Property Buyouts Can Be an Effective Solution for Flood-Prone Communities

Improved federal policy on funding and planning would deliver better long-term outcomes

Cover photo: Wetlands in Newport News, Virginia, which the city restored after removing some homes as part of a buyout project, help contain and absorb excess water from Salters Creek during a king tide in 2021. *Kristen Zeis*

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The Pew Charitable Trusts is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life.

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Overview

Each year across the United States, communities large and small, inland and coastal, face devastation from flooding. These disasters wipe out family savings, destroy lives and livelihoods, set high-risk communities back economically, are a regular occurrence in many areas, and have cost the nation over $1 trillion since 2000.[1]

One strategy to address repeated flooding is a "buyout," in which residents sell their flood-prone properties to the state or local government and relocate to areas with lower flood risk. The federal government makes funds available to help states and localities buy these properties from willing sellers through an array of agencies and departments, primarily the Federal Emergency Management Agency (FEMA) and the Department of Housing and Urban Development (HUD). And some states, including North Carolina and New Jersey, and numerous localities, notably the Metropolitan Government of Nashville and Davidson County, Tennessee, and Birmingham, Alabama, have sought to harness the damage-reduction potential of buyouts by establishing and maintaining buyout programs, sometimes supplementing federal dollars with their own revenue.[2]

Scaling up buyout efforts could save taxpayers billions—or more—in disaster response and recovery over the long term, and spare countless households catastrophic losses.[3] But to realize those benefits, officials must improve their approach to buyouts in ways that increase participation and effectiveness. Even in flood-prone areas where many residents want to relocate, the issue can be practically and politically fraught, with community members and public officials reporting that buyout assistance is too slow, limited, and difficult or impossible to access.[4] Others are unwilling or unable to make a move, and in some places, local officials resist buyouts for fear of reducing their tax base or disrupting a cherished sense of local community.[5]

Further, some journalists and academics have argued that buyout programs seldom reach the most at-risk people or, conversely, that programs unfairly target communities of color or those with little political influence and effectively gentrify neighborhoods in the name of flood prevention.[6] And some local officials and experts question the true success of buyout projects, asserting that too many participants end up moving to places that are just as flood-prone as their previous residences.[7]

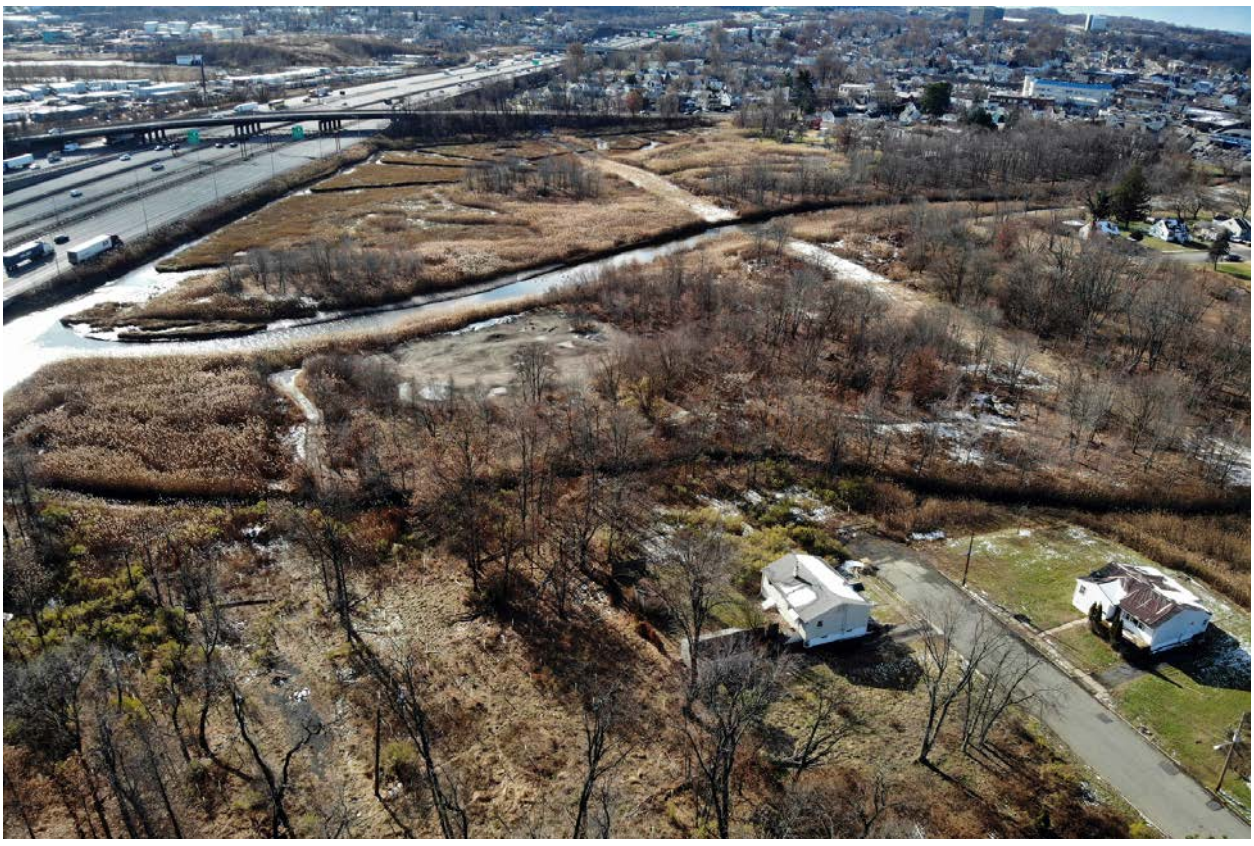
However, although these concerns are valid, buyouts, when pursued with a dual emphasis on alleviating flood risk and promoting equitable outcomes, have an important role to play in state and local flood mitigation efforts. Buyouts are just one strategy among many—including enhanced building standards and land-use requirements, flood-zone mapping, risk analyses, and structural and nature-based flood defenses, such as levees and wetland restoration, respectively—that governments can use to help communities better prepare for floods. But buyouts stand out amid these options because, at their best, they provide a permanent solution. Effective buyouts prevent future damage, make people safer, and ideally protect entire neighborhoods or communities. Moreover, once bought-out properties become natural open space, they can provide an added benefit of absorbing additional stormwater, further reducing flooding and helping to conserve habitats.

