

# Local Floodplain Management Programmes as a Learning Resource

Jamie Amelia\*

*Editorial office, Journal of Climatology and Weather Forecasting, Belgium*

## Corresponding Author\*

Jamie Amelia,  
Editorial office,  
Journal of Climatology and Weather Forecasting, Belgium  
Email: [Climatologyweather@gmail.com](mailto:Climatologyweather@gmail.com)

**Copyright:** ©2022 Amelia, J. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Received:** 26-Aug-2022, Manuscript No. JCWF-22-20375; **Editor assigned:** 07-Sep-2022, PreQC No. JCWF-22-20375(PQ); **Reviewed:** 21-Sep-2022, QC No. JCWF-22-20375 (Q); **Revised:** 23-Sep-2022, Manuscript No. JCWF-22-20375(R); **Published:** 28-Sep-2022, doi: 10.35248/2332-2594.22.10(9).379

## Abstract

Property buyouts are once again being considered as a cornerstone of managed retreat from coastal areas and floodplains in the United States due to flooding that is being made worse by climate change. Federal buyout programmes, however, are frequently criticised for being inequitable and difficult to access. We studied five top US state, county, and municipal buyout programmes to see what they might teach us about revamping future federal policy. Our goal was to determine whether and how subnational buyout programmes overcome these restrictions. Our mixed-methods research developed case studies using interviews and document analysis, contrasted subnational techniques with a review of critiques of federal buyouts, and held focus groups with subnational buyout managers and experts to pinpoint the programmes' shortcomings.

**Keywords:** Global warming • Floods • Climate Restriction • Municipal • Research based Flood

## Introduction

In comparison to national initiatives, we find that subnational ones can be more inclusive and better meet the needs of residents. We discover that subnational programmes, as opposed to current federal programmes, can be more inclusive and better meet the requirements of residents since they have access to specialised, non-federal funding and their standing institutional status, which enables them to grow and change over time. However, there is a lack of coordination between and control over the organisations that issue building permits and create affordable housing under these schemes. Due to this, buyout programmes have little influence over who has access to inexpensive, resilient housing following a buyout and who lives in floodplains as a whole. According to their findings, federal programmes can support managed retreat nationwide by boosting institutional and staff capacity at the state and county levels, encouraging initiatives to break down institutional silos at the subnational level, and comprehensively integrating climate considerations into all decision-making processes.

Home buyouts are becoming more popular in the United States as a part of planned retreat from coastal areas and floodplains and the reduction of flood risk brought on by climate-exacerbated floods. The Federal Emergency Management Agency's (FEMA) largest floodplain buyout programme, in particular, has come under heavy fire for being unnecessarily bureaucratic and racially and socioeconomically unequal. A growing body of research explores the best ways to change federal regulations, what policies should be used in their place, and what obstacles prevent policies from being implemented. To support policy learning and coordination, more research on past and present buyout programmes is required. Home buyouts are becoming more popular in the United States as a part of planned retreat

from coastal areas and floodplains and the reduction of flood risk brought on by climate-exacerbated floods. The Federal Emergency Management Agency's (FEMA) largest floodplain buyout programme, in particular, has come under heavy fire for being unnecessarily bureaucratic and racially and socioeconomically unequal. A growing body of research explores the best ways to change federal regulations, what policies should be used in their place, and what obstacles prevent policies from being implemented. To promote policy learning and coordination, further research on past and present buyout programmes is required. The five dedicated subnational (state, county, and local) buyout programmes in New Jersey, Washington State, Charlotte-Mecklenburg County (North Carolina), Harris County (Texas), and Austin are examined in this study. In order to inform future federal policy reform or the extension of subnational buyout and floodplain management programmes, it is important to know whether regional buyout programmes offer alternative strategies (in Texas). Subnational buyout schemes also rely on more flexible state or municipal funds in addition to regular federal funding support, which has strict limitations. Our objectives in examining these well-resourced programmes are to:

1. determine whether and how they have addressed issues of equity, justice, and resident needs, and
2. determine what the limitations of their successes suggest about what is required to achieve equitable adaptation in the floodplain.

