Community Reinvestment Act (CRA) Case Studies

Rebuild by Design
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Mobilizing Private Investments in Equitable Climate Infrastructure Under the New Community Reinvestment Act Guidelines

Final Report

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TABLE OF CONTENTS

EXECUTIVE SUMMARY **4**
INTRODUCTION **8**
BACKGROUND **10**
METHODOLOGY **12**
SECTION 1 ..... **15**
The Evolution of the Community Reinvestment Act **15**
Historical Landscape of Community Development 15
Advancing Equity in Climate Finance 17
SECTION 2 ..... **20**
Regulatory Framework and Implementation Challenges **20**
Roles of the Federal Reserve Board, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation 20
Challenges in CRA Implementation and Enforcement 23
SECTION 3 ..... **26**
Expanding the CRA: Financing Climate Resilience **26**
The Case for Climate-Resilient Infrastructure 26
Economic Benefits of Resilient Infrastructure 27
Updated CRA Rules and Expanded Investment Capabilities 28
SECTION 4 ..... **31**
Financing Mechanisms for Climate Resilience and Adaptation **31**
Emerging Sustainable Finance Approaches under the CRA 31
Traditional Financing Mechanisms for Public Investments 33
Innovative Financing Tools for Climate Adaptation 35
Emerging Public Revenue Mechanisms 38
Barriers to Investment in Climate Adaptation 40
Integrating Co-Benefits and Tapping into Broader Funding Programs 42
SECTION 5 ..... **44**
State-Level Adaptations and Opportunities **44**
State-Level CRA Initiatives 44
Key Findings: State-Level Lending Tests 47
Key Findings: State-Level Investment Tests 48
Case Studies: Leveraging the CRA 50
Case Study 1: SAFER Bay Project 51
Case Study 2: Lakeview/City Park Hazard Mitigation Project 57
Case Study 3: Craft3 – Cape Foulweather 62

Case Study 4: Memphis Block Wellness..... 67
Case Studies Comparison Table.....72
SECTION 6..... 73
Strategic Pathways and Challenges in a Deregulatory Landscape..... 74
Public-Private Partnerships and Innovative Financing..... 74
Navigating a Deregulatory Environment..... 77
SECTION 7..... 82
Guiding Principles for Climate-Resilient and Equitable CRA Investments..... 82
How Can Banks Maximize Equitable, Climate-Resilient CRA Investments..... 82
1. Expand CRA Investments Beyond Physical Branch Networks.....83
2. Partner with CDFIs and Financial Intermediaries to Scale Climate Resilience..... 84
3. Leverage Blended Financing to De-Risk Investments.....86
4. Prioritize Multi-Benefit Climate Resilience Projects to Protect Community and Financial Assets..... 88
5. Center Community-Driven Projects and Prevent Climate-Driven Displacement..... 91
6. Frame Climate Investments as Economic Stability to Reduce Political Risk..... 93
CONCLUSION..... 95

EXECUTIVE SUMMARY

Rebuild by Design, a nonprofit organization driven by a commitment to foster inclusive and community-focused solutions for urban climate resilience, engaged a Capstone team from NYU Wagner to analyze how the Community Reinvestment Act (CRA) can be leveraged to mobilize private investments in climate resilience projects within low- to moderate-income (LMI) communities. By examining the evolution of the CRA, regulatory enforcement gaps, financing tools, and case studies, this report aims to provide guiding principles for banks, policymakers, and stakeholders on how to effectively integrate climate resilience into CRA investments. The goal is to ensure that financial institutions contribute effectively to sustainable infrastructure development while preventing climate-driven displacement and inequitable investments.

To achieve this, the team utilized a comprehensive research methodology that consisted of five components:

- A literature review that analyzes key themes (climate finance, CRA regulations, climate infrastructure, and community inequity) by using targeted search terms and peer-reviewed sources;
- A landscape analysis that assesses traditional and emerging climate resilience financing models, with a focus on state-level CRA rule changes and responses to federal deregulation;
- An inventory of climate resilience projects that compiles examples of mitigation, adaptation, and resilience initiatives, evaluating their financing structures, geographic scope, and CRA eligibility;
- Four case studies that analyze climate resilience projects that prioritize LMI communities, exploring their funding mechanisms, climate risks addressed, and CRA applicability; and
- Guiding principles that consolidate recurring themes, challenges, and opportunities, offering practical recommendations for financial institutions to leverage CRA rule changes for equitable climate investments.

To understand the intersection of the CRA and climate resilience financing, the report's first section analyzes CRA's historical development and its expanding role in addressing environmental risks. The CRA was established in 1977 to combat redlining and financial exclusion. It required banks to reinvest in LMI communities to address systemic disinvestment. Over time, it evolved to support broader community development projects, while climate resilience was not explicitly included. As climate change disproportionately impacts LMI communities, the 2023 CRA amendments formally recognized climate adaptation and disaster resilience as eligible investment initiatives. However, integrating climate resilience into the CRA

presents new challenges, particularly in ensuring that investments genuinely benefit vulnerable communities without driving displacement or reinforcing economic disparities. This section establishes the foundation for understanding how the CRA's expansion can enhance financial inclusion while addressing climate risks.

Building on this historical foundation, the second section examines the regulatory framework of the CRA and the challenges associated with its implementation and enforcement. It relies on three primary regulatory agencies – the Federal Reserve Board, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation – to oversee compliance. These agencies evaluate banks through lending, investment, and service tests, assigning ratings that impact banks' abilities to expand operations. However, implementation challenges undermine the effectiveness of CRA enforcement. Since over 96% of banks receive high ratings, it reduces incentives for meaningful reinvestment in LMI communities. Additionally, geographic assessment gaps exclude many underserved areas, which limits access to credit where it is most needed. Data transparency issues further weaken accountability, making it difficult to measure the real impact of CRA-driven investments. Without stronger oversight, standardized enforcement, and expanded assessment areas, the CRA's role in promoting financial equity and climate resilience is limited.

With these regulatory challenges in mind, the third section explores how CRA investments have expanded to support climate resilience financing. As LMI communities face disproportionate climate risks, the CRA amendments now allow banks to earn CRA credit for financing flood mitigation, renewable energy, and disaster-resilient affordable housing. Unlike climate mitigation, climate adaptation and resilience efforts protect communities from extreme weather, flooding, and heatwaves. Investing in climate-resilient infrastructure can reduce long-term disaster recovery costs and improve property values and public health. However, traditional financial models often ignore these indirect benefits. Therefore, the 2023 CRA amendments expand assessment areas and strengthen evaluation criteria, ensuring a broader geographic impact and promoting equitable climate adaptation investments.

To support these expanded CRA investments, the fourth section examines the financial tools available for climate resilience projects. Traditional financing tools, such as general obligation bonds and revenue bonds, have historically funded public infrastructure projects but are inadequate for climate resilience efforts. Emerging alternatives such as green bonds, catastrophe bonds, and resilience bonds integrate risk reduction into financial structures, thus providing incentives for private investment. Additionally, blended finance models and public-private partnerships can attract private capital by sharing risks between public institutions and investors. Community Development Financial Institutions also play a key role in ensuring these funds reach LMI communities. While these financial mechanisms expand opportunities for climate resilience, challenges remain in scaling private investment and ensuring long-term sustainability.

Recognizing the limitations of federal CRA regulations, some states have taken proactive measures to expand climate resilience investments. The fifth section explores how state-level CRA policies and initiatives have strengthened investment frameworks. States such as New York, Massachusetts, and Illinois have incorporated renewable energy, flood resilience, and sustainable infrastructure projects into their assessments. Some states also extended CRA obligations beyond traditional banks to credit unions and mortgage companies, which increased financial engagement in underbanked communities. In addition to analyzing state-level adaptations, this section includes four case studies illustrating how CRA-driven investments can support climate resilience in LMI communities. They examine different multi-hazards and benefits, funding sources, CRA-eligible financing mechanisms, and CRA-qualifying activities, which provide practical insights into effective investment strategies and the role of financial institutions in building long-term resilience.

Despite state-level progress, the sixth section examines the challenges of scaling climate resilience financing under changing regulatory and financial environments. Deregulatory risks, inflated CRA ratings, and financial constraints limit large-scale implementation. CRA grading inflation and inconsistent oversight create accountability gaps, leaving banks to meet compliance requirements without making substantial investments. Additionally, political uncertainty threatens long-term enforcement, and as many climate adaptation projects lack immediate revenue streams, they are less attractive to traditional investors. Without stronger regulatory oversight, inter-agency coordination, and financial tools that de-risk climate investments, banks may find it challenging to expand their commitments.

Building on the research, case studies, regulatory analysis, and financing models explored in this report, the seventh section synthesizes key insights into six guiding principles for equitable and impactful CRA-driven climate investment:

1. Banks should expand CRA investments beyond their physical branch networks, allowing financing to reach underserved areas that lack direct banking services.
2. Partnering with Community Development Financial Institutions and financial intermediaries can help scale investments by leveraging local expertise and blended financing models.
3. Blended finance should be used to de-risk investments by combining public and private capital to make climate adaptation projects more viable.
4. Banks should prioritize multi-benefit resilience investments that protect both community infrastructure and private assets, mitigating financial risks while supporting economic stability.
5. Climate projects should center community needs and include anti-displacement measures, ensuring that resilience efforts do not drive gentrification or exclude vulnerable populations.

6. Framing climate investments as economic stability measures can reduce political resistance and encourage bipartisan support.

By following these principles, financial institutions can align CRA compliance with long-term community resilience, financial equity, and sustainable development goals.

The 2023 CRA amendments expand climate resilience financing, but regulatory gaps, financial barriers, and enforcement challenges limit their impact on LMI communities. Attracting private investment remains difficult due to high upfront costs and uncertain returns, and weak accountability measures allow banks to meet CRA requirements without substantial reinvestment. Without anti-displacement protections, climate projects risk gentrification rather than benefiting vulnerable communities. Additionally, political uncertainty threatens long-term CRA enforcement, reducing incentives for banks to prioritize climate resilience. To address these challenges, this report outlines six guiding principles that provide a strategic framework for banks, policymakers, and financial institutions to maximize the CRA's effectiveness. While the CRA's updates lay a foundation, continued innovation and long-term commitment are necessary to ensure equitable and impactful climate resilience financing.

INTRODUCTION

Rebuild by Design is a nonprofit organization driven by a commitment to foster inclusive, community-focused solutions for urban climate resilience. Emerging from the collaborative efforts following Hurricane Sandy, the organization plays a leading role in connecting policymakers, private sector allies, and neighborhood stakeholders to cultivate effective strategies for mitigating environmental and infrastructural vulnerabilities. By centering equity and local voices in its development framework, Rebuild by Design has continued to refine projects that address not only immediate climatic threats but also the long-standing socio-economic disparities prevalent in low- to moderate-income (LMI) neighborhoods. Its work directly supports the notion that truly resilient communities require sustained engagement, thorough planning, and adequate financial backing to thrive in the face of a rapidly changing climate. With rising rates of natural disasters due to climate change and evolving economic pressures from socio-political uncertainty, Rebuild by Design aims to harness the full potential of policy reforms and emerging financial mechanisms to bolster long-term resilience for those most exposed to climate-related risks.

This NYU Wagner Capstone project, undertaken in partnership with Rebuild by Design, investigates how recent updates to the CRA regulations can unlock private sector funding for a broad range of climate resilience initiatives. Historically, the CRA focused on combating redlining and supporting LMI communities through targeted financial investments, but the growing frequency of environmental disruptions has elevated the urgency of aligning these investments with climate adaptation projects. While the updated CRA rules offer banks an opportunity to direct capital toward sectors such as renewable energy, flood mitigation, and green infrastructure, effective implementation is far from guaranteed. In many cases, incomplete data collection and unclear impact metrics make it difficult to ascertain whether CRA-driven funding achieves meaningful climate benefits in the communities that need it most. Additionally, there are persistent questions about how best to structure such investments, given the non-traditional revenue models and extended timelines often associated with large-scale infrastructure and adaptation efforts. These complexities underscore the importance of rigorous policy research and stakeholder engagement, especially if the CRA is to become a decisive tool in financing equitable climate resilience.

In response to these challenges, the Capstone team analyzes the landscape of climate adaptation projects that can be supported under the updated CRA rules, explores the practicalities of different financing strategies, and develops guiding principles to help ensure that private capital drives both environmental and social advantages for underserved areas. The research approach includes in-depth research including a formal literature review, interviews with financial

institutions and community organizations, and case studies of successful projects that exemplify the synergies between climate adaptation and economic revitalization. Through these methods, the team aims to identify models that transcend traditional lending norms by incorporating considerations such as vulnerability assessments, community-based governance, and long-term resilience metrics. Ultimately, the team seeks to offer a roadmap for aligning the goals of financial institutions – namely, stable returns and compliance with federal regulations – with the needs of frontline communities confronting intensifying climate impacts. By bridging the gap between policy guidelines and tangible, measurable outcomes, this research analysis has the potential to both expand the range of viable climate projects and encourage more robust collaboration between the public and private sectors.

Leading this Capstone project are five candidates for Masters Degrees in Public Administration in Public and Nonprofit Management students, all specializing in Social Impact, Innovation, and Investment: Alex Tellides, Allison Shao, Claire McLean, Daniel Gunton, and Pei Li Chua. Their collective background spans policy analysis, urban planning, and financial management, enabling a multifaceted examination of the evolving CRA landscape and the nuanced investments necessary for sustained climate preparedness. Under the guidance of faculty at NYU Wagner, they produced resources that translate regulatory updates into actionable insights for banks, community development institutions, and government agencies alike. By illuminating the pathways for structuring climate-oriented investments within the CRA framework, the Capstone team aspires to foster a policy environment where resilience projects are not merely a regulatory requirement but a transformative force that addresses systemic inequalities while safeguarding communities against future climate uncertainties. Through this effort, the team hopes to inspire a new paradigm of CRA-driven investments, one that harmonizes equitable social outcomes and robust environmental protections in pursuit of a more sustainable and just urban future.

BACKGROUND

The intersection of climate risks and systemic financial inequities has prompted renewed attention to the CRA as a potential vehicle for steering private capital toward inclusive, climate-resilient infrastructure. Historically, the CRA was enacted to counteract redlining and spur investment in LMI neighborhoods, yet it did not originally consider climate-specific needs, leaving many communities with inadequate infrastructure ill-prepared for storms, floods, and heatwaves. As the frequency and severity of extreme weather events grow, this historical omission has become a critical gap, one that has magnified existing disparities in public health, housing stability, and long-term economic opportunity. LMI communities that were once deemed too risky for loans continue to endure shortfalls in disaster protection, often forcing local governments and nonprofits to triage problems rather than implement lasting solutions. These persistent vulnerabilities show why policymakers, community advocates, and financial institutions alike must explore how an updated CRA might be harnessed for more far-reaching climate adaptation projects.

Recent revisions to the CRA guidelines, designed to incorporate climate resilience as a qualifying category for credit, mark a significant shift in how financial institutions can engage in place-based adaptation projects. Large banks, for instance, no longer need to limit their investments to areas adjacent to a physical branch, broadening the geographies in which CRA projects can take root. This change has opened space for new types of lending and partnerships, ranging from financing solar retrofits in historically redlined neighborhoods to designing microgrids that power essential facilities during heatwaves. Simultaneously, many states are adopting or modifying their own CRA statutes, some of which expand mandates to nonbank mortgage lenders and credit unions, reflecting an evolving mortgage market where traditional institutions are no longer the lone gatekeepers.

While these developments are promising, stakeholders must grapple with the operational realities of weaving climate resilience goals into a regulatory framework that was never originally intended to measure outcomes in terms of disaster risk reduction or infrastructure upgrades. Such reforms carry both promise and challenge. On the one hand, by explicitly integrating climate adaptation, policymakers hope to attract mainstream financing to areas that need urgent, large-scale capital for resilience upgrades, such as flood defenses, wildfire prevention measures, and heat mitigation infrastructure. On the other hand, critics question whether the new rules will inadvertently trigger displacement or speculative real estate activity, as improved infrastructure can make once-neglected neighborhoods more attractive to higher-income buyers. There is also concern about how effectively regulators will enforce climate-related projects under the CRA,

particularly when historical patterns of inflated ratings and sparse data reporting persist. Lastly, initiatives coming from community development organizations indicate that meaningful participation from residents, beyond cursory consultation, is essential to preventing climate gentrification and ensuring that investments address local priorities. Without robust community engagement, banks risk funding projects that improve physical assets but do little to secure long-term affordability or avert displacement.

Parallel to these policy debates, the private sector faces its own learning curve. Many banks and asset managers have limited experience structuring deals for non-revenue generating resilience projects, such as flood mitigation or wildfire proofing, which may not produce clear cash flows. Traditional underwriting metrics may struggle to capture the economic value of avoided damages or the intangible benefits of stable, climate-ready housing. Meanwhile, blended finance arrangements that layer philanthropic or public grants with private investment offer a solution but introduce new complexities around compliance, risk allocation, and cost recovery. If structured thoughtfully, these partnerships could open the door to robust adaptation efforts, spanning everything from property-assessed resilience upgrades to region-wide green infrastructure initiatives that integrate local labor and community oversight. However, banks must also weigh the administrative complexity of these deals against competing opportunities with more straightforward returns, creating a tension that could either spark innovation or deter deeper investment in adaptation. At the state level, certain jurisdictions offer promising case studies on how expanded CRA legislation could interact with local climate goals.

Policymakers and advocates must grapple with how to ensure that climate investments lead to tangible community benefits, rather than token contributions that fulfill CRA obligations without strengthening local infrastructure. The complexities around scaling such initiatives highlight a persistent gap between ambitious policy language and on-the-ground implementation strategies that can transform entire neighborhoods. In light of these developments, an important question remains. Will the ongoing recalibration of federal and state CRA frameworks, coupled with new financing mechanisms and deeper community partnerships, successfully deliver transformative climate infrastructure to neighborhoods burdened by decades of redlining and chronic underinvestment? Or will regulatory and market hurdles, including inflated ratings, limited data transparency, and the complexities of large-scale adaptation funding, undermine the potential of these updated guidelines before they can meaningfully reshape the opportunities available to LMI communities? The answers to these questions will become clearer as banks begin to implement these revised standards and policymakers collect data on whether expanded CRA investments indeed foster more equitable outcomes in an era of intensifying climate threats.

METHODOLOGY

The Capstone team's research methodology sought to systematically analyze climate resilience financing and climate equity within the context of recent CRA rule changes. The project consisted of five components:

1. Literature Review
The literature review examines key themes identified through discussions with Rebuild by Design, including "Climate Finance," "the Community Reinvestment Act," "Climate Infrastructure," and "Community Inequity." Using these themes, the team developed approximately 30 search terms to guide the research. Boolean operators were used to refine search queries and improve relevance. The team reviewed a range of peer-reviewed journal articles before selecting those most relevant to the objectives of the client: to examine how the new CRA amendments can be leveraged to direct private investment in climate infrastructure that benefits LMI communities.

2. Landscape Analysis
The landscape analysis assessed the current state of climate resilience financing in the U.S., including how these projects have traditionally been financed, emerging financial models, and progressive state-level CRA rule changes. Conversations with Rebuild by Design informed the research focus, particularly in the wake of the Trump administration's election victory. Rebuild by Design wanted to understand how progressive state CRA laws were evolving, how stakeholders were responding to the political shift, and how climate resilience projects were being financed in practice. The research included sources beyond peer-reviewed articles, incorporating journalism, government agency publications, white papers from financial institutions, and policy reports. The analysis mapped traditional and innovative financing mechanisms, examined risks posed by federal deregulation, and distinguished state-level expansions from the federal CRA.

3. Inventory
The team curated an inventory of exemplary climate mitigation, resilience, and adaptation projects and analyzed them based on climate hazards addressed, financing mechanisms, key stakeholders, and their eligibility under current and future CRA rules. The inventory was structured as an Excel spreadsheet, with project data sourced from publicly available information from government agencies, and implementing organization's websites, as well as press releases and news articles. Each project was classified based on funding structure, geographic scope, and resilience impact, with particular attention to models that could be scaled or replicated in other LMI communities.

4. Case Studies

In consultation with Rebuild by Design, the team selected four case studies of climate resilience projects that addressed multiple hazards, delivered co-benefits, and prioritized LMI communities. Projects were chosen based on their unique financing structures, scale, and CRA-qualifying activities. Each case study explored the project's location, implementing entities, funding mechanisms, and climate hazards addressed with an analysis of how CRA funding could have been applied in its financing. The case studies took memo and presentation format, and included photographs of the projects and their designs. Similar to the inventory, information was sourced from publicly available information from government agencies, and implementing organization's websites, as well as press releases and news articles. For one case study involving a project that has been stalled, a stakeholder interview was conducted to understand why it stalled and what lessons could be learned.

5. Guiding Principles and Final Report

The guiding principles emerged as a culmination of the team's research over five months, identifying recurring themes, challenges, and opportunities related to private sector involvement in climate resilience, both broadly and in relation to the CRA's existing rules and potential future changes. The team approached these principles as a way to provide practical guidance for banks to better understand the implications of CRA rule changes and where they should look to uncover potential avenues for investment. The Capstone project then culminates in a final report, delivered as both a memo and a presentation, that restructures and reorganizes the research, integrating findings from the literature review, landscape analysis, project inventory, case studies, and guiding principles into a cohesive document. It systematically presents key challenges, emerging opportunities, and recommendations related to equitable climate resilience financing and its intersection with the CRA.

Combatting Biases

To overcome potential research biases, the team evaluated findings from the perspectives of different stakeholders involved in the CRA and climate finance, including financial institutions, impacted communities, policymakers, and political thought leaders both in favor of and against climate equity and CRA expansion. Research was drawn from diverse sources, including peer-reviewed academic articles, government publications, and industry reports. By comparing and cross-referencing information across these sources, the team aimed to prevent any single perspective from dominating the analysis.

Beyond reviewing diverse sources, the team made a conscious effort to examine both their own assumptions and those of the client, Rebuild by Design, as it progressed in the research. The team's strong perspectives on this research naturally introduced certain biases. The team critically assessed its own assumptions to ensure that all analyses remained as objective and

evidence-based as possible. To further mitigate bias, the team also engaged external subject matter experts.

The team's research also faced challenges due to gaps in the literature on how a Trump administration might influence CRA policies and climate resilience funding. This was particularly relevant for the literature review and landscape analysis, which were completed before the inauguration. While the team's findings reflect the available information at the time, they recognize that future shifts in regulatory priorities could necessitate adjustments. Despite these efforts, the team acknowledge that inherent biases—stemming from gaps in available literature, limitations in data collection, and entrenched institutional narratives—cannot be entirely eliminated.