To help communities address the challenges and complexities of residential buyouts and realize this potential, The Pew Charitable Trusts examined existing literature, reviewed selected state and local buyout efforts, and consulted with practitioners, academic experts, emergency responders, and planners. These diverse stakeholders shared lessons and approaches to inform Pew's research, including policy solutions to help make buyouts a more effective and equitable option for reducing the impacts of flooding. Specifically, the research identifies several key buyout challenges for states and localities:

- The many and varied priorities and requirements for federal programs that support buyouts create complexity for state and local governments and property owners.

- Communities that lack pre-disaster planning often consider property buyouts only in the days and weeks after a flood, when officials and residents are overwhelmed, traumatized, and under-resourced. And federal agencies' efforts to promote and improve local pre- and post-disaster planning are poorly coordinated, which presents barriers to state and local buyout initiatives immediately after a flood disaster, when they are in greatest demand.
- Federal resources are often tied to individual disasters, making sustaining buyout programs over the long term financially and logistically difficult.
- Poor coordination and collaboration across levels of government limit the effectiveness of outreach, engagement, and flood-risk awareness efforts. Moreover, inadequate access to risk and vulnerability identification tools can prevent under-resourced communities in flood-prone areas from effectively planning for buyouts and receiving necessary assistance.
- The liability and burden associated with the long-term maintenance of acquired property often makes buyout programs unattractive to local governments.

In addition to identifying these challenges, the workshop sessions and research also yielded recommendations aimed at improving the use of buyouts as a flood-preparedness tool. Although local governments typically have direct authority over land use, including management of flood-prone lands, the recommendations focus on federal policies because a large share of buyouts are wholly or largely funded with federal resources and because the rules and regulations governing federal funds influence state and local efforts to create and sustain buyout initiatives. To ensure that the recommendations are achievable, Pew focused on policies that departments and agencies, particularly FEMA, can implement relatively quickly and without statutory changes. Although some



This forest in a flood plain in Woodbridge, New Jersey, grows in what used to be the Watson Crampton neighborhood. Homeowners in the community accepted buyout offers through the state's Blue Acres program. *Ted Saffrey/AP Images*

recommendations call for modest rule and procedural changes, most require only simple administrative fixes to help ease the burdens on flood-prone communities. Specifically, Pew recommends that federal agencies that fund flood-related buyouts should:

- **Improve program guidance and provide greater flexibility and targeted funding.**
    - Establish an interagency task force or comparable mechanism to share information and harmonize program requirements.
    - Enhance support for state and local efforts to assess buyout options immediately after a disaster.
    - Reward communities for establishing effective programs.
    - Allow states and localities to use life estates to facilitate federally funded buyouts.
- **Enhance and expand buyout planning and encourage collaboration among local entities and across levels of government.**
    - Develop a multiagency, coordinated approach to promote and improve local pre- and post-disaster planning.
    - Better support community-led efforts to plan for, develop, and launch buyout programs.
    - Ensure that buyout plans account for critical community needs and prioritize investments for vulnerable populations.
    - Improve outreach and engagement activities on flood risk.
    - Encourage and fund stronger partnerships among state and local agencies, nonprofits, land trusts, parks and recreational organizations, watershed associations, and others.

This report looks at the history and current system of federally supported buyouts and provides detail on how departments and agencies can implement the recommendations to quickly and meaningfully improve the use of voluntary relocation to mitigate flood disasters and support vulnerable communities.

Methodology

Pew, in consultation with WaterWonks LLC, conducted this research along four tracks:

1. **Landscape review.** The research team examined a sample of federal, state, and local policies and programs that offer or influence property acquisitions, including studying reports, legislation, and research; analyzed the detailed mechanisms of federal buyout programs; and reviewed institutional or sociocultural factors that present obstacles for effective buyouts.
2. **State and local program review.** Based on the landscape review, the research team assessed state and local flood buyout programs, including conducting interviews with practitioners, to identify success stories and examples of barriers to success.
3. **Expert workshop.** Pew hosted a series of virtual discussion sessions, informed by the landscape analysis and review of local buyout efforts, that brought together academics, subject matter experts, and a number of local and state practitioners over three days to explore new ideas and strategic approaches for buyouts.
4. **Synthesis.** Finally, Pew's researchers synthesized the information from the previous steps and developed a set of recommendations aimed at improving federal buyout programs and policies.

The history of federally funded flood buyouts

The federal government has engaged in buyouts of flood-prone properties for decades. As far back as the 1930s and '40s, relocations occurred as part of large-scale infrastructure projects, including mandatory or forced property acquisitions under the doctrine of eminent domain. For example, the Tennessee Valley Authority removed residents, churches, and cemeteries to make way for dams and other flood-control structures.[8] And the Flood Control Act of 1938 authorized the Army Corps of Engineers (Corps) to remove and relocate structures to save on the costs of flood-control construction projects.[9] Throughout the latter half of the 20th century, the federal government purchased flood-prone homes as part of such projects or, on rare occasions, specifically to relocate at-risk residents.

Then in 1993, the role of buyouts shifted significantly toward supporting nonstructural flood-risk management, such as elevations, floodproofing, and removal of structures, including voluntary relocations.[10] That year, floodwaters covered huge swaths across nine Midwestern states, and the scale and duration of the disaster overwhelmed residents and local and state officials. Many families and communities that had persevered and rebuilt after previous flooding began to consider moving out of harm's way.[11]

Newly constructed homes in Rhineland, Missouri, sit on a hill above the town's former location. Rhineland residents opted to relocate as a community after a major Missouri River flood disaster in 1993. *L.G. Patterson/AP Images*

