

PAS QUICKNOTES

MANAGED RETREAT

Managed retreat is an intentional, coordinated municipal effort to permanently move community members, structures, and systems away from locations that are prone to prolonged or frequent high-intensity climatic events, such as flooding, wildfires, and hurricanes, that cause destruction beyond a community's ability to cope.

Due to the complex and multifaceted impacts of climate change, planners may be tasked with leading communities through tough situations with no simple solutions. Relocating people out of harm's way can be an effective adaptation approach, but the change and disruptions this causes can make managed retreat a **contentious topic**. Practitioners must be thorough when assessing whether managed retreat is appropriate for their communities and carefully **plan and coordinate** its application.

BACKGROUND

Local governments can apply managed retreat **strategies** for people and infrastructure at scales ranging from a single property to a neighborhood or an entire community. For example, targeted approaches like Mecklenburg County's **Floodplain Buyout Program** in North Carolina seek to remove people and structures from high-risk locations. A much larger-scale approach is being planned in **Indonesia**, where the government plans to relocate the country's capital to a new city on higher ground to avert a flooding disaster.

Components of managed retreat may include targeted planning for high-risk areas, regulating certain types of development in certain places, and designating no-build areas to prevent new development in high-risk areas. Many managed retreat efforts rely on **buy-back/buyout programs** in which local governments purchase high-risk properties from residents. A key component of managed retreat is the replacement of the built environment with green or open space, which may include habitat restoration and enhancement of stormwater management capacities.

Managed retreat can be **controversial** for reasons of social and cultural concerns, environmental sustainability, and financial feasibility. Its challenges include mitigating the effects of uprooting communities and finding safe places for relocation. Positives include preventing social, economic, and health impacts from forced relocation after a natural disaster, particularly for vulnerable populations; better living conditions for current and future generations; and long-term cost saving for governments. A coordinated and organized managed retreat is preferable to an evacuation scenario forced by a natural disaster in which community members must fend for themselves.

PREPARING THE COMMUNITY FOR MANAGED RETREAT

Hurricane-related flooding and coastal erosion are the primary climate events triggering a managed retreat strategy, but communities that experience above-average tornado activity, wildfires, landslides, and mudslides are also candidates for this approach. Local governments must consider both near-term and long-term climate risks when deciding to pursue managed retreat efforts. Planners can play a major role in identifying the vulnerabilities and natural hazard susceptibilities that may suggest a need for managed retreat and in **starting the conversation** in a mindful and respectful way.

If managed retreat is identified as an appropriate approach, planners must identify diverse community stakeholders and **ask for their involvement** in planning, implementing, and evaluating the managed retreat process. All groups, particularly those with limited choices for relocation, must be included. **Scenario planning** can be a key tool in this process by helping to generate a set of potential outcomes for which the community can prepare. **Exploring possible situations** in managed retreat is essential to navigating complex social, economic, and environmental decisions that create changes with far-reaching effects.

This PAS QuickNotes was prepared by Scarlet Andrzejczak, Research Associate at the American Planning Association, in partnership with the Lincoln Institute of Land Policy.



Managed retreat often involves property buyout programs following natural disasters, as implemented in Staten Island, New York's Ocean Breeze neighborhood after Hurricane Sandy. (Credit: Joe DeAngelis.)



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Understanding the questions, hesitations, needs, opinions, and concerns of community members and anticipating impacts are critical to the development of a managed retreat plan and its successful execution. Planners must center community engagement in each stage of the managed retreat process to ensure that decisions positively affect residents and business owners as well as the environment and municipal revenue streams. The [City of Austin, Texas](#), and the [New Jersey Blue Acres Buyout Program](#) enlist social workers to provide human support and individualized resources to those undergoing managed retreat.

PLANNING CONSIDERATIONS FOR IMPLEMENTING MANAGED RETREAT

Managed retreat will not be successful if residents and infrastructure are moved to areas that in turn become susceptible to climate risks. Relocation plans must also factor in potential impacts to the environment, such as future degradation of nature-based services, that could exacerbate climate impacts. Planners should seek additional expertise from [climatologists](#), ecologists, geotechnical consultants, and others to ensure that relocated structures and communities will be resilient to future climate vulnerabilities. Pairing managed retreat with other adaptation measures such as enhanced building standards and land use regulations, flood zone mapping, risk analyses, and structural and nature-based flood defenses like levees and wetland restoration will help strengthen this resilience over time.

Planners must also plan for land “left behind” by a retreating community to manage its transition to open space. Policies should address equity issues for those who decided against relocation while also prioritizing ecological considerations for newly cleared land, which can be restored to provide a natural buffer against further climate impacts and fill in disrupted habitat. Zoning strategies should prevent these properties from becoming redeveloped in the future to halt the build-destroy-rebuild cycle that managed retreat seeks to end. Deed restrictions can be a powerful tool to prohibit future development of vacated properties.

FUNDING FOR MANAGED RETREAT

Most [federal funding](#) for managed retreat is only available as aid following a presidential disaster declaration. Communities can take advantage of such funding to integrate managed retreat into a recovery process. After Hurricane Sandy, [New York City Build It Back's](#) Residency Resettlement Incentives program and New York State's [Acquisition for Redevelopment Program](#) helped applicants sell their storm-damaged houses and purchase new homes, providing many with crucial financial stability during a time of major disruption. Still, some residents [chose not to leave](#) for personal or more complicated financial reasons. Localities must ensure that those who have decided to remain in a largely retreating community are not forgotten.

But depending solely on reactive policies prevents communities with existing knowledge of impending hazards from taking proactive steps to retreat. To [fill in funding gaps](#) before disaster strikes, planners should seek out state, county, and local grants that can be used for managed retreat approaches. One example is the Illinois Department of Natural Resources' [Flood Hazard Mitigation Program](#), a buyout program that aims to reduce statewide flood damage.

In addition to leveraging and combining funding and in-kind support from multiple sources, planners should seek out new opportunities to finance managed retreat as a climate adaptation strategy. These may include public-private partnerships or support from private local entities.

CONCLUSIONS

Managed retreat offers an opportunity to minimize or avoid the risks associated with catastrophic displacement from natural disasters, which are increasing in frequency and intensity with climate change. This approach can be challenging to implement, but planners can learn from the [successes](#) and [failures](#) of previous managed retreat endeavors. With careful consideration of community characteristics, an understanding of risks, and effective cooperation and communication, planners can apply managed retreat as an appropriate strategy for the well-being of their communities.

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FURTHER READING

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