SECTION 1
The Evolution of the Community Reinvestment Act (CRA)

Historical Landscape of Community Development

Redlining and the Legacy of Disinvestment

Rooted in 20th-century housing policy, redlining is a discriminatory housing and lending practice that emerged in the 1930s when the Home Owners' Loan Corporation (HOLC), a New Deal agency created to help struggling homeowners by refinancing mortgages, created color-coded maps to assess mortgage lending risk in urban areas.[1] Neighborhoods with predominantly Black or minority residents were marked as "hazardous" or "inadequate" and outlined in red, which subsequently led to systematic denial of credit and investment. This practice systematically excluded entire communities from accessing mortgages, banking services, federal funding, and other financial resources, fueling long-term wealth gaps and disinvestment.[2] The resulting institutionalized disinvestment deepened economic and racial inequities, restricting opportunities for wealth accumulation, property ownership, and long-term stability in LMI areas.[3]

The CRA, enacted in 1977, was developed as a legislative countermeasure to redlining, which had marginalized minority and low-income neighborhoods by restricting their access to vital financial tools.[4] By explicitly directing regulated financial institutions to equitably serve all segments of their communities, including those historically neglected, the CRA has sought to address and reverse such disparities. Under this framework, eligible CRA activities encompass affordable housing loans, funding for small business ventures, and community development investments—with each intended to foster more inclusive growth and genuine uplift of vulnerable populations.[5]

While the CRA has facilitated some progress by encouraging regulated institutions to lend in underserved areas, its effectiveness has been limited in historically redlined neighborhoods due to structural limitations. A key issue lies in the changing landscape of the financial sector. The rise of nondepository mortgage lenders, which fall outside CRA regulatory oversight, has diluted

[1] Mitchell, B., & Franco, J. (2018). HOLC "Redlining" Maps: The Persistent Structure of Segregation and Economic Inequality. *National Community Reinvestment Coalition*.
[2] Aaronson, D., Hartley, D., & Mazumder, B. (2021). The Effects of the 1930s HOLC "Redlining" Maps. *American Economic Journal: Economic Policy*.
[3] Goodwyn, L. (2023). Changes on the Horizon for the Community Reinvestment Act. *American College of Mortgage Attorneys Abstract.*
[4] Keenan, J. M., & Mattiuzzi, E. (2019). Climate Adaptation Investment and the Community Reinvestment Act. *Federal Reserve Bank of San Francisco Community Development Research Brief.*
[5] Ibid.

the Act's influence and further complicates its ability to address inequities in the current financial landscape.[6] Furthermore, CRA-regulated institutions often do not lead in lending to historically redlined areas, a finding that reflects systemic inertia in addressing the legacy of racial discrimination.[7] This underscores the need to evolve the CRA framework to tackle contemporary challenges, such as climate adaptation, particularly as vulnerable communities disproportionately face environmental risks.

This historical context is critical for understanding the CRA's potential role in climate finance. The systemic barriers rooted in redlining have left many LMI communities with insufficient infrastructure to withstand climate risks, such as flooding or extreme heat.[8] As policymakers consider integrating climate adaptation into CRA mandates, lessons from its historical implementation point to the importance of addressing both geographic and structural inequities.

[6] Ding, L., & Nakamura, L. I. (2017). 'Don't Know What You Got Till It's Gone' — The Effects of the Community Reinvestment Act (CRA) on Mortgage Lending in the Philadelphia Market. *FRB of Philadelphia Working Paper No. 17-15.*
[7] Park, K. A., & Quercia , R. G. (2019). Who Lends Beyond the Red Line? The Community Reinvestment Act and the Legacy of Redlining. *Housing Policy Debate.*
[8] Wilson, B. (2020). Urban Heat Management and the Legacy of Redlining. *Journal of the American Planning Association*.

Advancing Equity in Climate Finance

The Equity Gap in Climate Finance

Equity concerns remain central to discussions on integrating climate finance into the CRA. Historically, the legacy of disinvestment has left LMI communities with weaker infrastructure and fewer resources to adapt to climate risks. Many LMI communities face intersecting vulnerabilities: substandard housing exacerbates heat stress, poor drainage infrastructure increases flood risks, and limited green space heightens urban heat island effects. These vulnerabilities are linked to historical land use patterns, such as discriminatory zoning laws and redlining, which have concentrated risks in marginalized neighborhoods. These areas now face compounding challenges, as climate adaptation investments can inadvertently lead to gentrification and displacement. For example, resilience-promoting projects like flood barriers or renewable energy systems in historically redlined neighborhoods may increase property values, making housing unaffordable for long-time residents. Therefore, without robust anti-displacement measures, such investments will only risk perpetuating the very inequities they aim to address.[9]

Moreover, CRA-regulated lenders often lag behind the broader market in serving historically redlined neighborhoods; in other words, merely meeting CRA obligations may not suffice to address entrenched disparities. Therefore, expanding CRA mandates to explicitly include climate adaptation financing could ensure not only that financial institutions are held accountable for supporting the resilience of LMI communities but also that these communities receive the benefits of sustainable investments while avoiding further exclusion.[10]

Environmental Justice and Barriers to Equitable Investment

While integrating environmental justice principles into climate finance is a laudable goal, it presents significant structural, procedural, and conceptual challenges that underscore its complexity. These challenges are not merely technical hurdles but reflect deeper systemic barriers in the financial, regulatory, and social frameworks governing climate adaptation investments. Addressing these barriers is critical for ensuring that LMI communities—those most vulnerable to climate risks—receive the resources they need for sustainable and equitable resilience-building.[11]

One of the key challenges identified is the scalability of private finance for climate infrastructure. LMI communities often require localized, community-specific interventions,

[9] Foster, S. R., Baptista, A., Nguyen, K. H., Tchen, J., Tedesco, M., & Leichenko, R. (2024). NPCC4: Advancing Climate Justice in Climate Adaptation Strategies for New York City. *Annals of the New York Academy of Sciences*.
[10] Park, K. A., & Quercia , R. G. (2019). Who Lends Beyond the Red Line? The Community Reinvestment Act and the Legacy of Redlining. *Housing Policy Debate*.
[11] Amorim-Maia, A. T., Anguelovski, I., Chu, E., & Connolly , J. (2023). Intersectional Climate Justice: A Conceptual Pathway for Bridging Adaptation Planning, Transformative Action, and Social Equity. *Urban Climate*.

which can be difficult to scale across broader geographies. The fragmentation of climate adaptation projects, where small-scale initiatives struggle to attract the level of investment needed for systemic change, further complicates the issue. For instance, urban green infrastructure projects may have high social and environmental value but lack the financial returns needed to attract private investors at scale. This also points us to another key tension, that is, the inherent misalignment between traditional financial priorities and the equitable outcomes central to environmental justice principles.[12]

Additionally, gaps in climate risk data and modeling exacerbate these challenges. In particular, many financial institutions lack the tools and transparency to assess how investments in LMI areas could mitigate long-term risks.[13] Not to mention, existing climate models often fail to account for the intersection of environmental hazards/climate risks with socioeconomic vulnerabilities, thus leaving critical gaps in understanding the full benefits of adaptation projects.[14] Therefore, addressing these issues requires enhanced data collection and transparency, as well as policy mechanisms that incentivize private investment in high-impact, lower immediate financial returns projects, let alone scaling them.[15]

Environmental justice provides a critical framework for aligning climate adaptation financing with equity goals. However, this ideal often clashes with the realities of project development. LMI communities frequently lack access to the technical expertise, funding, and organizational capacity required to participate effectively in these processes. Genuine, community-driven planning requires more than public consultations; it demands co-creation, where communities have equal footing with financial institutions and policymakers in decision-making.[16]

Unfortunately, financial institutions and project developers often control these processes, prioritizing efficiency and financial feasibility over inclusivity. Resilience projects may be planned with limited input from the communities they aim to serve, resulting in interventions that fail to address local needs or that unintentionally displace residents. This disconnect underscores a structural barrier: while the CRA provides a mandate to serve LMI communities, it does not explicitly require community co-leadership or procedural equity in project design. Therefore, strengthening this aspect of the CRA, alongside frameworks for accountability, could bridge the gap between financial planning and equitable outcomes. There needs to be strong advocacy around community-driven planning processes that integrate local knowledge and

[12] Amorim-Maia, A. T., Anguelovski, I., Chu, E., & Connolly , J. (2023). Intersectional Climate Justice: A Conceptual Pathway for Bridging Adaptation Planning, Transformative Action, and Social Equity. *Urban Climate*.
[13] De Bruin, K., Hubert , R., Evain, J., Clapp , C., Stackpole Dahl , M., & Bolt, J. (2019). Physical Climate Risk: Investor Needs and Information Gaps. *CICERO Center for International Climate Research.*
[14] Chen , C., Doherty, M., Coffee, J., Wong , T., & Hellmann, J. (2016). Measuring the Adaptation Gap: A Framework for Evaluating Climate Hazards and Opportunities in Urban Areas. *Environmental Science & Policy.*
[15] Liverman, D. (2016). U.S. National Climate Assessment Gaps and Research Needs: Overview, the Economy and the International Context. *Springer Climate*.
[16] Mfitumukiza, D., Roy, A. S., Simane, B., Hammill, A., Rahman, M. F., & Huq, S. (2020). Scaling Local and Community-Based Adaptation. *Global Commission on Adaptation*.

prioritize procedural equity. This approach not only ensures that investments reflect local priorities but also empowers historically marginalized groups to be active participants in decision-making and not only beneficiaries of resilience projects. For example, the report *NPCC4: Advancing climate justice in climate adaptation strategies for New York City* highlights best practices from New York City, where community organizations have implemented climate adaptation initiatives that address intersecting risks, such as extreme heat and housing affordability. Thus, while climate finance can address systemic vulnerabilities, it also risks reinforcing them if equity considerations are not embedded at every stage.[17]

[17] Foster, S. R., Baptista, A., Nguyen, K. H., Tchen, J., Tedesco, M., & Leichenko, R. (2024). NPCC4: Advancing Climate Justice in Climate Adaptation Strategies for New York City. *Annals of the New York Academy of Sciences*.

SECTION 2
Regulatory Framework and Implementation Challenges

Roles of the Federal Reserve Board (FRB), the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC)

Federal and Regulatory Oversight

The CRA does not specify how financial institutions should equitably serve LMI communities, combat redlining, or support community reinvestment; rather, it leaves implementation work to the regulatory agencies. These agencies evaluate banks based on their performance in meeting community credit needs, marketing credit, engaging in community development, maintaining branches, and avoiding discriminatory credit policies. This joint regulatory structure established by the FRB, OCC, and FDIC emphasizes a comprehensive approach to enforcing the CRA and encouraging fair credit.[18]

Banks are rated by regulators based on their performance in serving LMI neighborhoods. The agencies evaluate banks' performance through lending, investment, and service tests with ratings ranging from *Outstanding, Satisfactory, Needs to Improve* to *Substantial Noncompliance*. Banks with an *Outstanding* rating are expected to avoid taste-based discrimination and provide equitable lending services.[19]

From Saadi's perspective, the lending test is the most important component of a CRA evaluation as it assesses a bank's record of meeting the credit needs of its community through home mortgage lending, small business and small farm lending, and community development lending. This test carries the greatest weight in the overall CRA rating because it directly measures a bank's efforts to provide credit in underserved areas. Banks have to prove that they actively extend credit to LMI communities and that their lending practices are inclusive and non-discriminatory. The outcome of the lending test can significantly affect a bank's CRA rating and, therefore, its ability to expand through mergers and acquisitions.[20]

Furthermore, the investment test assesses a bank's investments in community development, such as affordable housing, community services, and economic development initiatives. The test

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[18] Dahl, D., Evanoff, D. D., & Spivey, M. F. (2010). The Community Reinvestment Act and Targeted Mortgage Lending. *Journal of Money, Credit and Banking*.
[19] Cyree, K. B., & Winters, D. B. (2023). Investigating Bank Lending Discrimination in the US Using CRA-Rated Banks' HMDA Loan Data. *Public Choice.*
[20] Saadi, V. (2020). Role of the Community Reinvestment Act in Mortgage Supply and the U.S. Housing Boom. *The Review of Financial Studies*.

examines how a bank's investment activities benefit the community. As a result, banks are incentivized to participate in projects with long-term benefits, including affordable housing and local economic development. The investment test assures that banks not only make loans but also encourage economic stability and prosperity in their communities.[21]

The service test focuses more on the availability and effectiveness of a bank's retail banking services in LMI neighborhoods. It includes branch distribution, the availability of alternative delivery systems such as ATMs and online banking, and the range of services offered. The test also considers a bank's community development services, such as financial literacy programs and support for local nonprofits. By evaluating these factors, regulators ensure that banks serve and meet the needs of all community members, thereby helping to build a more equitable and inclusive financial system.[22]

Agency-Specific Roles

The FRB is one of the primary federal regulatory agencies, supervising state-chartered member banks to ensure their stability, compliance, and sound operations. A core part of its mission is to encourage banks and savings associations to meet their local communities' credit needs safely and responsibly. FRB conducts on-site examinations and off-site monitoring to assess the banks' financial health and operational soundness.[23]

The FRB also plays a key role in promoting transparency by publishing CRA ratings. These ratings are valuable insights into banks' lending activities in their communities. By making CRA ratings publicly available, banks are incentivized to meet their community obligations and empower community groups, which promotes greater accountability and facilitates public participation in evaluating bank performance.[24]

In addition, the FRB considers a bank's CRA performance as a critical factor in approving or denying applications for new branches, mergers, or other expansion efforts. It ensures that banks prioritize community reinvestment targets while pursuing growth opportunities. Notably, compared to other regulators, the FRB assigns more CRA examiners to each bank and maintains a robust network of community affairs offices, reflecting its proactive stance on CRA enforcement.[25]

The OCC is also a primary federal banking regulator responsible for enforcing the CRA alongside the FRB and the FDIC. It oversees national banks and federal savings associations and

[21] Saadi, V. (2020). Role of the Community Reinvestment Act in Mortgage Supply and the U.S. Housing Boom. *The Review of Financial Studies*.
[22] Ibid.
[23] Huh, Y. (2024). Financial Regulatory Agency Behavior: Oscillating Priorities. *Business & Financial Law Review.*
[24] Ibid.
[25] Saadi, V. (2020). Role of the Community Reinvestment Act in Mortgage Supply and the U.S. Housing Boom. *The Review of Financial Studies*.

is widely regarded as the most supportive agency of the 1995 CRA reforms to improve the CRA's effectiveness by aligning the ratings more closely with tangible lending outcomes.[26]

In May 2022, the OCC issued a notice of proposed rulemaking to "strengthen and modernize" the CRA. This proposal includes new measures to address the changing banking landscape, such as updating regulations to account for mobile and online banking, tailoring assessments based on a bank's size and activities, and incorporating CRA-related complaints and examinations into performance evaluations. The aim is to increase the range and complexity of how bank activities and geographies are reviewed, ensuring that the CRA stays relevant in today's financial landscape.[27]

Similar to the FRB and OCC, the FDIC is another key regulator in CRA enforcement. It evaluates the CRA performance of state-chartered banks that are not members of the Federal Reserve System, which ensures these institutions meet community credit requirements.[28]

According to the Gramm-Leach-Bliley Act of 1999, the frequency of CRA examinations varies based on prior performance. Banks with *Outstanding* CRA ratings are examined every five years, those with *Satisfactory* ratings every four years, and those with lower ratings as needed. The FDIC's CRA evaluations, like those conducted by the FRB and OCC, focus on how effectively banks address the credit needs of LMI neighborhoods, promoting accountability and community impact.[29]

[26] Saadi, V. (2020). Role of the Community Reinvestment Act in Mortgage Supply and the U.S. Housing Boom. *The Review of Financial Studies*.
[27] Conti-Brown, P., & Feinstein, B. D. (2023). Banking on Curve: How to Restore the Community Reinvestment Act. *Harvard Business Law Review.*
[28] Saadi, V. (2020). Role of the Community Reinvestment Act in Mortgage Supply and the U.S. Housing Boom. *The Review of Financial Studies*.
[29] Dahl, D., Evanoff, D. D., & Spivey, M. F. (2010). The Community Reinvestment Act and Targeted Mortgage Lending. *Journal of Money, Credit and Banking.*

Challenges in CRA Implementation and Enforcement

Inflated Ratings and Lack of Differentiation Among Agencies

Conti-Brown and Feinstein (2023) criticize the FRB, OCC, and FDIC as a problem of "grade inflation" in CRA examinations, as scores are disproportionately high. Over 96% of banks receive one of the top two ratings (*Satisfactory* or *Outstanding*). The authors highlight that the small number of banks receiving low ratings reduces the effectiveness of the CRA and undermines the CRA's ability to incentivize meaningful improvements in meeting the credit needs of LMI communities. They also argue that the lack of score variation cannot give regulators, community groups, and the public an accurate picture of banks' community lending performance.[30]

To address these issues, they propose a forced distribution grading system, which requires banks to be graded on a curve to achieve a broader distribution of scores. This approach would place a certain percentage of banks in lower categories, potentially limiting their capacity to pursue new business opportunities. In addition, they recommend redefining "community" on a national level rather than allowing banks to determine their own assessment areas, which often results in strategic behavior that undermines CRA objectives. The authors also suggest regulators should improve public access to CRA ratings and provide more user-friendly information. This would enable community groups and the public to better understand and assess banks' effectiveness in meeting community credit needs.[31]

Geographic and Demographic Assessment Gaps

In addition, Harvard (2020) highlighted significant challenges faced by the FRB, OCC, and FDIC in excluding underserved areas from CRA assessment areas. This exclusion leads to an incomprehensive assessment of banks' performance in meeting the credit needs of LMI communities. As a result, critical geographic areas—those most in need of financial services—are overlooked in the regulatory framework. This incomplete assessment fails to reflect a bank's true efforts to serve all groups of people. It leaves banks with insufficient incentives to expand services as needed, perpetuating financial exclusion and perpetuating economic disparities. Without effective inclusion in assessment regions, these communities continue to have limited access to credit, restricting local economic growth, reducing financial stability, and hindering community development. This perpetuates cycles of poverty and restricts prospects for upward mobility.[32]

[30] Conti-Brown, P., & Feinstein, B. D. (2023). Banking on Curve: How to Restore the Community Reinvestment Act. *Harvard Business Law Review.*
[31] Ibid.
[32] Havard, C. J. (2020). Doin' Banks. University of Pennsylvania Journal of Law & Public Affairs.

To address these issues, Havard proposes redefining CRA assessment zones to ensure that all underserved areas are included. Regulators should also work together to develop consistent and comprehensive coverage criteria for defining these zones. At the same time, banks should be encouraged to extend their services to these areas through regulatory reforms and financial incentives. Harvard believes that by adopting these practices, the FRB, OCC, and FDIC can assess and encourage banks' efforts to meet the credit needs of all communities more effectively, fostering greater financial inclusion and economic justice.[33]

Data Transparency and Evaluation Limitations

Marijoan Bull (2017) analyzes the limitations of aggregated CRA data and its implications for assessing bank performance in LMI neighborhoods. Banks provide CRA data for self-defined assessment areas, which are often broad and may include many metropolitan statistical regions or political subdivisions. Because of the wide-scale and generalized information, it is difficult to tell whether community development initiatives took place in specific census tracts of importance to local organizations. Similarly, CRA performance evaluations also lack precise information on loans, investments, and services, which obscures the impact on low-income areas.[34]

Bull believes that FRB, OCC, and FDIC's heavy reliance on aggregated data decreases their accountability in bank performance evaluations. Without specific details, regulators and local organizations cannot clearly evaluate how well banks serve LMI communities, identify gaps, or recognize successful initiatives. This disconnect between the CRA's regulatory framework and local needs undermines its effectiveness in fostering equitable community development. Therefore, Bull called for more precise and truthful CRA reporting. She advocates that banks include full details in their performance evaluations, such as the organizations involved, project locations, and loan and investment frameworks. She also recommends that regulators thoroughly review performance situations and use local community data in their assessments. By aligning CRA evaluations with the scale at which community development corporations operate, these reforms will improve accountability, empower local organizations, and ensure that CRA ratings accurately represent the impact of banks' actions on LMI communities.[35]

Efficiency and Enforcement Challenges

During the 1990s, there was an increase in mortgage lending to LMI borrowers, which corresponded with shifts in CRA ratings. At the same time, there is a decline in the number of banks receiving the highest CRA ratings, accompanied by a rise in lower-category ratings, suggesting a potential link between CRA evaluations and LMI mortgage lending.[36]

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[33] Havard, C. J. (2020). Doin' Banks. *University of Pennsylvania Journal of Law & Public Affairs.*
[34] Bull, M. (2017). Data, Accountability, and the Public: Using Community Reinvestment Act Data for Local Community Development. *Cityscape.*
[35] Ibid.
[36] Dahl, D., Evanoff, D. D., & Spivey, M. F. (2010). The Community Reinvestment Act and Targeted Mortgage Lending. *Journal of Money, Credit and Banking.*

Empirical research by Dahl, Evanoff, and Spivey underscores the relationship between CRA ratings and mortgage lending patterns. Banks with upgraded CRA ratings demonstrated higher levels of LMI mortgage lending than those with downgraded ratings. However, little evidence suggests that downgrades incentivize banks to increase lending to LMI borrowers. The study further reveals that the 1990s reforms strengthened the alignment between CRA ratings and LMI lending, particularly for upgraded institutions. Despite these gains, critics argue that the CRA's enforcement remains inconsistent and overly reliant on the political will of regulatory agencies FRB, OCC, and FDIC.[37]

Baradaran critiques the CRA within the broader context of a neoliberal financial framework, which prioritizes market efficiency and profitability over equity and inclusion. While the CRA has achieved some success in increasing credit access for marginalized communities, its impact remains limited by the very market dynamics it seeks to address. Baradaran advocates for reimagining financial systems with equity as a core principle, calling for comprehensive policy interventions beyond reliance on the private sector. Although fintech innovations and other market-based solutions can contribute to addressing financial exclusion, Baradaran emphasizes their insufficiency in tackling systemic inequities. She proposes increased public sector involvement through public banking options and direct government interventions to complement the CRA's regulatory measures and ensure equitable access to financial services.[38]

Huh further recommends redefining community standards to close loopholes that allow banks to avoid CRA obligations in underserved areas. He also advocates for introducing tradeable CRA credits, which would incentivize resource allocation more effectively, and the expansion of public access to detailed CRA scores. Clearer regulatory guidance would empower community groups and other stakeholders to better assess and advocate for improved bank performance. By implementing these reforms, agencies like the FRB, OCC, and FDIC could bolster the CRA's ability to expand credit access, encourage investments in underserved areas, and address systemic racial inequities.[39]