The federal government responded to the catastrophe with the Hazard Mitigation and Relocation Assistance Act of 1993, which made funds available for projects ranging from flood walls and drainage improvements to structure elevations and relocation.[12] Thousands of people applied to be moved, and a reported 90% of the newly available federal money went to buyouts.[13] In many cases, community leaders packaged buyouts to relocate not just individual families but entire blocks or neighborhoods that had suffered repeated flooding, and by 1998, then-FEMA Director James Lee Witt reported that more than 20,000 structures had been removed from flood plains across the region,[14] allowing those lands to be returned to open space. As Witt pointed out, the value of buyouts and nonstructural approaches to flood mitigation had been demonstrated at scale, and the potential payoff of pre-disaster interventions began to be recognized.[15]

With a pilot program for pre-disaster mitigation, including buyouts, that Witt had championed ending in 2001,[16] Congress started to look at planning and pre-disaster mitigation in a new light. The Disaster Mitigation Act of

2000 added property acquisition and relocation assistance to the authorized uses of federal disaster aid and mitigation funding.[17] The law also increased the share that the federal government would provide to states for projects undertaken through the previously established Hazard Mitigation Grant Program (HMGP), initiated a push for state hazard mitigation planning, and created the Pre-Disaster Mitigation (PDM) grant program.[18] Voluntary buyouts had attained a new status as a legitimate and effective flood mitigation approach and an accepted option for disaster-impacted communities.

Federal buyout programs

Over the past two decades, federal dollars have funded, at least in part, tens of thousands of buyouts of flooded or flood-prone structures. And those funds have come not from a single program but from multiple federal agencies and programs. In most instances, the federal government does not purchase properties itself. Further, no federal programs are devoted specifically to buyouts, which often complicates community efforts to identify the most appropriate funding source to tap for buyout activities. Nevertheless, significant federal resources are directed to buyout programs, primarily through FEMA and HUD, with several other departments and agencies playing important roles in supporting and facilitating buyouts.

Federal Emergency Management Agency

FEMA funds flood buyouts through multiple programs, including three that are focused on addressing hazards:

- The HMGP, authorized under the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (Stafford Act).[19]
- The Building Resilient Infrastructure and Communities (BRIC) program, authorized in 2020 under amendments to the Stafford Act as a successor to the PDM program.[20]
- The Flood Mitigation Assistance (FMA) grant program operating under the National Flood Insurance Program (NFIP).[21]

Additionally, in 2012 Congress phased out two other initiatives that had addressed the flooding of structures that had been the subject of repeated NFIP claims—the Repetitive Flood Claims and Severe Repetitive Loss grant programs—and merged them into the FMA program. And FEMA's Community Rating System gives communities a financial incentive, in the form of reduced insurance premiums, for voluntarily performing flood plain management at a higher level than is required for participating in NFIP.

The HMGP, which predates FEMA's other mitigation programs, can be used for a range of projects and has historically been the most used FEMA funding source to conduct buyouts. Funding availability is triggered by a presidential disaster declaration, and affected states, territories, and tribes are eligible to receive federal money specifically designated for mitigation, which they may disburse to any local jurisdiction or certain eligible nonprofit organizations to cover project costs. Use of HMGP dollars generally requires the locality to share in the cost by spending its own funds equivalent to as much as 25% of the federal investment.

In a somewhat similar approach, BRIC funding is also tied to the level of federal spending associated with presidentially declared disasters but is not distributed to affected states in the aftermath of a specific disaster. Instead, BRIC monies are set aside in a mitigation fund and made available, largely on a competitive basis, to states, territories, and tribes, any of which may include localities as subapplicants in their applications.[22] Additionally, the BRIC program allows a federal share up to 90% for "small impoverished communities," as defined by the act.[23]

Congress created the FMA program in 1994 with the goal of reducing claims under the NFIP. Like FEMA's other initiatives, the program provides funding to states, territories, and tribes on a competitive basis, and through those entities to localities, but in the case of FMA, only local jurisdictions that participate in the NFIP can qualify as sub-applicants. After passage of the Biggert-Waters Flood Insurance Reform Act of 2012, the FMA program shifted its priorities toward the elimination of repeatedly flooded properties, which has resulted in an uptick in FMA-funded buyouts. When used for buyouts, FMA funds may only support the purchase of NFIP-insured properties, but within that constraint, they can be used to cover as much as 90% of the cost of "repetitive loss structures," which FEMA generally defines as properties that have incurred flood-related damage at least twice, with repair costs averaging at least 25% of the value of the structure.[24] "Severe repetitive loss structures"—those with a history of either two losses exceeding the value of the structure or at least four losses with cumulative claims payments in excess of $20,000—are eligible to have 100% of the cost of a buyout covered through FMA.[25] Other FMA buyouts are subject to the same 25% local cost share as HMGP and BRIC purchases.[26]

In 2007, FEMA issued rules on property acquisitions by each program,[27] and it then provided additional information in its 2015 Hazard Mitigation Assistance Guidance.[28] The guidance and rules cover a wide range of topics, including eligibility of applicants, cost-effectiveness of projects, cost-benefit analyses, time limits on project completion, acceptable appraisal methods, cost limitations, required documentation, and restrictions on ownership or use of purchased properties. The key points include:

- FEMA-funded buyouts must be voluntary on the part of the property owner.[29]
- All mitigation projects, including buyout projects, must be technically feasible and cost-effective.
- Acquired properties must be permanently returned to open space or other approved uses that support or enhance a naturally functioning flood plain.
- Buyout offers can be made for structures outside of designated flood zones, depending upon the results of cost-benefit analyses; acquisition of structures inside a flood zone is assumed to meet the cost-benefit threshold if the purchase price is $276,000 or less.
- Sellers may receive the pre-disaster value of the property.
- Duplicative payments from multiple programs or agencies are prohibited, unless specifically allowed by law.
- Acquired property must be deeded to the local government or another acceptable entity, such as a land trust.
- FEMA funds may not be used for maintenance of acquired property.

Department of Housing and Urban Development

The other federal agency that has significant involvement in flood buyouts is HUD, mainly through three programs: the Community Development Block Grant (CDBG), Community Development Block Grant Disaster Recovery (CDBG-DR), and Community Development Block Grant Mitigation (CDBG-MIT). State and local governments can use grant funds for flood mitigation projects, including the purchase of flood-damaged and flood-prone properties, or to cover the required cost-share for other federal funding.

