Coastal Unsettlement: Housing and Home on an Eroding Coastline

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Contents

Executive Summary **4**

Introduction **6**

Housing, home, and coastal erosion 6

Research questions 6

Structure and content of the report 6

Research context **7**

Housing and coastal erosion in East Riding of Yorkshire 7

'No Active Intervention' coastline 8

Coastal community mobilisations 8

Methodology **9**

Home and unsettlement on the coastal edge **10**

Holderness as home 10

Erosion and time 11

Navigating erosion rates and distance from the edge 12

Slow, pervasive unsettlement 12

Eviction, demolition, and fast unsettlement 13

Sea defences and uneven, relational unsettlement 14

Resident responses to coastal erosion and policy **15**

Grounded knowledge and practices 15

Household responses to policy implementation 16

Challenges facing local community mobilisations 17

Envisaging coastal housing futures 18

Conclusion **19**

Implications 19

The impermanence of housing and the environment 19

The future of home beyond precarious homeownership 19

Engagement with slow and fast unsettlement 19

The politics of climate adaptation in coastal rural communities 19

Contributions 20

Directions for future research 20

Executive Summary

This report analyses how local residents on the eroding Holderness coastline, in East Riding of Yorkshire in the northeast of England, make sense of their housing situation, articulate their sense of home, and navigate the policy context. The Holderness coastline is known to be one of the fastest eroding coastlines in the UK and across Europe. While this coastline has been a longstanding site of erosion, it has drawn renewed attention with the impacts of climate change including rising sea levels. In 2022, East Riding of Yorkshire was awarded funding as part of the Environment Agency's Coastal Transition Acceleration Programme in order to pilot new approaches to erosion.

The report is based on qualitative research in 2023-24, analysing the accounts of residents themselves, especially older homeowners or previous homeowners, both longer-term and more recent residents. The report is primarily based on 19 interviews conducted with 21 people who were living or had lived in the Holderness region. The report focuses on parts of the coastline marked by the local Shoreline Management Plan as 'No Active Intervention' areas, meaning that there was no plan in place to protect these parts of the coast. As a result, the people living in these areas would be expected to move if the risk posed by coastal erosion is deemed sufficient, measured by the local authority as when a building is 9.36 metres from the cliff edge. Once this point is understood to have been reached by officials, the local authority issues an eviction notice, while owners of buildings are required to pay for the demolition of buildings, with some limited funding and support available to assist with processes including building demolition and rehousing. The report addresses a number of key themes relating to housing and home in the context of coastal erosion as an environmental process that necessitates adaptation and change.

Precarious homeownership and the environment

The majority of the people interviewed for this report were older-age homeowners, or previous homeowners, living on the Holderness coastline. The research found that while most of the people interviewed expressed positive feelings about the coast as home in relation to the relative quietness and simplicity of life as well as proximity to the sea and nature, homeownership could also be precarious and unsettling in this context given how erosion conditioned their sense of the present and future. Some of those interviewed bought a house on the coast in or in preparation for retirement with a view to living the rest of their lives there, but not all were confident that this plan would be realised, sometimes referring to erosion outpacing what they had expected or calculated when they first bought.

The relative precarity of some homeowners was highlighted by the aftermath of the 2007 subprime mortgage crisis and 2008 global financial crisis. The precarity experienced by homeowners in the context of erosion on the Holderness coastline is a reminder that homeownership does not guarantee present or future security or the realisation of aspirations concerning home for those who have bought property. More than that, it highlights a wider set of implications concerning the future of home in the context of environmental change, in which impacts are unevenly distributed, costs are individualised, and not all present senses of home can be guaranteed. This presents a set of challenges for a renewed democratic politics of social solidarity that extends between people and across places and for housing models and development premised on social use-value rather than individualised asset ownership, risk, and security.

Coastal unsettlement

A key insight from the report concerns dynamics and temporalities of unsettlement for homeowners living close to the coast. Unsettlement is understood here to encompass both material and emotional dynamics and processes by which home is no longer guaranteed or perceived to be guaranteed in its present form. Several temporal framings were identified to be at play in residents' narratives about and making sense of home on the coast. These included providing historical context to present erosion through appeal to geology and the history of villages lost to erosion in the past, as well as articulating the interplay between the speeding up of erosion, homeowners' decisions and calculations about buying property, and their expectations and preferences about where they expected to be living over the course of their lives.

Examining experiences of and responses to coastal erosion and policy through the lens of coastal unsettlement directs attention towards this interplay, through which residents attempt to balance calculations about their finances and the future of the coast with the desire to preserve a set of circumstances in which they can live a simple life surrounded by nature and close to the sea. In addition, coastal unsettlement is mediated by two distinctive temporalities corresponding to the spatial circumstances of housing at risk from erosion, namely the slow, pervasive sense that land is gradually disappearing along the coast and the fast-paced dynamics of immediate demands around eviction, moving, and building demolition.

The unevenness of climate adaptation

Not all homeowners or residents are equally impacted by erosion. Part of the story here is a much longer one relating to the geology of the region, which has its own distinctive geography in which certain parts of the coast are more vulnerable to erosion due to the type of rock or clay that makes up the immediate frontier between the land and the sea. However, there is also the question of how geology and the environment interact with the built environment

and housing, which is itself unevenly distributed along the coast, including in lower and higher density, smaller and larger settlements. A key question regarding coastal policy and management concerns which areas of the coast to protect through sea defences, and which to manage through accepting that erosion will result in a loss of land. The result of past and current coastal policy in East Riding of Yorkshire is that while some larger settlements such as Bridlington, Withernsea, and Hornsea have been protected, smaller villages and more isolated farmhouses and buildings have not. A consequence, highlighted by residents in these unprotected areas, is that sea defences in one place can cause erosion rates to increase further down the coastline.

