



December 5, 2019

Mitigation Action Plan
P.O. Box 110465
Durham, NC 27709

Comments submitted to publiccomments@rebuild.nc.gov

The Natural Resources Defense Council (NRDC) appreciates the opportunity to provide input and comments to the North Carolina Office of Recovery and Resiliency (NCORR) on the State's draft Community Development Block Grant-Mitigation (CDBG-MIT) Action Plan.

NRDC is an international nonprofit environmental organization with more than 2 million members and online activists. Our organization works to safeguard the earth—its people, its plants and animals, and the natural systems on which all life depends. Our organizational goals include addressing the growing risks facing states and communities due to climate change and addressing the vulnerabilities that past natural disasters have already made evident.

NRDC is very supportive of the projects that NCORR has chosen to focus on. Buying out properties that are vulnerable to flooding is an important disaster mitigation activity that can help thousands of people escape recurrent flooding. Likewise, the focus on developing replacement housing serves a major need in the State and is an aspect of disaster recovery and resilience that is often overlooked. NRDC has identified several areas where the Draft Action Plan can be improved upon, both in the scope of activities the funding could support and in the implementation of the projects that are its current focus. Wherever possible, NRDC has developed language for NCORR's consideration that could be incorporated into the Draft Action Plan.

In general, NRDC believes the Draft Action Plan needs to be improved in five important ways:

1. As proposed, the plan does not meet the intent of HUD's CDBG-MIT to support states' efforts to improve their long-term plans as well as make lasting changes to their policies, programs, and practices.
2. As proposed, the Draft Action Plan does not meet Governor Cooper's goals set forth in Executive Order 80 to, "integrate climate adaptation and resiliency planning into [agency] policies, programs, and operations."¹

¹ Governor Roy Cooper, Executive Order 80, paragraph 9, page 3.

3. The proposed projects (buyouts/acquisitions and affordable housing) have a lot of merit and NRDC is supportive of those activities, but implementation needs to be more fully described and criteria must be included to prioritize selection of projects.
4. The State needs to do a meaningful assessment of future risks. Likewise, as described in the Draft Action Plan, the proposed projects will be undertaken without much consideration of future risks.
5. There are no leveraging opportunities identified, even though multiple opportunities to leverage CDBG-MIT funds exist in North Carolina.

The \$168 million in CDBG-MIT funding is perhaps a singular opportunity. For the first time ever, Congress made a special appropriation of \$16 billion specifically for disaster mitigation efforts through HUD. This may be one and only time that Congress makes CDBG-DR resources available to North Carolina for the express purpose of mitigating its vulnerability to future natural hazards and the impacts of climate change.

The Action Plan that North Carolina submits to HUD should be a critical component in the State's overall strategy to enhancing its resilience to the impacts of climate change and should have clear linkage to the State's Climate Risk Assessment and Resilience Plan (now under development and called for by Governor Cooper in Executive Order 80), the State Hazard Mitigation Plan prepared by NC Emergency Management, as well as the funding now available to North Carolina through federal disaster aid and mitigation programs and other state agency grant programs.

The Action Plan should be central to the directive Governor Cooper set forth in Executive Order 80 to "integrate climate adaptation and resiliency planning into [agency] policies, programs, and operations."² As proposed, the Draft Action Plan falls short of Governor Cooper's directive to agencies.

The Draft Action Plan proposes a relatively narrow set of projects and activities, namely the buyout or acquisition of vulnerable homes and the construction of affordable housing, both of which NRDC supports.³ NCORR's plan focuses on the buyout or acquisition of up to 2,302 residential properties that it has identified in the Hurricane Matthew and Florence Most Impacted and Distressed (MID) areas. There is no question that assisting the residents of these homes is important, but even if all of these properties were successfully acquired, it would still make a relatively small contribution to improving the State's overall preparedness and resilience, which is part of HUD's objective for CDBG-MIT.

NRDC is supportive of NCORR focusing on a narrow range of projects, as it allows NCORR to make meaningful and demonstrable progress toward HUD's CDBG-MIT goal of supporting projects that reduce future risks, but more should be done towards achieving two of HUD's other stated goals for CDBG-MIT funds, which are to "Build the capacity of States and local governments to comprehensively analyze disaster risks and to update hazard mitigation plans through the use of data and meaningful community engagement" and "Support the adoption of policies that reflect local and regional priorities that will have long-lasting effects on community risk reduction."⁴

² Governor Roy Cooper, Executive Order 80, paragraph 9, page 3.

³ See 84 FR 45864. Generally, a "buyout" involves the purchase of a property, demolition of all structures, and maintaining it as open space in perpetuity. An "acquisition" involves the purchase of a property and its subsequent redevelopment.

⁴ 84 FR 45838.

The Draft Action Plan also must go much further to identify opportunities to leverage other sources of funding. The last of HUD’s CDBG-MIT goals is to, “Maximize the impact of available funds by encouraging leverage, private-public partnerships, and coordination with other Federal programs.” As proposed, very little will be done to leverage these dollars.

NRDC has identified several sources of funding that the State would be well-served to leverage through this Action Plan. These could be used to improve upon the implementation of the proposed projects and make needed changes in local and state policies and, “integrate climate adaptation and resiliency planning into [agency] policies, programs, and operations,” as Governor Cooper has directed NCORR and all state agencies in Executive Order 80.⁵

As stated in HUD’s federal register notice, “While it is impossible to eliminate all risks, CDBG-MIT funds will enable grantees to mitigate against disaster risks, while at the same time allowing grantees the opportunity to *transform State and local planning* [emphasis added].”