Congress established the CDBG as part of the Housing and Community Development Act of 1974. The program provides formula-based block grant funding to states and more than 1,200 localities, primarily to improve housing, economic opportunity, and other conditions at the local level.

CDBG-DR is predicated on the same law but has largely operated in ad hoc fashion, offering support for state or local recovery initiatives only when Congress approves specific disaster-related supplemental appropriations. In this way, the program, which was first used in 1993, functions as a "gap filler" source of financial assistance when Congress determines that there are recovery needs not covered by other programs and requiring federal support.

CDBG-MIT arose after Hurricane Harvey and other major disasters in 2017 when Congress appropriated a supplemental $12 billion for a new mitigation initiative.[30] HUD later increased the amount available for the program by allocating an additional $3.9 billion, bringing the overall total of CDBG-MIT funds to $15.9 billion. Like CDBG-DR, CDBG-MIT is not a standing program with regular annual appropriations. Rather, it operates only to the extent that Congress provides supplemental funding.

CDBG-DR-funded buyout projects have some similar requirements to FEMA mitigation projects, but they also differ in several important respects. One key difference from FEMA's approach is that, in certain cases, HUD allows grantees to distinguish between "buyouts" and "acquisitions." For the former, owners are paid the pre-disaster value for their properties and the land must remain undeveloped. For the less common "acquisitions," properties may be used for purposes other than open space and sellers receive the fair market, post-disaster value.

In addition, although FEMA allows purchases only if the seller owned the property before the flood event and prioritizes residential properties, in some instances, HUD permits its funds to be used even if the owner bought the property after the disaster. HUD also allows the acquisition of commercial, agricultural, or vacant land if the purchase supports one of CDBG's national objectives: benefiting persons of low and moderate income; preventing slum or blight; or meeting an urgent community development need.

Further, because as previously noted, CDBG-DR funding becomes available only in the event of a supplemental or special congressional appropriation, HUD issues notices regarding requirements for and conditions on the use of funds after monies are appropriated. These notices may call for spending in certain geographic areas or for specific categories of community need, such as housing, infrastructure, or economic development. The recipient jurisdiction, frequently a state, then prepares an unmet needs assessment and an action plan for how the resources will be used, takes public comment on the plan, and submits it to HUD for approval. Once the action plan is approved and funds are disbursed, the grantee implements the plan, which may be amended as work progresses, and provides quarterly reports to HUD.[31]

Other federal agencies

The Corps regularly evaluates, at the request of local communities, flood-control options, including acquisition and other nonstructural flood-control measures.[32] Before undertaking a major study of flood-control options, the Corps may require the requesting locality to agree to use its eminent domain power to compel recalcitrant landowners to sell if removal of structures is essential to the flood-control project. As is the case for FEMA-funded mitigation projects, Corps-funded projects, including buyouts, must be able to demonstrate cost-effectiveness. However, buyouts account for a small fraction of the Corps' overall flood-related spending.

The U.S. Department of Agriculture's (USDA's) Natural Resources Conservation Service (NRCS) also has a role in flood management and can fund land acquisition through its Emergency Watershed Protection-Floodplain Easement Program.[33] In contrast to some other federal initiatives, the program focuses largely on agricultural or open lands, but it may also cover lands used for housing and was an important source of buyout assistance in some Northeastern communities affected by Superstorm Sandy and Hurricane Irene. Acquisition and relocation can also be funded through NRCS' Watershed and Flood Prevention Operations Program.[34]

These USDA programs rely heavily on the purchase of permanent easements that restrict a property's use rather than acquisition of the property itself. Easement constraints may vary but are designed to protect the flood plain's functions, such as preventing erosion and storing floodwater, while allowing for other compatible uses. NRCS reports that it has purchased permanent easements on more than 1,400 properties in 36 states since 1996.[35]

How Buyouts Work

A FEMA- or HUD-funded property purchase is generally not the straightforward exchange between buyer and seller that people would recognize from a standard real estate transaction.

Westfield Road in Charlotte, North Carolina, during a flood on Aug. 4, 2011, left, and after Mecklenburg County's Floodplain Buyout Program bought and removed homes on the street and converted the land into greenspace, right, which helps absorb excess water and provides environmental and recreational co-benefits. *Charlotte-Mecklenburg Storm Water Services*

Attempts to chart a typical flood buyout have generally started with the announcement that FEMA or HUD mitigation funding is available. However, neither HUD nor FEMA dictates what type of mitigation any given release of funds will pay for. States and localities are responsible for deploying available funds, and they may choose myriad other mitigation measures. Therefore, the buyout process truly begins when state and local governments establish a specific buyout program—sometimes at the behest of flood-impacted residents themselves—or otherwise make clear that they intend to pursue buyout activities with a dedicated source of funds.

In some cases, a local government may initiate a buyout program and must win the support of state officials who are responsible for administering FEMA grants or post-disaster CDBG-DR award allocations. Those officials evaluate the needs and proposals of various localities and set priorities for grant funds, at times effectively requiring communities seeking resources for buyouts to compete against other localities and objectives.

Once a plan or grant application is approved, a considerable amount of work still must be done. Although local planning and discussion before a disaster can expedite the buyout process, the municipality may still need to adjust in light of multiple, often moving, targets. For instance:

- The total amount of federal funding received; any required local, state, or private matches; and costs for appraisals, demolition, and project management will affect the final number and selection of properties to be acquired. As a result, the buyout area may be smaller or larger than initially planned.
- Because buyouts must be voluntary, adjustments may be necessary as more or fewer families choose to participate. And where a change of land use for multiple properties is planned, buyouts from willing sellers may be slowed so officials can gain consensus among a larger owner group.

For the community, the process does not end when purchase contracts are signed or residents move out. Federal agencies require demolition of structures and documented restrictions on future land use, and the local government takes ownership of and responsibility for managing the land, which could in some cases involve transferring ownership or management to a land trust or conservation organization.

Other agencies, including the Economic Development Administration, National Oceanic and Atmospheric Administration, Fish and Wildlife Service, and Environmental Protection Agency, may also partner in some aspects of buyout projects.

In practice, buyout plans can be complicated and often slow, not simply because of government rules and procedures, but also because they seek to accomplish more than moving one family or one business. And those objectives require the engagement of multiple layers of government and an alignment of interests.