Both the decision to protect only certain parts of the coastline and the potential to increase erosion rates elsewhere can lead to a heightened sense of injustice among residents on unprotected coastline who feel that they have been abandoned. Unsettlement therefore also needs to be thought about in a geographically relational sense, in which residents make connections between their own predicament and other parts of the coastline, including reference to how coastal policy manages different parts of the coastline and the potential impacts on erosion where they live.

The politics of rural coastal communities

The case of rural homeowners on the Holderness coastline points to the need to think about climate adaptation in a relational sense in terms of how national, regional, and local policy mediate but may also unevenly distribute the impacts of environmental processes. While it may be difficult to satisfy the preferences of all residents, the perspectives of residents in this research suggests the need to reframe questions of protection and preservation, compensation and subsidy, and relocation and rehousing by paying attention to what people are feeling and what they are saying about what they value, what can be maintained, what will be lost, and what it means substantively and emotionally to deal with this loss. An obvious implication explored by this report is to think about this in terms of how elderly homeowners articulate their sense of home on the coast, and to extend this to other groups for whom the coast is home, some of whom may be more marginalised.

However, the research also points to a further challenge facing rural coastal communities about the politics of adaptation. Those facing the most immediate risks associated with erosion can feel isolated and abandoned, while few residents seem inclined towards the idea that the challenges associated with erosion can be solved technocratically. A key issue here concerns the way in which costs as well as loss, and more broadly the dynamics of unsettlement characteristic of housing and home in the context of erosion, can end up being individualised and experienced as such. This is in spite of a rich tradition of interest in local history and the environment, suggesting emotional investments in more than an individual home but rather the importance of the coastal region as a home that is also experienced collectively. Yet individualisation of costs and loss is also more likely given the institution of private property ownership on the one hand and the relative isolation of many older-age homeowners on the other. A key challenge is therefore for there to be more of a meaningful, democratic sense across a relatively disparate set of localised communities that there is a future for all of them.

Introduction

Housing, home, and coastal erosion

> 'We had that [first house] for 12 years, but after eight years, nine years, we bought the next one [second house] down the road. The elderly person there died, so we bought that one thinking it would give us longer, but then in 2010, the council said they [both houses] needed to be demolished because they were too near the cliff edge.' (Edward)

> 'I'm not thinking, "Oh, my house will be worth four times more if it's not going over a cliff." I don't care about that. It'd just be nice to see my days out here.' (Mark)

Coastal erosion, rising sea levels, and coastal zone flooding, are significant and worsening problems for coastal communities in the UK. These risks are driven by a range of global and local factors including climate change and local geological formations.[1] The coast of the East Riding of Yorkshire ranks among the fastest eroding coastline in Europe, with average rates of coastal erosion up to four metres per year. In a speech in 2022, Sir James Bevan, Chief Executive of the Environment Agency, highlighted the 'inconvenient truth' that 'climate change means that some of our communities – both in this country and around the world – cannot stay where they are'. This means working with threatened communities to plan for a range of short- and longer-term adjustments. To this end, the Environment Agency made an investment of £36 million in the Coastal Transition Accelerator Programme, an initiative geared towards developing and piloting novel approaches to coastal management in light of erosion. Alongside North Norfolk, another significantly impacted region, East Riding of Yorkshire was a key beneficiary of this funding to plan for longer-term adaptation to climate change.

The wider context for this research is the interface of housing and climate vulnerability across the UK and globally, which produces various forms of precarity and displacement and elicits various technical and policy responses. Examples of climate vulnerability in housing include the overheating of homes in urban settings, vulnerability to extreme weather events such as wildfires and flooding, and permanent change of landscapes subject to erosion.[2] These issues necessitate understanding of local and regional environmental processes as well as how these are mediated by political and cultural contexts.

Despite media coverage of the loss of homes through coastal erosion, there has been limited research considering the impact of coastal erosion on housing and home in the UK context from the perspective of residents.[3] Drawing on interviews with residents of the Holderness coastline in East Riding of Yorkshire, this report contributes to such research efforts by exploring residents' experience and understanding of climate vulnerability in housing on an eroding coastline, drawing out different temporalities that govern these experiences, both fast and slow, and how residents engage with local policy measures.

Research questions

The research sought to address the following questions:

- How does the coast and erosion feature in individuals' housing histories and anticipated futures?
- What impact does living with coastal erosion have on individuals' sense of home?
- What different temporalities can be identified in individuals' narratives of life in a community affected by coastal erosion?

Related to these questions are a wider set of concerns about how climate vulnerability is experienced, what forms of protection or adaptation are appropriate, and who is seen as responsible and accountable. While a significant component of climate research importantly focuses on physical processes, there is also widely recognised need for situated research on human experiences and impacts.

Structure and content of the report

The next two sections of the report contextualise the research and clarify the methodological approach respectively. Following that there are two thematic sections before the report concludes by drawing out some wider implications.

