

BACKGROUND

Why is this Guide Needed?

Disaster-related losses continue to rise across the United States and these losses are increasing rapidly due to climate change. One of the most widely recognized strategies to mitigate these losses is through hazard-prone housing acquisition (i.e. "buyouts") and conversion of the land to open space. Currently, limited attention is focused on actionable guidelines for communities looking to create their own open space management strategies for buyout lands. The Open Space Management Guide seeks to fill that void.

How is this Guide Different from Existing Materials?

Currently, FEMA does not provide funding or technical assistance to support the development and implementation of an open space management strategy, which has proved challenging for many communities with less financial, technical, and administrative capacity. The Open Space Management Guide is designed to address this challenge by describing a broader set of resources that are available to communities. Drawing on techniques and processes found in land use planning and landscape architecture empowers communities to transform buyout properties into a community asset that aligns with recreation, economic development, environmental stewardship, hazard risk reduction, and other goals advanced by a network of partners.

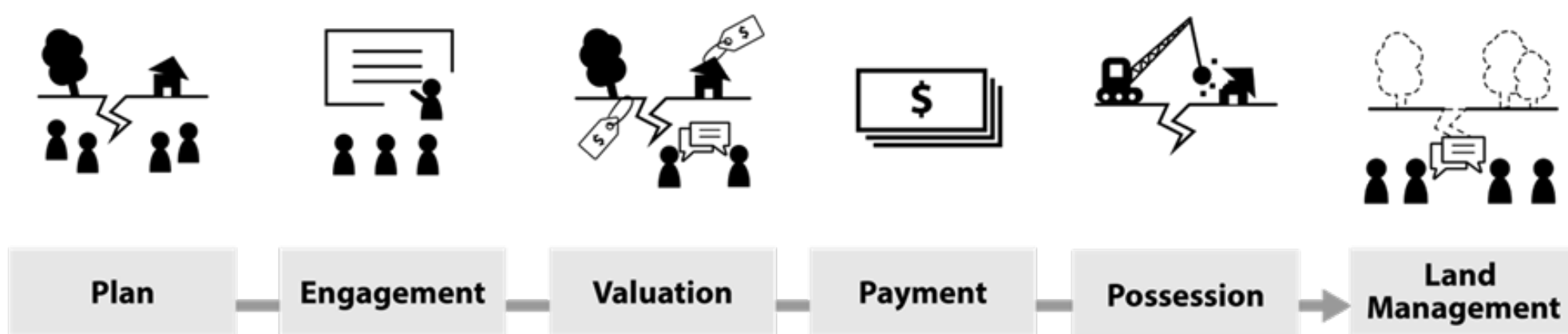
Who is the Intended Audience?

The guide is written for local government officials in urban, suburban, and rural areas including those communities possessing varied levels of financial, technical, and administrative capabilities. The guide is also intended for those who provide support for open space management like landscape architects, land use planners, residents, environmental and social justice non-profits, and recreational groups.

INTRODUCTION

What is a Buyout?