Our mixed-methods study makes use of case studies of various buyout programmes, management and field staff interviews, and focus group discussions with academics, managers, and planners of buyout programmes. Below, we first group criticisms of how floodplain buyout policies unfairly penalise households affected by flooding. After providing a brief overview of each programme, we compare its policies and tactics to those in the literature to see how well they address frequent criticisms. Based on interviews and document analysis, we investigate why some criticisms (such as increased resident responsiveness and inclusion) can be disproved but not others (e.g., access to infrastructure in the past and affordable replacement housing). We contend that the reason these subnational initiatives succeed is because they survive, which allows them to grow and change. In order to move to refurbished floodplains and affordable housing in flood-safe communities, we emphasise the significance of federal and state support for institution building and bridging at subnational levels. The design of the application creates a web of related implementation issues. Although extremely bureaucratic, the procedure is not standardised, which leaves a lot of leeway for bias and interpretation. States, counties, and cities generally establish ad hoc, temporary administrative offices to oversee buyout funding because federal funding is only made available after a disaster. The Biden Administration is reforming the complicated legal requirements that reactionary offices must navigate. They also must decide which areas and homes to prioritise, assist residents in making difficult decisions, and administer the land following a buyout. For instance, following Hurricane Sandy, both New York City and New York State established new buyout programme offices. These offices operated independently of the ongoing state and county FEMA buyout processes and were shut down seven years later. "At every step, we had to design a new protocol," said Paul Lozito, Director of Housing Policy and Affordable Housing for the New York Governor's Office of Storm Recovery, established in the wake of Hurricane Sandy. And everything was brand fresh on the ground. A whole neighbourhood had never before needed to be cleared by the city. There was no prior instance. And we had a tight deadline for everything (Lozito 2022). Each time, programmes are required to learn and build administrative roles, personnel, and connections. All of these factors have an impact on their capacity to coordinate, collaborate, learn, and grow services, particularly to vulnerable and difficult-to-reach groups, the removal of valued real estate from a city's tax registers could result in a permanent reduction in municipal tax revenues.

Participation in local governance and the setting of community priorities are further complicated by these financial effects. Because it adversely affected disadvantaged households disproportionately, the ensuing HMGP

programme has received harsh criticism. First, the HMGP frequently transgresses distributive justice principles, which contend that resource allocation should be done so as to improve rather than worsen the results of those who are most disadvantaged. Although not all people choose to move, some think buyouts give them the opportunity to leave a location associated with painful memories, recover financial investments, enhance their quality of life, or safeguard others from future disasters. However, the HMGP either favours single-family homeowners, nuclear households with a single head of household, and those with a clear mortgage and ownership documentation or is legally restricted to them<sup>Footnote</sup>. Since the buyout would not pay off the debt, households with upside-down mortgages where the debt exceeds pre-disaster market value (a circumstance that is becoming more typical for homes devalued by flood risk or flood insurance) are ineligible. Renters (who make up 28% of those living in floodplains and may be forced to leave by landlords who want a buyout), immigrants, families with multiple generations living together, Indigenous groups or unofficial residents with various property rights regimes, and homeowners with underwater mortgages are those who receive the least support and may feel trapped in areas with high flood risk. In a paradoxical way, federal buyout programmes can also be used to clear out undesirable neighbourhoods or poor communities. FEMA's financial gain In spite of the fact that wealthier counties implemented more buyouts, an analysis of FEMA's 43,000 buyouts to date revealed that the properties within those counties that had been bought out were relatively poorer, had lower education levels, had less proficiency in the English language, and had a higher racial diversity. As a

result, people who are most disadvantaged suffer the brunt of the costs associated with buyouts and relocation. Although a buyout could theoretically facilitate housing mobility, residents in hot housing markets are increasingly having trouble finding a nearby house of equivalent quality to purchase. Financial counselling, real estate services, or relocation aid are not funded by federal programmes. Buyouts can interfere with Black and Hispanic groups' hard-earned housing equity and generational wealth-building due to race-based homeownership inequalities in the United States if they cannot afford them. Second, the lack of transparency in buyout decision-making causes people to worry about procedural injustice, which would mean that those who have historically had the least voice in the decision-making process would lose their voice. Thirdly, buyout programmes do not take into account more comprehensive aspects of flood vulnerability, such as historical factors that have led to households residing in flood-prone areas without adequate protective infrastructure, concerns about household well-being following relocation, and issues with gentrification or displacement effects of relocation. Along with the elevation of a person's residence, historical forces of social, economic, and geographic inequality are reflected in both the vulnerability of people to floods and flood risk mitigation measures. Studies on housing discrimination in the South show that Black communities are racially segregated by altitude, where they are more vulnerable to flooding and have lower property values. While the majority of buyouts occur outside of formerly redlined areas, those that do so in redlined areas disproportionately occur in "C" and "D" zones.