While \$168 million is a substantial amount of federal funding, NRDC recognizes there are limitations to how much can be accomplished given the State’s current vulnerability and exposure to natural hazards like Hurricanes Matthew, Florence, and Dorian and the growing risks associated with climate change. That is why it is so critically important to recognize CDBG-MIT for the “unique and significant opportunity” that it provides. These funds should not only be deployed for a series of one-time projects, but also for North Carolina to strategically use these funds to reinforce ongoing statewide planning efforts and to creatively leverage existing local, state, and federal capital and other resources.

NRDC wants to assist North Carolina in any way possible to improve upon the Draft Action Plan and to support the State’s ongoing efforts to increase its resilience to impacts of climate change through the development of its Climate Risk Assessment and Resilience Plan. The following detailed comments on each of the sections of the Draft Action Plan are provided to NCORR in that spirit.

2.0 Mitigation Needs Assessment

HUD requires that each applicant for CDBG-MIT funds conduct a Mitigation Needs Assessment and “assess the characteristics and impacts of current and *future hazards* [emphasis added] identified through its recovery from the qualified disaster and any other Presidentially-declared disaster.”⁶

HUD also clearly states that “The action plan must include a risk-based Mitigation Needs Assessment that identifies and analyzes all significant current and future disaster risk, and provides a substantive basis for the activities proposed.”⁷

The Draft Action Plan correctly makes use of North Carolina’s 2018 State Hazard Mitigation Plan as the basis for its Mitigation Needs Assessment, but this assessment is still based exclusively on historical experience with natural hazards. It contains very little information and analysis of future hazards or the way that climate change will affect the likelihood or magnitude of future hazards, which NCORR acknowledges on p. 39 of the Draft Action Plan.

⁵ Governor Roy Cooper, Executive Order 80, paragraph 9, page 3.

⁶ 84 FR 45847.

⁷ 84 FR 45840.

There is a great deal of information available through the National Climate Assessment and through the analysis underway for the State's Climate Risk Assessment and Resilience Plan that could be utilized for this effort. We urge NCORR to incorporate this information into the final Mitigation Needs Assessment that is submitted to HUD. Other resources, like the sea level rise projections produced by the State in 2015, could also be incorporated; the North Carolina Coastal Resources Commission is updating those projections.^{8,9} However, given some of the restrictions imposed on the State's sea level rise projections, we also suggest that NOAA's most recent projections be included in the Action Plan.¹⁰

NRDC then recommends that the Draft Action Plan describe the number of properties that are within the area bounded by the State's own 2015 Sea Level Rise Assessment Report as well as the various scenarios included in NOAA's 2017 *Global and Regional Sea Level Rise Scenarios for the United States*. Also, the Draft Action Plan should inform HUD about the new sea level rise assessment that the State will complete in 2020.

By not assessing future sea level rise, as required by HUD, North Carolina is missing the opportunity to make fully informed decisions about the projects it proposes to undertake with CDBG-MIT funds and actions the State will need to take in the future. Moreover, on page 12 of the Draft Action Plan there is an acknowledgement that changing conditions have already made it necessary to update existing local hazard mitigation plans to reflect a new understanding of risks from natural hazards, yet there is little included to describe how that shortcoming will be remedied.

To remedy this shortcoming, NRDC recommends that the Draft Action Plan include language that dedicates up to 25 percent of the \$8,403,350 set aside for planning costs identified in the Draft Action Plan (p. 2) to support creation of a statewide Climate Risk Assessment and make funds available to local jurisdictions through a competitive grant program to update their hazard mitigation plans using the results of that analysis. Development of a statewide Climate Risk Assessment can be undertaken using climate modelling already underway by the North Carolina Institute for Climate Studies (NCICS). This modelling is being conducted as part of the Climate Risk Assessment and Resilience Plan that the Department of Environmental Quality is overseeing under Executive Order 80. Local jurisdictions could then apply to NCORR to use this information to update their local hazard mitigation plans, creating the type of data-driven and future-oriented hazard planning that HUD is hoping to achieve through CDBG-MIT.

The Draft Action Plan proposes to build new housing outside the 100-year floodplain, but that is no guarantee that these buildings will be safe from flooding. The Mitigation Needs Assessment should recognize the shortcomings of flood maps that it will rely upon to guide where new housing is developed. NRDC examined FEMA data on the National Flood Insurance Program (NFIP) and found that 16 percent

⁸ N.C. Coastal Resources Commission Science Panel, North Carolina Sea Level Rise Assessment Report, March 31, 2015. Available at <https://deq.nc.gov/about/divisions/coastal-management/coastal-resources-commission/sea-level-rise-study-update>.

⁹ N.C. Coastal Resources Commission Science Panel, Draft Charge to the Science Panel for the 2020 Sea Level Rise Assessment Report Update, Sept. 2019. Available at <https://files.nc.gov/ncdeq/Coastal%20Management/documents/PDF/Coastal%20Resources%20Commission%20-%20Meeting%20Agendas%20-%20Minutes/CRC-19-29-2020-SLR-Charge-to-the-Science-Panel.pdf>.

¹⁰ National Oceanic and Atmospheric Administration, *Global and Regional Sea Level Rise Scenarios for the United States*, NOAA Technical Report NOS CO-OPS 083, p. 23, February 2017.

of the 1,132 Severe Repetitive Properties in North Carolina as of May 2018 (generally, properties that have suffered four or more NFIP losses) lie outside the State’s 100-year floodplains (A and V Zones). Eighteen percent of all NFIP damage claims in North Carolina are for properties that are outside the 100-year floodplain. These are factors that the Draft Action Plan should take into consideration in the siting and design of new housing it proposes to build. It is quite possible that new housing built outside the 100-year floodplain will have a higher risk than the flood maps indicate, something the Draft Action Plan does not currently account for.