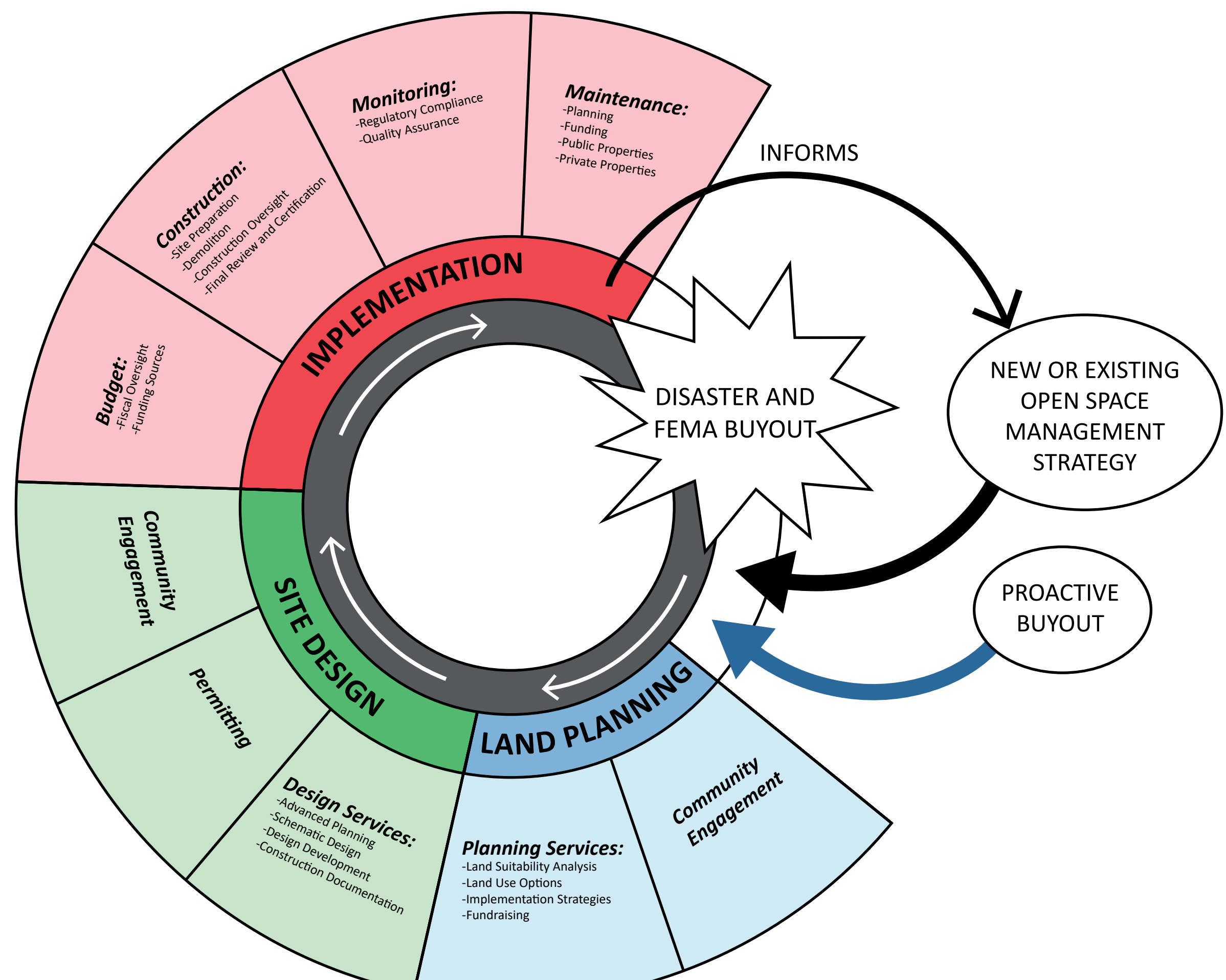
The buyout process, depicted below, is comprised of several steps, including the management of the resulting open space. The buyout process typically begins when an affected community recognizes the presence of at-risk properties and decides to identify a prospective buyout site(s). This requires engaging with prospective buyout participants to assess their interest in the program and to inform them about the overall process. Once eligible properties are identified, their pre-disaster value is determined, title searches are conducted, and an offer to purchase the property is made. The house is demolished, or in some cases relocated to another location, and the land is converted to open space in perpetuity. It is the responsibility of the local government to determine the strategy used to manage the land once acquired.



The Buyout Process. A Comparative Review of Hazard-Prone Housing Acquisition Laws, Policies, and Programs in the United States and Aotearoa, New Zealand: Opportunities to Improve Practice. Gavin Smith and Wendy Saunders, 2022.

Buyouts and the Open Space Management Process

Ideally an open space management strategy is developed before a disaster occurs. A proactive approach allows the community more time to assess the situation, solicit and sustain public input, garner necessary resources, and develop design options that inform the implementation and maintenance of an open space management strategy over time. This approach allows open space to become a community asset instead of a financial and administrative burden.



Open Space Management Process. Diagram showing how Open Space Management of FEMA buyout lands fits within the other processes of Land Planning, Site Design, and Implementation.

GUIDE CONTENTS

Case Studies

Case studies are chosen from across the United States to represent a variety of FEMA regions and include urban, rural, and suburban communities possessing varied levels of fiscal, technical, and administrative capacity. The cases provide a two-page community-specific narrative highlighting one or more open space management topics. Emphasis is placed on how certain actions were accomplished. Cases include a description of the topic(s), key takeaways, and references to relevant call-out boxes and tips in this guide.

LUMBERTON, NORTH CAROLINA

CATEGORY: Land Planning
SUBCATEGORY: Assistance from Committed Partners

Introduction
Lumberton, NC, a city comprised of 25,028 (2020) people, is located in the state's coastal plain. The City of Lumberton partnered with North Carolina State University's Coastal Dynamics Design Lab (CDDL) following Hurricane Matthew (2016), and has continued this relationship over time.

The CDDL worked in collaboration with city officials and community members to create and implement the Lumberton Community Floodplain Strategy for Resilient and Usable Open Space. The document includes open space design concepts informed by policy research, hydraulic modeling, vulnerability assessments, land planning analysis, and community engagement. The document also includes potential funding options to help achieve identified goals. Floodproofing provides the city with an in-depth analysis of flood conditions as well as site-specific recommendations to strategically locate open space to support the city's long-term goals spanning community health, resilience, culture, and economic vitality.

Open space acquisition proposed as a result of the Floodproofing research and engagement process in the Lumberton case. This residential trail connects an 8.5-mile path comprised of 150 properties totaling 600 acres.

Case Study Focus: Assistance from Committed Partners

The Lumberton Community Floodproofing highlights what can be achieved when communities partner with interdisciplinary design teams, such as the CDDL at North Carolina State University. The design team provided a public hearing that helped to convey the open space management strategy to multiple stakeholders, including potential funding organizations. Key partners include the City of Lumberton, the Corporation Fund, the North Carolina Office of Recovery and Resilience, the North Carolina Department of Transportation, North Carolina State Parks, and the Lumberton Community Development Center.

