managing climate-related financial risk. However, none of these proposals go far enough in pace or scale, with only tacit mentions of potential impacts on low-income communities and communities of color.

This paper offers a high-level initial analysis of the bluelining phenomenon, including what we know and do not know, critical implications, and initial recommendations for regulators and policymakers to consider to protect high-risk communities from these compounding crises. This challenge touches on a number of existential themes related to economic and social well-being, including self-determination, migration, the role of the market, and risk. We aim to offer perspective on how to address these questions while centering low-income communities and communities of color to ensure we do not repeat historical patterns of discrimination.

What is Bluelining?

Coined by Professor Jesse M. Keenan of Tulane University, bluelining is an emerging practice in which financial institutions increase prices of or withdraw services altogether from regions they perceive to be at high environmental risk, most commonly insurance, credit, and banking services.[14] While "blue" is a reference to flood risk, the term bluelining has evolved to include any climate-related risk. The term bluelining also alludes to redlining, an explicitly racist practice to segregate communities of color from white neighborhoods and systematically exclude people of color from the economy at large. Federal agencies developed maps of metropolitan areas with a color-coded system to indicate whether lenders should insure mortgages in certain areas. Communities of color, immigrants, and adjacent communities were systematically categorized as red, meaning "hazardous," resulting in the denial of loans which in turn led to the repression of economic development and, most relevant to bluelining, the hindrance of infrastructural improvement.[15]

Bluelining is a practice in which financial institutions increase prices of or withdraw services altogether from regions perceived to be at a high environmental risk.

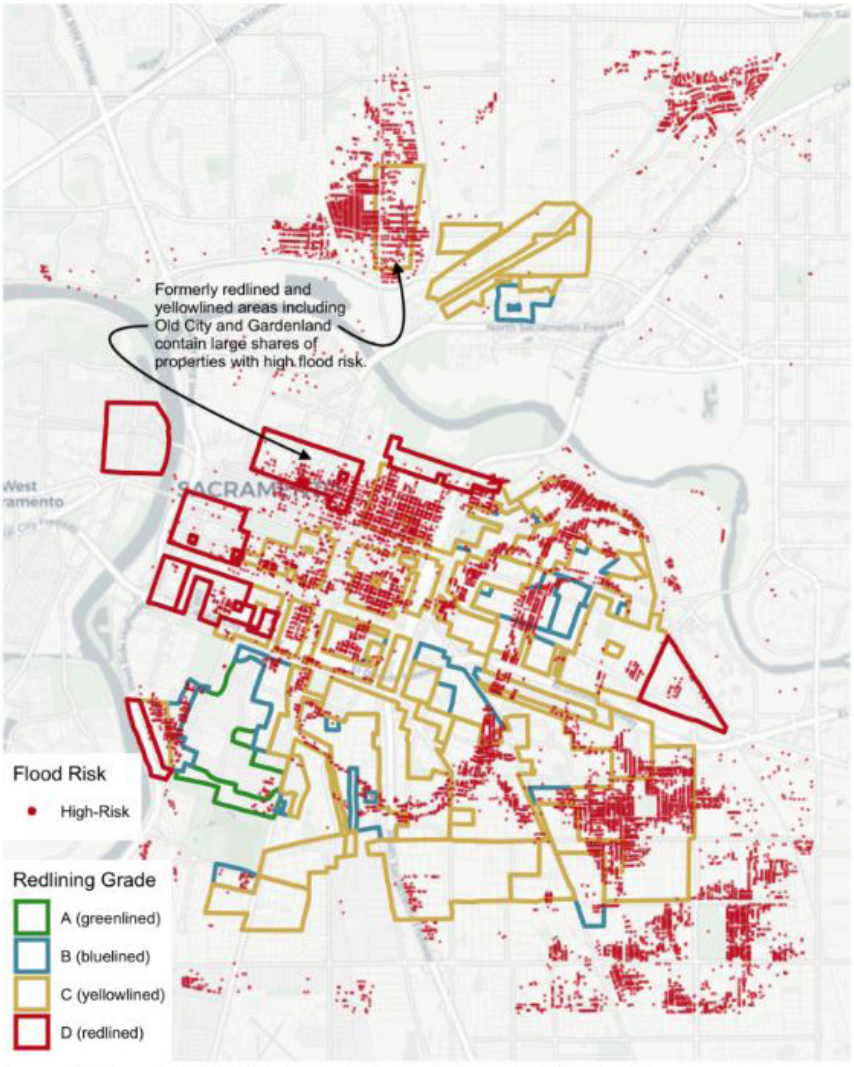
Redlining is the illegal and systemic practice of excluding communities of color from economic opportunities based on their race.