[37] Dahl, D., Evanoff, D. D., & Spivey, M. F. (2010). The Community Reinvestment Act and Targeted Mortgage Lending. *Journal of Money, Credit and Banking.*
[38] Baradaran, M. (2020). Banking on Democracy. *Washington University Law Review.*
[39] Huh, Y. (2024). Financial Regulatory Agency Behavior: Oscillating Priorities. *Business & Financial Law Review.*

SECTION 3
Expanding the CRA: Financing Climate Resilience

The Case for Climate-Resilient Infrastructure

Defining Climate Resilience, Adaptation, and Disaster Prevention Infrastructure

When examining literature discussing climate adaptation, resilience, or disaster prevention infrastructure, there is a clear distinction between climate mitigation and climate adaptation. While climate mitigation projects are clearly defined as reducing emissions and enhancing resource and energy efficiency, climate adaptation projects encompass wider definitions and are used more closely in tandem with disaster prevention infrastructure or climate-resilient infrastructure. The need for the world to reduce its emissions is clear; however, the effects of climate change are already evident when looking at heatwaves, floods, droughts, and storm surges. Casady discusses the ways in which these effects of climate change necessitate climate adaptation projects, specifically through climate-resilient infrastructure. Climate resilience is important because it can protect communities from devastating social, economic, and environmental losses.[40] Chaudhry and Harper discuss ways in which integrated, multi-benefit infrastructure projects can create healthy local economies and community vitality.[41]

[40] Casady, C. B., Cepparulo, A., & Giuriato, L. (2024). Public-Private Partnerships for Low-Carbon, Climate-Resilient Infrastructure: Insights from the Literature. *Journal of Cleaner Production.*

[41] Chaudhry, R. M., & Harper, A. (2023). EPA Spearheads Water Reuse for Climate-Resilient Infrastructure. *Journal AWWA.*

Economic Benefits of Resilient Infrastructure

Assessing the Full Benefits of Resilient Design

Hsu and Chao maintained that the economic benefits of climate-resilient infrastructure are significant; however, traditional valuation methods often fail to capture its full value. These projects not only reduce immediate disaster recovery costs but also provide indirect benefits such as enhanced property values, improved biodiversity, and better public health outcomes. These authors emphasize that the cost of constructing green infrastructure, such as flood-detention ponds and permeable pavements, is substantially lower than the long-term costs of post-disaster recovery. Additionally, buildings designed with resilience measures often incur lower insurance premiums. An example given in the study shows that earthquake insurance costs for standard buildings are 5.22% of their value, while green buildings incur rates of only 2.28%. Despite these benefits, the economic value of green and resilient infrastructure is often underreported because indirect advantages, such as increased community well-being and ecological health, are not included in most cost-benefit analyses.[42]

The City Re-Leaf program, located in Manchester, UK, tries to incorporate this in its analyses as well. This study calculated that over a 50-year period, the return on investment to local business people and the environment in the region would be £229 for every £1 spent on City Re-Leaf (2019 UK pounds, 1 pound = USD$1.2772 in 2019). The study findings were based on the evidence that land value increases by 5% on tree-lined streets and improved mental well-being increases by 26%.[43]

[42] Hsu, K.-W., & Chao, J.-C. (2020). Economic Valuation of Green Infrastructure Investments in Urban Renewal: The Case of the Station District in Taichung, Taiwan. *Department of Landscape and Urban Design, Chaoyang University of Technology.*

[43] Ayyub, B. M. (Ed.). (2015). Hazard-Resilient Infrastructure: Analysis and Design. *American Society of Civil Engineers.*

Updated CRA Rules and Expanded Investment Capabilities

2023 CRA Amendments: Broadening the Scope for Climate Resilience

The 2023 CRA amendments represent a notable paradigm shift by formally incorporating climate resilience and adaptation considerations into the realm of CRA-qualifying investments.[44] This progressive expansion acknowledges that LMI communities often bear the brunt of climate change's consequences, which can erode local economic foundations, diminish property values, and hamper community health and safety.[45] Under the new guidelines, banks can now earn CRA credit for funding projects that bolster community-level resilience, such as installing flood mitigation systems, financing solar initiatives accessible to low-income households, upgrading disaster-resilient affordable housing, and promoting energy-efficient home improvements.[46]

The latest CRA amendments also signal a critical modernization effort tailored to the evolving financial, social, and environmental landscapes. These reforms broaden assessment areas, requiring large financial institutions to consider a wider geographic scope rather than only their physical branch footprints, thereby addressing historically unmet credit needs beyond conventional boundaries.[47] Enhanced performance tests, bolstered data collection, and refined metrics also promote transparency and accountability, ensuring that banks' lending and investment decisions are more closely aligned with the CRA's original intentions.[48]

Furthermore, the amendments recognize the centrality of specialized financial entities, such as Community Development Financial Institutions (CDFIs), by officially integrating them into the CRA's evaluative framework. This inclusion underlines the critical role these institutions play in channeling capital into under-resourced communities and underscores the importance of diversifying sources of credit and financial services.[49] Aligning these environmental initiatives with economic equity objectives ensures that LMI populations benefit from strengthened infrastructure and enhanced community resources.[50]

Yet, these well-intentioned improvements may inadvertently spark gentrification pressures and displacement if rising property values and enhanced desirability lure wealthier residents. To

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[44] Ayyub, B. M. (Ed.). (2015). Hazard-Resilient Infrastructure: Analysis and Design. *American Society of Civil Engineers.*
[45] Keenan, J. M., & Mattiuzzi, E. (2019). Climate Adaptation Investment and the Community Reinvestment Act. *Federal Reserve Bank of San Francisco Community Development Research Brief.*
[46] Keenan, J. M. (2021). Climate Adaptation Finance and Investment in California. *Routledge.*
[47] Board of Governors of the Federal Reserve System. (2023). Community Reinvestment Act: Final rule. *Federal Reserve Board.*
[48] Keenan, J. M., & Mattiuzzi, E. (2019). Climate Adaptation Investment and the Community Reinvestment Act. *Federal Reserve Bank of San Francisco Community Development Research Brief.*
[49] Board of Governors of the Federal Reserve System. (2023). Community Reinvestment Act: Final rule. *Federal Reserve Board.*
[50] Rebuild by Design. (2023). Community Reinvestment Act.

prevent such outcomes, it is crucial that municipalities, regulators, and financial institutions jointly develop robust anti-displacement measures to ensure that climate adaptation strategies and improved environmental conditions are equitably shared and do not simply shift societal burdens onto other vulnerable groups.[51]

In this context, the concept of "bluelining" also becomes increasingly relevant, whereby financial institutions withdraw services from areas deemed environmentally high-risk, often without considering the social consequences of such actions. This emerging trend mirrors the discriminatory practices of redlining, thus exacerbating existing financial and environmental inequities.[52]

The CRA can serve as a counterbalance to bluelining by incentivizing investments in climate resilience projects such as flood mitigation, renewable energy installations, and green infrastructure that would directly benefit LMI communities. For example, targeted infrastructure such as seawalls, green roofs, and energy-efficient housing could enhance both the physical and economic resilience of these areas. However, achieving this requires robust regulatory frameworks to ensure that financial institutions prioritize equitable outcomes over risk avoidance. By leveraging tools like the Inflation Reduction Act's Greenhouse Gas Reduction Fund to integrate climate resilience into CRA-compliant investments, financial institutions can address both climate risks and systemic inequities simultaneously.[53]

This evolving risk landscape underscores not only the need to proactively incentivize investments in climate adaptation infrastructure but also the need for a paradigm shift in how financial institutions assess risk. Traditional underwriting models often fail to capture the long-term benefits of resilience projects and focus instead on immediate financial metrics. Therefore, developing standardized climate risk models that incorporate social vulnerability indices could address these gaps and align private finance with public goals.[54]

From Traditional Lending to Climate Investment

CRA-regulated financial institutions have provided substantial funding to support community development in underserved areas. Since its inception, the CRA has driven nearly $2 trillion in small-business and home loans in LMI neighborhoods.[55] However, most of these investments have focused on traditional economic development activities, such as affordable housing and small business financing, with climate-focused investments only recently emerging as a significant component. Historically, CRA evaluations have been based on activities that

[51] Keenan, J. M. (2021). Climate Adaptation Finance and Investment in California. *Routledge.*
[52] Montgomery, B., & Palmeira, M. (2023). Bluelining: Climate Financial Discrimination on the Horizon. *The Greenlining Institute.*
[53] Ibid.
[54] Ibid.
[55] Kaushal, A., & Mitchell, D. (2019). The Community Reinvestment Act and the Future of Financial Inclusion. *The Aspen Institute.*

revitalize or stabilize communities, provide economic benefits, and improve access to financial services. For example, CRA-qualifying projects have included the financing of energy-efficient affordable housing and infrastructure improvements, which indirectly contribute to climate mitigation and adaptation.[56] Financial institutions ranging from HSBC and Morgan Stanley to Green Dot Bank are beginning to integrate environmental investment strategies into their CRA portfolios, reflecting the increasing demand for climate-conscious financing. The Partnership for Carbon Accounting Financials, a global partnership of financial institutions, which includes 66 financial institutions managing USD$5.3 trillion in assets, has emphasized the importance of disclosing and reducing carbon-intensive investments.

Progress has been made by CRA initiatives in critical areas for LMI communities—under the CRA in 2018, USD$103 billion in community development loans was distributed.[57] However, the CRA's focus on geographic assessment areas typically limited to regions surrounding physical bank branches, has created gaps in coverage, particularly in rural areas and regions underserved by traditional banking institutions and the closing of physical bank branches. Disinvestment and historical redlining have left many neighborhoods with inadequate infrastructure, compounding their vulnerability to climate risks.[58] Programs like philanthropic grants, foundation-backed loan funds, and microfinance initiatives have begun to bridge this gap, but the scale of funding needed far exceeds what these sources can provide.[59] Collaborative efforts between nonprofits, local governments, and financial institutions are essential for bundling resources and engaging residents to ensure successful implementation.

[56] Zonta, M., & Willingham, C. Z. (2020). A CRA to Meet the Challenge of Climate Change. *Center for American Progress*. Retrieved from: https://www.americanprogress.org/article/cra-meet-challenge-climate-change/.
[57] Goodman, L., Seidman, E., & Zhu, J. (2020). Under Current CRA Rules, Banks Earn Most of Their CRA Credit through Community Development and Single-Family Mortgage Lending. *Urban Institute.*
[58] Ding, L., & Reid, C. K. (2019). The Community Reinvestment Act (CRA) and Bank Branching Patterns. *Federal Reserve Bank of Philadelphia.*
[59] Havard, C. J. (2020). Doin' Banks. *University of Pennsylvania Journal of Law & Public Affairs.*

SECTION 4
Financing Mechanisms for Climate Resilience and Adaptation

Emerging Sustainable Finance Approaches under the CRA

Bank-Led Sustainable Finance Initiatives

Banks are increasingly leveraging sustainable finance products to meet CRA obligations, align with environmental goals, and differentiate themselves in a competitive marketplace. Instruments such as green mortgages, sustainability-linked loans, and renewable energy financing packages can directly target the vulnerabilities LMI communities face, including high energy costs and exposure to climate risks.[60] By integrating environmental sustainability into credit decision-making processes, banks help improve resource efficiency and resilience while expanding economic opportunities. Still, to ensure that these sustainability-oriented products truly serve LMI populations, continuous monitoring and community engagement are paramount.[61] Without careful stewardship, such initiatives might inadvertently accelerate gentrification or replicate exclusionary practices. Instead, the strategic alignment of environmental investments with the CRA's socio-economic equity objectives can nurture healthier, more resilient communities prepared for current and future environmental challenges.[62]

Community Development Financial Institutions (CDFIs)

CDFIs are pivotal instruments in realizing the CRA's vision, operating in neighborhoods that traditional banking systems often overlook. These mission-driven lenders, certified by the U.S. Department of the Treasury's CDFI Fund, provide financial services tailored to the unique contexts of economically distressed communities. They offer capital for small businesses, nonprofits, and affordable housing initiatives, setting more flexible and inclusive underwriting standards than conventional banks.[63] By placing social equity at the core of their mission, CDFIs help broaden financial inclusion and dismantle systemic barriers to credit access. As CDFIs gain official recognition under the updated CRA rules, their ability to attract both public and private investments is likely to increase, bolstering their capacity to support multifaceted community development efforts. By combining public subsidies with private capital, CDFIs amplify the

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[60] Berr, J. (2023). How Banks Stand to Gain from Climate Resilience: A Credit to CRA. *Banking Dive.*
[61] Rebuild by Design. (2023). Community Reinvestment Act
[62] Watkiss, P., Wilby, R., & Rodgers, C. A. (2020). Principles of Climate Risk Management for Climate Proofing Projects. *Asian Development Bank.*
[63] Keenan, J. M., & Mattiuzzi, E. (2019). Climate Adaptation Investment and the Community Reinvestment Act. *Federal Reserve Bank of San Francisco Community Development Research Brief.*

impact of each dollar invested, catalyzing sustainable economic growth and expanding opportunity within LMI communities.[64]

Greenhouse Gas Reduction Fund

The $27 billion Greenhouse Gas Reduction Fund, established under the Inflation Reduction Act, complements the CRA's evolving focus on climate adaptation and equitable development.[65] By mobilizing private capital into clean energy projects and resilience-focused infrastructure, the fund specifically targets underserved and climate-vulnerable areas.[66]

[64] Board of Governors of the Federal Reserve System. (2023). Community Reinvestment Act: Final rule. *Federal Reserve Board.*
[65] Keenan, J. M. (2021). Climate Adaptation Finance and Investment in California. *Routledge.*
[66] New York State Climate Action Council. (2022). Final Scoping Plan. *New York State*.

Traditional Financing Mechanisms for Public Investments

Traditional financing mechanisms have historically served as the cornerstone of public investments, addressing infrastructure, social programs, and economic development. General obligation bonds are among the most secure instruments, backed by the issuing government's ability to levy taxes.[67] These bonds can be well-suited for projects that deliver broad public benefits, such as restoration, flood risk reduction, and water quality improvements.[68] Their primary strength lies in providing equitable access to essential services without relying on user fees, which is critical for both climate adaptation and addressing disparities in LMI communities.[69]

Revenue Bonds

Revenue bonds, in contrast, draw their repayment from income generated by the financed project. This model is frequently employed in infrastructure projects such as toll roads, water utilities, and transit systems, where predictable revenue streams attract private investment.[70] These bonds are well-suited to bankable, resilient projects that provide a direct repayment mechanism through the services they deliver. For example, a city might issue revenue bonds to fund a flood control system, with repayment linked to stormwater fees collected from residents.[71] However, these bonds are less applicable to climate or social impact projects lacking direct revenue streams. For example, green infrastructure solutions like urban cooling or wetland restoration often provide indirect or long-term benefits that are harder to monetize. Despite these challenges, revenue bonds remain a critical tool for projects with reliable cash flows.

Green Bonds

Green bonds have emerged as a pivotal evolution of traditional mechanisms, funding projects explicitly aligned with environmental sustainability, such as renewable energy installations and ecosystem restoration.[72] In 2024, the U.S. became the largest single-country issuer of green bonds, with 287 deals totaling USD$27.6 billion.[73] Climate adaptation and resilience (A&R) efforts, which historically represented just 3%-5% of green bonds in 2017, have grown significantly. By September 2020, A&R activities accounted for 16.4% of globally labeled green

[67] DeMarco, T., & Perlovsky, I. (2021). Not All Local General Obligations Are Created Equal. *Fidelity Capital Markets.*
[68] Environmental Bond Act. (n.d.). Funding Categories: Environmental Bond Act. *New York State.*
[69] Robare, E. (2019). How Community-Focused Municipal Bond Investments Can Drive Social Impact. *GreenMoney Journal.*
[70] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann.*
[71] Ibid.
[72] Chouhan, N., & Harrison, C. (2024). Sustainable Debt Market Summary Q1 2024. *Climate Bonds Initiative.*
[73] Ibid.

bond deals.[74] Their rapid growth reflects increasing investor demand for instruments addressing climate mitigation. However, green bonds face limitations, particularly in generating a sufficient pipeline of impactful projects in regions with underdeveloped sustainability frameworks.

[74] Qadir, U., & Pillay, K. (2021). Green Bonds for Climate Resilience: State of Play and Roadmap to Scale. *Global Center on Adaptation.*

Innovative Financing Tools for Climate Adaptation

When traditional financing mechanisms fall short, innovative tools step in to address the complexities of climate adaptation and social impact.

Catastrophe Bonds (Cat Bonds)

Cat bonds allow governments and agencies to transfer disaster-related risks to private investors, reducing the financial burden of extreme events such as hurricanes or floods. These instruments provide a safeguard for governments while enabling private investors to earn higher returns for assuming significant risks.[75] These bonds activate when specific conditions, such as high wind speeds, heavy rainfall, or significant seismic activity, are met. Investors provide upfront funding in exchange for periodic returns from the bond issuer, and if no disaster occurs during the bond's term, typically three to five years, the initial investment is returned. However, if a triggering event happens, the funds are redirected to support recovery efforts, with investors losing their principal. Unlike traditional insurance, payouts are predetermined and often exceed actual damages which gives governments greater financial flexibility in worst-case scenarios. Cat bonds have proven effective in managing risks associated with infrequent but severe disasters. For example, California's Earthquake Authority uses these instruments to protect homeowners in earthquake-prone areas.[76] In another application, the New York Metropolitan Transportation Authority (MTA) issued its first cat bond in 2013 to prepare for future storm-related events following Hurricane Sandy. This allowed the MTA to access funds for infrastructure repair without significant delays by proactively securing financial resources in anticipation of any future storm-related damages. By 2017, the MTA expanded its coverage, renewing the bond with additional protections for earthquake-related risks.[77]

Resilience Bonds

Resilience bonds aim to raise capital specifically for climate-resilient investments and are an innovative financial tool designed to provide protection against climate risks while funding projects to reduce vulnerabilities. Unlike cat bonds, they integrate risk reduction by offering rebates to sponsors like local governments, who can reinvest the funds into resilience projects.[78] For example, a resilience bond insuring against windstorm damage could also finance upgrades like impact-resistant roofs or high-performance windows to reduce future risks. The dual-purpose structure lowers insurance premiums for sponsors while minimizing overall investor risk.[79]

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[75] Di, W., Banzhaf, H. S., & Whitehead, J. C. (2018). Environmental Justice and Pollution: The Economic Perspective (No. 405). *Federal Reserve Bank of Chicago.*
[76] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*
[77] Ibid.
[78] Ibid.
[79] Ibid.

These financial instruments improve the ability of assets and systems to persist, adapt, or transform in response to climate risks, while reducing the potential for maladaptation and unlocking broader development benefits. By incorporating mechanisms to finance proactive adaptation measures, resilience bonds can help entities invest in risk-reducing projects such as improved infrastructure or climate-resilient systems. The European Bank for Reconstruction and Development pioneered this concept in 2019 by launching the first dedicated resilience bond, which raised USD$700 million for increasing asset resilience.[80]

Nonetheless, in *Climate Adaptation Finance and Investment in California*, Jesse Keenan highlights key challenges facing resilience bonds. Accurately modeling the relationship between risk reduction investments and reduced vulnerabilities remains a major hurdle, especially for complex hazards like flooding. Additionally, scaling the bonds sufficiently to generate meaningful rebates is difficult which severely limits their feasibility for local governments. Keenan suggests these instruments are currently more suitable for national-level entities or organizations with large, diverse asset portfolios.[81]

Property Tax Increment Financing (TIF)

TIF represents another innovative approach, dedicating future property tax revenues to cover the costs of public improvements within designated districts. The "increment" refers to the additional revenue generated as property values rise above their initial valuation at the time the district is established. Historically, TIF was widely used in California to finance public facilities, services, and affordable housing until legislative changes in 2011 restricted its use by economic development agencies. In response, newer frameworks such as Infrastructure Finance Districts (IFDs) and Enhanced Infrastructure Finance Districts (EIFDs) were introduced. These models allow Public Financing Authorities to oversee funds and channel property tax increments toward infrastructure and climate adaptation projects, with voter approval mechanisms providing greater accountability.[82]

Keenan highlights the potential of IFDs and EIFDs to support climate adaptation by financing projects like ecological restoration and flood control. For instance, Los Angeles has explored the use of an EIFD to fund improvements along the Los Angeles River since 2016, but there has been no implementation yet. Additionally, San Francisco has considered using an IFD to finance upgrades to its seawall.[83]

However, Keenan also examines the limitations of TIF, noting that its success relies heavily on rising property values. In areas vulnerable to climate risks like sea-level rise, property values

[80] Bascunan, F. L., Molloy, D., & Sauer, B. (2020). What are Resilience Bonds and How Can They Protect Us Against Climate Crises? *Global Center on Adaptation.*
[81] Ibid.
[82] Ibid.
[83] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*

may decline faster than adaptation measures can mitigate the risks, threatening the financial sustainability of such mechanisms. Outside California, similar dynamics have been observed. The Chicago Transit Authority, for example, used TIF districts to fund upgrades to aging transit infrastructure, such as tracks and bridges, improving system resilience. TIF revenues from these districts also served as a local match for federal grants, including those from the Federal Transit Administration and the Congestion Mitigation and Air Quality Improvement program. However, in Chicago's case, rising property values were driven largely by independent infill development rather than the transit improvements themselves. This highlights the vulnerability of TIF-based models in climate-vulnerable areas where value capture mechanisms may be less reliable.[84]

Keenan further warns of the potential for "climate gentrification," where adaptation investments drive up property values and lead to higher-density development that displaces marginalized communities. While this growth may enhance TIF revenue, it can prioritize speculative investment over equitable outcomes. Keenan observes, "This trade-off between density, adequate enough to support value capture mechanisms, and Climate Gentrification will likely shape coastal adaptation discourse for many years to come."[85]

[84] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*
[85] Ibid.

Emerging Public Revenue Mechanisms

Public Revenue Sources

Public revenue sources make up the majority of financing for resilient and adaptation infrastructure, relying on general taxes, fees, carbon taxes, cap-and-trade systems, and federal grants.[86] General taxes include general property taxes, sales taxes, income taxes, real estate property transfer taxes, and mortgage recording taxes. Income and corporate tax are the greatest source of revenue for the federal government, and property tax represents a significant amount of local public revenue.[87] Fees include utility service fees, impact fees, tolls, business fees, and carbon pricing revenue. In recent years, innovative financing mechanisms administered by state and municipal governments like California's Cap and Trade System and the Northeast Regional Greenhouse Gas Initiative have also been very effective at generating additional revenue to finance climate resilience and adaptation projects.[88]

Cap and Invest

Cap-and-invest systems are gaining traction as an effective means to finance climate resilience while simultaneously encouraging emissions reductions from greenhouse gas-intensive companies. These programs cap greenhouse gas emissions for industries and require companies to purchase allowances for any emissions exceeding the limit. A fixed amount of allowances are auctioned each year, and the total available decreases annually to drive long-term emissions reductions incrementally. Revenues from these auctions are reinvested in clean energy, resilience infrastructure, and environmental justice projects, providing a new stream of funding while minimizing direct costs to consumers.[89]

Washington's cap-and-invest program, launched in 2023, raised USD$1.8 billion in its first year, with much of the funding allocated to public transportation and capacity-building projects. Efforts to link Washington's program with similar initiatives in California and Quebec are underway to expand the carbon market's breadth and impact.[90] Similarly, New York's 2024 cap-and-invest program is projected to generate USD$6–12 billion annually by 2030, with USD$4-6 billion earmarked for investment.[91] These programs represent a growing trend toward linking emissions reduction mandates with climate adaptation funding.