Local, state, and federal agencies and residents of a flooded neighborhood must reach consensus for a buyout to be completed. And when buyouts are employed post-disaster, as they often are, the need for deliberation, inclusive community engagement, and consensus-building can conflict with flood survivors' pressing needs. State governments can—and some do—take action to help local communities expedite flood-related buyouts. And local governments can and should take proactive measures before disaster strikes—through risk assessment, planning, and extensive outreach and engagement within flood-prone communities—to consider relocations as one component of holistic efforts to break the cycle of flooding, rebuilding, and flooding again.

Nevertheless, because federal agencies provide the lion's share of financial support for buyouts, this research has primarily focused on steps that the federal government can take to promote the use of buyouts as part of a comprehensive national approach to flood mitigation and to expedite buyout processes for communities.

Recommendations

Federal funding sources and guidelines

The various FEMA and HUD programs that can assist with buyouts suffer from poorly timed or insufficient funding, inconsistent requirements, legislative delays in providing resources, and inflexibility in how funds may be deployed immediately after flood events, when people are most interested and motivated to relocate. Although states and localities need to be more proactive in developing and executing pre-disaster buyout plans, as currently operated, federal programs can also hamper local efforts and discourage community participation.

As an example, a Government Accountability Office (GAO) study recently cited state and local officials' concerns about the "complex and lengthy" application requirements and stated that "benefit-cost analysis was a challenge for applicants."[36] Although the GAO report acknowledged that FEMA has made changes to its cost-benefit formulas to account for a wider array of benefits, including environmental benefits, it also noted the need to expand FEMA's set of "pre-calculated benefits"—predetermined values used to assess a project's cost-effectiveness—for particular project types. The report further observed that FEMA should create additional mechanisms to measure cost-effectiveness such as loss-avoidance studies, which examine how various mitigation efforts perform in real-world scenarios.[37]

Along with these recent federal efforts and to meet the growing need for buyouts, officials at all levels of government should work to develop a mutual understanding of all available funding resources. Doing so will help to satisfy as much need as possible, as well as provide long-term support for successful programs initially developed and funded with federal post-disaster grants. To help achieve those goals, federal officials should:

Establish an interagency task force or comparable mechanism to share information and harmonize program requirements

Each federal program that can be accessed for buyouts has its own priorities and requirements. For example, HUD might prioritize availability of affordable housing, while USDA may favor agricultural needs and FEMA might focus on the fiscal health of the NFIP. And though these agencies' varying missions do necessitate multiple

programs, the different rules and restrictions for cost shares, appraisals, and documentation, as well as the limits on the amounts that governments offer to compensate property owners, can present hurdles for states and municipalities. These conditions can also cause confusion, distrust, and delay for residents in potential buyout areas, particularly those living in small and midsize communities with limited resources and staff capacity.

As much as possible, program rules should give grantees the flexibility to combine multiple federal funding sources to address diverse needs within a flood-prone area while also supplementing those resources with state and local funds. To further this goal, federal agencies should streamline priorities and regulations across programs and regions. For example, although HMGP and CDBG-DR funds both become available after a federally declared disaster, they may do so according to different timelines and may impose different deadlines on grantees to spend the funds. HMGP calculates awards based on tangible costs associated with the declared disaster weeks or months after the event, while CDBG-DR funds, if Congress chooses to appropriate them, may not be available to an affected jurisdiction for a year or more after the disaster. In such situations—when funding sources from different federal agencies are made available at different times to address a common set of impacts—an interagency task force or comparable body could provide an effective mechanism for sharing information and identifying opportunities to ease or harmonize rules and requirements to help states and local governments complete buyout projects.

Such a dedicated group could help ensure federal consultation with states and localities to present and explain the full range of buyout options and provide a channel of communication for consistent cross-program guidance to grant applicants. Moreover, a task force could serve as a central repository for templates and language that state and local applicants can use in developing their initiatives, including general program guidelines, open space deed restrictions, protective covenants, and post-buyout open space development standards, and could share examples of and lessons learned from states and localities that have successfully tailored federal resources to the needs of their residents.

Enhance support for state and local efforts to assess buyout options immediately after a disaster

Although thoughtful pre-disaster planning is ideal, many communities first confront the possibility of property buyouts in the days and weeks following a flood. Under such emergency circumstances, beginning a relocation

Local Spotlight: Portland, Oregon

Beginning in 1997, Portland began planning an ambitious watershed project to provide a common solution for nuisance flooding, water quality problems, and fish and wildlife declines. Over the ensuing 15 years, the project acquired more than 106 acres, removed over 70 structures, and implemented nature-based strategies,[38] all financed using a combination of three state and federal sources: pre-disaster funds from the city's Bureau of Environmental Services and HMGP and CDBG-DR grants. The varied funding sources enabled the program to create a robust approach that addressed multiple issues.

Flood survivors use an inflatable raft to navigate a residential neighborhood in the Portland area during the 1996 Willamette flood in Oregon. The disaster affected much of the Portland metropolitan area and prompted the city to launch an ambitious watershed management project that included property buyouts.
Portland District, U.S. Army Corps of Engineers

discussion is difficult. Officials are overwhelmed and under-resourced, and residents are traumatized and eager to "return to normal."

However, FEMA, in its first-response capacity, can make that difficult discussion easier by providing reliable, prompt, and consistent information on potential buyout alternatives. Immediately following a disaster and in collaboration with other federal partners, FEMA should deploy dedicated staff with specific training and knowledge about buyouts and other mitigation options to help flood victims navigate labyrinthine aid applications. This "buyout team" should remain in the affected area to provide continuing support and technical assistance through the launch of a post-disaster state or local buyout program.