While the term was not originally coined to directly invoke redlining, early signs of bluelining appear to overlap with the same patterns of disinvestment established by redlining. Over the years, while communities designated by federal agencies as "best" and "desirable" were endowed with sewers, levees, trees, and other infrastructure that today wards off significant climate-related impacts, many redlined communities were denied the investment necessary to build protective infrastructure against the exacerbated climate conditions they experience today.[16] In fact, a 2021 Redfin study found that modern flood risk maps resemble redlining maps, with 8.4% of homes in historically redlined neighborhoods facing high flood risk compared with 6.9% of communities located in "desirable" neighborhoods.[17] Summer temperatures are also an average of 5 degrees hotter in formerly redlined areas, partly attributed to the lack of trees which mitigate both extreme heat and flood risk, and more pavement which attracts heat and drives up temperatures.[18]

As financial institutions increasingly factor climate risk mitigation into their business strategies, low-income communities and communities of color may witness a resurgence of racial and economic exclusion that mimics redlining practices, with increasingly debilitating consequences as the climate crisis intensifies.

Figure 1.1

Sacramento's Formerly Redlined and Yellowlined Neighborhoods Face High Flood Risk



An analysis of Sacramento, CA conducted by Redfin shows parallels between high flood risk and formerly redlined and yellowlined communities. (In this instance, "bluelined" does not mean "bluelining" but a grade of redlining denoting less risk.) Photo Credit: Redfin, First Street Foundation, and OpenStreetMap contributors

Evidence of Emerging Bluelining Trends

The financial risks of climate change are becoming a greater point of concern both in the policy and financial world, and bluelining may become more prevalent as financial institutions increasingly consider how the climate crisis will impact their economic stability.[19] Though concrete evidence of the prevalence and institutionalization of the practice of bluelining is still limited, we explore the early warning signs and initial evidence of bluelining trends across three financial sectors: credit, mortgages and homeownership, and insurance.

Credit Impact

Bluelining has the potential to further reduce access to credit, an essential aspect of post-disaster recovery that allows households to withstand the financial shock caused by climate disaster.[20] Shouldering the unexpected expense of home repairs, replacing important possessions such as vehicles, and potential loss of business or employment are among the many reasons people rely on credit in the aftermath of a disaster.[21] However, low-income households and households of color are more likely to be unbanked or underbanked, which impedes their access to credit.[22] Because low-income communities and communities of color that lack generational wealth have little or no credit to fall back on during periods of unemployment or property damage following climate catastrophe, they are more likely to file for bankruptcy and, as a result, see their credit scores decrease substantially.[23] This creates a cycle of decreasing access to credit and a potential spiral into economic turmoil following each climate disaster.

Bluelining has the potential to compound this effect and further decrease credit availability for communities of color in disaster-prone regions. Evidence of "credit rationing,"[24] in which lenders refuse to provide funds to a borrower even at higher interest rates, has been documented as far back as the 1990s when a decrease in commercial real estate loans was associated with higher earthquake risk.[25] This phenomenon is not race-blind, with studies finding that this effect of credit rationing was more acute for Black communities where insurance coverage was less prevalent.[26]

Additionally, counties with low credit ratings and high climate risk are subject to higher underwriting fees and initial yields than counties with similar climate risk but higher credit ratings.[27] This signals a preference from financial institutions to invest in more affluent communities rather than low-income communities and communities of color that urgently need investments to prepare for climate disasters.[28]

Mortgages and Homeownership

The risk bluelining poses to the accessibility of housing and the stability of the mortgage industry is significant and troubling. Housing is an essential component of financial strength and mobility for communities of color, serving as a primary source of wealth for most U.S. households and an even greater share of Black and Latino/a homeowners' wealth.[29] However, people of color struggle to gain equal access to homeownership compared to their white peers. Black people in particular face higher mortgage rates, interest rates, insurance premiums, and property taxes.[30]

The proximity of communities of color to the climate crisis adds an additional layer of hardship when seeking and maintaining homeownership. Overall, evidence points to the fact that lenders today do not accurately price in potential risks of climate change.[31] This means that lenders may overvalue a home's worth, burdening homeowners with a mortgage too high for the amount of climate risk it bears. However, the inverse also presents disparate impacts to homeowners, as studies have found that when climate phenomena are properly accounted for, homeowners experience declining housing values and higher interest costs.[32] Because people of color are more likely to live in areas prone to climate-related disaster, these communities are at particular risk of losing value on their homes, potentially widening the already significant racial wealth gap.[33]