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[86] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann.*
[87] Ibid.
[88] Ibid.
[89] Yousofi, F., & Gullett, E. (2024). States are Exploring Paths to Finance Climate Resilient Infrastructure. *The Pew Charitable Trusts.*
[90] Ibid.
[91] Binder, J. (2024). Climate Leadership and Community Protection Act: NY Cap & Invest Program (NYCI). *NYU Institute for Policy Integrity.*

Polluter Pays

The polluter pays principle offers another transformative approach to resilience financing. It is similar to the cap-and-invest initiative in that it shifts the costs of climate resilience from taxpayers to corporations and the biggest emitters.

Vermont was the first state to implement a polluter pay model with its Climate Superfund Law in 2024. New York quickly followed with its Climate Change Superfund Act, which is awaiting a final signature from Governor Kathy Hochul.[92]

The act targets companies responsible for major emissions between 2000 and 2018. Specifically, the Act applies to firms involved in the extraction, production, refinement, and sale of petroleum that contributed more than 1 billion metric tons of CO_2 emissions during this period. Fees are calculated based on each company's share of global greenhouse gas emissions, using carbon dioxide equivalence factors tailored to fossil fuel types (e.g., coal, natural gas, or oil). Companies emitting less than the 1 billion metric ton threshold are exempt, and liability extends only to domestic and foreign entities with sufficient ties to New York under constitutional nexus requirements. Firms can pay over nine years, with the New York Department of Environmental Conservation managing fund collection and allocation.[93]

This initiative is expected to recover $75 billion over 25 years. Other states are following Vermont's and New York's lead. Massachusetts and Maryland have introduced similar measures that aim to generate $75 billion and $9 billion, respectively, over 25 years. California is also working on a similar proposal, which, while still in development, could generate hundreds of billions of dollars over two decades depending on its final structure.[94]

These innovative approaches—cap-and-invest programs and polluter-pays models—represent a significant shift in resilience financing. By holding polluters accountable for emissions, states are mobilizing substantial resources for climate adaptation that do not rely on taxes and public debt.

[92] Yousofi, F., & Gullett, E. (2024). States are Exploring Paths to Finance Climate Resilient Infrastructure. *The Pew Charitable Trusts*.
[93] Howard, P. H., & Xu, M. (2022). Enacting the "Polluter Pays" Principle: New York's Climate Change Superfund Act and its Impact on Gasoline Prices. *Institute for Policy Integrity, New York University School of Law.*
[94] Yousofi, F., & Gullett, E. (2024). States are Exploring Paths to Finance Climate Resilient Infrastructure. *The Pew Charitable Trusts.*

Barriers to Investment in Climate Adaptation

Why the Private Sector is Reluctant to Invest

Several studies have highlighted the limited private sector involvement in financing A&R projects.[95] Unlike climate mitigation projects, like renewable energy initiatives or energy efficiency upgrades, which often provide direct financial returns through energy sales or energy-efficiency cost savings, adaptation efforts struggle to attract private investors due to their public goods characteristics.[96] These projects deliver major public benefits but lack clear revenue streams.[97]

In *Financing Climate Change Adaptation: International Initiatives,* Timilsina finds that, as profit-driven entities, private sector investments are typically guided by financial returns or regulatory mandates, with only some guided by "goodwill hunting." The majority of climate resilience and adaptation activities involve investing in and upgrading public infrastructure like roads, bridges, parks, and irrigation systems—all of which offer little financial return. Typically, the private sector lacks sufficient motivation to invest in these public goods and services under normal circumstances.[98]

Private sector aversion is further exacerbated by high upfront costs and the inherent difficulty of quantifying the benefits of such initiatives.[99] Additionally, the significant liability associated with climate risks in adaptation projects deters investors, as the nature of resilience and adaptation projects involves significant financial exposure.[100] Bisaro and Hinkel find that the uncertainties of climate change and sea level rise have deterred private investor involvement with coastal adaptation efforts, as scenarios of extreme sea level rise in which large-scale damage is done to critical infrastructure would necessarily impose massive financial liabilities. While large-scale liability caps have been effective at mobilizing private investment in areas like nuclear energy, such policy has yet to be implemented in coastal adaptation. On the other hand, Bisaro and Hinkel observed that private investors are significantly more inclined to fund adaptation efforts when their own assets are directly threatened by climate risks. This trend is particularly evident

[95] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann*; Bisaro, A., & Hinkel, J. (2018). Mobilizing Private Finance for Coastal Adaptation: A Literature Review. *Wiley Interdisciplinary Reviews*; Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*
[96] Timilsina, G. R. (2021). Financing Climate Change Adaptation: International Initiatives. *Sustainability.*
[97] Ibid.
[98] Ibid.
[99] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*
[100] Bisaro, A., & Hinkel, J. (2018). Mobilizing Private Finance for Coastal Adaptation: A Literature Review. *Wiley Interdisciplinary Reviews.*

in sectors like agriculture, where addressing weather-related risks is essential to maintaining profitability.[101]

Many adaptation and resilience projects, particularly at the local or community level, are often too small to appeal to institutional investors, who are deterred by the high transaction costs associated with small-scale infrastructure projects. As a result, many local resilience initiatives struggle to access large pools of capital needed to begin development and construction.[102]

Why The Public Sector is Reluctant to Invest

While adaptation and resilience projects provide significant public benefits and should be a priority for government expenditure, the public sector also faces substantial challenges in financing these initiatives. Bisaro and Hinkel highlight high project preparation costs, competing budgetary demands, and the difficulty of prioritizing investments in risks that may not manifest benefits in the near term as major obstacles. They note that investments in coastal adaptation are often deprioritized because flood risks are infrequent and not immediately visible to the public. This lack of urgency makes it politically challenging to allocate substantial resources to A&R projects, particularly for local governments that have taken on greater financial burdens due to the decentralization of responsibilities from central governments in recent decades.[103]

[101] Bisaro, A., & Hinkel, J. (2018). Mobilizing Private Finance for Coastal Adaptation: A Literature Review. *Wiley Interdisciplinary Reviews.*

[102] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann.*

[103] Bisaro, A., & Hinkel, J. (2018). Mobilizing Private Finance for Coastal Adaptation: A Literature Review. *Wiley Interdisciplinary Reviews.*

Integrating Co-Benefits and Tapping into Broader Funding Programs

Leveraging Co-Benefits in Adaptation Finance

A key theme emphasized by both Jesse Keenan and Ryan Colker is the potential for adaptation finance to tap into value chains that deliver significant co-benefits.

In *Climate Adaptation Finance and Investment in California*, Keenan notes that adaptation finance often extends beyond seeking dedicated funding streams for standalone resilience or adaptation projects. Instead, it frequently involves addressing the incremental or marginal costs of incorporating adaptation measures into broader investments. For example, rather than constructing a bridge solely to withstand flash floods, adaptation elements—such as reinforced materials or elevated designs—can be integrated into a comprehensive infrastructure upgrade to optimize costs. Keenan also highlights the opportunity for adaptation finance to tap into value chains that provide co-benefits, including enhanced transportation systems, affordable housing, ecological conservation, and public health improvements. While many funding opportunities indirectly support these co-benefits rather than explicitly targeting adaptation, their alignment with adaptation goals can enhance project viability. For instance, a transportation project that incorporates flood-resistant features may simultaneously improve access to underserved areas and reduce emissions. Keenan emphasizes that effective adaptation finance strategies must harness these synergies to maximize impact and align with broader societal objectives.[104]

Building on this concept of leveraging co-benefits, Colker argues that another critical dimension of adaptation finance lies in creatively utilizing existing funding programs. Many federal and state funding sources not explicitly designed for resilience or adaptation can still be strategically repurposed to advance these goals, and states have been successful in recent years in doing so. The Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program, Pre-Disaster Mitigation Grants Program, and HUD's Community Development Block Grant-Disaster Recovery are all federal funds that, while not explicitly meant for infrastructure resilience, have been tapped into to fund resilience projects. In 2018, a USD$89.3 billion emergency disaster supplemental was allocated USD$28 billion to HUD's Community Development Block Grant (CDBG) program to address sea-level rise risk.[105]

Additionally, in 2021, California utilized the Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) program funding to create the Local Transportation Climate Adaptation Program. The initial designation for the PROTECT program

[104] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*
[105] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann.*

provided grants for surface transportation improvements, but California is using this funding to finance climate-resilient upgrades to roads, bridges, and highways across the state.[106]

[106] Yousofi, F., & Gullett, E. (2024). States are Exploring Paths to Finance Climate Resilient Infrastructure. *The Pew Charitable Trusts.*

SECTION 5
State-Level Adaptations and Opportunities

State-Level CRA Initiatives

After the passage of the CRA at the federal level, several states enacted their own versions of CRA laws to address local priorities. The New York CRA more explicitly recognizes climate mitigation and adaptation as eligible activities for CRA credit. One way banking institutions are evaluated under the New York CRA is the extent to which their investments "serve community development by revitalizing or stabilizing both LMI geographies and underserved nonmetropolitan middle-income geographies."[107] Ensuring access to credit in these communities for climate resiliency or mitigation activities can both help mitigate climate change risks and revitalize or stabilize those areas. This improves the community and credits banking institutions in their CRA grading.

There are several activities that support climate resiliency and may qualify for credit under the New York CRA as community development lending or qualified investments that revitalize or stabilize the community. Examples include renewable energy, energy efficiency, and water conservation equipment that reduce utility payments for LMI tenants. Additionally, supporting community solar projects that provide energy to affordable housing developments and investing in microgrid and battery storage projects in these areas prone to power outages due to flooding or wind events could qualify for credit. Other qualifying activities include improving infrastructure in LMI areas by improving sewer lines, storm drains, and levees, as well as addressing flood resilience in affordable housing through building elevation and relocation and installation of sump pumps.[108] While the New York CRA makes the connection between climate change investments more explicit, on a broader scale, environmentally friendly investments would likely only qualify under community development under the current regulations.

The most significant departure from the federal CRA is the choice by some states to extend CRA obligations beyond FDIC-insured depository institutions—such as national banks, savings associations, and state-chartered banks—to include nonbank lenders like credit unions and

[107] Department of Financial Services. (2021). Industry Letter: CRA Consideration for Activities that Contribute to Climate Mitigation and Adaptation. *New York State.*
[108] Ibid.

independent mortgage banks.[109] These state-level expansions were developed in response to the significant evolution of the mortgage market since the federal CRA was enacted in 1977.[110]

In 1977, banks held 74% of all outstanding mortgage debt. By 2021, this dynamic had shifted dramatically, with nonbank mortgage companies originating 64% of mortgage loans, compared to just 25% by banks.[111] Recognizing the growing influence of nonbank lenders, proponents of federal CRA modernization in recent years have also argued for the inclusion of nonbank entities and credit unions under federal CRA obligations.[112] While the 2023 CRA final rule acknowledged this shift by modernizing aspects of the federal CRA to account for online and mobile banking, it did not extend CRA obligations to nonbank lenders and credit unions, leaving states to continue to address these gaps through their own legislative efforts.[113]

Below is a table that breaks down state efforts to expand CRA obligations to nonbank lenders.[114]

State	Banks	Credit Unions	Mortgage Companies	Additional Coverage
Connecticut	Yes	Yes	No	None
District of Columbia	Yes	Yes	Yes	Non-depositories and other regulated entities
Illinois	Yes	Yes	Yes	Others as designated by regulator
Massachusetts	Yes	Yes	Yes	Wholesale and limited-purpose institutions
New York	Yes	Yes	Yes	Wholesale and limited-purpose banking institutions
Rhode Island	Yes	Yes	No	None
Washington	Yes	No	No	None
West Virginia	Yes	No	No	None

Source: Consumer Financial Protection Bureau. (2023).

This expanded scope of state-level CRAs has fostered more inclusive lending practices in a market dominated by nonbank lenders and also has the potential to channel greater capital into climate-related projects in LMI communities. By applying CRA evaluation criteria to nonbank

[109] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[110] Goodman, L., Zhu, L., & Visalli, K. (2023). Expanding the Community Reinvestment Act at the State Level: What Do the Numbers Tell Us? *Urban Institute*. Retrieved from: https://www.urban.org/urban-wire/expanding-community-reinvestment-act-state-level-what-do-numbers-tell-us.
[111] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[112] Ibid.
[113] Delaney, T. J., Byrne, T., Keeley, M., & McManus, C. (2023). Federal Banking Regulators Finalize Modernized Community Reinvestment Act Regulations. *Norton Rose Fulbright*.
[114] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.

lending institutions, states can potentially incentivize credit unions and mortgage companies to direct capital toward climate infrastructure projects. Below, the team highlights specific distinctions in state CRA legislation, where the coupling of expanded institutional coverage and relevant CRA evaluation criteria could provide opportunities for climate investments at the state level. Given the nature of climate projects, this analysis focuses solely on lending and investment-related CRA criteria, omitting service-related factors.

Key Findings: State-Level Lending Tests

Similar to the federal level, state-level lending tests assess how effectively financial institutions meet local credit needs across different loan categories - home, small business, small farm, consumer, and community development.[115] Significantly, in states with expanded institutional coverage with CRA obligations that apply to banks, credit unions, and mortgage companies, all institutions must undergo a lending evaluation. However, the degree of evaluation varies, with some states requiring nonbank lenders to meet standards in only one or a few categories rather than all five.[116]

Of the five aforementioned loan categories, community development loans have the greatest potential to direct capital toward climate-related projects, especially with the 2023 expansion of qualifying "community development activities" at the federal level, which now includes "disaster preparedness and weather resiliency."[117] Massachusetts evaluates all institutions, including banks, credit unions, and mortgage companies, on their community development loans, while Illinois's proposed regulations aim to do the same. In contrast, New York evaluates only banks and credit unions for these loans, excluding mortgage companies from consideration.[118]

This table below summarizes states that take into consideration community development lending of nonbank institutions in CRA grading:[119]

State	Banks	Credit Unions	Mortgage Companies
Illinois	Proposed	Proposed	Proposed
Massachusetts	Yes	Yes	Yes
New York	Yes	Yes	No
Rhode Island	Yes	Yes	Yes
Connecticut	Same as federal CRA*	Same as federal CRA*	Same as federal CRA*

Source: Consumer Financial Protection Bureau. (2023).
Note: "Same as federal CRA" indicates that no matter the institution, the extent of the CRA evaluation and whether institutions are subject to community development testing depends on their size. If institutions have over USD$330 million in assets, they will be subject to a community development test.[120]

[115] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[116] Ibid.
[117] Coleman, S., & Dannecker, S. (2023). The New CRA: Understanding the Final Rule and its Impact on Large, Intermediate, and Small Banks. *Ballard Spahr Consumer Finance Monitor*.
[118] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[119] Ibid.
[120] Reger, A. (2021). Connecticut's Community Reinvestment Act (CRA). *Connecticut General Assembly Office of Legislative Research*.

Key Findings: State-Level Investment Tests

Investment testing at the state level is similar to lending tests in that it is largely modeled after the federal framework. State laws, like the federal CRA, outline the types of activities that qualify as investments for evaluation or provide explicit examples in statutes or regulations. These investments can include loans, grants, in-kind contributions, participation in community development initiatives, and other financial instruments. Beyond this general framework, several state laws have been identified below that feature unique "qualifying investments" with the potential to be directly applied to climate-focused projects in LMI communities.[121]

West Virginia expands on the federal CRA criteria by including additional provisions to encourage participation and investment in industrial and economic development programs, industrial revenue bonds, and local and municipal school bonds.[122] Industrial revenue bonds, as tax-exempt private activity bonds, have been effectively used by clean energy manufacturing companies in the past to finance clean energy projects, including renewable energy manufacturing facilities and energy-efficient infrastructure.[123] The Illinois and Massachusetts CRAs both recognize investments in minority depository institutions (MDIs) as eligible qualifying investments.[124] MDIs typically operate in communities where a larger portion of the population resides in LMI census tracts and have the potential to act as a conduit for directing financial resources toward high-impact climate projects in disadvantaged communities.[125] Washington's CRA is progressive in its emphasis on encouraging local and community-focused projects, creating opportunities to address both economic and environmental priorities in LMI communities. It includes provisions that recognize investments in local community and micro-enterprise projects, as well as cash or in-kind support to state or local organizations supporting small businesses.[126] These provisions provide great opportunities to direct capital toward climate-focused projects, particularly benefiting LMI communities. For example, community solar projects can be classified as "local community projects" under Washington's CRA framework, as they reduce cost by providing shared access to renewable energy resources and promoting energy equity.[127] Washington's CRA encourages financial institutions to support these projects while advancing renewable energy adoption in underserved communities. In

[121] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[122] Ibid.
[123] Clean Energy Group & Council of Development Finance Agencies. (2013). Clean Energy Bond Finance Model Industrial Development Bonds (IDBs). *Clean Energy and Bond Finance Initiative.* Retrieved from: https://www.cleanegroup.org/wp-content/uploads/Industrial-Development-Bonds.pdf.
[124] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[125] Elam, N., & Mahon, C. (2023). BankThink: The EPA Must Enable MDIs to Take the Lead on Climate Lending. *American Banker*. Retrieved from: https://www.americanbanker.com/opinion/the-epa-must-enable-mdis-to-take-the-lead-on-climate-lending.
[126] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.
[127] Solar Energy Industries Association. (2022). Press Release: Solar and Storage Industry Backs Banking Reforms that Bolster Equitable Clean Energy Deployment.

addition, Washington House Bill 1509, as a legislative approach, also emphasizes the importance of community solar in expanding equitable access to renewable energy, further reinforcing the alignment with CRA objectives.[128] Another example is the Community Energy Efficiency Program (CEEP), managed by Washington State University.[129] This small business energy efficiency program also qualifies as a CRA-eligible activity. CEEP encourages homeowners and small businesses to make energy efficiency improvements. These upgrades reduce operating costs and contribute to broader social sustainability goals.[130] By participating in such programs, financial institutions can demonstrate measurable benefits, such as lower energy bills and improved business resiliency, which helps them meet CRA requirements.

Below is a table that breaks down unique state CRA "qualifying investments" that could create opportunities for climate investments in LMI communities beyond federal law, as well as which types of financial institutions must comply. Please note that federal qualifying investments are capable of creating opportunities for climate investments, but for the purpose of this report, only unique departures from the federal CRA have been included that may offer additional opportunities for institutions to support climate projects.[131]

State	Unique Qualifying Investments	Institutions Covered
Illinois	Investments in MDIs and CDFIs.	Banks, Credit Unions, Mortgage Companies
Massachusetts	Investments in MDIs and women's depository institutions.	Banks, Mortgage Companies
Rhode Island	Investments in local community development and redevelopment projects or programs.	Banks, Credit Unions
Washington	Investments in local community and microenterprise projects, cash or in-kind support to state or local organizations supporting small businesses.	Banks
West Virginia	Industrial and economic development programs, industrial revenue bonds, and local/municipal school bonds.	Banks

Source: Consumer Financial Protection Bureau. (2023).

[128] Washington State Legislature. (2023). HB 1509 - Community Solar. *Washington State Bill Details*. Retrieved from: https://wa-law.org/bill/2023-24/hb/1509/1/.
[129] WSU Energy Program. (n.d.). Community Energy Efficiency Program. *Washington State University*. Retrieved from: https://energy.wsu.edu/BuildingEfficiency/CommunityEEProgram.aspx.
[130] American Council for an Energy-Efficient Economy. (n.d.). State and Local Policy Database: Washington. Retrieved from: https://database.aceee.org/state/washington.
[131] Consumer Financial Protection Bureau. (2023). State Community Reinvestment Acts: Summary of State Laws.

Case Studies: Leveraging the CRA

Building on state-level adaptations and regulatory insights, the following four case studies – SAFER Bay Project, Lakeview/City Park Hazard Mitigation Project, Craft3 – Cape Foulweather, and Memphis Block Wellness – illustrate how the CRA finances climate resilience investments, detailing each initiative, relevant CRA-qualifying activities, and supported climate infrastructure.

Case Study 1: SAFER Bay Project

Source: San Francisquito Creek Joint Powers Authority

Introduction

The watershed and floodplain of San Francisquito Creek, California, which stretches approximately 130 square kilometers from the Santa Cruz Mountains to San Francisco Bay, is a region of significant economic and ecological importance. The Bay Area is central to the region's financial and tourism sectors and serves as a hub for major ports, heavy industry, and leading technology companies including the headquarters of Google, Facebook, and Hewlett-Packard. Despite its natural and economic wealth, the area has historically faced significant challenges related to riverine and coastal flooding. Many of the poorest communities in the region are particularly vulnerable, with homes located below sea level and protected only by non-engineered berms that function as makeshift levees. The overlapping floodplains of the creek and the bay pose additional risks, threatening critical regional infrastructure, including transportation networks, water supply and treatment systems, and electrical and natural gas transmission facilities. Surrounded by dense residential and commercial development, the creek

is also home to diverse plant and animal species, as well as recreational spaces used by local residents and visitors. However, the history of flooding, including a major event in 1998 that damaged approximately 1,700 properties, underscored the need for coordinated action to address these challenges. To transform the creek and its surrounding floodplains from liabilities into assets, five local agencies spanning two counties came together in 1998 to form the San Francisquito Creek Joint Powers Authority (SFCJPA). This multi-jurisdictional regional agency, representing the cities of Palo Alto, Menlo Park, and East Palo Alto, along with San Mateo County and the Santa Clara Valley Water District, was created to address the region's shared flooding, environmental, and recreational challenges.[132]

Background

The Strategy to Advance Flood Protection, Ecosystems, and Recreation along the Bay (SAFER Bay Project) is a transformative initiative developed by the SFCJPA to address the critical challenges faced by communities and ecosystems in the San Francisco Bay Area. This multi-benefit, multi-jurisdictional project integrates flood protection, habitat restoration, and recreational enhancements, while also safeguarding critical infrastructure and providing long-term community resilience to climate-related risks.[133]

Location and Context: The SAFER Bay Project serves East Palo Alto, Menlo Park, and Palo Alto. East Palo Alto, an LMI community, has a population of about 30,000, with 63% Hispanic, 11% Black, and 10% Asian residents. Many homes rely on aging berms for flood protection. The project also safeguards commercial areas and major infrastructure, including transportation networks, power substations, and the Hetch Hetchy water transmission pipelines serving 2.4 million people.