The first thematic section addresses residents' lived experience of erosion in terms of people's sense of home and the temporal and spatial dimensions of risk, uncertainty, and displacement through which this sense of home is unsettled. The coast can feel very grounding through the experience of living in relatively undeveloped, natural landscapes. At the same time, processes of erosion can be unsettling. Unsettlement is an ongoing, complex process. It involves speculation about future displacement in relation

1 Sir James Bevan, 'When the levee breaks: climate change and limits of flood protection', 7 June 2022 https://www.gov.uk/government/speeches/when-the-levee-breaks-climate-change-and-the-limits-of-flood-protection

2 See, for example, Yesudas, N.M., The heat is on: the growing problem of overheating in domestic homes in England and the need for a national strategy, UK Collaborative Centre for Housing Evidence, 2024 https://housingevidence.ac.uk/publications/the-heat-is-on-the-growing-problem-of-overheating-in-domestic-homes-in-england-and-the-need-for-a-national-strategy/

3 For a recent exception exploring dynamics of coastal erosion in East Riding of Yorkshire through the lens of risk perception and residential mobility, see Buck, M. (2025). Living on the edge: how do perceptions of coastal erosion risk affect residential mobility decisions?. Local Environment, 1-15.

to distinctive yet intersecting temporalities of local ecology, coastal erosion, property ownership, and the life course. Unsettlement is concretely manifest in the gradual and sudden disappearance of coastal land and evictions of coastal dwellers. At the same time, unsettlement is also spatially relational and uneven, where erosion and coastal protection mechanisms in one place can impact the extent and impacts of erosion elsewhere.[4]

The second thematic section focuses on how residents make sense of and engage with coastal policy and management along coastline not designated for protection and what kind of future scenarios they envisage for themselves and the region in light of erosion. Individual and collective structures of feeling inform how and when residents are inclined to accept, tolerate, or mobilise against erosion and its impacts. Often, residents whose homes are most threatened by erosion end up feeling isolated and marginalised. Some have contributed to media coverage of erosion and its impacts, but have not secured guarantees around protection or compensation.

Research context

Housing and coastal erosion in East Riding of Yorkshire

Local geology is central to understanding the lived experience and politics of erosion along the Holderness coastline. Formation of the East Riding coastline began around 100,000 years ago, while formation of the current Holderness coastline began closer to 50,000 years ago during the last ice age, when glaciers deposited boulder clay of around 20 to 50 metres deep to cover the chalk that had formed in the earlier period. At the end of this ice age, around 10,000 years ago, the coastline had formed around 15-20 kilometres east of its current position. The boulder clay, which is relatively soft, has eroded over time due to wave and tidal forces, with recent historical records showing rates of around 1.5-2 metres per year.[5] Some of the boulder clay that is dislodged through erosion then travels with the tides down the coast and is deposited further south, at Spurn at the south end of the Holderness coastline and in Lincolnshire even further south. For centuries, then, communities living along the UK's coastlines, such as Holderness, have had to adapt and move in relation to a shifting coastline. In East Riding of Yorkshire, maps of lost villages known to many residents attest to these longer processes of displacement and renewal of coastal settlements and communities, with an estimated 32 villages lost since Roman times.[6]

Today, however, coastal erosion, rising sea levels, and coastal zone flooding, are significant and worsening problems for coastal communities in the UK, with up to 1.5 million properties (not limited to residential) potentially at risk from coastal flooding and 100,000 at risk due to erosion by the 2080s.[7] These risks are driven by a range of global and local factors including climate change and local geological formations. The coast of the East Riding of Yorkshire ranks among the fastest eroding coastlines in Europe, with average rates of coastal erosion up to 4 metres per year, although as this report explores, erosion in practice impacts the coast unevenly across different parts of the coastline and over time.[8]

According to One Home, a UK-based campaign group that has conducted extensive research into and mapping of the impacts of coastal erosion, roughly 80,000 homes are at risk between now and 2100, with 'no insurance or compensation scheme available for those impacted [while] home owners may have to pay for the demolition of their home'. [9] This is still considerably fewer homes than those at risk of tidal flooding with rising sea levels. After the tidal barrier of Hull, the closest major city to Holderness, was almost breached in 2013, a new barrier was constructed at the cost of £42 million to provide 113,000 homes added protection from, while it is estimated that London's Thames tidal barrier will require significant investment in the next 50 years.[10]

Nevertheless, coastal erosion represents a distinctive threat to coastal communities, often in lower density, smaller settlements than London or Hull. Of the 21 sections of coastline most at risk of coastal erosion between now and 2100, One Home highlight four as being along the Holderness coastline in East Riding of Yorkshire, with 648 properties (including caravans) with a combined value of about £93 million currently likely to be lost.[11] A key reason for this is the geological makeup of the coast, consisting of cliffs formed out of soft clay that can rapidly erode through the combined impact of waves, especially during storms, and rainwater draining through the land. In addition, government policy has a significant role to play in determining how these impacts are

4 For an analysis of dynamics of unsettlement in the context of building remediation, see Preece, J. (2025). Inhabiting unsettlement: Living through building safety remediation works in England. Urban Studies.
5 East Riding of Yorkshire, 'Coastal explorer' website https://coastalexplorer.eastriding.gov.uk/
6 Neil White, 'Lost Villages' photography project https://www.neilawhite.com/lostvillages
7 Committee on Climate Change, Managing the coast in a changing climate (October 2018) https://www.theccc.org.uk/wp-content/uploads/2018/10/Managing-the-coast-in-a-changing-climate-October-2018.pdf
8 East Riding of Yorkshire, East Riding climate change strategy, 2022-2030 https://cape.mysociety.org/media/data/plans/east-riding-of-yorkshire-council-8bd6a5e.pdf
9 One Home, 'Collapsing cliffs: English seaside communities under threat from climate change' https://onehome.org.uk/campaign/campaigns/coast/
10 One Home, 'What are Shoreline Management Plans' https://onehome.org.uk/topics/find-out-more/further-reading/what-are-shoreline-management-plans/
11 One Home, 'Coastlines at risk' https://onehome.org.uk/campaign/campaigns/coast/coastlines-at-risk/

distributed and experienced, as well as supporting affected residents with alternative arrangements and planning for the future.