A flooded street in an oceanside community shows the power of Hurricane Sandy, a powerful storm which crashed into the Eastern USA. A porch which has been torn off of a house lies in the flooded street.
Photo Credit: Jonathan Sloane via Getty Images

The incomplete and limited nature of the science used to inform these lending decisions further exacerbates both scenarios. A concept known as "underwaterwriting" references both flood risk and underwriting to describe the consideration of climate data and science, catastrophe modeling, and insurance modeling when assessing loans and a home's value.[34] The potential inaccuracies in the science used in underwaterwriting may lead to imprecise assignments of threat, meaning both the potential under- and over-counting of climate-related risk and likely subsequent bluelining of entire communities. Both situations can lead to further erosion of the wealth-building potential for households of color via homeownership.

Insurance

The primary purpose of insurance is to provide financial protection in the face of a particular risk, including loss of life or property. In many ways, insurance practices may be the most sensitive to climate-related risk and, therefore, likely bellwethers for detecting bluelining trends. Homeowners insurance, for example, is essential to a household's ability to access mortgage capital. Lenders require homeowners insurance to qualify for a mortgage, but insurance companies are increasingly raising their premiums and deductibles, refusing to cover "named storms,"[35] and declining to provide or renew policies in areas prone to natural disasters altogether.[36] The rising cost of insurance, with rate increases as high as 57% on average in Florida,[37] could disproportionately price out low-income communities and

communities of color from obtaining mortgages or, for those that already own their homes, may force them to recover financially from climate disaster entirely out of pocket. States have plans known as Fair Access to Insurance Requirements (FAIR) Plans, which offer insurance-of-last-resort for hard-to-insure properties, but these plans are often expensive and limited in their coverage.[38]

The flood insurance industry demonstrates how bluelining may exacerbate hardships for low-income communities and communities of color in the midst of a worsening climate crisis. Mortgage lenders rely on flood maps to determine whether to require flood insurance in high-risk areas, but the flood maps they use to make these determinations are inaccurate and outdated.[39] As a result, tens of millions of people invest in homes that are susceptible to high flood risk without knowing that flood insurance is needed to minimize financial damages. In fact, about 75% of homes hit by Hurricane Harvey in Texas did not have flood insurance.[40] Homeowners who forgo flood insurance and experience a natural disaster may end up experiencing the dual threat of property damage and property devaluation, leading to potential mortgage default or even property abandonment.[41] Communities of color, who bear more undisclosed flood risk than average,[42] and lack access to post-disaster recovery funds compared to their white counterparts, are most susceptible to these financial risks.[43]

Lenders, noting a decline in property values and anticipating defaults and uninsured disaster losses in high-risk flood areas, may also be inclined to stop investing in climate-vulnerable communities, which are disproportionately low-income communities and communities of color.[44] Bluelining such as this can ignite a vicious cycle of declining property investment which leads to the erosion of the local tax base needed to pay for preventative infrastructure upgrades.

Cycle of Disinvestment: Consequences of Inaction

Ensuring that policymakers and regulators closely monitor and take action on potential bluelining trends is essential to building a safe and sound financial system. The U.S. has only begun to account for climate-related financial risk as a systemic issue. In 2021, the Biden Administration released an Executive Order on Climate-Related Financial Risk, which prompted regulators, including the Federal Reserve, Office of the Comptroller of the Currency (OCC), and Federal Deposit Insurance Corporation (FDIC), to begin offering initial guidance to financial institutions on how to manage such risk.[45]

However, there is an inherent tension – well-intentioned consideration of climate-related financial risk may result in discriminatory actions such as curtailing access to credit and capital for climate-vulnerable communities, which are most likely to be low-income communities and communities of color. To date, policymakers and regulators have only made cursory mention of impacts and potential collateral damage from climate risk mitigation to low-income communities and communities of color.

We cannot continue to consider these communities as an afterthought. Racial and economic equity must be a core consideration by institutions and policymakers when responding to climate risk. Below we explore some of the ramifications of not addressing the potential harms of bluelining in the context of climate-related financial risk.