Year: Planning began in 2016 in response to past flooding, including the 1998 event that damaged 1,700 properties. Major funding was secured in 2023, with construction expected to proceed in phases through the late 2020s.

Lead Planning and Implementing Entities: SFCJPA leads the project, working with Palo Alto, Menlo Park, East Palo Alto, San Mateo County, and the Santa Clara Valley Water District. Funding comes from the California Department of Water Resources, the San Francisco Bay Restoration Authority, FEMA's Building Resilient Infrastructure and Communities (BRIC) Program, and private sector partners like PG&E and Meta.

Project Status: The project is in the design and permitting phase, with construction set to begin in stages over the next few years.

[132] Mandle, L. A., Ouyang, Z., Salzman, J. E., & Daily, G. C. (2019). Green Growth That Works: Natural Capital Policy and Finance Mechanisms Around the World. *Island Press.*
[133] San Francisquito Creek Joint Powers Authority. (n.d.). SAFER Bay Project.

Connection to Climate Adaptation and Resilience: SAFER Bay mitigates tidal flooding, storm surges, and sea level rise using engineered levees and marshland restoration. It enhances flood resilience in vulnerable communities while improving biodiversity.

Climate Adaptation Project Specifics

Primary Climate Risks Mitigated: The SAFER Bay Project mitigates tidal flooding and sea level rise through engineered flood control structures and nature-based solutions. Horizontal levees with gradual slopes and ecological zones sustain marshlands while protecting against storm surges and rising tides. The project restores critical habitats in the bay's floodplain and former salt ponds, supporting federally endangered and threatened species while improving ecological health. Marshland restoration creates wildlife habitats, sequesters carbon, and improves water quality by filtering pollutants and trapping sediments. SAFER Bay protects critical infrastructure, including the Hetch Hetchy water transmission pipelines, which supply drinking water to over 2.4 million residents, and the Ravenswood and Cooley Landing electrical substations, which provide power to over 300,000 customers.[134]

Co-Benefits: The project will enhance public access to recreational spaces by expanding the Bay Trail network and upgrading levee-top bicycle and pedestrian trails. These improvements promote physical activity, mental well-being, and connectivity between communities while providing alternative transportation routes for commuters in the highly urbanized Silicon Valley region.[135]

[134] San Francisquito Creek Joint Powers Authority. (n.d.). SAFER Bay Project.
[135] Ibid.

Funding Mechanisms (in USD)

Grant Agency	Grantee	Amount	Match	Match Source
CA Department of Water Resources	SFCJPA	$1,045,625	$448,125	East Palo Alto and Menlo Park
San Francisco Bay Restoration Authority (SFBRA) (Measure AA Parcel Tax 9-County Bay Area)	SFCJPA	$4,980,000	0	0
CalOES HMGP (Hazard Mitigation Grant Program) East Palo Alto Phase 1 Funding (active)	East Palo Alto	$3,643,253	$1,162,310	City of East Palo Alto
CalOES HMGP East Palo Alto Phase 2 Funding (pending)	East Palo Alto	$18,454,137	$4,612,690	City of East Palo Alto
FEMA BRIC/Menlo Park (Phase 1 awarded May 31, 2023)	Menlo Park	$3,759,474	$1,330,526	PG&E ($10M) and Meta ($7.8M)
FEMA BRIC/Menlo Park Phase 2 Funding (pending)	Menlo Park	$46,420,526	$16,469,474	PG&E ($10M) and Meta ($7.8M)
Subtotal		$78,123,015	$24,023,125	
Total Funding		**$102,146,140**		

Source: SAFER Bay Project Fact Sheet (2023)[136]

The SAFER Bay Project secured funding through a blended finance approach, combining private, federal, regional, and local sources. The project has raised over USD$102 million, with major contributions from FEMA's BRIC and HMGP programs, the California Department of Water Resources, and the SFBRA's Measure AA parcel tax. Local governments, including East Palo Alto and Menlo Park, have provided required match funding, while private sector partners PG&E and Meta contributed nearly USD$20 million.[137]

[136] San Francisquito Creek Joint Powers Authority. (2023). SAFER Bay Project Summary Fact Sheet.
[137] Ibid.

How Would CRA Dollars Be Applied to This Case Study?

Of the communities that stand to benefit the most from the SAFER Bay Project, Belle Haven holds particular significance. As the only neighborhood in Menlo Park east of Route 101, Belle Haven has a history of systemic disadvantage, shaped by its status as a historically redlined, predominantly Black, Indigenous, and People of Color community. Residents here, 69% Hispanic, 18% Black, 4% White, and 3% Asian/Pacific Islander, have faced barriers to building generational wealth due to discriminatory housing practices.[138] It is designated as an LMI census tract, qualifying this project for CRA credit.

This investment would qualify under the future CRA rule under the activity "disaster preparedness and weather resiliency." After the rule changes to the CRA in 2023, implementing agencies (FRB, OCC, and FDIC) issued a supplementary document titled *Supplementary Information*, containing a non-exhaustive list of examples of disaster preparedness and weather resiliency activities. Among the listed examples, this project qualifies as a "flood control system" due to its benefits to the flood-prone LMI census tract of Belle Haven.[139]

The *Supplementary Information* to these regulations allows for a range of financing options for banks to support Disaster Preparedness and Weather Resiliency (DP&WR) activities, including grants, loans, and non-financial resource support. Additionally, there is a requirement that DP&WR activities be implemented in conjunction with a government or mission-driven nonprofit initiative.[140] Possible CRA investments in the case of the SAFER Bay project could be grants for high-risk early-stage activities like permitting and feasibility studies, engineering and environmental assessments, and/or funding for community-led adaptation planning in conjunction with community-based organizations that are involved, such as Climate Resilient Communities and Nuestra Casa.[141] Banks could also provide grants or low-interest loans for the construction of the levees and drainage improvements, which is an example of qualifying activities Infrastructure Improvements Loan (T-4) and Flood Control System (U-5) under the current rules.[142]

Conclusion

The SAFER Bay Project exemplifies how climate resilience initiatives that provide broad regional benefits can successfully engage private sector actors when tangible benefits align with

[138] Community Reinvestment Communities. (n.d.). Belle Haven. Retrieved from: https://crcommunities.org/belle-haven.
[139] Keenan, J.M., Mattiuzzi, E., & Council, D. (2024). What's Possible: Investing Now for Prosperous, Sustainable Neighborhoods: Bridging Community Investment and Resilience in the Community Reinvestment Act. *Federal Reserve Bank of New York, Local Initiatives Support Corporation, and Enterprise Community Partners.*
[140] Ibid.
[141] San Francisquito Creek Joint Powers Authority. (n.d.). SAFER Bay Project.
[142] Office of the Comptroller of the Currency (OCC). (n.d.). CRA Illustrative List of Qualifying Activities.

their interests. Traditionally, the private sector views public works, including environmental and infrastructure projects, as the sole responsibility of government entities. However, when projects like SAFER Bay demonstrate unique, direct advantages—such as flood protection for critical infrastructure or business continuity—private entities can be motivated to actively participate in funding, planning, and implementation.

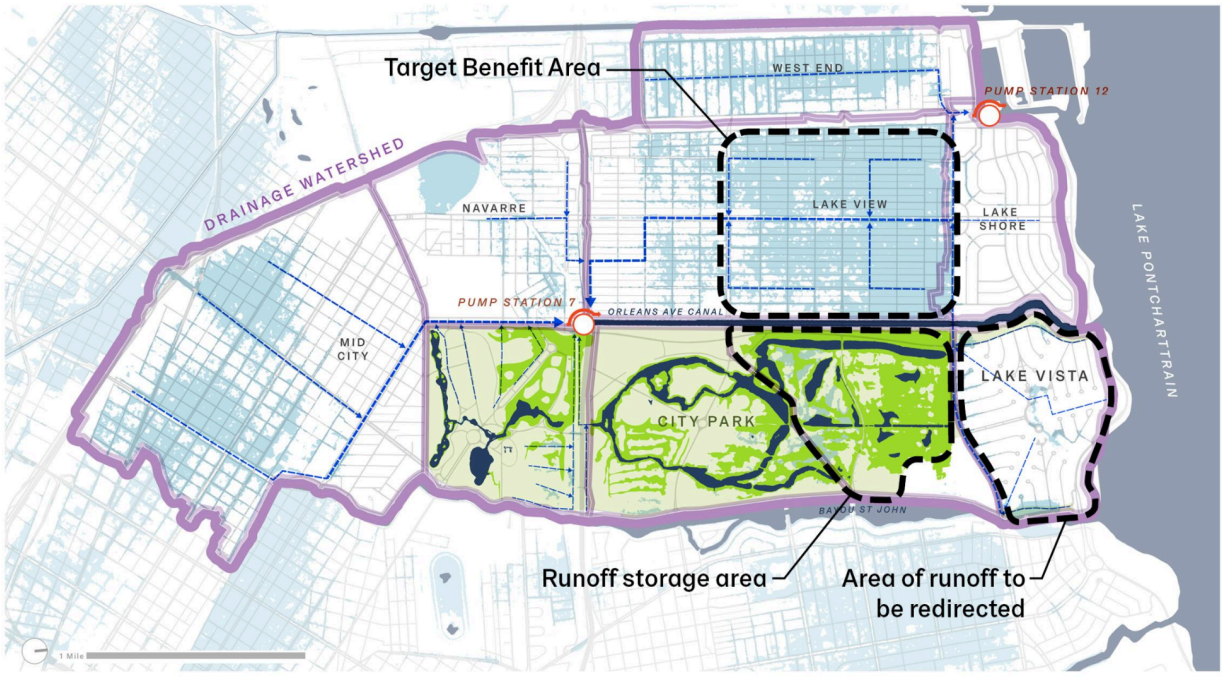
SAFER Bay leveraged this principle by securing significant contributions from PG&E and Meta, whose facilities faced specific, direct risks from flooding and sea-level rise:

- PG&E: The Ravenswood and Cooley Landing electrical substations, which serve over 300,000 customers across the Peninsula, were highly vulnerable to tidal flooding and storm surges.[143]
- Meta (parent company of Facebook): Meta's headquarters campus, located in a marshland near the Bay, was directly threatened by rising sea levels and storm-related flooding.[144]

Even with challenges such as jurisdictional boundaries, land use constraints, and complex permitting requirements, the SAFER Bay Project demonstrates that multi-benefit, multijurisdictional initiatives can drive compromises among stakeholders and deliver solutions that protect communities, ecosystems, and businesses alike.[145]

[143] San Francisquito Creek Joint Powers Authority. (n.d.). SAFER Bay Project.
[144] Mandle, L. A., Ouyang, Z., Salzman, J. E., & Daily, G. C. (2019). Green Growth That Works: Natural Capital Policy and Finance Mechanisms Around the World. *Island Press*.
[145] Ibid.

Case Study 2: [Lakeview/City Park Hazard Mitigation Project]



Source: Lakeview/City Park Hazard Mitigation Project

Introduction

The City of New Orleans, with its 300-year history, faces significant challenges in stormwater management due to limited green space for new infrastructure projects. For over a century, the city has relied on forced drainage systems to pump rainwater out, which is both expensive and resource-intensive while also contributing to ground subsidence. New Orleans experiences frequent extreme rainfall events, with a 10-year precipitation event bringing approximately 8.5 inches of rain in 24 hours, most of which often falls in a concentrated one to two-hour period. The challenges are further exacerbated by the overlap between hurricane season and the summer months when intense rainfall is most frequent, leading to widespread flooding across the city.[146]

To address these risks, the Lakeview/City Park Hazard Mitigation Project in New Orleans uses a comprehensive approach to urban flood management. It integrates both engineered and natural solutions and effectively enhances climate resilience. By improving the lagoon systems within City Park, this project aims to mitigate flood risks in the Lakeview neighborhood and nearby areas by increasing stormwater storage capacity and reducing reliance on the city's aging pump

[146] Lakeview/City Park Hazard Mitigation Project. (n.d.).

and pipe infrastructure.[147] Once completed, the enhanced lagoons are expected to store up to 49 million gallons of stormwater, significantly reducing flood risks in the surrounding neighborhoods.[148]

Background

Location and Context: The project serves the residents of Lakeview and Lake Vista. Historically, Lakeview has been a middle to upper-middle-class neighborhood. Lakeview had approximately 9,512 residents, with 74% identifying as White, 18% as Hispanic, 4% as African American, and 2% as Asian.[149] The median household income in Lakeview is significantly higher than the city average, so it is not considered an LMI community.

Construction Status: Planning for the Lakeview/City Park Hazard Mitigation Project began in the early 2020s. By late 2021, the engineering and design process was at least 90% complete.[150] However, significant resident concerns and political opposition stalled the project's implementation. In May 2022, public meetings revealed strong resistance from residents.[151] According to Feldbaum, "There's a lot of mistrust in government in general, and they had valid concerns that it wouldn't work as the designers were telling them."[152] As a result, construction did not proceed as expected and remains uncertain. Discussions of alternative drainage solutions are still ongoing.

Lead Planning and Implementing Entities: The project is a collaborative effort between the City of New Orleans and City Park officials. Funding comes from the FEMA HMGP.[153]

Connection to Climate Adaptation and Resilience: This project directly addresses climate adaptation by enhancing flood protection and stormwater management in the Lakeview and Lake Vista areas. By improving the lagoon systems within City Park to reduce flooding during intense rain events, the neighborhood's resilience to climate-induced weather patterns is increased. In addition, this project aligns with broader climate resilience goals in New Orleans. It integrates

[147] Lakeview/City Park Hazard Mitigation Project. (n.d.).
[148] Mayor's Office. (2021). City Announces Resilience Design Review Committee meeting for Lakeview City Park Drainage Improvement. *NOLA.gov.*
[149] Niche. (n.d.). Lakeview Residents. Retrieved from: https://www.niche.com/places-to-live/n/lakeview-new-orleans-la/residents/
[150] City of New Orleans announces Resilience Design Review Committee meeting for Lakeview/City Park Hazard Mitigation Grant Program Project. (2021). *New Orleans Newswire.*
[151] Myers, B. (2022). Mayor LaToya Cantrell blames Lakeview residents for drainage project delays, threatens funding. *NOLA.com.*
[152] Feldbaum, A. (2025). Interview by Daniel Gunton, Hazard Mitigation Administrator, City of New Orleans.
[153] Mayor's Office. (2021). City Announces Resilience Design Review Committee meeting for Lakeview City Park Drainage Improvement. *NOLA.gov.*

green infrastructure solutions to manage stormwater, contributing to the city's overall sustainability goals.[154]

Climate Adaptation Project Specifics

Primary Climate Risks Mitigated: The Lakeview/City Park Hazard Mitigation Project in New Orleans tackles major climate-related challenges. It primarily addresses urban flooding caused by heavy rainfall and storm surges. By enhancing the lagoon systems within City Park, the project aims to store up to 49 million gallons of stormwater to reduce the burden on the city's drainage infrastructure. Additionally, improvements in water management infrastructure help mitigate the impacts of storm surges, which are expected to become more frequent and severe due to climate change. The project also considers the impacts of rising sea levels and changing precipitation patterns. By improving stormwater management, it boosts the city's resilience against future climate uncertainties.[155]

Co-Benefits Beyond Flood Protection: In addition to mitigating flood risks, the project also supports environmental restoration. Enhancing the lagoon systems promotes natural filtration, which improves water quality and supports local ecosystems. The integration of green infrastructure, such as bioswales and natural filtration zones, helps capture and treat stormwater runoff. This reduces pollution and fosters biodiversity.[156] Economically, the project enhances public safety by reducing flood-related disruptions and potential property damage. Improved stormwater management can decrease disaster recovery costs, offering long-term financial savings for the community. Socially, the project improves public spaces within City Park, providing recreational opportunities and contributing to residents' well-being.[157]

Cost-Benefit Analysis: The Lakeview/City Park Hazard Mitigation Project in New Orleans is a major investment in climate resilience and urban sustainability. By expanding the lagoon system, the project seeks to improve stormwater retention, thereby reducing the frequency and severity of flooding in surrounding neighborhoods. Additionally, the integration of green infrastructure, such as bioswales and shoreline stabilization, is intended to support local biodiversity and improve water quality.[158] From an economic perspective, this project is expected to generate long-term cost savings. Flood-related disasters impose significant financial burdens on communities. These include infrastructure repairs, emergency response costs, and property

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[154] Lakeview/City Park Hazard Mitigation project. (n.d.).
[155] City of New Orleans. (2021). City announces Resilience Design Review Committee meeting for Lakeview/City Park Hazard Mitigation Grant Program Project.
[156] Newton, E. (2023). How do bioswales protect water from urban runoff? *Stormwater Solutions*. Retrieved from: https://www.stormwater.com/transportation-and-construction/runoff/article/53071912/how-do-bioswales-protect-water-from-urban-runoff.
[157] City of New Orleans. (2021). City announces Resilience Design Review Committee meeting for Lakeview/City Park Hazard Mitigation Grant Program Project.
[158] Lakeview/City Park Hazard Mitigation project. (n.d.).

damage expenses. By proactively managing stormwater, this project reduces the likelihood of severe flooding events.

Funding Mechanisms (in USD)

Grant Agency	Grantee	Potential Amount	Match Requirement	Match Source
FEMA[159]	HMGP	$18 million	Typically 25% Non-Federal	State/local government funds

Note: The team only identified one grant agency, and no publicly available information was found on other grant agencies, their specific programs, potential funding amounts, match requirements, or sources.

How Would CRA Dollars Be Applied to This Case Study?

The 2023 CRA rule changes expand the scope of eligible community development activities beyond post-disaster recovery and include pre-disaster climate resilience projects. According to *Supplementary Information* from federal regulators, the Lakeview/City Park Hazard Mitigation Project is eligible for "flood control systems."[160] While the project was not explicitly designed for LMI communities, similar flood mitigation initiatives could qualify for CRA credit if structured to serve LMI populations or designated disaster-prone census tracts.

Among the non-exhaustive list of DP&WR activities of *Supplementary Information*, the Lakeview/City Park Hazard Mitigation Project aligns with several CRA-qualifying activities that support climate resilience and flood mitigation. For example, banks could provide low-interest loans or invest in municipal bonds under Flood Control Systems (U-5) to finance stormwater retention basins and drainage improvements as part of the city's broader flood mitigation strategy. Additionally, under Flood Prevention in LMI Areas (U-8), financial institutions could purchase municipal bonds to support infrastructure projects that prevent flooding in LMI-designated neighborhoods to reduce both economic and public health risks. Investments in Water and Wastewater System Improvements (T-3) could also allow banks to finance upgrades to stormwater infrastructure, bioswales, and green drainage systems, which further enhance New Orleans' climate resilience. Finally, if the City of New Orleans designates a Tax Increment Financing (TIF) district, banks could invest in TIF bonds (Z-4) to fund stormwater management

[159] Mayor's Office. (2021). City announces Resilience Design Review Committee meeting for Lakeview City Park Drainage Improvement. *NOLA.gov.*

[160] Keenan, J.M., Mattiuzzi, E., & Council, D. (2024). What's Possible: Investing Now for Prosperous, Sustainable Neighborhoods: Bridging Community Investment and Resilience in the Community Reinvestment Act. *Federal Reserve Bank of New York, Local Initiatives Support Corporation, and Enterprise Community Partners.*

improvements in flood-prone LMI areas, ensuring long-term community protection and sustainability.[161]

As CRA-eligible activities expand to include climate adaptation, financial institutions and community stakeholders now have the opportunity to reframe traditional urban infrastructure projects through a resilience perspective. Programs previously limited to housing and transportation can now incorporate nature-based flood mitigation strategies to qualify for CRA credit and attract greater investment.

Conclusion

The Lakeview/City Park Hazard Mitigation Project is a notable example of a climate-adaptive approach to urban flood management, combining nature-based and engineered solutions to improve stormwater retention and flood resilience. By expanding the lagoon system in City Park, the project aims to reduce reliance on aging drainage infrastructure while offering co-benefits such as improved water quality and ecosystem restoration. However, community opposition has stalled implementation, highlighting the need for greater public engagement and trust-building in resilience planning.

From a funding perspective, the project predominantly relies on FEMA HMGP funding, with limited publicly available information on additional sources. Under the 2023 CRA rule changes, similar flood mitigation initiatives could qualify for CRA credit if structured to benefit LMI communities or disaster-prone census tracts. Banks could support such projects through low-interest loans, municipal bonds, or TIF financing (U-5, U-8, T-3, and Z-4), thereby strengthening both community resilience and CRA investment opportunities.

Overall, the Lakeview/City Park Hazard Mitigation Project, as a scalable framework for urban flood resilience, demonstrates how integrated stormwater management can improve climate adaptation. It highlights the intersection of climate resilience, infrastructure financing, and community development, and stresses the critical role of financial institutions in promoting long-term sustainability and catastrophe preparedness initiatives.

[161] Office of the Comptroller of the Currency (OCC). (n.d.). CRA Illustrative List of Qualifying Activities.

Case Study 3: Craft3 – Cape Foulweather

Source: Yachats News

Introduction

The Confederated Tribes of Siletz Indians (CTSI) successfully reclaimed 27 acres of ancestral coastal land at Cape Foulweather, Oregon, using innovative conservation bridge financing. This project exemplifies how flexible capital can support tribal sovereignty, ecological preservation, and cultural revitalization. Craft3's Conservation Bridge Fund played a critical role by providing bridge financing to secure the property before permanent funding became available.
This case study highlights the power of conservation bridge financing within the structure and qualifying activities of CRA[162] in advancing land repatriation and environmental conservation for underserved communities, demonstrating a replicable financial model for similar initiatives.[163]

[162] Office of the Comptroller of the Currency (OCC). (n.d.). CRA Illustrative List of Qualifying Activities.
[163] Confederated Tribes of the Siletz Indians. (n.d.). Creating the Coast (Siletz) Reservation.