Publications like the Lumberton Floodproofing can provide lessons and ideas for other communities. The document includes important underlying conditions, and based on that information, offers conceptual design strategies and identifies the resources needed to carry them out. The CDDL prioritizes long-term solutions that have and have not been used to inform the research needed to perform the research and actions necessary to support the needed funding. As a result, the CDDL plays a crucial role in ensuring that innovative open space management can be funded and implemented.

Key Takeaways:

- Design documents like Floodproofing present a holistic approach to community needs assessment, land planning, and implementation.
- A long-term partner, like CDDL, can assist an under-resourced community address unique challenges like floodproofing by identifying strategic parcels that when purchased with additional grants, provide a continuous set of properties that can be programmed in a manner that serves as a community-wide asset.

Case Study Lessons

Figure 4: Case Study Lessons. The lessons drawn from the case studies found throughout the guide are organized across the themes and subcategories listed in Figure 1 to provide readers a glimpse of information from community-specific open space management strategies.

Case Number	Theme	Subcategory	Key Takeaways
01	Land Planning	Assistance from Committed Partners	Public and private partnerships can improve the quality of open space management strategies. Education and engagement can lead to increased buyout rates. Floodproofing can lead to increased buyout rates and improved community health, resilience, and economic vitality.
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Call-out Boxes

Call-out boxes are used to describe broader open space management-related issues. Examples include a description of the legal issues tied to the management of open space, the identification of complementary community goals that align with an open space management strategy, and how to contract open space management consulting services.

Call-out Box: Contracting Consulting Services Across the Open Space Management Process

Land Planning
Component: Request for Proposals
Component: Planning Services
Component: Design Services
Component: Community Engagement

Site Design
Component: Design Services
Component: Community Engagement

Implementation
Component: Construction
Component: Budget
Component: Monitoring
Component: Maintenance

Checklists

Checklists provide information for communities to tackle an issue. Examples include a list of questions local officials might pose to prospective consultants tasked with the development and implementation of an open space management strategy, and a list of departmental, agency, and organizational representatives to include in a community's open space management team.

Checklist: Questions to Ask During an RFP Interview

Checklist: Questions to Ask During an RFP Interview

Tips

Tips provide brief insights on relevant topics to development of an open space management strategy, references to documents that may be used by members of the open space management team, and "food for thought" for those tasked with open space management activities. Examples include a discussion of the potential use of consultants and a description of how open space management activities can reduce the flood insurance rates of policyholders if participating in the National Flood Insurance Program's Community Rating System.

Tip: Procurement Guide for Nature Based Solutions
An additional reference that may prove useful when developing requests for proposals tied to buyouts and open space management is titled "A Procurement Guide to Nature-Based Solutions." This guide, written by the Nature Conservancy, can be found at: http://trc001.bios.org/wp-content/uploads/2018/03/2018_NBS_Procurement_Guide.pdf

Tip: Assessing Losses Avoided Following Buyouts
As part of a community's monitoring of buyout lands, local governments may choose to assess the "losses avoided" following future flood events by estimating the monetary savings accrued by converting the land to open space before a future flood event occurs. This information can be used to inform residents as well as external funders about the risk reduction benefits of buyouts. Given the technical nature of conducting this assessment, the process may be undertaken by state agencies, FEMA, or consultants. The assessment may be further strengthened by collecting personal testimonials from residents who have participated in a buyout and are willing to discuss how they benefited from the process by moving out of harm's way. A collection of losses avoided studies can be found at: Hazard Mitigation Assistance Loss Avoidance Study Summaries | FEMA.gov.

CALL TO ACTION

Expand the Use of Federal Funds

Provide federal funds for planning, site design, implementation, and maintenance of open space associated with buyouts.

Align BRIC Grants and Buyouts

Improve the alignment of Building Resilient Infrastructure and Communities (BRIC) grants and buyout sites.

Reduce the Complexity of the Buyout Process

Reduce the complexity of the overall buyout process, including open space management-related activities.

Enhance the Role of State Agencies

Encourage state government agencies to play a greater role in delivering technical assistance and funding to support open space management activities on FEMA-funded buyout lands.

Increase Buyout Incentives

Incentivize buyouts and the creation of open space management strategies through improved federal policies.

Enhance the Role of Local Governments

Encourage local governments to identify buyout projects in local hazard mitigation plans and provide additional funding to support open space management activities.

Improve the role local governments play in funding open space management activities, recognizing that some communities do not possess the resources to undertake this type of activity.

A Call to Action: Policy Recommendations to Improve Open Space Management Processes and Outcomes

Align BRIC Grants and Buyouts

Expand the Use of Federal Funds

Reduce the Complexity of the Buyout Process

Enhance the Role of State Agencies

Improve the Role of Local Governments

Support Peer-to-peer Networks

Deliver Technical Assistance

Educate and Train the Next Generation

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FUTURE IMPLICATIONS

Distribution

As this guide is distributed and shared among policy makers, governmental officials, disaster mitigation professionals, municipal planners, landscape architects, community groups, non-profit groups, and individual community members, it can serve to bridge to gap between training and implementation. By making this information accessible, this guide helps to support communities regardless of size or capacity design and implement open space management strategies that make buyout lands an asset and amenity for the community.

FUNDING