Fannie Mae and Freddie Mac: Potential Taxpayer Liability and Risk to Low-Income Communities

Federal National Mortgage Association (FNMA - Fannie Mae) and Federal Home Loan Mortgage Corporation (FHLMC - Freddie Mac) are Government Sponsored Enterprises (GSEs) created by Congress to help improve access to housing by supporting the secondary mortgage market as well as mortgage lending to lower and middle-income homebuyers.[46] Collectively, they own or guarantee more than half of the nation's mortgages, with a disproportionate amount of those mortgages located in climate-vulnerable communities.[47] Further, because the GSEs are required to provide services to underserved markets, should borrowers' homes be damaged or destroyed, there may be an increase in delinquencies, default rates, and loan losses, which jeopardizes the financial stability of the GSEs.[48] As Fannie Mae and Freddie Mac collectively guarantee the majority of residential mortgages, spillover effects into the broader mortgage market that resemble the failure of the GSEs in the 2008 financial crisis, resulting in the GSE's conservatorship and a $191 billion taxpayer bailout,[49] could occur.

Aerial view of leveled homes in the Coffey Park neighborhood of Santa Rosa, California burned in the the Tubbs Fire in November 2018.
Photo Credit: DutcherAerials via Getty Plus / iStock

The risks that climate change poses to the GSEs represent a severe challenge for the securitization of mortgages in low-income communities and communities of color.[50] Further propelling these risks, private lending institutions are increasingly selling their loans in climate-vulnerable areas to Fannie Mae and Freddie Mac, thus transferring the climate-related financial risk they have willingly invested in to the taxpayers who support GSEs and the underserved markets who rely on their services to obtain a mortgage.[51] This strategy of passing off risk emphasizes the need for regulation over how private financial institutions handle climate-related financial risk, as early warning signs such as this suggest the tendency to disregard the financial well-being of vulnerable populations in favor of economic gain.

As an "implicit" insurer for the most at-risk properties in the country,[52] the Federal Housing Finance Agency (FHFA), which oversees the GSEs, is the foremost actor in addressing climate-related financial risk and bluelining in the housing market with a racial and economic equity lens. However, should regulation and potential financial penalty for passing off risk to the GSEs be instated, private institutions will be forced to bear their own risk, which may accelerate the practice of bluelining. Regulators must therefore walk a fine line between the need for regulation and consideration of its potential side effects.

Risks to Smaller Regional Banks and Minority Depository Institutions

Minority Depository Institutions (MDIs) and smaller, regional, and community-oriented banks, including credit unions, are at particular financial risk from climate change. Compared to large national banks with more diversified portfolios of deposits and investments, community-oriented banks often have loan and investment portfolios tied to specific markets and regions. For this reason, they tend to have a better grasp of local climate risks and are more equipped to understand risk and resilient investment strategies that would be useful in preparing communities for climate disasters.[53]

However, financial institutions with concentrated portfolios in climate-vulnerable communities also face financial jeopardy as the local economies they serve reel from disaster. This effect is even more pronounced for regional banks that serve majority people of color, who are most likely to struggle to financially recover from climate catastrophe.

MDIs, federally insured depository institutions that predominantly serve minority communities, are similarly at risk due to the higher likelihood of climate disaster in communities of color. A 2023 study found that more than half of active MDIs are headquartered in cities with high climate risk.[54] MDIs and community banks are critical institutions to the financial access and health of underserved communities, and their failure could compound existing racial inequities in financial services.

Mass Migration and Climate Gentrification

Some argue that banks and insurers should have complete control over how they price climate-related risk, thus allowing the capital and real estate markets to signal to communities who is and is not worthy of investment. This approach, however, would replicate historical patterns of discrimination, exacerbate existing inequities in our housing and financial systems, and potentially reshape entire communities.

Though climate-related financial risk is not yet fully incorporated into housing valuation, the market has already begun to reflect initial shifts in response to climate change. One study found that between 2007 and 2016, U.S. coastal property sales values declined by 7% in accordance with the severity of sea level rise.[55] As investment risks in properties such as these continue to become more apparent, affluent buyers will increasingly pull out of climate-risky areas and start investing in climate-resilient locations that are more likely to maintain a higher property value.