Background

Location: Cape Foulweather, a coastal property with significant ecological and cultural importance, was originally part of a 1.1-million-acre reservation established in 1855 for CTSI. In 1865, an executive order issued by President Andrew Johnson released much of this property for use by White settlers in the Willamette Valley.[164] The headland, defined by its rocky shore and Sitka spruce forest, historically provided a setting for hunting, fishing, and gathering by CTSI. Over several decades, members of the CTSI community have sought to regain control of their ancestral property along the Oregon coast. The urgency of this effort became clear when a 27-acre parcel on Cape Foulweather was listed for sale in March 2021, creating a risk that a private developer might acquire it before CTSI could secure the necessary funds.[165]

Year: The acquisition process began in 2021, and the land was secured in August 2022 with the assistance of Craft3's Conservation Bridge Fund and the McKenzie River Trust (MRT). Established in 2011 through a program-related investment and grants from the Meyer Memorial Trust, the fund has been actively supporting conservation efforts for over a decade. Since its inception, it has closed 36 loans and deployed USD$26.3 million in conservation financing, helping 23 organizations conserve over 18,000 acres in Oregon and Washington.[166] In 2023, a federal award of $2.01 million under the National Oceanic and Atmospheric Administration (NOAA) Coastal Zone Management Habitat Protection and Restoration program ensured that the bridge loan would be repaid, facilitating the final transfer of the property to CTSI in 2024.

Lead Planning and Implementing Entities: The project is a collaborative effort involving multiple organizations, including CTSI, Craft3's Conservation Bridge Fund, the MRT, Lincoln County, The Nature Conservancy, and the M.J. Murdock Charitable Trust.

Construction Status: As a land acquisition and conservation project, no construction is involved. CTSI completed the multi-year effort to regain ownership of the land in November 2024.[167]

Connection to Climate Adaptation and Resilience: The project protects coastal ecosystems, mitigates land degradation, and preserves culturally significant landscapes vulnerable to climate change impacts.[168]

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[164] Kuhnhausen, K. (2023). Press Release—NOAA Grant Helps Secure Culturally Significant Lands for the Confederated Tribes of the Siletz Indians. *Coalition of Oregon Land Trusts*.
[165] Mayham, A. (2023). Oregon Tribes Receive Grant to Purchase Land on Cape Foulweather. *Courthouse News Service.*
[166] Craft3. (n.d.). *Conservation Bridge Fund.*
[167] Tims, D. (2024). Siletz Tribe Completes Purchase of 27 Acres on Cape Foulweather That was Once Part of Its Reservation. *YachatsNews*. Retrieved from: https://yachatsnews.com/siletz-tribe-announces-purchase-of-27-acres-on-cape-foulweather-that-was-once-part-of-its-reservation/.
[168] Torre, J., & Mason, S. (2023). Case Study: Cape Foulweather Bridge Financing. *Nicholas Institute for Energy, Environment & Sustainability, Duke University.*

Funding Mechanisms (in USD)

Grant Agency	Grantee	Amount	Match	Match Source
NOAA	Department of Land Conservation and Development and CTSI	$2.01 million	$300,000	McKenzie River Trust (private donations)
Craft3's Conservation Bridge Fund	McKenzie River Trust	Unspecified low-interest bridge loan	N/A	N/A

Source: Information synthesized from "Background" section of case study.

The Cape Foulweather project involved multiple funding sources beyond the USD$2 million NOAA grant. In August 2022, MRT secured the 27-acre parcel at Cape Foulweather using a low-interest bridge loan from Craft3's Conservation Bridge Fund to prevent its conversion for commercial use, supplemented by USD$300,000 from MRT's own resources and support from the Lincoln County Land Legacy Program.[169] This acquisition was made possible through a flexible, low-interest bridge loan provided by Craft3's Conservation Bridge Fund, with MRT also contributing USD$300,000 from its own resources.[170] The financing strategy was developed in cooperation with CTSI, Lincoln County, The Nature Conservancy, and the M.J. Murdock Charitable Trust.[171] The bridge loan allowed MRT to complete the purchase rapidly, a necessary step given the risk of a swift sale to private interests. Soon after the acquisition, MRT, CTSI, and the Oregon Coastal Management Program prepared a grant proposal under the NOAA Coastal Zone Management Habitat Protection and Restoration Bipartisan Infrastructure Law program. In 2023, this effort resulted in a federal award of USD$2.01 million.[172] The funding repaid the bridge loan and facilitated the transfer of the property back to CTSI in November 2024.[173]

[169] McKenzie River Trust. (n.d.). Conserving Cherished Places on Oregon's Coast. Retrieved from: https://mckenzieriver.org/conserving-cherished-places-on-oregons-coast/
[170] Craft3. (n.d.). Conservation Bridge Fund.
[171] Kuhnhausen, K. (2023). Press Release—NOAA Grant Helps Secure Culturally Significant Lands for the Confederated Tribes of the Siletz Indians. *Coalition of Oregon Land Trusts*.
[172] Oregon Department of Land Conservation and Development. (2023). News Release—DLCD and Confederated Tribes of Siletz Indians awarded Bipartisan Infrastructure Funding for Coastal Resilience.
[173] Tims, D. (2024). Siletz Tribe Completes Purchase of 27 Acres on Cape Foulweather That was Once Part of Its Reservation. *YachatsNews*.

Climate Adaptation Project Specifics

Primary Climate Risks Mitigated: The project mitigates several key environmental challenges including coastal erosion, habitat degradation, and biodiversity loss. The protection of this land helps stabilize shorelines that are increasingly vulnerable to climate change-related risks. The prevention of commercial development ensures that the local ecosystem remains intact and biodiversity is preserved while the negative environmental impacts associated with land conversion are prevented.[174]

Co-Benefits: Craft3's Conservation Bridge Fund also intends to create opportunities for education and outreach by informing visitors about the ecological functions and cultural importance of protected coastal regions. In the case of Cape Foulweather, returning the management of the property to CTSI will allow traditional practices to be reinstituted, which supports both environmental stewardship and community resilience.[175]

How Would CRA Dollars Be Applied to This Case Study?

CRA funds could support projects like Cape Foulweather by providing financial instruments that reduce risks for tribal property acquisitions as a whole. CRA dollars could be used to offer loan guarantees that lower the financial barriers faced by tribal entities in acquiring ancestral property.[176]Alternatively, financial institutions might allocate direct grants through CRA programs[177] to help secure culturally significant properties for Native communities.[178] This type of financial support would align with the dual objectives of advancing community development and protecting environmentally sensitive sites, making such projects eligible under CRA guidelines. It can also be replicated for other types of land trusts, including those focused on building resilient parks or housing developments. This approach aligns well with CRA guidelines, and is an example of Tribal Community Revitalization Grant (Z-1) under the list of qualifying activities, as the updated regulations include investments in "disaster preparedness and climate resilience" for LMI communities, making such projects potentially eligible for CRA consideration while advancing community development objectives.[179] CRA programming could also forge strategic partnerships with Native communities through direct technical assistance, such as banks providing financial guidance on land management and conservation to CTSI and

[174] Torre, J., & Mason, S. (2023). Case Study: Cape Foulweather Bridge Financing. *Nicholas Institute for Energy, Environment & Sustainability, Duke University.*
[175] Ibid.
[176] Oregon Department of Land Conservation and Development. (2023). News Release—DLCD and Confederated Tribes of Siletz Indians awarded Bipartisan Infrastructure Funding for Coastal Resilience.
[177] Federal Reserve History. (1977). Community Reinvestment Act of 1977. Retrieved from: https://www.federalreservehistory.org/essays/community-reinvestment-act
[178] Confederated Tribes of the Siletz Indians. (n.d.). Creating the Coast (Siletz) Reservation.
[179] Office of the Comptroller of the Currency (OCC). (n.d.). CRA Illustrative List of Qualifying Activities.

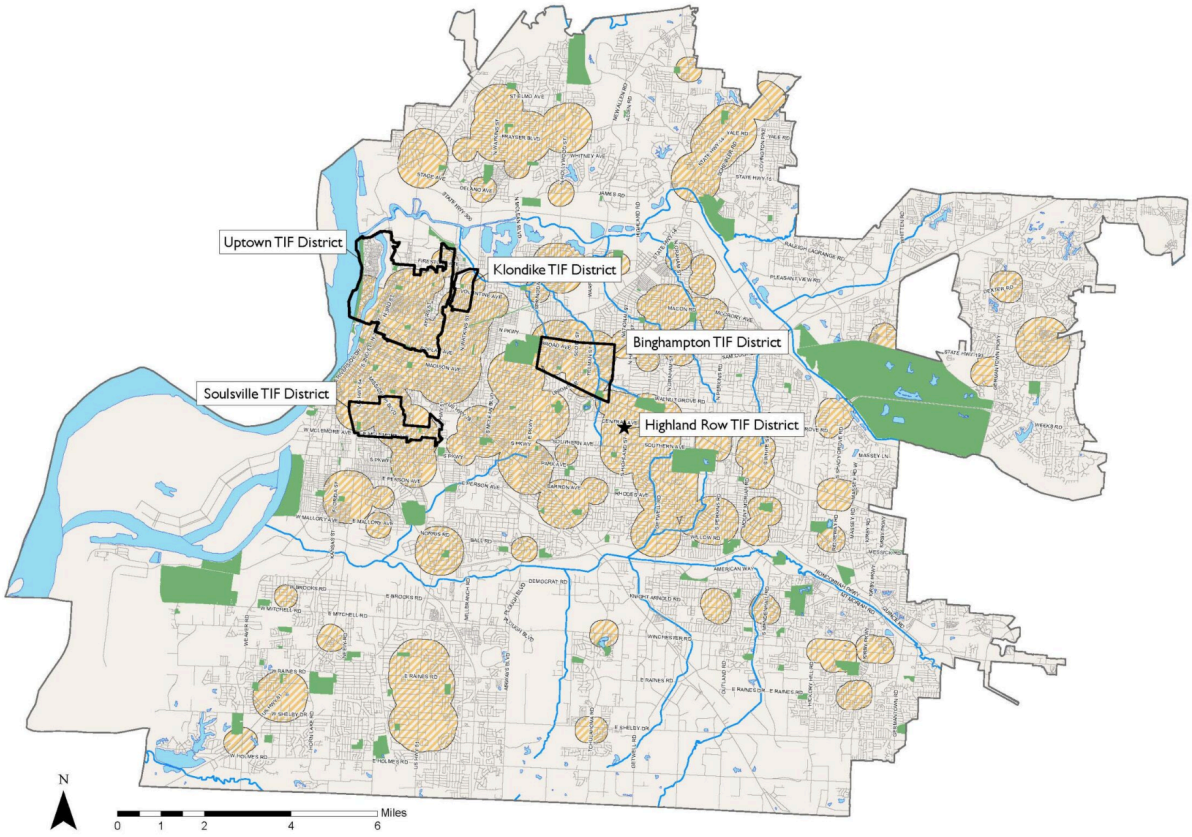
collaborating with Native Community Development Financial Institutions[180] to design project financing.[181]

Conclusion

The Cape Foulweather project provides an example of how flexible financing mechanisms can facilitate the rapid acquisition of property with both cultural and environmental significance. Through the use of a low-interest bridge loan from Craft3 and the Conservation Bridge Fund, the MRT was able to secure the property before it could be developed commercially.[182] The return of the 27-acre parcel to CTSI will allow traditional stewardship practices to be reinstated, thereby supporting the preservation of coastal ecosystems and reinforcing community resilience not only for CTSI but LMI communities as a whole.

[180] Oxendine, C. (2023). Revised Community Reinvestment Act Opens New Avenues for Native Businesses, Communities. *Tribal Business News*.
[181] Castillo, D., Mitchell, B.C., Richardson, J., & Edlebi, J. (2023). Redlining The Reservation: The Brutal Cost Of Financial Services Inaccessibility In Native Communities. *National Community Reinvestment Coalition.*
[182] Mayham, A. (2023). Oregon Tribes Receive Grant to Purchase Land on Cape Foulweather. *Courthouse News Service.*

Case Study 4: Memphis Block Wellness



Source: Memphis and Shelby County Community Redevelopment Agency

Introduction

Memphis, Tennessee has been shaped by decades of disinvestment, White flight, and exclusionary housing policies, leaving many neighborhoods with aging infrastructure, abandoned properties, and widespread blight. Historically, communities such as North Memphis, South Memphis, and Orange Mound were systematically denied investment, cutting them off from the financial resources needed to maintain homes, improve infrastructure, and/or support local businesses.

By the 1980s, the closure of major employers like Firestone and International Harvester led to large-scale job losses, accelerating economic decline in already struggling communities. As middle-class residents and businesses moved to suburban areas, property values dropped, leaving behind vacant buildings, overgrown lots, and crumbling infrastructure. Without reinvestment,

these conditions worsened, creating environmental hazards, safety risks, and increased costs for low-income residents.

Recognizing the urgent need for neighborhood revitalization, the Memphis and Shelby County Community Redevelopment Agency (MSCCRA) was established to tackle blight, stabilize property values, and direct investment into historically disinvested areas. The Memphis Block Wellness program is one of MSCCRA's initiatives that aims to address long-standing infrastructure deficiencies through targeted block-by-block interventions.[183]

Background

Location and Context: The Memphis Block Wellness program serves neighborhoods within the Uptown TIF District, including areas with a history of systemic disinvestment such as North Memphis, South Memphis, and Orange Mound. These communities have experienced decades of economic decline due to White flight, industrial job losses, and exclusionary housing policies. Many residential areas are classified as LMI.[184]

Year: The program is an ongoing initiative of the MSCCRA, with active cleanup and infrastructure improvements occurring regularly. Each month, five companies are contracted to clean the 102 streets of the Uptown TIF district, with special attention given to the streets that need it most.[185] There is no publicly available information on its start date.

Lead Planning and Implementing Entities: The program is led by the MSCCRA, which oversees the planning, implementation, and coordination of neighborhood cleanup and resilience initiatives. The MSCCRA partners with multiple local contractors and service providers to carry out debris removal, tree clearing, and infrastructure repairs.[186]

Construction Status: The program operates as an ongoing neighborhood revitalization effort rather than a one-time construction project.

Climate Adaptation Project Specifics

Primary Climate Risks Mitigated: The Memphis Block Wellness program reduces climate risks by addressing storm hazards, extreme heat, and flooding in vulnerable neighborhoods. Removing dead trees prevents wind damage that could destroy homes and infrastructure. Clearing overgrown lots improves drainage and mitigates standing water, reducing localized flooding risks. While the program currently focuses on hazard removal, it has the potential to expand into

[183] Memphis Community Redevelopment Agency. (2020). The Beacon (Issue 1).
[184] Ibid.
[185] Memphis Community Redevelopment Agency. (2020, August). The Beacon (Issue 7).
[186] Ibid.

planting wind-resistant trees, which could provide long-term resilience benefits by reducing storm impacts, cooling neighborhoods, and improving air quality.[187]

Co-Benefits: The program strengthens neighborhood resilience through property value stabilization, public safety improvements, and economic revitalization. Removing overgrowth deters crime and illegal dumping, while infrastructure upgrades attract businesses and promote long-term investment. Expanding the program to include tree planting could mitigate urban heat island effects, lower cooling costs, and enhance public health.[188]

Funding Mechanisms

The MSCCRA utilizes TIF to reinvest in Memphis neighborhoods that have experienced long-term disinvestment. TIF captures increases in property tax revenue beyond a set base year and directs those funds toward housing, streets, sidewalks, parks, and other critical infrastructure improvements. Unlike many TIFs that focus on commercial development, downtown revitalization, or tourism, the Uptown TIF is guided by community priorities and covers broad residential and mixed-use areas to ensure reinvestment directly benefits long-term neighborhood stability.[189]

Note: A funding mechanism table is not included as publicly available information published by the MSCCRA indicates that the Memphis Block Wellness program is solely TIF-financed.

How Would CRA Dollars Be Applied to This Case Study?

The updates to the CRA shift the focus from post-disaster recovery to pre-disaster preparedness, creating new opportunities to invest in community resilience. Under the DP&WR category, financial institutions can now support projects that reduce climate-related risks before disasters occur.[190]

The Memphis Block Wellness Program already reduces storm hazards by removing dead trees, lowering property damage and insurance costs for LMI households. Expanding the program to replace removed trees with wind-resistant species would enhance long-term resilience by reducing storm damage, mitigating extreme heat, and improving public health. The *Supplementary Information* to the 2023 CRA rule changes includes a non-exhaustive list of

[187] Keenan, J.M., Mattiuzzi, E., & Council, D. (2024). What's Possible: Investing Now for Prosperous, Sustainable Neighborhoods: Bridging Community Investment and Resilience in the Community Reinvestment Act. *Federal Reserve Bank of New York, Local Initiatives Support Corporation, and Enterprise Community Partners.*
[188] Ibid.
[189] Memphis Community Redevelopment Agency. (2020). The Beacon (Issue 1).
[190] Keenan, J.M., Mattiuzzi, E., & Council, D. (2024). What's Possible: Investing Now for Prosperous, Sustainable Neighborhoods: Bridging Community Investment and Resilience in the Community Reinvestment Act. *Federal Reserve Bank of New York, Local Initiatives Support Corporation, and Enterprise Community Partners.*

disaster preparedness and weather resiliency activities. One example is "greenspace and heat-mitigating landscapes." Under the new rules, a bank could effectively invest in the TIF bond that MSCCRA utilizes to fund a program expansion and be eligible for CRA credit as a DP&WR activity. Investments in TIF bonds qualify as community development investments under the current CRA rules (Z-4).[191]

Conclusion

As CRA-eligible activities expand to include climate adaptation, financial institutions and community stakeholders have the chance to reframe traditional redevelopment projects through a resilience lens. Programs previously limited to community development, housing and infrastructure can now incorporate resilience strategies to make themselves eligible for CRA credit and attract more funding opportunities from banks.[192] The Memphis Block Wellness program is one such example of the potential the CRA rule changes have to reshape programs with proactive strategies for climate resilience.

[191] Office of the Comptroller of the Currency (OCC). (n.d.). CRA Illustrative List of Qualifying Activities.
[192] Ibid.

Case Studies Comparison Table

The following table summarizes each project's multi-benefits, primary funding sources, and the specific CRA-eligible financing mechanisms employed. This comprehensive analysis not only demonstrates the practical application of the updated CRA rules but also provides a blueprint for replicable strategies that can empower LMI communities through sustainable, climate-resilient investments.

**Note: Some CRA-eligible financing mechanisms do not have designated qualifying activity topic numbers (e.g., Z-4) because they are based on the Supplementary Information provided by regulatory agencies for the 2023 rule changes and have not yet been formally codified. These mechanisms have been included based on an analysis of the non-exhaustive examples listed under the new DP&WR category.[193] In contrast, financing mechanisms with assigned codes are drawn from the Illustrative List of Qualifying Activities under the previous CRA regulations issued by OCC.[194]*

[193] Keenan, J. M., Mattiuzzi, E., & Council, D. (2024). *Bridging community investment and resilience in the Community Reinvestment Act.* In *What's possible: Investing now for prosperous, sustainable neighborhoods.* Federal Reserve Bank of New York.
[194] Office of the Comptroller of the Currency (OCC). (n.d.). CRA Illustrative List of Qualifying Activities.

Case Study	Multi Hazards/ Benefits	Primary Funding Sources	CRA Eligible Financing Mechanism	CRA Qualifying Activity	Climate Infrastructure Where This is Applicable
SAFER Bay Project	- Flood resilience - Ecological restoration - Critical infrastructure protection - Recreational co-benefits	- FEMA BRIC - CalOES HMGP - CA DWR - SFBRA - PG&E - Meta	- Grants for early-stage development activities - Low-interest loans for construction of levees and drainage infrastructure (T-4, U-5) - Grants for community-based organizations	- Community development - DP&WR - Flood control system	- Flood resilience projects with private sector involvement that can benefit from leveraging public dollars/grant money for early-stage derisking - Flood resilience projects that feature levees and drainage infrastructure - Projects that feature planning and collaboration with community-based organizations
Lakeview/City Park Hazard Mitigation Project	- Flood resilience - Stormwater management - Ecological resilience - Reduced reliance on aging drainage infrastructure	- FEMA HMGP	- Low-interest loans for stormwater retention and drainage improvements (U-5) - Municipal bonds (U-8, T-3), TIF Bonds (Z-4)	- Community development - DP&WR - Flood control system - Water and wastewater system improvements	- Flood resilience projects that integrate stormwater storage and expand green spaces - Stormwater retention systems - Nature-based infrastructure for resilience - Projects that reduce reliance on traditional gray drainage systems
Craft3 – Cape Foulweather	- Coastal erosion / habitat protection - Cultural preservation (tribal sovereignty) - Education / outreach - Community resilience	- NOAA grant - Craft3 Conservation Bridge Fund - McKenzie River Trust - Lincoln County Land Legacy Program	- Bridge financing (low-interest) - Potential loan guarantees / grants (Z-1)	- Land repatriation for underserved communities - Disaster preparedness & climate resilience - Environmental / LMI benefits	- Coastal habitat protection - Ecosystem conservation - Shoreline stabilization - Sustainable land use
Memphis Block Wellness	- Tree removal - Flood mitigation - Urban heat mitigation - Storm resilience	- Uptown TIF District	- TIF Bond (Z-4)	- Community development - DP&WR - Greenspace and heat-mitigating landscapes	- River flood control and ecological restoration - Seawall infrastructure - Transit infrastructure resilience upgrades

SECTION 6
Strategic Pathways and Challenges in a Deregulatory Landscape

Public-Private Partnerships (PPPs) and Innovative Financing

Attracting Private Sector Investment through PPPs

Despite the many benefits of climate-resilient infrastructure, implementing and procuring financing faces significant challenges. Financial barriers, such as high upfront costs and fragmented funding sources, often deter investment.[195] Hsu and Chao also emphasize that while the long-term benefits of green infrastructure, such as reduced recovery costs and lower insurance premiums, are significant, these are often undervalued or overlooked in traditional economic assessments.[196] Public perception can also pose a challenge, particularly for innovative solutions like water reuse systems. Chaudhry and Harper note that community resistance to potable water reuse comes from misconceptions about its safety and effectiveness. They also cite regulatory issues as another factor that further complicates the implementation of some types of climate-resilient infrastructure.[197]

PPPs can offer an avenue for financing and implementing climate adaptation or mitigation projects. These collaborations leverage the resources, expertise, and risk-sharing capabilities of both public and private stakeholders to address funding gaps for large-scale projects. The private sector's involvement is often motivated by profitability, risk mitigation, and alignment with corporate social responsibility goals. Climate mitigation efforts such as renewable energy projects like wind farms and solar installations are attractive and well-invested in because they can offer substantial returns and present less risk. Adaptation projects, such as flood defenses or water reuse systems, are less likely to attract investment due to perceived risks and longer payback periods.[198]

[195] Casady, C. B., Cepparulo, A., & Giuriato, L. (2024). Public-Private Partnerships for Low-Carbon, Climate-Resilient Infrastructure: Insights from the Literature. *Journal of Cleaner Production.*
[196] Hsu, K.-W., & Chao, J.-C. (2020). Economic Valuation of Green Infrastructure Investments in Urban Renewal: The Case of the Station District in Taichung, Taiwan. *Department of Landscape and Urban Design, Chaoyang University of Technology.*
[197] Chaudhry, R. M., & Harper, A. (2023). EPA Spearheads Water Reuse for Climate-Resilient Infrastructure. *Journal AWWA.*
[198] Casady, C. B., Cepparulo, A., & Giuriato, L. (2024). Public-Private Partnerships for Low-Carbon, Climate-Resilient Infrastructure: Insights from the Literature. *Journal of Cleaner Production.*