The Mitigation Needs Assessment should also consider how extreme levels of rainfall impact flooding, particularly for any new housing built using CDBG-MIT funds. As such, the assessment should be informed by projections of future rainfall that are readily available from NCICS, NOAA, the National Climate Assessment and many other sources.

Given the lack of future conditions analysis included in the Draft Action Plan, the 2,300 properties identified for potential buyouts or acquisitions may be far less than the number of properties the State should be planning to buyout. As a result, the amount of affordable housing may also be significantly underestimated. While the \$168 million in CDBG-MIT funding being applied is insufficient to conduct all the buyouts and affordable housing that would be identified, it is still very important for the State to take advantage of the opportunity afforded by these funds to assess those needs, which is exactly what HUD is requiring states to do.

3.0 Long-Term Planning and Risk Mitigation Considerations

The CDBG-MIT program, unlike traditional CDBG-DR funding that is targeted at prior disasters, is meant to foster a culture of preparedness and long-term resiliency to future extreme events. Such an objective requires grantees to have more than a project-specific vision, but to consider more broadly how changes to governmental policies, practices, and programs can attain enduring adaptation and resilience benefits. As such, HUD’s Notice of CDBG-MIT funding requires NCORR to “describe how it plans to: promote long and regional planning and implementation informed by its Mitigation Needs Assessment,” which includes the development and enforcement of building codes, vertical flood protections, and land use and zoning policies. Additionally, the notice requires NCORR to consider how wind and “continued sea level rise” will affect flood mitigation efforts. NCORR’s “Long-Term Planning and Risk Mitigation Considerations” section comes close, but does not attain HUD’s objective for the grant program.

First, the State of North Carolina is currently engaged in creating a Climate Risk Assessment and Resilience Plan under Governor Cooper’s Executive Order 80. However, NCORR’s CDBG-MIT Action Plan makes no mention of this effort. NCORR should consider how CDBG-MIT funding not only can be used to inform that effort, but also how the content of the Climate Risk Assessment and Resilience Plan will contribute to long-term planning and risk mitigation considerations. The absence of reference to the Climate Risk Assessment and Resilience Plan is a missed opportunity for NCORR to demonstrate its commitment to foster long-term resiliency to future extreme events.

Second, HUD expects NCORR to take “steps to set in place substantial governmental policies,” such as the development and enforcement of more stringent building and zoning codes, to “enhance the impact of HUD-funded investments.” While NCORR’s Action Plan discusses both building code standards and land use and zoning policies, the Draft Action Plan lacks specificity concerning how NCORR could encourage

or develop more stringent standards and policies. As NCORR notes in the Draft Action Plan, North Carolina's building codes have regressed concerning elevation requirements for flood protection. The current code only requires elevation to the height of the 100-year flood, whereas previous iterations required an additional foot of elevation above the height of the 100-year flood.

Encouraging North Carolina communities to adopt more protective building and zoning policies to future extreme events achieves the objectives of the CDBG-MIT program to foster a holistic approach to resiliency rather than a narrow project-by-project focus. Such an approach is especially true regarding vertical elevation standards for flood protection. NRDC is pleased with NCORR's requirement that new or substantially improved residential structures using CDBG-MIT funds be elevated two feet above the 100-year flood height if located in a 100-year floodplain or the high water mark if outside the 100-year floodplain. However, such a requirement will only benefit a small subset of residential structures located in a recipient community, and the remainder of future new or substantially improved homes will remain vulnerable. This is not the result HUD is trying to achieve with CDBG-MIT.

NRDC recognizes amending building standards and zoning codes may be beyond NCORR's direct control, but NCORR could leverage its funding to encourage changes to such at the local level. For example, per the Draft Action Plan, "land use and zoning practices, including adopting zoning regulation and amending zoning text of maps, is a legislative policy choice entrusted to local elected officials." NRDC therefore recommends that NCORR give priority to local governments that have adopted more protective and resilient building and zoning practices or are committed to adopting such codes in the course of their CDBG-MIT funded projects. Prioritizing subgrantees' receipt of funding based on such could encourage communities that may lack sufficient building and zoning codes and policies to move towards adopting such so as not to miss a future funding opportunity.

Third, HUD requires NCORR to consider high wind and "continued sea level rise" in any planned flood mitigation efforts. While Section 3 of NCORR's Draft Action Plan discusses both wind and *past* sea level rise, the Draft Action Plan provides zero discussion of how "continued" sea level rise impacts will alter future flood risk, especially concerning how North Carolina's 100-year floodplains will likely expand. As noted above, nearly one in five of North Carolina's severe repetitive loss properties are located outside of the 100-year floodplain and the same is true for the State's NFIP claims overall. As sea level rise exacerbates flood risk, those numbers are likely to grow. As such, the absence of any reference to future sea level rise limits NCORR's ability to prepare for future flood events.

NCORR must address how relative sea level rise projections will be incorporated into flood risk assessments, especially in regard to the siting and design of NCORR's affordable housing projects, as well as how NCORR may prioritize buyout projects in coastal areas. NCORR could then prioritize assistance to areas that face the greatest threat of future flooding to best ensure long-term resiliency.