'No Active Intervention' coastline

The Environment Agency (EA) has recently made a significant investment in the Coastal Transition Accelerator Programme (CTAP) of £36 million. East Riding of Yorkshire is one beneficiary of this funding to plan for a long-term adaptation to climate change alongside North Norfolk, with the EA suggesting that the two regions contain between them '84% of all residential properties at risk of coastal erosion in England the next 20 years'.[12] The aims of CTAP are to set out planning strategies for transition away from affected coastlines and to trial and support innovative interventions on the ground. The latter include supporting the 'roll back' of property and facilities further inland and harnessing local planning systems to this end, improving and replacing affected coastal infrastructure, temporary repurposing of coastal land, and developing new financial and funding models for local community development.

Locally, coastal erosion is governed in accordance with 22 Shoreline Management Plans (SMPs) covering the coastline of England and Wales, through a partnership of the EA, local authorities, and key stakeholders. SMPs have been determined through a cost-benefit analysis regarding different kinds of intervention or not intervening to protect specific stretches of coastline. Determined in the 2000s, SMPs account for short-term (2005-2025), medium-term (2026-2055), and long-term (2056-2100) planning over the course of the 21st century. Each stretch of coastline has been given one of the following designations:

1. Hold the Line (HTL): maintaining or upgrading the level of protection provided by sea defences

2. Managed Realignment (MR): moving or allowing the shoreline to retreat or advance in a managed way, and creating tidal habitats where appropriate

3. No Active Intervention (NAI): a decision not to invest in providing or maintaining sea defences. This requires engagement and adaptation where it affects communities.[13]

Significantly, SMPs have neither legal status nor funding. The former means that development can continue in NAI areas, while the latter means that in practice some HTL or MR areas may become NAI areas in time.[14] The Holderness coastline, between Bridlington to the north and Spurn Point to the south, has four stretches designated as 'No Active Intervention' by the local SMP, the four stretches estimated by One Home to contain 648 properties that are likely to be lost to erosion by 2100. The larger local towns of Bridlington, Hornsea, and Withernsea, as well as the smaller village of Mappleton, have sea defences. The most recent sea defences were added to the south of Withernsea in 2019, costing £7 million to provide '400 metres of rock armour', using granite imported on barges from Norway.[15]

To date, residents along NAI stretches of coastline have faced relatively bleak prospects. In some areas, the announcement of NAI as part of a local SMP led to immediate reduction in house prices, although the relatively cheap properties have then appealed to new buyers potentially mitigating some of the fall.[16] Nonetheless, the prospects are particularly bleak as the coastline erodes towards the point at which buildings are at risk of falling over the edge of the cliff. In many cases, residents are expected to pay for the demolition of buildings on the land that they own. For the most part residents have received little to no compensation. Some assistance has been available through 'roll back', offering residents the chance to purchase and redevelop land further inland at a subsidised price. This has not been taken up by many residents because it requires significant work and capital even when subsidised.

Coastal community mobilisations

The loss of land and the perception that the government could be doing more to protect coastline or to support residents at risk from erosion has led some people to mobilise and campaign for more protection and greater support. Resident mobilisations have taken shape across the UK, from Cornwall to East Anglia to Yorkshire to Wales. For instance, Happisburgh, a village in Norfolk that has lost numerous buildings to erosion in recent years, has been a focal point of media attention and local community mobilisations. A video from 2008 shows the Happisburgh Singers performing a song about 'faceless bureaucrats', 'government fools', and 'highly educated people in Westminster' leaving the village's rural community 'stranded'. There have also been legal challenges and attempts to lobby the Committee on Climate Change and shift current SMP policy. In Hemsby, also in Norfolk just south of Happisburgh, a disabled man who lost his home to coastal erosion was supported by Friends of the Earth to challenge the government's National Adaptation Plan 3 (NAP3) as insufficient and unlawful in not accounting sufficiently for the position of marginalised groups such as older and disabled people.[17] Individuals and organisations such as One Home continue to campaign and raise awareness at various scales.

12 Environment Agency, 'Communities to trial innovative ways of adapting to coastal erosion' (26 March 2022) https://www.gov.uk/government/news/communities-to-trial-innovative-ways-of-adapting-to-coastal-erosion

13 One Home, 'What are Shoreline Management Plans' https://onehome.org.uk/topics/find-out-more/further-reading/what-are-shoreline-management-plans/

14 One Home, 'Collapsing cliffs: English seaside communities under threat from climate change' https://onehome.org.uk/campaign/campaigns/coast/

15 YORHub, 'South Withernsea Coastal Defence Scheme' https://www.yorhub.com/projects/withernsea-coastal-defence-scheme/

16 One Home, 'What are Shoreline Management Plans' https://onehome.org.uk/topics/find-out-more/further-reading/what-are-shoreline-management-plans/

17 Damien Gayle, 'Man who lost home to coastal erosion loses court case against UK government' (25 October 2024) https://www.theguardian.com/uk-news/2024/oct/25/kevin-jordan-lost-home-coastal-erosion-court-case-uk-government

However, government policy on SMPs means that residents along NAI stretches of coastline remain in a relatively precarious position, restricted in terms of opportunities for protection and preservation, with One Home conceding that it is not possible for all stretches of the UK's coastline to be protected. In addition, the numbers of people affected are relatively small and geographically dispersed, both between villages and smaller settlements in specific coastal regions and across the UK. Despite some local, regional, national, and even international media attention, mobilisations and campaigns can be difficult to sustain. While some residents do participate in community mobilisations to protect their homes and preserve stretches of coastline, much of the onus to resolve issues around erosion, eviction, and property demolition tends to fall on individual residents.

Methodology

The majority of the research on which this report is based was carried out in 2024, with some preliminary research in 2023. The main method used was semi-structured interviews with residents living along the Holderness coastline of East Riding of Yorkshire.