Compared to affluent purchasers, many first-time buyers and communities of color are more likely to prioritize affordability due to constricted budgets, and thus are unable to factor climate risk into their purchasing decision. A disproportionate amount of climate disaster-prone properties are more likely to be purchased by these two groups despite their financial inability to absorb the short and long-term costs of climate risks. Further, the lack of standardization when it comes to sellers disclosing climate risk may lead to buyers investing in a home that fits their budget but is, unbeknownst to them, a liability in the face of climate disaster.[56]

As climate disasters increase in severity and begin to make some areas uninhabitable, public knowledge of climate risk will likely instigate mass migration of individuals and communities from climate-vulnerable areas to more climate-resilient locations. One projection of mass migration away from submerged coastlines is estimated to be 13 million if carbon emissions continue rising.[57] This would be the largest migration in the history of North America and does not include those forced to evacuate due to wildfires, extreme heat, and other climate phenomena.[58] In another estimate, hundreds of thousands of climate refugees – people pushed out of their communities due to the effects of the climate on their environment –[59]are projected to migrate to Atlanta by 2100, causing a population spike that will overload the city's already weak water infrastructure and transportation as well as exacerbate its existing income inequality.[60]

Mass migration is also likely to accelerate "climate gentrification" – a practice reminiscent of blockbusting in which homeowners of color were encouraged to sell their property below market value, paving the way for more affluent, white communities to gentrify the area. Climate gentrification occurs when the rich displace communities of color who live in climate-safe areas using these same blockbusting techniques, pushing them to places that already are or will soon be affected by the climate crisis. Climate gentrification has already begun in coastal areas such as Miami, where wealthier, white communities are increasingly turning away from waterfront properties in favor of inland developments that are pricing out long-term residents of color.[61]

In the context of global migration, mobility is "often a reflection of relative wealth," in which those who can afford to leave do, while the poorest and most vulnerable communities remain trapped in an economy that has lost its tax base, labor force, and consumers. These abandoned communities will find it nearly impossible to secure the funds they need to financially keep their city and infrastructure afloat as they face the compounding crises of declining civic services, unattainable insurance costs, and bluelining from other financial institutions. As more individuals choose to evacuate, communities of color are most likely to become trapped in a vicious new cycle of degradation as they simultaneously attempt to survive under heightened climate risks.

It is important to understand that although these consequences are projections, they are likely. There must be a preventive, proactive framework in place to anticipate the worst-case bluelining scenario in order to safeguard the most vulnerable communities from financial and physical harm so as not to repeat the historical, systemic practices of redlining and blockbusting.

Gaps in Our Understanding of Bluelining and its Impacts

Thus far, we understand that climate change is an increasing threat to the ability of low-income communities and communities of color to access financial services and that we need to take societal action to prevent the worst consequences from occurring. However, the lack of publicly available and standardized information presents a critical barrier that lawmakers and regulators must address. Below we highlight further analysis needed to better understand potential bluelining trends.

Climate Modeling Gaps

While analytics related to climate change are already a sophisticated science, there is widespread acknowledgment that the models that predict climate impacts need improvement.[62] A lack of asset-level data and reliance on likely outdated science could contribute to miscalculated financial risk and immense inconsistencies between institutions.[63] Further, companies marketing proprietary climate models to analyze risk are not subject to any accreditation or standardization from regulators.[64] This regulatory loophole permits financial institutions to designate areas of risk arbitrarily. For example, companies may mistakenly designate low-risk areas as high-risk areas, subjecting communities to unnecessary bluelining and disrupting their local economy.

Transparency into Potential Bluelining Practices

A second data consideration is understanding how prevalent bluelining is and the degree to which financial institutions formally integrate the practice into their underwriting processes. For example, in the early stages of bluelining, the practice may be carried out on an individualized level, such as an individual bank branch refusing to lend to areas in their locality they know are prone to climate-related issues. But as climate-related financial risk is increasingly considered at the institutional level, enterprise-level policies may be implemented related to underwriting standards or geography.

There may also be occurrences of self-selection, where residents of climate-vulnerable communities seek less access to financial resources as a direct result of their vulnerability. More detailed analysis is needed to better understand if there are already concentrated trends of bluelining occurring in low-income communities, communities of color, and others that are most climate-vulnerable.

Overview of destruction of a mobile home park after Hurricane Harvey in La Grange, Texas in 2017.
Photo Credit: RoschetzkyIstockPhoto via iStock

Policy Gaps and Recommendations

The United States is at the beginning of a potentially convergent crisis of both climate and finance, with low-income communities and communities of color at greatest risk of loss of life, livelihood, and economic well-being. State and national policymakers and regulators must take action to ensure a smooth just transition and protect communities from financial harm. The Greenlining Institute offers nine policy recommendations as initial, concrete steps to promote racial and economic equity and prevent systemic financial risk and societal harm to climate-vulnerable communities.