The North Carolina Coastal Resources Commission's Sea Level Rise Assessment Report provides sea level rise projections for a 30-year timeframe.¹¹ In addition, as mentioned above, the Commission is

¹¹ N.C. Coastal Resources Commission Science Panel, North Carolina Sea Level Rise Assessment Report: 2015 Update to the 2010 Report and 2012 Addendum (March 31, 2015) available at <https://files.nc.gov/ncdeq/Coastal%20Management/documents/PDF/Science%20Panel/2015%20NC%20SLR%20Assessment-FINAL%20REPORT%20Jan%2028%202016.pdf>

already in the process of updating those projections. NRDC also recommends that the State incorporate information from NOAA’s 2017 *Global and Regional Sea Level Rise Scenarios for the United States*, which includes a wider range of scenarios over a longer time scale than the Commission was allowed to consider in its assessment. The Commission’s science advisory panel is preparing for the five-year update to the 2015 report, which will require an update to the regional rates for potential sea level rise.¹² NCORR should utilize this report to inform their long-term planning risk and mitigation considerations concerning sea level rise and future flood risk.

4.0 Mitigation Projects and Leverage

The Draft Action Plan has identified very few opportunities to leverage other sources of funding. One of HUD’s goals for CDBG-MIT is to “Maximize the impact of available funds by encouraging leverage, private-public partnerships, and coordination with other Federal programs.”¹³ In addition, HUD clearly states that “each grantee must align its CDBG-MIT programs or projects with other planned federal, state, regional, or local capital improvements.”¹⁴ Finally, “each grantee must describe how it will leverage CDBG-MIT funds with other funding provided through public-private partnerships and by other Federal, State, local, private, and nonprofit sources to generate more effective and comprehensive mitigation outcomes.”¹⁵ As proposed, very little will be done to leverage these dollars or coordinate their use with other planned capital improvements.

North Carolina is already in receipt of hundreds of millions of dollars of federal disaster aid from FEMA, HUD, and other agencies from Hurricanes Matthew, Florence, and Dorian, all of which could be potentially leveraged with CDBG-MIT. The State also has several grant programs available to local communities that could further leverage CDBG-MIT, but none of these are recognized in the Draft Action Plan. NRDC offers the following recommendations for how to comply with HUD’s leveraging requirements.

FEMA Public Assistance (PA) Program and Hazard Mitigation Grant Program (HMGP): The Draft Action Plan acknowledges that these funds are available to the State. These dollars are easily leveraged for the activities proposed. HMGP dollars, in particular, can be used for property buyouts, demolition of structures, and to support the construction of green infrastructure and other flood mitigation projects. These projects require a 25 percent non-federal match, but CDBG-MIT funds can be used for that match. PA grants can be used for repairing infrastructure and making those systems more resilient, which should also be closely coordinated with use of CDBG-MIT funds.

FEMA NFIP Claims and Increased Cost of Compliance (ICC) Payments: In conducting buyouts of properties, NCORR could potentially leverage NFIP claims to offset some of the costs of purchasing the damaged properties. Charlotte-Mecklenburg County Stormwater Services has run a very successful

¹² Memorandum from the Coastal Resources Commission to Tancred Miller, 2020 Sea Level Rise Report Update – Charge to Science Panel, (Sept. 3, 2019) available at <https://files.nc.gov/ncdeq/Coastal%20Management/documents/PDF/Coastal%20Resources%20Commission%20-%20Meeting%20Agendas%20-%20Minutes/CRC-19-29-2020-SLR-Charge-to-the-Science-Panel.pdf>.

¹³ 84 FR 45838.

¹⁴ 84 FR 45847.

¹⁵ 84 FR 45848.

buyout program for years that does this.^{16,17} NCORR should talk to them about how such a program could be structured using CDBG-MIT funds that leverages NFIP claims. In addition, NFIP Increased Cost of Compliance claims can be leveraged to cover the costs of demolition for buyouts.

HUD CDBG-DR: The State has or will receive a total of \$573,050,000 in HUD funding, in addition to the \$168 million covered by the Draft Action Plan. This includes \$236,529,000 in funding from Hurricane Matthew, of which the State has \$208,490,905 remaining.¹⁸ The State will receive an additional \$336,521,000 due to Hurricane Florence.¹⁹ All of these dollars are available as potential leverage and the State has or will soon develop similar Action Plans for their use.

State Sources: Beyond the federal disaster dollars the State has already received or will receive, NRDC has identified several state sources should be leveraged through this Action Plan. These could be used to expand the scope of the Draft Action Plan, support additional planning by local governments, improve upon the implementation of the proposed projects, make needed changes in local and state policies or, “integrate climate adaptation and resiliency planning into [agency] policies, programs, and operations,” as Governor Cooper has directed NCORR and all state agencies in Executive Order 80.²⁰ These state funding sources could include:

- \$180 million for disaster recovery efforts appropriated by the State legislature.
- NCDOC-State Rural Grants, which can support local governments with infrastructure projects that will lead to the creation of new, full-time jobs (<https://www.nccommerce.com/grants-incentives/public-infrastructure-funds/infrastructure-state-rural-grants>).
- NCDOC-GoldenLEAF and other Workforce Development Grants, which could support new housing jobs, including the salvage and re-use of demolished homes and materials²¹ (<https://www.nccommerce.com/grants-incentives/workforce-grants>).
- NCDEQ-Water Resources Development Grant Program, which can be used for land acquisition, stream restoration and other purposes complementary to this application.
- NCDEQ-205(j) Water Quality Management Planning Grants, which could be leveraged to plan for reuse of acquired properties and for green/natural infrastructure.
- NCDEQ-Watershed grants, such as the Section 319 grant program, the NCDEQ-Clean Water Management Trust, the Clean Water State Revolving Fund (which could be a source of funding for green infrastructure and natural infrastructure and other water infrastructure needs related to

¹⁶ Charlotte Mecklenburg County Stormwater Services, Floodplain Buyout Program. Available at <https://charlottenc.gov/StormWater/Flooding/Pages/FloodplainBuyoutProgram.aspx>.