Participant recruitment was mainly through writing to individual addresses. A list of suitable addresses was made by triangulating between the One Home map of NAI coastline and properties likely to be impacted by and lost to erosion by 2100, Google Maps, and the Royal Mail address finder. Approximately 300 addresses were sent a letter requesting their participation in the research, stipulating that the research team would like to hear from them if they had already had to move due to erosion, were at risk of having to move due to erosion, or lived on or near a part of the coastline lacking sea defences. Interviewees were offered a £25 shopping voucher to thank them for taking part in the research.

The interview questions focused on the background of how each resident came to live where they are, how this fitted into their experience of housing throughout their life, what felt like home about where they lived, the experience of living with coastal erosion (as well as having had to move if they had already been displaced to erosion), and their thinking about their individual and wider collective housing futures. Residents were offered the opportunity to share photographs relating to their experience of home, housing, and coastal erosion, which in some cases provided a basis for some of the discussion. Some interviewees also shared photographs and documents after the interview.

In total, the research involved 19 recorded interviews with 21 people (17 interviews with 1 person being interviewed, 2 with 2 people being interviewed), alongside several additional informal conversations with local residents and professionals involved in coastal management policy and initiatives. Interviews varied in length between 29 and 95 minutes, with an average (mean) of 52 minutes. All interviewees were 50 years old or older except two (both under 30), with 13 female and 8 male interviewees, all British, and all white except one. The vast majority were homeowners at the time of the interview, with two living in housing owned by family members and two who had previously owned property on the coast now renting further inland. Several had at some point lived in a static caravan in the area either prior to or after owning a fixed home along the coast, although none were doing so at the time of the interview.

This tenure, age, and ethnicity profile may in part reflect a selection bias that may have been informed by the participant recruitment process. However, it also reflects the tenure and demographic profile of the area. The parts of the Holderness coastline that are subject to NAI zoning in the local SMP fall in four administrative wards of East Riding of Yorkshire – East Wolds and Coastal, North Holderness, Mid Holderness, and South East Holderness. Some population, demographic, and tenure statistics for these four wards are presented in the table below.[18]

	East Wolds and Coastal	North Holderness	Mid Holderness	South East Holderness
Population (2022)	14,713	10,543	13,805	14,698
Households (2021)	6,463	4,701	6,044	6,564
% 65+ (2022)	30.3	34.6	29.1	29.5
% retired (2021)	33.4	38.7	32.8	33.6
% White (2021)	99	98.3	98.9	98.4
% homeowners (2021)	76	72.4	80.7	68.5
% private tenants (2021)	16.5	17.1	12.2	19.3

18 Statistics taken from East Riding of Yorkshire Council Intelligence Hub ward profiles, based on 2022 ONS population estimates and 2021 Census https://intel-hub.eastriding.gov.uk/

In each of the four wards, more than two-thirds of the population live in owner-occupied housing, while around a third in each case are aged over 65 with between a fifth and a quarter retired, and 99 per cent of the population identify as white. Across the whole of East Riding of Yorkshire, the median age increased from 45 to 49 between the 2011 Census and 2021 Census, with the number aged 65-74 increasing by 25% and the number aged 35-49 falling by 18%.[19] On the one hand, the skewing towards homeownership and older-age among interviewees therefore is representative of a significant part of the population and tenure characteristics of the Holderness region, and offers an opportunity to analyse particular dynamics of home, housing, and coastal erosion for this group. At the same time, the sample largely excludes certain, in some cases potentially more marginalised groups, meaning that some experiences and perspectives are likely to be unaccounted for in this report. The analysis presented is therefore mostly oriented towards addressing coastal climate housing vulnerability from the perspective of older-age homeowners. Issues with this include the relative lack of power of certain groups such as private or council tenants when it comes to lobbying or compensation, even compared to homeowners, and potential conflicts between groups, as for instance with traveller communities who squat land that has been left unoccupied when it is at imminent risk of being lost to erosion.

An important dimension of the sample given the geographies of rural coastal housing was the specific location of housing. All except one of the interviews were with people who were living or had previously been living, prior to leaving their house due to erosion and eventual demolition, in NAI zones according to the local SMP. Beyond this, the sample was divided between the majority of people living (or who had been living) in small villages, hamlets, or rows of houses adjacent to larger caravan sites (mostly detached houses or bungalows, with two living in flats in buildings) and four people (from four separate interviews) living (or who had been living) in isolated houses, typically farmhouses. The sample also contained a diverse range in terms of how far people were or had been living from the coast, ranging from 1-2 metres away from receipt of an eviction notice to roughly 500 metres from the coast. Of the interviews with people who were or had been living in NAI zones, three interviews were with people facing no obvious risk associated with coastal erosion by their own account, five were with people facing no immediate risk but in houses that they expected to be at risk due to erosion (although possibly not in their lifetime), four were with people at risk of being impacted by erosion in their lifetime, two were with people imminently awaiting eviction notices, three were with people who had already moved inland but stayed close by (in one case having moved inland the interviewee was now again at risk and is included in both counts), and one was with someone who had left the Holderness region altogether.

These interviews were supplemented by several other methods: in-depth conversations with key stakeholders in the local authority, Environment Agency, and a firm subcontracted by the local authority to produce virtual reality visualisations of the coastline; a two-day visit to the Holderness coastline, visiting settlements affected by erosion and those with sea defences and speaking to residents; and online research, focused on news reports, policy documents, campaigning materials, video footage, and testimonies. The majority of the report focuses on the interview material, integrating insights from these supplementary methods as appropriate.

All interviewees are referred to using a pseudonym in this report and identifying information has been anonymised. In addition, while the specific geography including relations (geological, tidal, infrastructural) between different places along the coastline is significant to the findings, the report does not mention the names of specific coastal settlements in order to protect the anonymity of interviewees, particularly given that many of the settlements in question are relatively small in size.