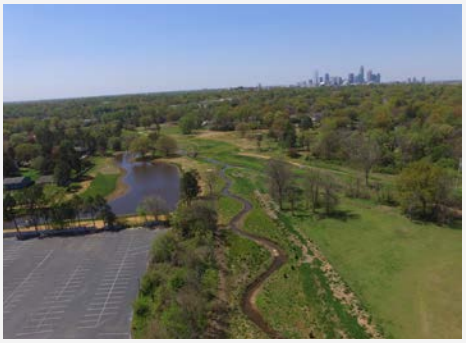
Reward communities for establishing effective programs

Community leaders have worked to make buyouts an accessible and attractive option for residents in flood-prone cities and counties throughout the country, including Tulsa, Oklahoma; Charlotte-Mecklenburg, North Carolina; Nashville, Tennessee; Birmingham, Alabama; and Austin, Texas. Several jurisdictions have used local funding sources to sustain their programs beyond the availability of federal post-disaster resources. Federal agencies funding buyout programs should reward these communities for their innovation and leadership and encourage similar initiatives elsewhere. For example, FEMA could extend deadlines beyond standard "periods of performance"—the time allotted to grantees to spend grant funds, after which they may not seek additional federal reimbursements—giving communities more time to implement successful programs. Alternatively, established programs could enjoy relaxed requirements that reduce or eliminate the need to calculate a cost-benefit ratio for projects in designated areas. This flexibility could make it possible for jurisdictions to acquire lower-value properties that would otherwise compromise their programs' funding eligibility.

For instance, since the mid-1990s Birmingham, Alabama, has been successful in acquiring flood-prone properties largely because city leadership has committed full-time staff and contractors to the program. However, in recent years as resources have become scarce, the city has downsized the program, and its future is now in jeopardy.[39] Federal agencies, particularly FEMA and HUD, should take steps to support programs such as Birmingham's. One option could be adjusting the framework that the BRIC program uses to score funding applications so that it rewards established and effective buyout efforts. Additionally, FEMA could set aside some portion of BRIC or FMA funding to support proven programs or dedicate a special round of annual BRIC funding for programs with a track record of success.

State Spotlight: North Carolina

North Carolina has a strong track record of including resilience efforts in statewide hazard mitigation planning, including developing and sustaining successful buyout programs. From the mid-1990s through 2019, North Carolina estimates that it acquired more than 5,600 homes damaged by hurricanes or considered flood-prone based on location. These efforts paid additional dividends when, in 2014, the state earned FEMA's Enhanced Hazard Mitigation status, which was renewed in 2018. This status allowed North Carolina to access an additional 5% in HMGP funding after Hurricane Matthew. This translated to an extra $25 million to help 210 homeowners relocate.[40]



This area along Briar Creek in Mecklenburg County, North Carolina, was one of the most flood-prone areas in the county, but has since been turned into the Chantilly Ecological Sanctuary after the removal of residential structures.
Charlotte-Mecklenburg Storm Water Services

Allow states and localities to use life estates to facilitate federally funded buyouts

Residents with deep, long-standing attachments to their homes and communities may be especially resistant to buyouts. In some cases, even when many residents relocate because of flooding, compelling personal factors may lead others to stay. The federal government has used life estates to acquire property for its own use, such as to create national parks,[41] because they allow homeowners to remain in their homes for the rest of their lives or until they choose to leave, at which point the government takes sole possession of the property. Once the interest transfers to the government, the land can be converted to open space. Allowing state and local governments the flexibility to use this model for flood-related buyouts may be especially effective in communities with significant elderly populations for whom moving may be undesirable or where residents enjoy strong cultural or historical ties to the land. The federal government should explicitly allow state and local governments to use life estates as a mechanism to acquire property through buyout programs.

Planning for buyouts

In 2000 Congress passed the Disaster Mitigation Act,[42] which requires local communities and states to develop hazard mitigation plans—short- and medium-term strategies for disaster mitigation that can include buyouts and are updated every five years—to be eligible for certain FEMA disaster relief and grant programs. However, states and localities often develop their plans with specific funding sources in mind and, as a result, aim to meet only the minimum required standards. Expanded federal support for comprehensive, long-term participatory planning efforts could encourage jurisdictions to create buyout initiatives that are more actionable, adaptable, and aligned with forward-looking approaches to community development.

States and localities need more federal support in meeting the challenge of facilitating effective buyout discussions. Because they are often difficult and tension-filled, particularly in post-disaster environments, communication with property owners and residents must be honest, transparent, data-driven, and prompt. Without such effective communication, misinformation can quickly undermine consensus and diminish support for buyouts, especially in the confusion that follows a disaster. For instance, residents may opt to use relief funding to repair and remain in flood-prone properties instead of pursuing a buyout, or they may get overwhelmed by the breadth of options while in the midst of post-disaster trauma. The best approach is to clearly communicate options well in advance of a disaster, including how long buyouts will take and how much money they will generate for property owners. Although state and local leaders are best positioned to lead such discussions, they must collaborate with their federal counterparts to ensure that they have a full understanding of and can effectively explain all programmatic requirements and constraints.

In addition, many jurisdictions lack accurate flood-risk information. Communities across the nation often rely solely on FEMA's maps to identify their flood risk and to develop mitigation plans. However, FEMA developed the maps to assess and price actuarial risk for flood policyholders, not to support community planning. FEMA's maps are sometimes based on outdated data and fail to capture future risks posed by new development and climate change and so are not necessarily the appropriate tools to help homeowners and communities assess and plan for their flood risks.[43] Some states, such as Iowa through its Iowa Watershed Approach, have dedicated resources to analyze and incorporate flood risk into their long-term mitigation strategies.[44]

Under FEMA's buyout guidelines, acquired properties must become open space and meet certain requirements for long-term maintenance and care.[45] And although FEMA does consider benefits to the environment as a value-add when deciding whether to approve a buyout project,[46] it does not provide dedicated support for the long-term repurposing and maintenance of acquired parcels, leaving communities to assume those costs in perpetuity. Without federal assistance to develop disposition or long-term maintenance plans, localities may not be able to assume the burden of property upkeep and so may not be able to pursue buyouts as a mitigation strategy.

A 10-acre lot along Mohawk Trail in Hopkinsville, Kentucky's Cherokee Park community stands nearly vacant. Most of the 50 homes that were previously on the parcel were removed as part of a flood buyout program. *Jennifer P. Brow/Kentucky New Era via AP Images*

Finally, all buyout plans should address the potential consequences of relocation for high-risk communities, particularly the disruption of essential social networks and access to vital services. People of color, renters, those with mobility challenges, and older adults may have compelling reasons to fear moving—including the need to be close to work, family, and community support networks—even when they reside in high-risk areas. Alternatively, they simply may not have the means to relocate or know where to go. Federal guidelines should make clear that preserving community and livelihoods should be an essential element in planning buyout programs in these higher-risk communities.