¹⁷ “One city’s plan to combat climate change: Bulldoze homes, rebuild paradise,” *Washington Post*, November 26, 2019. Available at <https://www.washingtonpost.com/climate-solutions/2019/11/26/one-citys-plan-combat-climate-change-bulldoze-homes-rebuild-paradise/>.

¹⁸ HUD, *Monthly CDBG-DR Grant Financial Report*, October 31, 2019. Available at <https://files.hudexchange.info/resources/documents/CDBG-DR-Financial-Report-2019-11-01.pdf>.

¹⁹ P.L. 115-254 Oct. 5, 2018. Also see *CDBG-Disaster Recovery Grant History, 1992 – 2019*, available at <https://files.hudexchange.info/resources/documents/CDBG-DR-Grant-History-Report.pdf>.

²⁰ Governor Roy Cooper, Executive Order 80, paragraph 9, page 3.

²¹ Milwaukee Metropolitan Sewer District supported a program to employ locals to salvage homes that were bought and demolished. See <http://archive.jsonline.com/news/milwaukee/87049617.html/>.

new affordable housing), and NC Division of Mitigation funding for wetland, stream, and riparian restoration (<https://deq.nc.gov/about/divisions/water-resources/planning/basin-planning/use-restoration-watershed-programs/funding>).

- NCDEQ Coastal Area Management Act grants for planning (<https://deq.nc.gov/about/divisions/coastal-management/coastal-management-land-use-planning/about-land-use-planning>).
- NCDEQ Public Access Grants, which can be used for creating public access to waterways that may be near/adjacent to buyouts (<https://deq.nc.gov/about/divisions/coastal-management/coastal-management-beach-waterfront-awareness-program/public-access-grant-application-package>).
- The NC Dept of Ag-ADFP Trust Fund, which supports conservation easements and agricultural planning.

5.0 Natural Infrastructure

The State should focus on how properties that are the subject of a buyout can then be used for the construction of natural infrastructure, to include activities like public access, restoration of wetlands and floodplains, and other nature-based flood mitigation measures.

At present the State does not make it clear what will be done with properties that are subject to a buyout or an acquisition (see below).

NRDC recommends that the following language be added to the Draft Action Plan:

Use of CDBG-MIT funds will place highest priority on projects that incorporate all of the following elements:

- property buyouts (no subsequent redevelopment allowed and property deed-restricted),
- construction of replacement housing for LMI residents, and
- properties subject to a buyout are used for natural infrastructure projects.

6.0 Construction Standards

HUD's CDBG-MIT announcement encourages NCORR "to meet the Green Building Standard" for all new construction of residential buildings or repair of substantially damaged residential buildings.²² NRDC is pleased to see that NCORR will require that the project scopes for all construction projects incorporate "Green Building materials to the extent feasible." NCORR proposes requiring all constructions materials must meet established industry-recognized standards that have achieve certification under at least one of the following:

- ENERGY STAR.
- Enterprise Green Communities.
- LEED.
- ICC-700 National Green Building Standard.

²² 84 FR 45863.

- Any other equivalent comprehensive green building program.

In addition to the standards above, which are required to be used by HUD, NRDC also recommends that the Draft Action Plan add the New York City Resiliency Design Guidelines.²³

While NRDC acknowledges a “one-size fits all” approach would not be appropriate, NRDC recommends NCORR provide a process for ensuring that the most protective measures to future extreme weather events from the above list are prioritized to achieve the highest level of protection and safety.

NCORR could develop a scoring system that ranks the various options from the eligible programs according to their “resiliency effectiveness.” For example, options that make a residential structure more resilient (i.e. safer from flood, heat, or severe wind events) would receive more points. Project scopes that receive the highest scores are the ones prioritized for funding.

The City of Norfolk, Virginia has established a “resilience quotient” as part of their permitting program that could serve as basis for how NCORR could structure its scoring system.²⁴ Under the resilience quotient system, developers can earn points for adopting different protective measures that achieve flood risk reduction, storm water management, and energy efficiency. New developments are required to meet different resilience point values based on development type and size before a permit will be issued.

NCORR could develop a similar system for reviewing project scopes, requiring projects to attain a certain point value before funding will be made available. For example, NCORR’s Draft Action Plan notes that drought is among the likely hazards, and that drought poses a high threat in the Risk Assessment. Water efficiency measures can improve community resilience during times of drought. Additionally, water efficiency measures can reduce the extent of groundwater withdrawals, which themselves may exacerbate the extent of saltwater intrusion in the Coastal Plain, compromising the quality and reliability of this important water supply. Although most North Carolinians are supplied by surface water, over 300 million gallons of groundwater per day are withdrawn statewide for domestic wells and public water supplies, plus additional withdrawals for agricultural irrigation. If appropriate for the geographic location, project scopes that incorporate options from the above-referenced standards to improve water efficiency could receive a higher score than projects that do not.

7.0 Minimizing Displacement and Ensuring Accessibility

NCORR states that it does not anticipate using CDBG-MIT funding for activities that will trigger the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA); pursuant to Section 8.6.5 of the Draft Action Plan, only owner-occupants of primary residences will be eligible for buyouts, thereby avoiding any displacement of tenants. If tenants are displaced by a CDBG-MIT activity, NCORR states that it has the plans and capacity needed to fulfill all URA requirements.