Home and unsettlement on the coastal edge

Holderness as home

The relative remoteness and 'slower pace of life' (Alison) are integral to what made Holderness feel like home, as well as the sense of being close to nature and wildlife. Winters are hard, but the benefits, including walking along the beach and looking out to sea, were worth it. For homeowners, their house was a home first and foremost before any financial considerations came into play.

However, feelings about Holderness as home extend relationally beyond the coastline. Many residents have moved to the coast from further inland, often as part of a retirement plan. Some had been to the coastline on holiday, while others had relatives living there already. Moving to the coast offered an alternative, relatively affordable option away from their busy lives in towns and cities further inland. Renovating a coastal house could form part of a retirement project. People who moved to the coast had varying levels of wealth and financial security, while the coastline varies in terms of the relative wealth and security of residents.

Processes including deindustrialisation, uneven development, and the shift away from social democratic welfarism towards asset-based welfare, situate home in Holderness within wider geographies of home in the north of England.[20] Homeownership rates in Holderness are high among those likely to be impacted by coastal erosion. Yet coastal erosion

19 East Riding of Yorkshire Council Intelligence Hub, 'Key statistics' https://intel-hub.eastriding.gov.uk/mps-key-statistics/

20 On deindustrialisation and uneven development, see Hudson, R. (2025). The Political Economy of Uneven and Combined Development: The Case of North East England. Taylor & Francis. On housing and asset-based welfare, see Doling, J., & Ronald, R. (2010). Home ownership and asset-based welfare. Journal of housing and the built environment, 25(2), 165-173.

makes holding onto these homes precarious. Here the British dream of homeownership, sold by Margeret Thatcher and successive governments as the path to prosperity and security, does not necessarily hold on a physical frontier of a world impacted and altered by environmental change.[21]

The market value of coastal property is determined by the location, quality, and type of housing. Proximity to the eroding coastline leads to some property being relatively affordable. Robert, who bought an old farmhouse with his wife, reflected that in other places their property 'would have been well beyond our [their] means'. At the same time, people looking to buy in NAI coastal areas may face restricted access to mortgage finance. David and Catherine, who also bought a house that was not immediately at risk due to erosion, were aware that the market value would likely fall over time and may not attract a mortgage in the future. Yet, overall, residents tended to emphasise their sense of the use-value of a house or flat as home over its market exchange-value.

Home on the Holderness coastline is changing with erosion alongside other economic and social processes. Some villages have lost important community spaces over time, including shops, churches, and pubs. Houses and flats are converted into holiday homes or as holiday lets. Caravans are increasingly being used as primary accommodation, rather than as holiday residences, with some sites becoming '12-month sites now' (Edward). According to Michael and Pamela, whose bungalow was on land between a caravan park and the sea, the interests of caravan park owners and local residents with fixed housing units are unlikely to be aligned, given the relative flexibility for caravan park development and the desirability of a sea view should homes blocking a direct sea view be lost to erosion.

Joanne, whose home was not especially at risk despite proximity to the sea, was not the only person to remark on the 'very dramatic' changes to the landscape that come about because of erosion. These changes, for instance where a road 'literally just disappears' or with fences 'literally hanging over' the cliff edge, can make the coast feel like a precarious, unsettled place. Not all residents feel that climate change underpins coastal change, although increasingly some do consider it to be an important dynamic of current change. As Joanne reflected, offshore windfarms contributed to a sense of Holderness being 'a green energy coastline', in which 'we live in this little … island, and it's all changing around us. But … we're still here. … Living on the edge'. The sense of home in Holderness is conditioned by the sense of being on the edge in relation to environmental processes. At the same time, this same sense of being on the edge speaks to a much wider set of circumstances and geographies linking housing precarity with the loss of home in the UK and globally.

Erosion and time

Multiple temporal horizons shape people's sense of home on the coast, including geological time, the life cycles of humans, the physical durability of houses, property markets, and embodied experiences of the present. The complex interweaving of geological time, property relations, and everyday life frames how people make sense of whether there is a home for them on the coastline in the short-, medium-, and long-term.

Many residents have a keen interest in local history, connected to making sense of erosion. One dimension of this historical interest concerns the region's military history. Concrete pillboxes remain a feature of the coastline, and offer a distinctive indicator and reminder of the physical impact of erosion as the land they were built on is subject to erosion. In addition, part of the Holderness coastline was the site of an ex-Royal Air Force base, with bombs from RAF practice bombing still lodged in the clay cliffs dislodged by erosion and requiring safe detonation by a company subcontracted by the Ministry of Defence. For residents of a nearby village, explosions are regularly heard and felt, with interviewees from this village suspecting that this may further contribute to local erosion rates. Meanwhile, many local residents are familiar with maps of and books about the 'lost villages' of Holderness. Some interviewees were amateur archivists, while others collected fossils found on the beach. Shared, collective memory and storytelling can also be important in accounting for the history of the region, as residents share stories about lost villages, narrating these in relation to landmarks and material artefacts that can be found along the coastline (Anthony). The sense of more extensive historical time, extending even to prehuman history, can also feature in how residents narrate the coastal present. For instance, Sandra reflected how '[the water from the sea] put the land there in the first place, you know, 30,000 years ago, into the Ice Age, when all of that boulder clay came down, and it put that land there, and it's taking it back'.