Enablers and Innovative Financing Mechanisms

In *Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses*, Ryan Colker identifies PPPs as a key mechanism for enabling resilient infrastructure.[199] Broadly defined, a PPP is a collaboration between a public agency and a private sector entity that leverages the unique resources and expertise of each party to deliver public services and provide returns on the private sector's investment. PPPs are often pursued due to their potential to leverage greater overall financing, improve management efficiency, and shift certain risks from the public to the private sector.[200]

The Pevensey Bay PPP demonstrates how flexible service delivery and long-term contracts can create economic and operational efficiencies while meeting critical flood protection needs. This PPP, which safeguards a 9 km stretch of the UK's southeast coast, including 17,000 properties and a Ramsar wetland, emerged in response to the Environment Agency's significant investment challenges in the late 1990s. Faced with a deteriorating shingle bank and groynes, the agency awarded a £30 million, 25-year contract (2000–2025) to Pevensey Coastal Defence Limited (PCDL), a consortium of four dredging and construction companies.[201]

Under the contract, PCDL was required to deliver an initial 200,000 m^3 of shingle to upgrade the bank to a 1-in-400-year flood protection standard and maintain that standard for the contract's duration while accounting for sea-level rise. Performance measures included annual replenishment of 20,000 m^3 of shingle, a total supply of 2 million m^3 over the project period, and a minimum crest width of 22 meters. Bisaro and Hinkel highlight that a crucial success factor for this PPP was how the contract specified outcomes rather than methods, which in turn allowed for PCDL to determine how best to achieve its targets.[202]

Instead of rigid delivery schedules typically set by public agencies, the contract allowed for shingles to be supplied at any time during the year, which allowed the consortium to coordinate with other harbor dredging projects. By optimizing the use of its near-shore dredging vessel that was employed on other contracts along the south coast, PCDL was able to significantly reduce costs and maximize the ship's utilization.[203]

The long-term nature of the contract further allowed for efficiency gains. Over time, PCDL has refined its operations by studying sediment flows and synchronizing shingle delivery with tidal patterns. The Environment Agency determined that the PPP model achieved a cost reduction of approximately 15% compared to the expenses associated with traditional public sector

[199] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann.*
[200] Ibid.
[201] Bisaro, A., & Hinkel, J. (2018). Mobilizing Private Finance for Coastal Adaptation: A Literature Review. *Wiley Interdisciplinary Reviews*.
[202] Ibid.
[203] Ibid.

approaches. These efficiencies translated directly into profits for the consortium, as the project's structure allows for private returns on operational savings.[204]

Colker also highlights Property-Assessed Resilience (PAR) as an innovative way to finance resilience and sustainability upgrades for buildings. Modeled after the Property-Assessed Clean Energy (PACE) framework—now often called PACE+—PAR provides property owners with funding for improvements like floodproofing or energy efficiency retrofits. What makes PAR distinct is its repayment structure: instead of traditional loan payments, the costs are added to property taxes or mortgages. PAR programs tie the repayment to the property rather than the owner, which reduces financial risk for those who want to sell before the costs are fully paid off. Aligning the repayment with the property makes it easier to finance upgrades that deliver benefits over decades. Lower upfront costs, long-term payment options, and the potential for increased property value make it an appealing solution for property owners.[205]

Colker highlights green banks as innovative public-private entities that are succeeding in attracting private investment in sustainable infrastructure. Established through state or local legislation, green banks blend public funds with private capital to support projects that might otherwise struggle to secure financing by tools like loan loss reserves to mitigate default risks, loan guarantees to secure repayment, and securitization to bundle smaller projects into larger, more attractive investment opportunities. While their primary focus is reducing greenhouse gas emissions, advancing renewable energy, and ensuring water stability, Colker believes they hold significant potential to expand into broader adaptation resilience financing.[206]

Impact Investment Opportunities and Risks

Impact investing in climate resilience projects aligns with the CRA's directives, as these investments strive to produce measurable social and environmental returns alongside financial gains. They are well-suited to address systemic inequities and climate vulnerabilities.[207] Yet significant barriers remain: high upfront costs, uncertain timelines, and lower short-term returns limit institutional participation. Scaling adaptation projects across diverse geographies with varying needs and resources further demands flexible financing models and strong regulatory guidance.[208] Additionally, measuring social outcomes remains a challenge. Frameworks like the Global Impact Investing Network's Impact Reporting and Investment Standards are increasingly important for ensuring transparency and accountability.

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[204] Bisaro, A., & Hinkel, J. (2018). Mobilizing Private Finance for Coastal Adaptation: A Literature Review. *Wiley Interdisciplinary Reviews*.
[205] Colker, R. (2019). Optimizing Community Infrastructure: Resilience in the Face of Shocks and Stresses. *Butterworth-Heinemann.*
[206] Ibid.
[207] Keenan, M., & Mattiuzzi, A. (2019). Climate Adaptation Investment and the Community Reinvestment Act. *Federal Reserve Bank of San Francisco Community Development Research Brief.*
[208] Watkiss, P., Wilby, R., & Rodgers, C. A. (2020). Principles of Climate Risk Management for Climate Proofing Projects. *Asian Development Bank.*

Overcoming these hurdles necessitates robust collaboration among regulators, financial institutions, investors, and community stakeholders. By advancing frameworks that emphasize equity, community input, and durability, impact investments can effectively bridge the gap between capital markets and underserved neighborhoods. In doing so, they offer a powerful vehicle for addressing climate-induced risks and building long-term resilience, complementing the CRA's overarching mission of promoting inclusive and equitable community development.[209]

[209] Keenan, J. M., & Mattiuzzi, E. (2019). Climate adaptation investment and the Community Reinvestment Act. *Federal Reserve Bank of San Francisco Community Development Research Brief.*

Navigating a Deregulatory Environment

Implications of the Trump Administration

The first Trump administration from 2016 to 2020 introduced significant uncertainty to the CRA and the broader domains of impact investing and environmental, social, and governance (ESG) initiatives. Republican critiques, amplified under Trump's leadership, framed ESG as a mechanism for advancing liberal policies, particularly those aimed at transitioning away from fossil fuels. This stance risked undermining ESG frameworks designed to address long-term risks tied to environmental sustainability and social equity.[210]

With the oil and gas sector constituting a substantial portion of the U.S. gross domestic product, the first Trump administration prioritized short-term financial interests over sustainability objectives. This approach not only limited the CRA's potential to channel investments into climate solutions but also stigmatized ESG as a partisan issue, discouraging corporate and investor participation. Furthermore, the administration's emphasis on deregulation created a challenging environment for companies adhering to ESG principles, as Republican-led states introduced anti-ESG measures that discouraged adoption and heightened financial risks.[211]

This shift from long-term sustainability to short-term profit maximization threatened the core ethos of impact investing, which seeks measurable social and environmental benefits alongside financial returns. Innovative climate initiatives were particularly vulnerable, as anti-ESG policies hindered progress and polarized the investment landscape.[212]

CRA Grading Reform in a Deregulatory Era

The evolving regulatory landscape surrounding the CRA reveals systemic vulnerabilities that could deepen under a renewed deregulatory push from a second Trump administration—specifically, an ideological shift that prioritizes corporate profitability over community well-being and equitable financial oversight. Historically, CRA enforcement has been undermined by structural inefficiencies, such as lenient grading criteria and a lack of specificity regarding qualifying activities. These issues were exacerbated during the first Trump presidency, with Joseph Otting's tenure as Comptroller of the Currency marked by efforts to weaken CRA regulations.[213] While the Biden administration rescinded these changes and

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[210] Thomson Reuters. (2024). The Economic & Regulatory Implications of Trump's 2024 Election Victory. Retrieved from: https://www.thomsonreuters.com/en-us/posts/government/trump-economic-regulatory-implications/.

[211] Hilson, C. (2024). Climate Change and the Politicization of ESG in the US. *Frontiers in Political Science Volume 6.*

[212] Gross, S. (2020). What is the Trump Administration's Track Record on the Environment? *Brookings Institution.*

[213] Ensign, R. L., Tracy, R. (2018). Bankers vs. Activists: Battle Lines Form Over Low-Income Lending Rules. *The Wall Street Journal*. Retrieved from: https://www.wsj.com/articles/mnuchins-fight-with-activists-inspired-community-reinvestment-act-revamp-1537885753.

introduced climate-focused updates in 2023, the CRA remains an underleveraged tool in addressing systemic inequities and disparities in resource allocation.

The prospect of a more lenient regulatory environment under a Trump administration could pose significant risks to the CRA's intended outcomes. For one, a rollback of recent amendments that include climate resilience and disaster preparedness as eligible activities could stall progress in mobilizing private capital for equitable climate infrastructure. These provisions, while nascent, represent an attempt to align financial incentives with community and environmental resilience. Without regulatory clarity or enforcement, banks may deprioritize these investments and, as a result, leave LMI communities disproportionately exposed to climate risks.[214]

Moreover, the CRA's enforcement mechanism—grading—remains a critical weak point. With 98% of banks receiving passing grades despite persistent inequities in capital access, the grading process is largely performative—a reflection of systemic ratings inflation that undermines the distinction between high- and low-performing institutions.[215] A deregulatory agenda that prioritizes reducing compliance burdens for banks will likely exacerbate this issue. Banks with historically strong ratings may find little incentive to innovate or deepen their engagement with underserved communities, especially if compliance becomes less stringent. This could further marginalize communities that have long struggled with disinvestment, particularly in the context of historical redlining.

Another glaring gap is the seemingly limited research and transparency regarding inter-agency collaboration among the FRB, OCC, and the FDIC.[216] These agencies are tasked with ensuring consistent CRA implementation across financial institutions, yet there is minimal evidence of meaningful coordination. There have been concerns from community development organizations that a lack of clarity impedes a comprehensive understanding of how regulatory agencies can or should act cohesively to enforce CRA standards.[217] The absence of rigorous mechanisms to standardize compliance across agencies risks creating uneven application of the law—loopholes may exist for larger banks to exploit while smaller institutions continue to be at a disadvantage—which may disproportionately affect smaller financial institutions or community banks, and further consolidating power among larger banks.

The potential resurgence of deregulatory priorities under the Trump administration also extends beyond CRA enforcement. A more favorable environment for big banks—likely manifested in eased restrictions on mergers, reduced capital retention requirements, and diminished

[214] Elis, N. (2017). Here Are the 66 Programs Eliminated in Trump's Budget. *The Hill*. Retrieved from: https://thehill.com/policy/finance/334768-here-are-the-66-programs-eliminated-in-trumps-budget/.
[215] Getter, D. E. (2020). The Effectiveness of the Community Reinvestment Act. *Congressional Research Service*.
[216] American Bankers Association et al. (2021). Joint Trades Letter to OCC re: CRA Evaluation Benchmarks. *American Bankers Association.*
[217] Americans for Financial Reform et al. (2018). Joint Letter: A Collaboration to Strengthen the Community Reinvestment Act. *National Association for Latino Community Asset Builders.*

oversight—risks further concentrating the banking sector. Big banks' enthusiasm for a deregulatory environment also underscores the stark divergence between institutional priorities and broader societal needs. Increased leniency toward mergers and acquisitions could dwindle community banks, which historically play a pivotal role in addressing the unique needs of local economies.[218] The halving of community banks since 2005, as reported by the FDIC, is not merely a result of market forces but also a failure of policy to preserve localized financial ecosystems.[219] Community banks traditionally leverage their regional expertise to serve small businesses and economically marginalized areas. Their decline risks further alienating these groups, especially in LMI communities where large financial institutions often fail to engage meaningfully.

Stricter grading systems would create more granular distinctions among banks and encourage competition to achieve higher ratings and drive greater investment in underserved communities. The potential to unlock significantly higher levels of lending and investment underscores the necessity of these reforms. Without them, the risk of declining engagement with LMI communities becomes more pronounced, particularly under a deregulatory administration. Stronger grading criteria and accountability measures could serve as a counterbalance to deregulatory efforts, thus ensuring that even in a less stringent regulatory environment, banks remain incentivized to engage meaningfully with the communities they serve.

The prospect of reduced capital retention requirements for large banks epitomizes the prioritization of shareholder gains over systemic stability. While bank executives celebrate the Federal Reserve's decision to significantly scale back proposed buffer requirements, this also raises concerns about the resilience of these institutions in future economic downturns. The banking industry's pursuit of short-term profits through dividends and share buybacks could undermine long-term stability, a lesson starkly illustrated by past financial crises.[220]

Furthermore, efforts to defund or dismantle cornerstone community development programs, such as the Community Development Block Grant (CDBG) program and the CDFI Fund, not only reflect a broader erosion of support for equitable growth but also stand in direct contradiction to President Trump's stated goals of enhancing U.S. competitiveness and national security.[221] These programs, which have historically enjoyed bipartisan support, play an outsized role in leveraging private and public funds to drive local economic development. For example, the CDFI Fund's

[218] Bautzer, T. (2024). Big Bank Deals Could Be Spurred by Trump Administration, Executives Say. *Reuters.* Retrieved from: https://www.reuters.com/business/finance/big-bank-deals-could-be-spurred-by-trump-administration-executives-say-2024-11-12/.
[219] Federal Deposit Insurance Corporation. (n.d.). FDIC Quarterly Banking Profile.
[220] Abello, O. P. (2025). The Economic Development Issues We're Watching Under Another Trump Administration. *Next City*. Retrieved from: https://nextcity.org/urbanist-news/economic-development-banks-credit-unions-2025-trump.
[221] Roeder, K., & Rao, S. (2024). EDA Officials are 'Hopeful' Tech Hubs Program will Live on Under Trump. *Technical.ly*. Retrieved from: https://technical.ly/civic-news/eda-tech-hubs-trump-outlook/.

capacity to generate USD$8 in additional funding for every USD$1 it receives underscores its critical role in amplifying federal investments.[222]

CDBG funding declined from USD$4.8 billion in 2005 to USD$3.5 billion in 2013.[223] This steady decline in inflation-adjusted CDBG funding, coupled with the increasing number of eligible communities, illustrates a systemic underfunding of vital community infrastructure. Rather than scaling these programs to meet growing demand, political efforts have been directed at preserving their existence, diverting advocacy resources that could have been used to expand their scope and impact.[224] The failure to adapt these programs to modern challenges, such as climate resilience and infrastructure needs, further compounds the risk of entrenched inequities. By undermining institutions and defunding programs that support local economic resilience, the Trump administration would not only disproportionately harm marginalized communities and exacerbate systemic inequities in access to capital, but also erode the very foundations of long-term economic stability.

Moreover, the lack of research on how CRA-regulated lending intersects with climate-focused initiatives represents a missed opportunity. Despite the inclusion of climate resilience in the 2023 updates, there is minimal guidance on how banks should operationalize these provisions. This ambiguity leaves financial institutions uncertain about how to align their portfolios with regulatory expectations and inhibits the development of innovative models for climate adaptation financing. The absence of robust data on the impact of CRA-driven climate investments further hinders efforts to quantify and scale these initiatives. That said, the inclusion of climate resilience as a qualifying activity under the CRA could be bolstered by stricter grading standards that prioritize long-term, high-impact investments in LMI communities. A more rigorous examination framework could incentivize banks to adopt innovative financing models for climate adaptation, aligning financial returns with community and environmental resilience. By ensuring that these activities are accurately assessed and rewarded, tougher grading could play a pivotal role in addressing both systemic inequities and emerging climate challenges.

The incoming administration's deregulatory ethos, coupled with historical precedent, underscores a broader ideological conflict at the heart of CRA enforcement: the tension between fostering community investment and minimizing regulatory burdens on financial institutions. The CRA's potential as a tool for addressing systemic inequities and fostering climate resilience is undeniable, but its effectiveness hinges on rigorous enforcement, inter-agency collaboration,

[222] U.S. Department of the Treasury. (2021). Press Release: Remarks by Secretary of the Treasury Janet L. Yellen on $1.25 Billion Award to CDFIs to Support Economic Relief in Underserved Communities Affected by COVID-19 Community. Retrieved from: https://home.treasury.gov/news/press-releases/jy0229.
[223] Abello, O. P. (2017). CDBGs Lack Star Power, With Biggest Impact Often Hidden. *Next City*. Retrieved from: https://nextcity.org/urbanist-news/trump-budget-community-development-block-grants-cdbg-cuts.
[224] Ibid.

and clear, actionable guidelines. Absent these elements, the CRA risks becoming a symbolic gesture rather than a catalyst for transformative change.

SECTION 7
Guiding Principles for Climate-Resilient and Equitable CRA Investments

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How Can Banks Maximize Equitable, Climate-Resilient CRA Investments?

The Capstone team's research examined CRA qualifying activities, funding mechanisms, and case studies that can help guide banks in structuring loans and investments that drive both financial and social impact. The following six guiding principles are designed to offer a framework to help banks make investments in climate resiliency that maximize LMI community benefits.

The six guiding principles are:

1. Expand CRA Investments Beyond Physical Branch Networks;
2. Partner with CDFIs and Financial Intermediaries to Scale Climate Resilience;
3. Leverage Blended Financing to De-Risk Investments;
4. Prioritize Resilience Investments That Protect Both Community and Private Assets;
5. Center Community-Driven Projects and Prevent Climate-Driven Displacement; and
6. Frame Climate Investments as Economic Stability Measures to Reduce Political Risk.

The following are suggestions regarding how institutions may best implement these principles.

1. Expand CRA Investments Beyond Physical Branch Networks

The 2023 updated CRA rule changes provide banks with greater flexibility to invest in climate adaptation projects beyond their immediate branch networks, supporting regional and national investments in climate adaptation projects and disaster resilience. Previously, banks only received credit for CRA investments within their physical assessment areas, limiting funding for projects that serve LMI communities outside of their direct service areas.[225] However, under the new CRA rules, banks will automatically receive credit for qualifying community development loans and investments made outside their branch networks, provided they meet the relevant criteria.[226] This change creates additional pathways for banks to finance broader climate adaptation initiatives, which can enhance the resilience of LMI communities while reducing long-term disaster recovery costs.

The updated CRA rules take into account how the banking industry has evolved, particularly with internet and mobile banking reducing reliance on physical branches. Many communities, particularly LMI communities, do not have easy access to a physical bank branch since many banks have closed various locations in recent years with the rise of branchless or hybrid banking models. Banks can now meet CRA obligations through climate resilience investments that benefit LMI communities, regardless of geographic proximity. This may be particularly applicable to Native land areas and rural areas, geographies that often face difficulty in securing CRA investments. In the case of Cape Foulweather, while the entity that provided the bridge loan was not a bank, the project is an example where a bank without close physical proximity could provide loan guarantees with CRA dollars. Investing in disaster preparedness, resilient housing, and flood mitigation projects can help banks with CRA compliance and provide a wider range of geographies with projects from which to choose. Moving forward, banks can consider leveraging CRA incentives to invest in projects that align with interests and investment goals, while vulnerable communities may gain investments they could not have accessed previously.

Key Takeaway

1.1. The updated CRA rules allow banks to receive credit for climate adaptation investments beyond their physical branch footprint, increasing opportunities to fund critical infrastructure in LMI communities that previously lacked access to CRA-backed financing.

[225] Federal Deposit Insurance Corporation. (2023). Agencies Finalize Rule Updating and Modernizing the Community Reinvestment Act (CRA). Retrieved from: https://www.fdic.gov/news/financial-institution-letters/2023/fil23061.html.
[226] Abbott, S. (2023). Scaling Low-Income Solar with the Inflation Reduction Act. *Rocky Mountain Institute.* Retrieved from: https://rmi.org/scaling-low-income-solar-with-the-inflation-reduction-act/.

2. Partner with CDFIs and Financial Intermediaries to Scale Climate Resilience

Investing in CDFIs and other intermediaries is a great way to invest in climate resiliency projects in LMI communities while achieving CRA compliance. CDFIs specialize in serving economically disadvantaged communities that traditional banks often overlook, making them well-positioned to direct capital toward various climate projects. These institutions provide critical financing in LMI communities and integrate community engagement, affordability protections, and social equity considerations into their investment strategies.[227] As a result, banks that invest in CDFIs can extend their impact beyond their physical branch networks and ensure that climate resilience projects fit with the needs of vulnerable populations.

While investments in CDFIs and similar financial intermediaries already qualified for CRA credit before the 2023 rule changes, banks can qualify for CRA credit by making investments in disaster preparedness and weather resiliency in conjunction with a CDFI. CDFIs are also continually incorporating climate resilience into their community development activities. This update provides banks with a way to support the sustainable investing efforts of CDFIs without requiring them to develop extensive in-house expertise in climate finance.[228] Additionally, CDFIs often leverage blended financing models by combining public subsidies, private capital, and philanthropic funding to maximize the impact of each dollar invested. This helps scale climate resilience efforts and reduces financial risk for banks by distributing investment responsibility across multiple funding sources.

Additionally, CDFIs are continually incorporating climate resilience into community development activities. Despite their strengths, not all CDFIs have well-developed climate finance portfolios, so banks should conduct due diligence when selecting investment partners. Evaluating a CDFI's historical performance, financial stability, and approach to community engagement can ensure that funds are directed toward projects that effectively address climate risks while delivering meaningful benefits to LMI communities. Banks may also explore loan guarantees from the U.S. Department of Energy's Loan Program Office or similar initiatives that can further de-risk these investments.[229] As CDFIs continue to gain traction as a sustainable and de-risked way to facilitate climate investments in LMI communities, financial institutions can play an important role in expanding access to capital in LMI communities by supporting CDFIs with strong capabilities.

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[227] Westbrooks, S. (2024). Investing in Decarbonization: The Role of CDFIs. *Institute for Sustainable Communities*. Retrieved from: https://sustain.org/blog/investing-in-decarbonization-the-role-of-cdfis/.
[228] Keenan, J.M., Mattiuzzi, E., & Council, D. (2024). What's Possible: Investing Now for Prosperous, Sustainable Neighborhoods: Bridging Community Investment and Resilience in the Community Reinvestment Act. *Federal Reserve Bank of New York, Local Initiatives Support Corporation, and Enterprise Community Partners.*
[229] U.S. Department of Energy. (n.d.). Loan Programs Office (LPO). Retrieved from: https://www.energy.gov/lpo/loan-programs-office.