However, the CDBG-MIT notice requires each grantee to “describe how it plans to minimize displacement of persons or entities, and assist any persons or entities displaced through its mitigation

²³ New York City Resiliency Design Guidelines. Available at https://www1.nyc.gov/assets/ort/pdf/NYC_Climate_Resiliency_Design_Guidelines_v3-0.pdf.

²⁴ Building a Better Norfolk: a zoning ordinance for the 21st Century (Jan. 23, 2018) available at <https://www.norfolk.gov/DocumentCenter/View/35581/Adopted-Zoning-Ordinance?bidId=>.

activities (except for mitigation through voluntary buyout activities that are designed to move households out of harm's way)."²⁵ This suggests that NCORR must consider the displacement implications of non-buyout acquisitions. This is especially important because NCORR has not yet determined the post-purchase use of properties (i.e., how many will be "buyouts" and how many will be "acquisitions"). As described below, NRDC also has concerns about NCORR's plans to restrict eligibility to owner-occupied residences.

Beyond the requirements of the URA, NCORR has an opportunity to establish buyout/acquisition practices that explicitly incorporate considerations of social cohesion, neighborhood character, and long-term community goals—reflecting not just the hazards that people are moving away from, but the vision of what they are moving toward. Recent analyses of FEMA data show that buyouts are generally implemented by whiter, wealthier communities (those with the capacity to take on a resource-intensive buyout project), with the acquired properties concentrated in areas of greater social vulnerability within those communities.^{26,27} This may reflect the fact that the most flood-prone homes in the nation tend to be owned and occupied by lower-income households; particularly in inland locations and cities with a legacy of redlining, low-income communities and communities of color are likely to experience higher flood risk due to lower-lying elevations and/or underinvestment in flood mitigation infrastructure.^{28, 29, 30, 31} At the same time, it also highlights a disproportionate risk of displacement for these communities.

As NCORR's Draft Action Plan states, "A recurring theme and comment from the community engagement during Draft Action Plan development was the importance of place and home for impacted individuals" (Section 8.4.1). NCORR's plans for buyouts and acquisitions should include support for participating households to find suitable replacement housing, even if the residents do not meet the URA's definition of "displaced persons." New Jersey's Blue Acres Program, which provides participants with real estate, legal, and other services, could serve as a model. Providing such support (whether financial or otherwise) should increase participation/reduce attrition and help NCORR meet its hazard mitigation goals, in addition to increasing participant satisfaction. This is particularly important because it seems that buyout/acquisition recipients are not expected to reside in the new housing constructed with CDBG-MIT funds.

²⁵ 84 FR 45848.

²⁶ Robert Benincasa, "Search the Thousands of Disaster Buyouts FEMA Didn't Want You to See," NPR.org, March 5, 2019, <https://www.npr.org/2019/03/05/696995788/search-the-thousands-of-disaster-buyouts-fema-didnt-want-you-to-see>.

²⁷ Katharine J. Mach, Caroline M. Kraan, Miyuki Hino, A. R. Siders, Erica M. Johnston, and Christopher B. Field, "Managed retreat through voluntary buyouts of flood-prone properties," *Science Advances* 5, no. 10 (October 2019): eaax8995, <https://doi.org/10.1126/sciadv.aax8995>.

²⁸ Rob Moore, "Seeking Higher Ground: How to Break the Cycle of Repeated Flooding with Climate-Smart Flood Insurance Reforms," NRDC, July 2017, <https://www.nrdc.org/sites/default/files/climate-smart-flood-insurance-ib.pdf>.

²⁹ Marilyn C. Montgomery and Jayajit Chakraborty, "Assessing the Environmental Justice Consequences of Flood Risk: A Case Study in Miami, Florida," *Environmental Research Letters* 10, no. 9 (September 1, 2015): 095010, <https://doi.org/10.1088/1748-9326/10/9/095010>.

³⁰ Jeremy Deaton, "Hurricane Harvey Hit Low-Income Communities Hardest," Nexus Media, September 1, 2017, <https://nexusmedianews.com/hurricane-harveyhit-low-income-communities-hardest-6966d859e61f>.

³¹ Brentin Mock, "Zoned for Displacement," CityLab, September 13, 2017, <https://www.citylab.com/equity/2017/09/climate-changes-inevitable-displacement-of-most-vulnerable/539232/>.

NRDC also encourages NCORR to consider unintended consequences of post-buyout land use, so that newly acquired public space does not lead to housing pressure and displacement of residents who remain in the neighborhood. All members of a community should have access to resulting green space or other public amenities, and newly constructed affordable housing should be sited with these considerations in mind.

Finally, NRDC recommends that NCORR partner with researchers to follow up with participants and local governments. Existing buyout literature is mostly composed of single case studies; there is little cross-study comparison, discussion of broad themes, and connection between process and outcome. NCORR's buyouts and acquisitions provide a rich opportunity to add to the nation's understanding of how such programs affect residents and communities in the long term. NRDC recently convened an expert workshop on home buyouts at the University of North Carolina and can connect NCORR with interested researchers.