The coast is also a place sedimented with memories and family histories, including memories of houses or people that were no longer there. Sandra, whose family had had a bungalow on the coast dating back to the 1930s, told the story of how the original bungalow, along with many other bungalows, had been demolished in the 1980s and the whole road moved further inland. The second road was later lost to the sea and the erosion began to take away land from residents' gardens, with gardens gradually disappearing in front of windows looking directly out to sea. Following that, the residents used a dirt track that was previously an alleyway behind the houses further inland as their way of accessing the houses. On each occasion, the new road kept the same name as the old road. Sandra's mum continued to refer to the seaside view, where the second road had been, as the 'front' of the house, even after access from that side had gone.

Erosion itself occupies a complex temporal horizon, between imminent and pervasive, sudden and slow, predictable and changing, proceeding gradually, speeding up, slowing down. Residents had picked up on the cyclical nature of erosion in some places, with significant loss of land in a short period of time followed by long periods of stability, with Edward suggesting that there were seven-year cycles, at least on the coast of the village where he and his wife were living. These cycles are not captured by average erosion rates that inform policy and the calculations of prospective

21 For the broader context of the faltering promise of homeownership, see Arundel, R., & Ronald, R. (2021). The false promise of homeownership: Homeowner societies in an era of declining access and rising inequality. Urban Studies, 58(6), 1120-1140.

buyers, with Anthony observing that it was more a case of 'five or six metres [going] in the space of a couple of weeks' than 'a constant progression' over time. Some residents, for instance Paul, felt that their particular section of coastline was unlikely to erode significantly unless there was a 'once in a generation type of occurrence', such as the 'Beast from the East', the colloquial name given to a particularly intense storm that affected the UK in 2018. At the same time, there is a general sense among residents that the average rate of erosion has sped up in recent years in a manner that can be easily observed by those familiar with the coast. Diane and her husband, who had moved to the area quite recently, estimated that the house they bought was more likely to fall into the sea in 300 years rather than the 500 years they had been told when they bought it.

> 'In the first 10 years, that is from 1987 to 1997, we lost next to nothing. … In 1997, we lost about 10 metres. … And since then, the erosion rate has officially been between 3 and 3.5 metres, but it varies from a couple of metres to 5 metres or more.' (John)

Navigating erosion rates and distance from the edge

Navigating the risk and uncertainty associated with erosion features in decisions about buying, selling, moving, staying put, and inheritance. Awareness of erosion shaped buyers' sense of the financial opportunity and constraints, as erosion would likely lessen future selling price but may also make it more difficult to get a mortgage. Buying under these circumstances could be framed as 'a chance' (Paul) or 'a gamble' as the buyers might 'lose everything' if erosion sped up, a 'realistic' not 'fatalistic' view (Robert). Nevertheless, several interviewees who had bought hoped that a newly bought coastal property would see them out for the rest of their lives. A key variable in these calculations concerns how many years before the house is expected to fall into the sea. Residents typically use the latest data on average metres lost per year to erosion on that part of the coast, informing the sense that an investment was 'good for 150 years' (Alison) or for '90 to 100 years' (Paul). For Alison and her husband, considerations about distance from the coast also factored into their thinking about when might be the right time to sell up, before prospective buyers would be put off.

The length of time furthermore impacted whether residents expected to pass on significant inheritance to their children, with owners with children often factored in potential inheritance considerations into their calculations. Some, such as David and Catherine, reflected that their children could take care of themselves. Anthony, whose children grew up in the house that they had lived in since the 1980s, was concerned about leaving them with the hassle of selling or dealing with a house that would be difficult to sell 'because of the peculiar circumstances of coastal erosion', even if it wasn't immediately at risk. Those living further away may still see the house as an investment and form of inheritance. As Amanda remarked, 'we're just kind of holding onto the property until the kids come of age'.

The changing pace of erosion shifts the sense of whether having a coastal home for the rest of a person's life is likely. Mark had adjusted his sense of the time he might have left in the house he bought down from 35 years to 20-25 years, expecting he may need to make alternative plans later in his life. Michael and Pamela did a significant amount of research and calculations before moving in, with just under 200 metres between the house and the cliff edge and 1.5-3 metres per year lost on average to erosion at the time they bought in 2000, estimating the house would last around 50-75 years without sea defences, a figure that they checked with someone at the council. In 2024, their house was 1-2 metres of cliff loss to erosion away from them being sent an eviction notice by the council. They had painted an 'eviction line' on the fence in their back garden, a measurement of the point at which they expected to receive the eviction letter.

The local authority uses a figure of 9.36 metre to determine when a house is no longer safe to live in, based upon a measure of how much land was lost on one single occasion along the Holderness coast in the early 21st century. The council uses the narrowest point to determine whether the 9.36 metre threshold has been crossed. 9.36 metres is a key figure, figuring prominently in the experience of those living closest to the edge in how they manage their sense of the impacts of erosion. For instance, Sandra commented that '9.36 metres could last us possibly 10 years … certainly realistically five years.' For some people less imminently threatened by erosion, there remain grounds for confidence in feeling that they will not have to move during their lifetime. For those closer to the coast, accelerating erosion may mean they will be displaced sooner rather than later.

Slow, pervasive unsettlement

Unsettlement is mediated by how close people's houses are to the coast, as well as subjective factors. Some senses of unsettlement, both material and emotional, are slower, relating to the wider context of erosion, whereas other senses are faster, particularly around processes of eviction, building demolition, and moving.

Living in the present was integral to how some interviewees navigate the wider context and emotional landscape of erosion, reflected in sentiments such as 'plan as if you're going to live forever, and live every moment as if it's your last' (John) and '[d]o you know what, I could get run over by a bus tomorrow, so why not just enjoy 20 years and worry about it in 20 years?' (Mark). However, living in the present with considerable uncertainty can be a challenge. For residents at greatest immediate risk of eviction, unsettlement can feel pervasive, materialised in changes around them or changes they have to make. For instance, for Gillian, living in a farmhouse at immediate risk from erosion, ongoing adjustments included 'having to think about it because of the amount of fence I'm taking back'. The loss of home can already seem to be in process, even if it has not yet materialised through eviction and building demolition. The

sense of impending loss may be present in interactions with officials, changes to the physical landscape, and the absence of neighbours who have already moved or been evicted.