The Solar and Energy Loan Fund (SELF) serves as a strong example of how CDFIs can channel capital into climate adaptation efforts for LMI communities. As a dual green bank and CDFI, SELF has deployed over USD$30 million in financing for home resilience upgrades, with a focus on borrowers who are traditionally underserved by traditional financial institutions. By prioritizing an applicant's ability to repay rather than relying on credit scores, SELF demonstrates how CDFIs can remove financial barriers to critical home adaptation measures such as roof repairs, impact-resistant windows and doors, air conditioning, and floodproofing. These investments help protect homes from extreme weather, and help residents maintain insurance coverage and avoid displacement. SELF's strong repayment performance, with a loan default rate of only 2%, highlights the financial viability of these models.[230] This example demonstrates that banks can support high-impact, community adaptation projects while de-risking investments through partnerships with experienced CDFIs.

Key Takeaways

2.1. Investing in CDFIs allows banks to finance climate resilience projects in LMI communities while receiving CRA credit, expanding their impact beyond traditional branch networks.

2.2. CDFIs provide a de-risked, scalable financing model for banks by leveraging blended capital sources and ensuring community-driven investment strategies.

[230] Coalition for Green Capital. (2023). SELF Leads Climate Resiliency Efforts Across the South. Retrieved from: https://coalitionforgreencapital.com/self-leads-climate-resiliency-efforts-across-the-south/.

3. Leverage Blended Financing to De-Risk Investments

Blended financing can help reduce potential losses for private investors in climate adaptation projects, especially in LMI communities. Pairing concessionary capital from philanthropic or public sources with market-rate investments can help banks and other stakeholders address the uncertainties of climate-related ventures.[231] When government bodies or foundations provide loan guarantees or other risk-absorbing measures, investors become more willing to participate, leading to increased capital flow into areas that often face funding gaps. This approach can take various forms. In some regions, short-term conservation or resilience trusts secure at-risk land or infrastructure quickly (such as the case with Cape Foulweather and CTSI), then repay those funds as philanthropic grants or government allocations are approved.[232] Other strategies involve combining multiple financial tools—for example, blending TIF with direct grants to improve flood defenses or upgrade critical infrastructure. When diverse partners unite under a shared set of objectives, it becomes easier to address climate threats while creating new economic opportunities for local residents.

To manage long-term risk, partners often tie project milestones to performance indicators, such as improved flood management or reduced damage costs over time.[233] This transparency reassures investors that their funds support well-designed efforts, strengthening commitments across all sources of funding. Government agencies may provide policy incentives or technical support, while philanthropic organizations focus on community engagement, making sure resources reach areas of greatest need. Blended financing also promotes ongoing oversight and adaptive management. Rather than leaving projects underfunded, structured agreements help maintain momentum until private and public capital can be repaid, recycled, or reinvested. These frameworks allow banks to meet obligations to underserved communities, fulfill broader sustainability goals, and remain competitive in a market that increasingly values environmental risk management.[234] As more financial institutions adopt blended financing, communities facing climate impacts benefit from stronger, more resilient support systems.

Key Takeaways

3.1. By layering philanthropic or public funds with market-rate investments and blended financing lowers the risks for private investors. This makes it more attractive to invest in

[231] UK Foreign, Commonwealth, and Development Office (FCDO) & Convergence Blended Finance. (2021). How to Increase Private Investment for Climate Adaptation and Resilience. *Convergence.*
[232] Lemos de Sá, R. (2023). The Innovative Climate Finance Model that Has Protected over 120 million hectares. *World Economic Forum.* Retrieved from: https://www.weforum.org/stories/2023/07/climate-finance-pfp/.
[233] Network for Greening the Financial System (NGFS). (2023). Scaling Up Blended Finance for Climate Mitigation and Adaptation in Emerging Market and Developing Economies (EMDEs).
[234] Davar, D., Michel, L., Schieck, V., & Wouters, S. (2024). The Power to Scale Impact. A Primer on Blended Finance. *UBS Group.*

climate adaptation projects in LMI communities that typically struggle to secure adequate funding.

3.2. Blended financing can take many forms, such as short-term trusts or combining tax increment financing with grants, and relies on collaboration across government agencies, foundations, and financial institutions. This cooperation ensures that projects are well-funded, strategically aligned, and capable of driving both environmental resilience and local economic benefits.

3.3. Tying funding to clear performance indicators such as improved flood management reassures investors about the impact of their contributions. Ongoing oversight and the possibility of repaying and recycling capital maintain long-term momentum, ensuring that support for climate adaptation continues to evolve and expand as conditions change.

4. Prioritize Multi-Benefit Climate Resilience Projects to Protect Community and Financial Assets

The 2023 CRA updates allow banks to strategically allocate capital to infrastructure projects that mitigate climate risks while fulfilling regulatory requirements,[235] creating win-win scenarios for multiple stakeholders.[236] Multi-benefit climate resilience projects often draw broad support from local governments, nonprofits, and community-based organizations (CBOs). In addition to mitigating climate impacts, these projects provide a range of other environmental, social, and economic benefits—including protecting critical infrastructure, helping maintain property values, improving air quality, enhancing biodiversity, and often providing additional green spaces. This approach maximizes impact and ensures sustainable development that benefits both businesses and LMI communities. Key investment areas include disaster risk reduction, such as flood control, wildfire mitigation, and storm-resistant infrastructure. Banks may also invest in infrastructure resilience, including upgraded power grids, stormwater management systems, transportation protections, and sustainable development methods like tree canopies, permeable pavements, and water reuse systems.[237]

As climate-vulnerable areas experience declining real estate values, banks face increased risk to their mortgage-backed securities and commercial lending portfolios.[238] Insurance costs are also rising as properties in flood-prone and wildfire-prone areas become uninsurable, leading to higher loan defaults.[239] Failing to invest in climate resilience presents growing financial risks for banks. Conversely, banks that proactively invest in climate resilience can gain benefits such as improved loan performance, lower insurance costs, and stronger regional economies. Resilience projects that deliver shared benefits to both public and private sectors are more likely to attract corporate co-investment. Businesses facing climate risks to their supply chains, physical assets, and energy systems have a financial incentive to contribute to these initiatives. For example, the SAFER Bay Project secured funding from public sources like FEMA and the California Department of Water Resources, as well as private companies like PG&E and Meta. These corporations recognized the financial risk that flooding posed to their infrastructure and operations, prompting them to invest in protective measures. Structuring projects to deliver

[235] Department of the Treasury Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation. (2024). Community Reinvestment Act. *Federal Register*. Retrieved from: https://www.federalregister.gov/documents/2024/02/01/2023-25797/community-reinvestment-act.
[236] Ibid.
[237] Gruenberg, M. J. (2023). Final Rule on Community Reinvestment Act Regulations. *Federal Deposit Insurance Corporation*. Retrieved from: https://www.fdic.gov/news/speeches/2023/spoct2423.html.
[238] Kingsley, R. (2024). Banks' Mortgage Lending Portfolios Laced With Climate Risk. *National Mortgage Professional*. Retrieved from: https://nationalmortgageprofessional.com/news/banks-mortgage-lending-portfolios-laced-climate-risk.
[239] Alpert, B. (2025). How the Wildfires Could Reshape California Mortgage Lending. *Barron's*. Retrieved from: https://www.barrons.com/articles/la-california-fires-mortgages-413131cb.

mutual benefits expands total funding, increases project scale, and enhances long-term sustainability and economic resilience.[240]

Banks may consider collaborating with climate risk modeling firms like First Street Foundation[241] and Moody's Climate Risk[242] to quantify financial risks and project returns. They provide data-driven insights on long-term financial risks which helps banks evaluate property value depreciation, insurance cost trends, and disaster-related loan risks. By integrating climate modeling into investment decision-making, banks can better assess risk exposure, justify infrastructure investments, and optimize portfolio resilience strategies. In addition to environmental benefits, investing in climate-resilient infrastructure can lower insurance costs, attract public-private co-investment, and improve financial stability. The following categories are types of climate-resilient infrastructure banks may consider investing in:

- **Flood-Resilient Infrastructure**
  Flood-resilient solutions mitigate flood risks while enhancing urban sustainability. Key investments include:
  - Permeable pavements to reduce surface runoff and improve groundwater recharge
  - Flood-detention ponds and stormwater basins to store excess rainwater and prevent urban flooding
  - Greenbelt systems and wetland restoration to absorb floodwaters and enhance biodiversity
  - Enhanced drainage and stormwater management systems that manage excess water and reduce the impact of heavy rainfall.

  These solutions are cost-effective and offer co-benefits such as reduced flood damage costs, improved water management efficiency, and enhanced environmental sustainability.[243]

- **Green and Nature-Based Infrastructure**
  Green infrastructure integrates nature-based solutions into urban planning. Investments include:
  - Urban tree canopies to reduce urban heat islands, lower cooling costs, and improve air quality.

[240] San Francisquito Creek Joint Powers Authority. (2024). The SAFER Bay Project: Strategy to Advance Flood protection, Ecosystems and Recreation along San Francisco Bay. Retrieved from https://www.sfcjpa.org/safer-bay-project.
[241] First Street. (n.d.). The Standard for Climate Risk Financial Modeling. Retrieved from: https://firststreet.org/.
[242] Moody's. (n.d.). Climate Risk Management. Retrieved from: https://www.moodys.com/web/en/us/capabilities/climate-risk.html.
[243] Hsu, K.-W., & Chao, J.-C. (2020). Economic Valuation of Green Infrastructure Investments in Urban Renewal: The Case of the Station District in Taichung, Taiwan. *Department of Landscape and Urban Design, Chaoyang University of Technology.*

    - Rain gardens and bioswales to capture and filter stormwater while improving community aesthetics.
    - Green roofs and walls to improve building insulation and aesthetics, reduce runoff, and enhance cooling. [244]

- **Water Reuse and Management Systems**
  These types of infrastructure projects address drought risks and water scarcity:
    - Greywater recycling systems to reduce strain on municipal water supplies.
    - Stormwater capture and retention technologies to improve water availability in drought-prone areas. [245]

- **Climate Monitoring and Early Warning Systems**
  Investments in community-based adaptation plans and climate risk monitoring are critical for mitigating financial and operational risks. Investments include:
    - Real-time flood and storm tracking systems that provide timely alerts for extreme weather events.
    - Drought and wildfire early warning systems minimize losses and protect assets in high-risk areas.
    - Climate risk assessment platforms enable financial institutions, insurers and urban planners to use data to assess financial exposure

These measures complement physical infrastructure by helping businesses, governments, and financial institutions prepare for climate disasters, enhancing long-term climate resilience. Investing in multi-benefit climate infrastructure is an opportunity for banks to protect financial assets, meet CRA obligations, and deliver mutual benefits to the community. These projects lower financial risk by preventing loan defaults, stabilizing property values, and reducing insurance costs. By prioritizing investments in multi-benefit climate infrastructure projects, banks can create economic benefits in the community, improve environmental sustainability, and contribute to long-term financial stability in the communities they serve.

Key Takeaways

4.1. Investing in climate resilience helps banks mitigate financial risks, including loan defaults, asset devaluation, and regulatory scrutiny, while strengthening long-term portfolio stability.

4.2. Investing in multi-benefit climate infrastructure projects offers benefits outside of mitigating climate risks such as strengthening local economies, enhancing biodiversity and air quality, and providing social/recreational benefits.

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[244] Ayyub, B. M. (Ed.). (2015). Hazard-Resilient Infrastructure: Analysis and Design. *American Society of Civil Engineers.*

[245] Chaudhry, R. M., & Harper, A. (2023). EPA Spearheads Water Reuse for Climate-Resilient Infrastructure. *Journal AWWA.*

5. Center Community-Driven Projects and Prevent Climate-Driven Displacement

For banks to effectively invest in climate resilience through the CRA, it is important to ensure that projects are rooted in community priorities and consider the risk of gentrification and displacement. Top-down planning, without meaningful community engagement, can lead to resistance, delays, and unintended negative consequences. By selecting projects that actively work with CBOs, advocacy groups, and local stakeholders, banks can make investments in climate resilience that fit with the actual needs of LMI communities and mitigate the risks of displacing the very populations these projects are meant to support.

The Lakeview/City Park Hazard Mitigation Project in New Orleans serves as a cautionary example of what can happen when community engagement is insufficient. While the project had clear environmental benefits such as reducing urban flooding by expanding the park's lagoon system, residents generally opposed the plan, citing a lack of transparency and engagement in the decision-making process. The planners overlooked spillover effects from the project such as revenue loss from the park's golf course closures, and questioned whether the project was the best use of resources. Residents also felt that the project did not prioritize their concerns. As a result, the project stalled despite funding availability from FEMA and local infrastructure programs. This example highlights the importance of climate adaptation projects with strategic engagement that prioritizes the community's needs.

Beyond engagement, anti-displacement measures are an important consideration in climate resilience investments. Many infrastructure improvements, particularly in historically marginalized neighborhoods, can trigger climate gentrification, which is when property values in low-income areas increase due to either resilience upgrades or the area's ability to handle the effects of climate change. This then attracts wealthier residents, ultimately pushing out existing LMI households.[246] Climate adaptation investments, such as stormwater infrastructure, flood barriers, and green space expansions, often contribute to rising rents and property taxes unless proactive affordability protections are enacted. To prevent these unintended consequences, banks should look for climate adaptation projects that integrate housing affordability strategies into their climate finance approach. Such measures include property tax relief programs for long-time LMI homeowners, community land trusts that preserve affordable housing in these areas, and tenant protection policies.

Historically, financial institutions and policymakers have controlled project design and implementation, prioritizing efficiency over equity and inclusivity. However, the co-creation of projects, where residents have influence in decision-making, is an important factor in successful

[246] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*

climate adaptation efforts. Banks should look for similar models when choosing CRA-eligible climate investments.

Additionally, the 2023 CRA rule updates acknowledge the role of CDFIs in channeling capital into under-resourced areas, reinforcing the importance of diversifying financial mechanisms to support climate resilience. However, unless these funds are deployed with anti-displacement safeguards, they risk fueling speculative development rather than securing long-term community benefits. This is particularly true in cities where land-use policies and financing mechanisms like TIF have led to mixed outcomes, at times accelerating displacement rather than addressing systemic vulnerabilities.[247]

Key Takeaways

5.1. Early and strategic community engagement is essential. Banks should select projects that work with and incorporate feedback from CBOs, nonprofits, and municipalities to ensure projects reflect local community priorities.

5.2. Anti-displacement measures should be integrated into climate investments in order to prevent climate gentrification. Affordable housing protections should be embedded in project financing to prevent climate gentrification.

By incorporating these principles into their CRA investment strategies, banks can help strengthen community resilience, guarantee projects materialize, and ensure that LMI communities benefit equitably from climate adaptation projects.

[247] Keenan, J. M. (2019). Climate Adaptation Finance and Investment in California. *Routledge.*

6. Frame Climate Investments as Economic Stability to Reduce Political Risk

Climate resilience investments can become politically contentious, especially in regions where climate change is a divisive issue. Opposition often arises from concerns about government overreach, regulatory burdens, or the perceived misallocation of financial resources. To mitigate these risks in areas where climate change is divisive, banks can strategically position resilience projects as economic security measures rather than climate-driven mandates.[248] The U.S. Chamber of Commerce emphasizes that investments in disaster resilience yield significant economic returns. Every USD$1 spent on preparedness can save up to USD$13 in economic impact, damage prevention, and recovery costs.[249] Framing climate finance as a tool for economic stability, infrastructure protection, and business continuity can increase bipartisan support and reduce political resistance. Businesses and financial institutions that position sustainability as a tool for financial resilience and competitiveness may gain stronger backing from both private and public sectors.[250]

Since public perception can influence the success of resilience investments, banks should ensure that projects they invest in have conducted thorough risk assessments, which include evaluating potential regulatory, political, and economic risks. With support from internal compliance teams and/or consulting firms, banks can prioritize funding initiatives that have already incorporated political and financial risk mitigation strategies. Projects that integrate local stakeholder engagement and economic co-benefits tend to face less opposition and yield stronger long-term support.

Strategic communication is also important in ensuring that resilience investments are understood as financially sound and beneficial for both businesses and communities. Banks may work with local economic development agencies, business groups, and CDFIs to frame more neutral, community-centered messaging that highlights economic benefits such as disaster risk reduction, infrastructure protection, and long-term cost savings.[251] For example, the Memphis Block Wellness Project successfully integrates public health and economic development into its resilience planning. This approach reduces community resistance and secures broader

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[248] Tomer, A. et al. (2024). Mobilizing the Market: The Barriers to Financing a More Scalable Climate Response. *Brookings Institution*. Retrieved from: https://www.brookings.edu/articles/mobilizing-the-market-the-barriers-to-financing-a-more-scalable-climate-response/.

[249] U.S. Chamber of Commerce, Allstate, U.S. Chamber of Commerce Foundation. (2024). The Preparedness Payoff: The Economic Benefits of Investing in Climate Resilience. *U.S. Chamber of Commerce.*

[250] The Institutional Investors Group on Climate Change (IIGCC). (n.d.). Net Zero Investment Framework. Retrieved from: https://www.iigcc.org/net-zero-investment-framework.

[251] Organization for Economic Cooperation and Development (OECD). (2024). Infrastructure for a Climate-Resilient Future. *OECD Publishing, Paris.* Retrieved from: https://doi.org/10.1787/a74a45b0-en.

stakeholder buy-in.[252] The SAFER Bay Project also demonstrates how incorporating co-benefits like bike lanes and public amenities into a flood mitigation plan can broaden appeal beyond just environmental concerns.[253] Conversely, the Lakeview/City Park Project in New Orleans faced significant local resistance when economic interests in the area were threatened because the project's plans would impact a nearby golf course.[254] These cases highlight the importance of balancing resilience goals with economic and recreational concerns. By prioritizing projects that align resilience goals with local economic and community interests, banks can reduce opposition and ensure long-term investment success.

Key Takeaways

6.1. In contentious regions, banks should position projects around disaster preparedness, business continuity, and economic stability, reducing political resistance and broadening bipartisan support.

6.2. Banks should prioritize funding initiatives that have already integrated stakeholder engagement with balanced economic, social, and environmental interests, along with regulatory compliance strategies and financial risk mitigation in their planning.

[252] Community Redevelopment Agency. (n.d.). Block Wellness. Retrieved from: https://cramemphis.org/block-wellness.

[253] San Francisquito Creek Joint Powers Authority. (2024). The SAFER Bay Project: Strategy to Advance Flood protection, Ecosystems and Recreation along San Francisco Bay. Retrieved from https://www.sfcjpa.org/safer-bay-project.

[254] Myers, B. (2022). Mayor LaToya Cantrell Blames Lakeview Residents for Drainage Project Delays, Threatens Funding. *NOLA.com*. Retrieved from: https://www.nola.com/news/politics/mayor-latoya-cantrell-blames-lakeview-residents-for-drainage-project-delays-threatens-funding/article_fcd534ea-eb6b-11ec-aff6-cb2a53b5d8a0.html.

CONCLUSION

The CRA was developed to combat redlining and predatory lending practices that marginalized LMI communities and led to institutionalized disinvestment that deepened economic inequities. Communities subjected to redlining often have inadequate infrastructure to withstand climate risks and experience flooding, storm surges, extreme heat, and other climate-related disasters with greater intensity. The 2023 CRA amendments made progress in addressing these climate inequities by incorporating climate resilience and adaptation projects into CRA-qualifying investments and loans. The new amendments also make other important changes, including broadening assessment areas, integrating CDFIs, and enhancing performance tests. While the CRA updates represent progress, structural limitations, grading inflation, and the changing landscape of the financial sector present ongoing challenges. Because only a small number of banks receive low ratings, the effectiveness of CRA is undermined to incentivize meaningful improvements in meeting the credit needs of LMI communities. Financing climate adaptation infrastructure presents additional challenges. To improve climate resilience, communities often require localized and specific interventions, which can be difficult to scale. These small-scale initiatives struggle to attract the level of investment needed, as financial returns necessary to attract investors at scale can be difficult to achieve.

Investing in climate resilience is necessary to help protect communities from devastating social, economic, and environmental losses. Although the cost of climate infrastructure investments is significantly lower than the long-term costs of post-disaster recovery, the benefits are extremely hard to quantify and upfront costs are high, making it difficult to attract investors. Several innovative financing mechanisms have developed to address these issues such as cat bonds, resilience bonds, and TIF. Blended financing can help de-risk private investments in climate adaptation projects by pairing philanthropic capital and public financing with an investment or combining multiple financial tools such as bonds and TIF. Implementing blended and innovative financing tools can help drive private investment in climate resiliency in LMI communities who typically do not get access to climate funding. When looking holistically at climate adaptation investment, projects that provide co-benefits, such as public health improvements and economic stability, can help maximize impact and align with broader societal goals. While these climate projects and infrastructure improvements are greatly needed, there is a potential to spark gentrification and displacement of historical residents if these improvements cause property values to rise or wealthier residents decide to move communities. To prevent this, local governments, community stakeholders, and financial institutions should guard against displacement.

While the 2023 CRA amendments will be difficult to roll back, the deregulatory and anti-ESG push from the second Trump administration presents difficulties for incentivizing CRA investments in climate infrastructure. The President's ideology prioritizes corporate profitability over community equity and equitable financial oversight. The first Trump administration showed leniency in grading criteria and a lack of clarity regarding CRA qualifying activities. Because of this, banks may deprioritize climate adaptation investments, leaving LMI communities disproportionately exposed to climate risks.

In order to continue driving private investment in climate resiliency while considering the realities of the current political climate, the team suggests six guiding principles for equitable climate finance investments that benefit LMI communities. Encouraging banks to expand investments beyond physical branch networks increases the number of opportunities banks have to fund critical infrastructure in places that previously may have been overlooked. Partnering with CDFIs and other financial intermediaries is a way to expand involvement in climate resilience, as CDFIs provide a less risky and scalable financing model for banks. Leveraging blended financing is another way of broadening financial mechanisms to unlock additional capital for climate adaptation projects. Beyond financing strategies, prioritizing multi-benefit climate resilience projects ensures that investments provide economic, environmental and social benefits, while protecting both community and private financial assets. Banks can further enhance the efficacy and equity of climate adaptation investments by investing in community-driven projects with anti-displacement safeguards, making sure that resilience efforts do not further contribute to economic or social inequities. Lastly, banks must navigate political realities by emphasizing the economic stability climate infrastructure projects help provide. Demonstrating the financial and risk-mitigation benefits of resilience investments strengthens the case for continued capital flow into these critical initiatives.

Without sustained investment in climate adaptation, LMI communities will remain disproportionately vulnerable to climate-related disasters. To ensure these communities are protected as the climate crisis worsens, private investors, financial institutions, policymakers, and community leaders must work together to create an environment for successful climate resilience investments. The 2023 CRA rules provide a critical foundation, but continued innovation, cross-sector partnerships, and a long-term commitment are essential in driving equitable and effective investments in climate resilience.