8.0 Activities and Allocation of Funds

NRDC is highly supportive of NCORR's decision to concentrate CDBG-MIT project funding on buyouts/acquisitions and affordable housing. Buyouts are the only way to permanently remove the risk of flood damage on a property, and the resulting public land can provide great value to the community. NRDC also recognizes that, when done thoughtfully and in consultation with affected neighborhoods, climate-smart redevelopment of acquired properties can also be beneficial and improve the resilience of communities. Coupling buyouts/acquisitions with new housing in low-risk areas can, ideally, provide replacement housing for buyout participants and help alleviate a community's overall housing stress.

While NRDC supports NCORR's selection of activities, we believe the Draft Action Plan should describe their implementation in more detail to ensure they will successfully meet the goals of the grant. As stated in the Federal Register notice, "The Administration cannot emphasize strongly enough the need for grantees to fully and carefully evaluate the projects that will be assisted with CDBG-MIT funds."³² Our recommendations focus on three areas: prioritizing properties to acquire and the fate of those properties, participant eligibility criteria, and standards for constructing new affordable housing.

Prioritization and Disposition of Properties

Because NCORR will directly administer the buyout and acquisition projects, it must describe "all criteria used to select applications for funding, including the relative importance of each criterion."³³ Section 8.5.4 of the Draft Action Plan describes prioritization for acquiring properties in terms of the residents' income status and the property's location/risk profile. Are these the only characteristics that NCORR will use when selecting properties to acquire? As the buyout/acquisition programs are likely to be oversubscribed, NCORR should establish more specific criteria for selecting the communities that will host buyout/acquisition projects and for prioritizing among interested households.

Section 8.5.1 of the Draft Action Plan states that the "post-purchase fate of the acquired properties" (i.e., whether they can be redeveloped) "will be determined by the State, in consultation with local officials, to

³² 84 FR 45839.

³³ 84 FR 45849.

ensure these properties best serve the future goals of the community.” NCORR should establish criteria for making these determinations, emphasizing equity, the outcome of engagement with residents of the affected neighborhood, and the current and future risks faced by the community. It is unclear from the Draft Action Plan whether residents will apply directly to NCORR or whether applications will be compiled into proposals by local governments; NRDC recommends the latter.

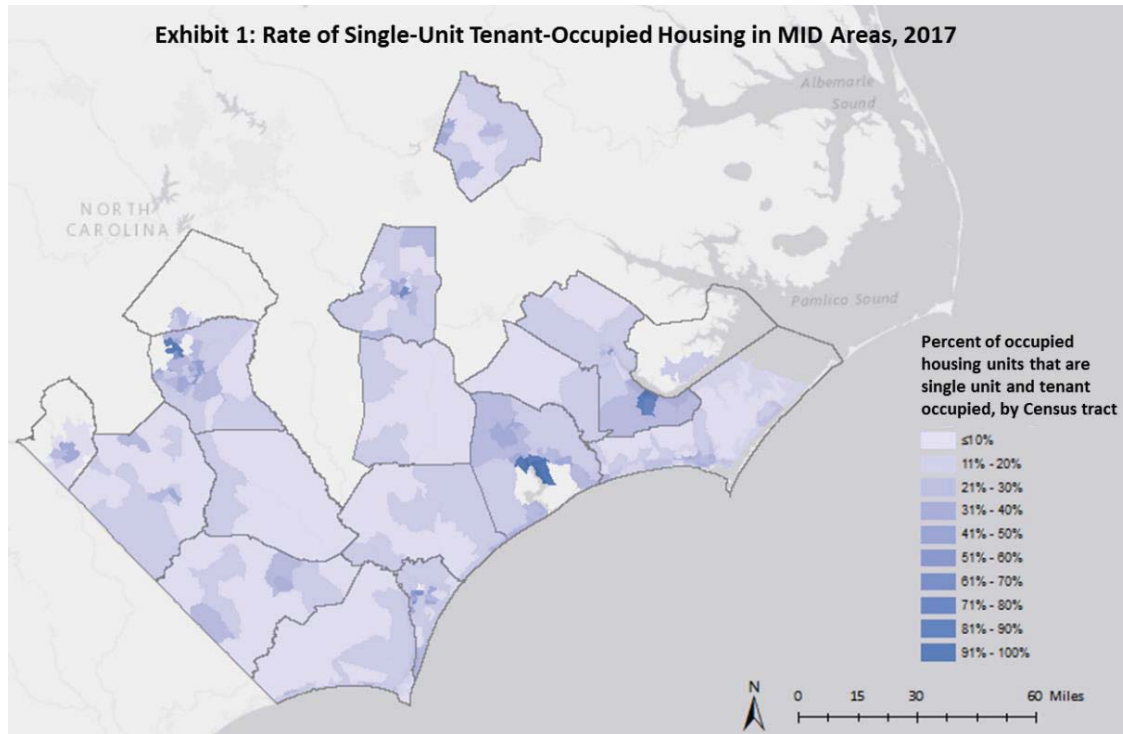
In addition, NCORR should establish a mechanism to ensure that local jurisdictions comply with any redevelopment plans/agreements. Because NCORR is prioritizing low- and middle-income households, and because (per 84 FR 45866) recipients of non-buyout acquisitions cannot receive the pre-flood fair market value for their homes, it is possible that socioeconomically vulnerable households would be selling their homes at a loss, only to see the property obtained by a luxury housing developer that can afford to meet resilient building standards. Localities should not be incentivized to select non-buyout acquisitions at the expense of their lower-income residents.