1. **Lawmakers and regulators need more in-depth research and analysis to understand how bluelining is unfolding across credit, mortgage, and insurance markets.**

   While, in this paper, we compile evidence and information on the warning signs of bluelining across existing literature and media, a more rigorous and granular analysis is necessary to understand if there are geographic trends in the allocation of credit and capital and how that may be disproportionately impacting low-income communities and communities of color.

   An example of an initial analysis includes looking at Home Mortgage Disclosure Act (HMDA) and soon available Section 1071 Small Business Lending Data alongside various potential climate risks to see if there has been systematic withdrawal over roughly the last five years. Acknowledging the data challenges already mentioned in this paper, these analyses should be followed up with groundtruthing[65] to confirm whether data trends align with communities' lived experiences.

   Groundtruthing broadly means to compare facts stated in official documents and maps with the ground realities at a site or in a place

   Regulatory agencies can and should play a leadership role in these analyses. The Federal Reserve already publishes research and staff reports on various climate-related topics.[66] Research on this topic will help the agency and its sister regulators, including the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC), start to understand this issue and take proactive steps to ensure the practice of bluelining does not become more widespread.

2. **Financial institutions should leverage the Community Reinvestment Act (CRA) and the Inflation Reduction Act's Greenhouse Gas Reduction Fund (GGRF) to the maximum extent possible to maintain proactive investment in climate resilience measures in low-income communities and communities of color vulnerable to climate change impacts.**

   Given financial institutions' need to balance climate-related financial risk with obligations to fair lending practices and preventing discrimination, we urge these institutions to proactively invest in infrastructure projects intended to bolster resilience, adaptation, and hazard mitigation in order

to provide safety to communities facing potential impacts from climate change.[67] This preventive approach is one of the best opportunities to navigate this inherent tension equitably.

The Community Reinvestment Act (CRA), a Civil Rights era law that ended the discriminatory practice of redlining and obligates banks to reinvest in low-income communities,[68] has resulted in trillions of dollars of lending and investment in underserved communities. The three major financial regulators, the Federal Reserve, the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC), together released proposed regulatory updates in 2022 that would allow financial institutions to receive favorable credit on CRA exams for investing in climate resiliency. Should these proposed regulations be adopted, banks will have a strong incentive to invest in projects related to flood control, extreme heat, drought, and sea-level rise.[69] If and when this incentive is in place, regulators should work with community-based organizations and technical assistance providers to educate financial institutions on these climate-resilient investment opportunities and facilitate the relationships with community-based organizations necessary to bring these projects to fruition.

Additionally, the Greenhouse Gas Reduction Fund, authorized in the Inflation Reduction Act, consists of $27 billion to catalyze the financing of clean energy and climate projects with an emphasis on benefiting disadvantaged communities.[70] While the program is still under development, it is clear there will be opportunities to not only invest in traditional "green" projects such as renewable energy, but also the opportunity to de-risk climate projects such that they may become feasible for private investment. Technical assistance is a significant component of GGRF implementation, and similar to the upcoming potential changes to the CRA regulations, financial institutions need to be educated on these opportunities to ensure this market is shaped to effectively meet the needs of climate-vulnerable communities.

3. **Regulators should provide specific guidance to smaller financial institutions and Minority Depository Institutions (MDIs) in order to balance climate-related financial risk and harms from intentional or unintentional bluelining practices.**

Due to the localized nature of smaller banks, credit unions, and MDIs, it is especially important they receive guidance on how to effectively account for climate-related financial risk, given the likelihood their portfolios could include significant concentrations of capital in climate-vulnerable areas. At the time of publishing this paper, the National Credit Union Administration (NCUA) has released a Request for Information on climate-related financial risk that makes some mention of the impact on low-income customers. However, draft guidance from other regulators often only applies to institutions holding bigger balance sheets. Because of the specific vulnerabilities of small institutions and MDIs, proposed guidance should also extend to these institutions.

Regulators, including the NCUA and the Federal Deposit Insurance Corporation (FDIC), should prioritize establishing guidelines on how MDIs and smaller banks can best prepare for and respond to climate disasters by surveying previous successful strategies. Partnerships with green banks could be a useful resource as they have expertise in climate-related lending in novel markets, which could endow small banks with the confidence necessary to begin shoring up their communities with climate investments. Regulators should also implement policies and procedures on how to make bank branches physically resilient in the face of climate disaster, and community-based banks should focus on investments that promote operational resilience for local businesses, which can safeguard the financial health of the community by preserving local jobs and resources.