Develop a multiagency, coordinated approach to promote and improve local pre- and post-disaster planning

Successful buyout programs require thoughtful, deliberate preplanning. Despite clear benefits associated with relocating households out of prohibitively flood-prone locations, buyouts do come with downsides, both for families displaced from tightly knit communities and for local governments faced with the prospect of a reduced tax base. Buyout programs that are strategic, equitable, and affordable should be co-designed with the communities they are meant to benefit. Through such an approach, mutual understandings of risk, alternatives, and costs can be agreed upon, and a common holistic vision for the program—and a community's shared future—can be developed. However, these ideal outcomes take time, deliberation, and forethought.

More coordination between FEMA and HUD, as well as additional flexibility to allow the agencies' funding to be combined, would better support state and local efforts on flood planning. Under the Stafford Act, state, local, tribal, and territorial governments must adopt FEMA-approved hazard mitigation plans to receive certain types

of nonemergency disaster assistance, and many states and communities have relied on FEMA funds to create and update those plans. Historically, these hazard mitigation plans have failed to explain how local governments are contemplating comprehensive mitigation activities, or how such activities may be integrated into policies and procedures for land use and development or capital investment frameworks as part of normal local government functions.[47] In a post-disaster context, HUD-mandated action plans governing state and local use of CDBG-DR funds may provide another vehicle to help communities think through their buyout needs within long-term recovery efforts. However, as these instruments have traditionally focused on measuring disaster impact, planned recovery expenditures, and CDBG regulatory compliance, enhanced requirements and frameworks would need to be developed to achieve this goal.

Better support community-led efforts to plan for, develop, and launch buyout programs

FEMA, as the lead federal agency on disaster response and preparedness and hazard mitigation, as well as a major source of funding for buyout activities, should have primary responsibility for coordinating federal planning for buyouts. First, the agency should improve its own guidance on planning and better support its regional offices, which are responsible for reviewing state hazard mitigation plans.[48] As FEMA promotes improved planning, it should also coordinate resources that it and other federal agencies have to offer, including those from the Department of Homeland Security's Emergency Management Institute, the Resilient Nation Partnership Network, and the Corps-led Silver Jackets program, to name a few.

In addition, the federal government should offer specific trainings and workshops tailored to communities that are developing buyout programs. These educational modules could draw on the American Planning Association's Hazard Mitigation Policy Guide and Georgetown Climate Center's Managed Retreat Toolkit to focus on topics such as the procedural details of buyout programs, but they could also be targeted to help local attorneys and program managers navigate appraisals, title searches, purchase offers, documentation requirements, and post-buyout land use requirements.[49] Training materials could also include effective options for outreach and community listening sessions, identification of other federal funding sources, and creation of specific post-disaster recovery plans that allow for reasonable consideration of buyouts as a component of holistic and resilient recovery efforts.

Local Spotlight: New Orleans and Isle de Jean Charles, Louisiana

New Orleans

Hurricane Katrina devastated New Orleans in 2005, causing 50 levee breaches that spilled more than 225 billion gallons of water into the city.[50] In the aftermath, city leaders formed the Bring New Orleans Back Commission to coordinate development of a comprehensive recovery and redevelopment plan. The commission quickly coalesced around an approach focusing on the city's land uses and identified a series of neighborhoods designated as "areas for future parkland."[51]

The list of locations where the commission recommended curtailing redevelopment activity—which came to be known as the Green Dot Map—sparked heated debate and, as one study observed, "for thousands of displaced New Orleanians … represented a graphic manifestation of their worst fears of losing their homes and the right to return to their neighborhoods."[52] The controversy led to widespread criticism of the commission and abandonment of the "Green Dot" approach and serves as a cautionary tale for buyout planning efforts, highlighting the inherent sensitivity for residents of high-flood-risk areas.[53]

Isle de Jean Charles

About an 80-mile drive southwest of New Orleans, along the furthest reaches of Louisiana's coastline, sits Isle de Jean Charles, an island community that once encompassed more than 22,000 acres but has been reduced to just 320 acres by sea level rise and significant flood events.[54] The island had been home to as many as 80 households, but only about half that total remained in 2016, when HUD's National Disaster Resilience Competition awarded the state $48.3 million to relocate the entire community, as a group, to a new upland home.[55]

Storm clouds gather above Isle de Jean Charles in Terrebonne Parish, Louisiana. After repeated severe floods, Louisiana initiated a relocation program in 2017 to move island residents to a safer inland location. *CSRS*

Over the next three years, Louisiana officials led an extensive relocation planning process, including six community meetings, an open house in the "receiving" community—where the "New Isle" settlement was to be built—and several design workshops, during which Isle de Jean Charles residents outlined preferences for the look, feel, and function of their new homes and neighborhood.[56] Of 42 households eligible for relocation to the New Isle community, 37 opted in, with one household choosing to relocate to a separate location apart from the new settlement.[57]

As residents prepare to move into their new homes in 2022, the wisdom and urgency of their decision to relocate was reinforced when Isle de Jean Charles took another direct storm hit from Hurricane Ida in August 2021.[58]

Ensure that buyout plans account for critical community needs and prioritize investments for vulnerable populations

In addition to hazard mitigation grants, FEMA helps states and communities invest in flood plain management and risk assessment, including through the Community Assistance Program–State Support Services Element, which offers funding and technical support. FEMA should target these efforts to focus on identifying the needs of at-risk communities and ensuring that they receive the necessary support. For instance, FEMA could incorporate into its Coordinated Needs Management Strategy the Centers for Disease Control and Prevention's Social Vulnerability Index, which tracks "… [t]he potential negative effects on communities caused by external stresses on human health … [such as] natural or human-caused disasters, or disease outbreaks," as a consideration to inform its decisions on which flood-risk maps should be updated in support of the NFIP.[59]