In general, NRDC recommends that NCORR adopt a standardized process for working with localities to (1) identify areas where buyouts or acquisitions could take place; (2) engage with affected neighborhoods to understand the level of interest and community goals for hazard mitigation, land use, etc.; and (3) evaluate the eligibility and prioritization of applications. Wherever possible, NCORR should prioritize buyouts rather than acquisitions and emphasize post-buyout land uses that involve ecological restoration, green/natural infrastructure, and other nature-based approaches to flood mitigation. Where redevelopment is permitted, it should be informed by a future-oriented risk analysis and demonstrate an NCORR-approved level of safety from future flood events. NRDC recommends that NCORR prioritize projects in communities that have updated building codes, land use plans, etc. to reflect climate hazards and reduce the risk of future flood damage. For a practical example, NCORR could consult the mitigation project criteria used by Charlotte-Mecklenburg Storm Water Services for their floodplain buyout program.

Participant Eligibility

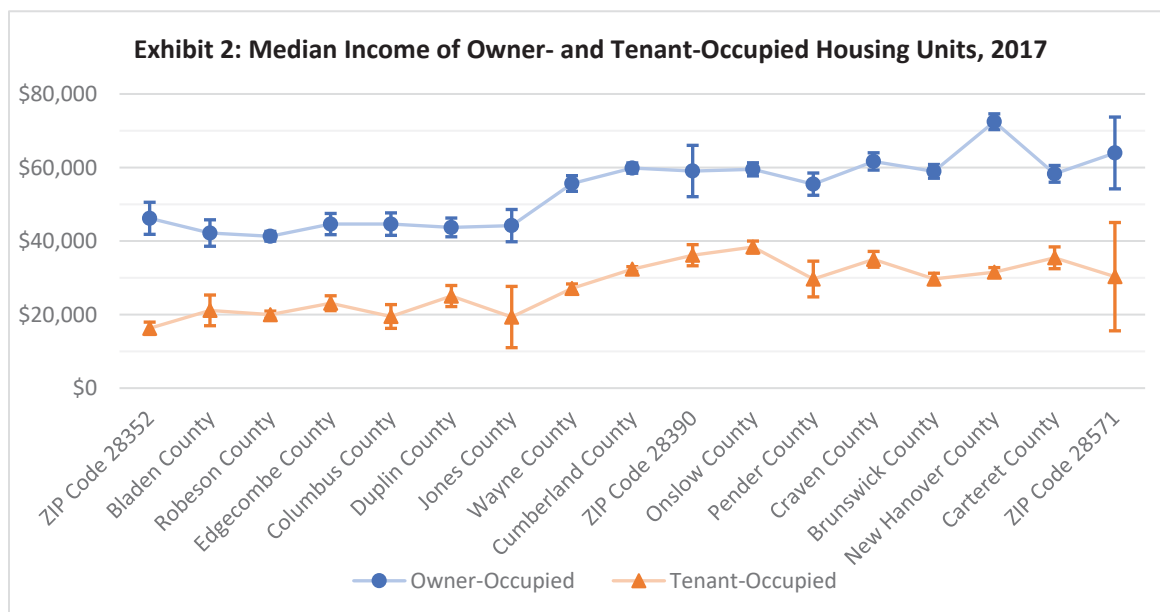
Section 8.5.5 of the Draft Action Plan states that only owner-occupied primary residences will be eligible for buyouts or acquisitions. NRDC supports the decision to exclude secondary residences. We also recognize that purchasing tenant-occupied housing involves additional considerations that can complicate project implementation, but that should not deter NCORR. NRDC is concerned that omitting rental properties from the buyout/acquisition program can have serious equity implications, as well as restrict NCORR from achieving its goal of purchasing adjacent parcels. At a minimum, NRDC encourages NCORR to consider extending eligibility to tenant-occupied single-family homes that would otherwise meet the location and income criteria.

As shown in the map below, some locations within the MID areas have relatively low proportions of owner-occupied housing. According to the American Community Survey’s 2017 five-year estimates, the MID areas have approximately 620,000 occupied housing units, about 40% of which are rentals. In some Census tracts, single-unit rentals represent the majority of occupied housing units.



Data source: American Community Survey 2017 five-year estimates (<https://www.census.gov/data.html>).

Tenants in the MID areas are likely to have lower incomes than owner-occupants. In each of the MID area counties and ZIP Code Tabulation Areas, the median income of owner-occupied housing units is substantially higher than that of tenant-occupied units (see Exhibit 2). Excluding tenants from participating in the buyout/acquisition program means that they could be left behind to face future storms and flooding—and also that the programs are likely to benefit more financially secure residents.



Data source: American Community Survey 2017 five-year estimates (<https://www.census.gov/data.html>). Vertical bars represent margins of error. Jurisdictions are sorted by overall median income (across all housing units).

Location of New Housing

The Draft Action Plan states that “construction must occur outside of the 100-year floodplain” (Section 8.6.3) and that “new or substantially improved residential structures are elevated two feet or more above the BFE or high water mark (if outside the floodplain)” (Section 3.1.1). This is consistent with 84 FR 45864, and NRDC agrees that new housing should be located away from flood risk and held to an elevation standard where that is not feasible. However, NRDC is concerned that HUD’s two-foot freeboard requirement may not be sufficient throughout the MID area. Nearly one in five of North Carolina’s severe repetitive loss properties are located outside of the 100-year floodplain and the same is true for the State’s NFIP claims overall. In recognition of increasing flood risk and sea level rise projections, NCORR should consider future predictions of flood risk in addition to backward-looking flood zones.

Sincerely,

A handwritten signature in black ink, appearing to read "Rob Moore".

Rob Moore
Director, Water & Climate Team
Natural Resources Defense Council

Cc: Office of Governor Roy Cooper
Federal Department of Housing and Urban Development
North Carolina Department of Environmental Quality