4. **Financial institutions should financially support and actively participate in community engagement efforts related to climate risk, community impact, and the creation of just solutions.**

Many will say that the market can signal to consumers where climate risk is and where people should and should not live. This has begun to play itself out, such as in coastal Louisiana, where communities have continued to experience climate consequences too severe to reasonably weather, both physically and financially.[71] This could have catastrophic implications for low-income communities and communities of color left behind to atrophy financially and eventually forced to move or take a buy-out that has been demonstrated to erode wealth-building and social cohesion.

That said, there may be instances where options such as "managed retreat," defined as the proactive move of people, structures, and infrastructure out of harm's way before disasters or other threats occur,[72] may need to be considered to ensure the livelihoods and financial well-being of communities remain intact. Retreat processes such as this have historically been slow and inequitably implemented in reaction to natural disasters. Solutions like managed retreat should be considered with self-determination as a central tenet and as part of a robust engagement process.[73]

We recommend that financial institutions provide funding for community-driven engagement processes where these difficult and essential conversations can take place in a proactive manner such that communities can decide for themselves how best to proceed. This investment could come, for example, in the form of CRA investment in supporting a municipal planning process. Further, financial institutions should participate in these processes as stakeholders themselves, offering transparency into how they are assessing climate risk and what it will mean for communities. Such participation could be distinctly fruitful for smaller institutions and credit unions, which tend to have increased exposure to climate risk and a local presence that facilitates responsiveness and trust.

By participating in these processes, financial institutions can educate the public on their interconnected responsibilities to manage climate-related risk while also learning about discrete community needs. In the best-case scenario, such a process would bring about solutions that facilitate local investment in some shape or form that benefit communities and allow financial institutions to manage their risk effectively.

5. **In alignment with Affirmatively Furthering Fair Housing, local jurisdictions should evaluate potential bluelining trends as part of Equity Plans. Low-income communities and communities of color should be offered access to housing opportunities that would facilitate a move to areas of higher opportunity.**

   An additional avenue for enforcement and opportunity is the Fair Housing Act and obligations to Affirmatively Further Fair Housing (AFFH). AFFH regulations, as currently proposed by HUD, would require recipients of federal housing dollars to work proactively to remedy segregation and require local jurisdictions to submit Equity Plans to HUD for review.[74] In theory, issues related to climate change impacts and how they may affect communities' ability to access financial services could be incorporated into these plans. Should the proposed regulations be finalized, local jurisdictions should be encouraged to explore these climate-related questions in the development of their Equity Plans and report any potential bluelining activity to the appropriate regulator.

   Additionally, Equity Plans can explore how climate-vulnerable communities, on their terms, may be able to access opportunities to relocate to less vulnerable areas. This exploration could include partnering with financial institutions to offer mortgages and other lending services to facilitate this process. Further upstream, Congress could authorize additional funding for HUD to expand its offerings of Housing Choice Vouchers (also known as Section 8 vouchers) in order to provide more options for renters to find affordable, more sustainable housing options.

6. **Regulators should utilize the Equal Credit Opportunity Act (ECOA) and the Community Reinvestment Act (CRA) examination process as an enforcement mechanism to hold financial institutions accountable for bluelining.**

   Financial regulators must demonstrate a willingness to enforce fair lending laws arising from climate-related implications. ECOA and CRA are complementary Civil Rights-era legal tools that aim to extend access to credit and capital and prevent discrimination by creditors. While neither ECOA nor the CRA statutes name "climate" or "climate-vulnerable" as a protected class or communities prioritized for investment, there are opportunities to bring action against an institution for a violation that may be climate-driven.

   The CRA examination process already includes an analysis to determine any financial discrimination. Under the CRA, financial regulators should consider downgrading bank CRA scores for avoiding climate-vulnerable areas in their assessment areas without providing alternative investment opportunities for those communities or for pulling out of markets the bank previously served. This could be done by external stakeholders conducting independent analyses and submitting findings to the regulator for consideration on an institution's next CRA exam. Alternatively, the regulators could also flag potential discrimination as part of the regular "Discriminatory or Other Illegal Credit Practices Review" portion of the CRA exam intended to identify potential redlining.