Further, grant criteria should prioritize under-resourced applicants. For example, to ensure that BRIC and other disaster mitigation programs do not disadvantage under-resourced communities that need buyouts the most, FEMA should re-evaluate program requirements related to determining whether projects are cost-effective. FEMA also should provide more funding to state and local applications that prioritize buyouts for residents most at risk. Finally, the federal government should allow for more liberal use of the Uniform Relocation Assistance and Real Property Act and other mechanisms for accessing additional funds that could be used for buyout activities. [60]

Local Spotlight: Kinston, North Carolina

The city of Kinston experienced devastating flooding in the wake of Hurricane Floyd. The majority of impacted residents were low-income Black families. As a buyout program became a viable option for the community, issues arose of cultural displacement and the affordability of relocating outside of the flood-prone area. The North Carolina Legislature created the State Acquisition and Relocation Fund, or SARF, to assist flood-prone households in relocating to often more expensive properties outside of the flood plain, increasing the participation in a buyout program. Notably, SARF conditioned grants to homeowners for buyouts on them moving within the same city, and 90% to 97% of SARF participants relocated within the same municipality, minimizing the loss of the local tax base.[61]

In addition to these relocation funds, Kinston and Lenoir County residents were able to take advantage of both FEMA HMGP and HUD CDBG resources leading to the buyouts of over 1,600 homes from 1997 to the early 2000s.[62] This high participation rate is partially attributable to the combination of federal and state dollars, a recommendation that Pew makes in this report; however, understanding the social vulnerability of the community and offering relief were key to individual decisions to move out of harm's way. Still, Kinston is not universally regarded as an example of success. Some officials have criticized the "breaking apart" of a historically Black community, and residents living in proximity of the buyout area have complained that the acquired property has not been properly maintained.[63]

People travel by boat along Davis Street in Kinston, North Carolina, on Sept. 30, 1999, after Hurricane Floyd caused the Neuse River to flood the area. The city bought several of the homes closest to the river as part of a local buyout program. *Alan Marler/AP Images*

Improve outreach and engagement activities on flood risk

Through closer collaboration, officials could support more robust and frequent outreach, engagement, and flood-risk awareness efforts and highlight buyouts as a flood mitigation option. By sharing resources—such as the National Institute of Standards and Technology's Community Resilience Planning Guide; the Mississippi-Alabama Sea Grant Consortium and National Oceanic and Atmospheric Administration's (NOAA's) Coastal Resilience Index; the Natural Hazard Mitigation Association and Louisiana Floodplain Management Association's Build Back Safer and Smarter tips, Disaster Risk Reduction curriculum, and Roadmap to Resilience publications; and FEMA's National Risk Index—federal agencies can make needed information simple and easy to access.[64] Readily searchable, cross-agency websites and inventories should be set up with local users, not necessarily agency hierarchies, in mind. NOAA's Digital Coast's Sea Level Rise Viewer and U.S. Interagency Elevation Inventory offer easy access to publicly available flood modeling data, and the Adapt Virginia information gateway, developed by multiple nongovernmental and academic partners in the state, provides examples of flood risk at multiple scales.[65]

FEMA plays a critical role in providing successful models and training materials for local governments to host listening sessions that help communities contemplate options for buyouts both before and after disasters

Since a catastrophic flood struck the Pennington Bend neighborhood in Nashville, Tennessee, on May 3, 2010, the local government has purchased and removed hundreds of homes from this and other flood-affected areas. *Samuel M. Simpkins/The Tennessean via AP Images*

occur.[66] FEMA could partner with NOAA and other agencies to expand resources and capacity for "train the trainer" sessions, with the goal of developing local leaders. Virtual options could also increase community participation. In particular, FEMA could support state- and locally led "visioning sessions" in which communities describe their priorities for buyouts, including ideas for relocation and creation of open spaces offering recreational co-benefits.[67]

Federal agencies may also leverage regional planning councils; regional climate collaboratives, such as the Southeast Florida Regional Climate Change Compact; and city-to-city networks, including state municipal leagues and the National League of Cities, to help disseminate information and build knowledge among local officials.

Encourage and fund stronger partnerships among state and local agencies, nonprofits, land trusts, parks and recreational organizations, watershed associations, and others

Federal and state agencies should help localities develop disposition plans for parcels post-buyout to ensure long-term sustainability and lasting co-benefits. Currently, local governments assume most of the liability and burden associated with the long-term maintenance of acquired property, often rendering such programs unattractive to those government entities. To share that burden, disposition plans should contemplate a variety of partnerships with entities that may assist in maintaining open space in perpetuity. For instance, funding could help expand initiatives in which local Scout troops or churches help neighborhoods maintain empty lots or community gardens. Larger parcels of open space may be appropriate for the support of a land conservancy organization or trust.

Additionally, federal officials could work with state and local governments to identify policies and program designs that help alleviate property maintenance burdens to promote the use of buyouts. For example, the zoning ordinance in Norfolk, Virginia, includes provisions to "extinguish development rights" in areas subject to recurrent coastal flooding and to allow developers to purchase and transfer development rights from higher- to lower-risk areas, providing an incentive that encourages conservation while maximizing economic benefits.[68] A similar approach has been implemented in King County, Washington, and considered for adoption in Miami-Dade County, Florida, and may be appropriate for flood-prone communities across the country.[69]

Conclusion

Over the next several decades, the frequency and severity of flooding events are projected to increase significantly, putting communities across the country at even greater levels of risk than we are currently experiencing. The economic costs and social ruptures of moving away from areas plagued by flooding and sea level rise will only become more challenging over time.

Voluntary property acquisitions can be one of the most effective strategies to mitigate flood risk for individuals and communities in ways that enhance public safety and prosperity while also providing opportunities to restore or create green space and wetlands. But federal agencies must do more to coordinate and streamline financial resources, expertise, and lessons learned to support states and municipalities across the country in scoping, planning for, and funding buyout programs.

As federal agencies increasingly direct resources toward reducing disaster risk, including through new programs such as BRIC, those efforts must be tailored to socially vulnerable communities that need them the most. In turn, as state and local officials receive support for buyouts, they must strategically use these resources to plan for longer time horizons while working with residents to envision better outcomes through relocation and transition to lives and livelihoods away from rising floodwaters.

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