ECOA provides a possible incentive for financial institutions to prioritize racial and economic equity in their response to climate-related financial risk. Notably, ECOA prohibits creditors from discriminating, either intentionally or unintentionally, against credit applicants on the basis of race and color, amongst other factors.[75] Should a financial institution's engagement in bluelining be found to have a disparate impact on communities of color, the institution could be held legally responsible. Both the Department of Justice and the Consumer Financial Protection Bureau (CFPB), under a joint memorandum of understanding, should pursue enforcement actions.

7. **Financial institutions should offer opportunities to harden and safeguard homes in exchange for more affordable access to products and services, including premium and/or interest rate relief.**

Households should be offered opportunities to take proactive steps to improve the conditions of their homes to mitigate potential losses in exchange for more affordable products and services from their financial institution.

A key case study for such a program is Safer from Wildfires, an initiative of the California Department of Insurance and other state emergency response organizations. The program outlines 10 steps a homeowner can take to protect their home from wildfire risk, including installing a Class-A fire-rated roof and creating defensible space around the home.[76] California state code outlines how insurance companies are required to comply in regards to data disclosure and discounts for customers, including rate filings.[77]

While this program is new and should be monitored to evaluate effectiveness, similar models should be considered across the broader mortgage and credit industries to ensure vulnerable communities have an opportunity to access affordable financial services to help protect themselves and their communities.

8. **Lawmakers and regulators should intervene to standardize climate risk modeling practices to avoid greenwashing, maladaptation, and disparate impact on low-income communities and communities of color. To facilitate better modeling, strong regulation requiring climate disclosures must be adopted.**

We observe that the private sector is utilizing varying methodologies and potentially selectively picking their science to make their climate projections, creating a chaotic and disorganized landscape of climate modeling.[78] This inconsistency not only promotes inaccurate projections and increased potential risk for financial institutions, but also collateral damage for low-income communities and communities of color by potentially both understating and overstating climate risk.[79] Government intervention should create standardized processes for this analysis to appropriately account for uncertainty and safeguard against disparate impact on low-income communities and communities of color.[80]

One significant opportunity is to adopt the Securities and Exchange Commission's (SEC) proposed regulation on climate-related financial disclosures, including Scope 3 emissions, which include emissions across a company's entire value chain. The proposed regulation would create important consistency in measuring emissions and risk, taken from the internationally-vetted Greenhouse Gas

Protocol, and allow investors and stakeholders to better understand corporate impacts on climate. Understanding current emissions and projected emissions reductions from companies with net-zero transition plans will enable financial institutions to more accurately model climate-related financial risk to make safe, sound, and fair lending decisions.

9. Increase transparency into how financial institutions consider climate in their underwriting processes.

As regulators such as the Federal Reserve, the New York State Department of Financial Services, and the California Department of Insurance have put forth guidance on how industries should disclose and assess climate-related financial risk, regulators should take similar action to collect more information and data about how financial institutions make underwriting decisions with climate considerations.

Many institutions claim to have "enhanced due diligence" requirements, meaning a more extensive review and approval process, for emissions-heavy or other climate-impacting investments but disclose very little about what is involved in these processes.

This could be done by the three major financial regulators, the Federal Reserve, the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC), as part of their supervisory role to ensure institution-level processes related to underwriting are in keeping with safety and soundness requirements.[81] Eventually, the regulators could institute underwriting standards to help alleviate potential financial discrimination towards low-income communities and communities of color most at risk of being bluelined.

A house is raised off its foundation in the Highlands, New Jersey. Photo taken October 15, 2013, almost one year after Hurricane Sandy hit the eastern coast of the United States.
Photo Credit: luvemakphoto, iStock

Conclusion: Addressing Bluelining Head On

Bluelining and its potential implications for the financial sector, low-income communities, and communities of color are vastly complicated issues that touch on many different facets of our society. There is not one right answer. **Fundamentally, we must refrain from relying on the market to determine when communities should no longer live in a particular area due to diminishing access to credit and capital. Doing so would disproportionately harm low-income communities and communities of color, leaving them highly susceptible to the adverse effects of climate change in both the social and financial spheres.**

Further, there are more demographics that, due to the focus of this paper on racial and economic equity, we have not considered more fully, including those of older adults and people with disabilities who are also likely to be negatively impacted by bluelining. If we do not address bluelining head-on, we are destined to repeat the past and create a new frontier of redlining. We encourage policymakers and regulators to consider the above recommendations and act now with a thoughtful approach to this challenge that will afford these communities the opportunity to determine and make their own informed, resourced choices about their futures.

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