In some instances, travellers occupy plots of abandoned land on the cliff edge, in a national, regional, and local context in which there are few legal plots available for travellers to live on.[22] For Michael and Pamela, the presence of travellers further exacerbated their sense of unsettlement, through encounters with travellers' ways of living, which they reported have included fires. In this case, the experience was of a kind of double displacement, in relation to the prospect of eviction and to ongoing changes to their social as well as physical surroundings. More broadly, pervasive unsettlement features in some residents' sense of the coastline as a 'rundown' place 'because it might all get washed away tomorrow' (Robert). Residents living further inland like Amanda were concerned also about potential loss of access to the larger towns in the case of a key road close to the cliff edge.

The sense of life on the coast as precarious and unsettled through erosion has led to significant media coverage over the years. Several interviewees had already featured in previous media coverage, including TV news, documentaries, and news articles. Such attention can offer an opportunity to share experiences and lobby for change. At the same time, it can play into residents' the overarching sense of precarity and associated structures of feeling. Media presence tends to be sporadic, responding when there are storms or imminent threats to houses, but is also continuous over time, puncturing normal daily life in an unpredictable, discontinuous manner comparable to erosion itself. The impacts of coastal erosion on residents can feature as part of a short TV or radio segment. Sandra reflected how this might appear to someone living inland 'munching their supper thinking, "Oh, isn't that awful? Those poor people have had to lose their home."'. For residents living close to the coast, erosion is an enduring feature of the physical and emotional landscape of their home. At the same time, Anthony and his wife found that coverage could also play into their sense, as people who don't live as close to the coast and whose house is not imminently at risk from erosion, that the erosion is more of a threat to them than it is in practice.

Some residents living close to the edge have made gradual adaptations as land has disappeared. Sandra's family recently removed an extension to their bungalow in order to remain within the 9.36 metre eviction limit for longer, although at the time of the interview they had 'less than a metre left before we're served with eviction again' using a piece of string to measure the distance. Residents of older, more isolated farmhouses have gradually demolished outbuildings closer to the cliff edge, replacing them further inland. John's family demolished their house and built a new one further inland. Edward and his wife bought two properties relatively cheaply next to each other on the same road, hoping that the second one that was further from the cliff edge would be given a few more years than the first and that they could move into that when the first was due for demolition. In the end, the council asked for both houses to be demolished at the same time.

However, not everyone is as aware of the risks and regulations around erosion. Patricia, who had had to move from the farmhouse she had lived in with her husband, only became aware once the local authority began to take action.

> 'Well, when we started losing the outbuildings, because behind the house there were various rundown outbuildings and they started going dramatically, and what happened is, officially if they were within 20 metres of the coast, we're supposed to demolish them. … And for want of a better expression, we get hassle from the council saying, "No, you've got to do this, because if you don't do it, we'll send somebody in and charge you for it," what have you. And we're in that situation now because buildings we built 15 years ago, outbuildings we built 15 years ago to replace the ones that went, they have now started to disappear.' (John)

Eviction, demolition, and fast unsettlement

> '[The council] said that if any properties within [9.36] metres of the cliff top, then they would serve an eviction notice, no compensation, and give people, residents, maybe a week or two weeks to leave. And we've seen people leave in tears. Honestly, I've seen people leave in tears. … [S]ome people were renters, and they weren't even given time to pack their belongings up … and some of them had to leave their belongings in the property before it was demolished. They came back to it, but someone had broken in and stolen their belongings.' (Michael)

> '[I]t's quite frightening really, because you know that you've got to do something … I put [as an online post], "Needing to... needing to relocate because of erosion. Looking for a one to two bedroomed, you know, house or whatever". And somebody answered within two hours … It was that quick.' (Patricia)

As in other housing contexts, eviction is often distressing and practically demanding. In addition, eviction constitutes a loss of property as a financial asset for homeowners and poses additional financial costs, including the cost of demolishing buildings.

In some cases where it has been possible, residents have built a new house further inland when the sea has come to close to their old house, as described by Sandra and John in the case of each of their families respectively. This has not been possible in other cases. Patricia didn't know where she would be living next when she was evicted from the old farmhouse

22 Burgum, S., Jones, H., & Powell, R. (2022). Manufacturing mandates: Property, race, and the criminalisation of trespass in England and Wales. Environment and Planning C: Politics and Space, 40(6), 1219-1236.

she had been living in, although she found somewhere relatively quickly, relocating to another part of the UK where she also had a strong sense of connection. Patricia was not the only homeowner to have moved into rented accommodation. In contrast to Patricia, Edward and his wife managed to stay in the same village on the same road. Edward and his wife were offered rehousing by the local authority but declined the offer, as it was unlikely to keep them close to where they had been living, which was what they preferred.

Above all, eviction and building demolition crystallise, condense, and contain both material and symbolic markers of loss of home in fast-paced processes of unsettlement. Such moments stand in contrast to the slow, pervasive unsettlement that marks home in the context of erosion. While residents may have had longstanding dealings with the council around the risk posed by erosion, the instruction to leave and demolish buildings acquires an increased intensity when the risk is deemed sufficient. Elaine, whose family lost the house on their farm to erosion in the 1990s, recalled how the family were offered a council house on Friday, which they declined to take up, with their house 'half demolished' by Monday morning. The family did some of the work of disassembling the house themselves, taking the tiles of the roof to save money, as '[w]hen you get to that situation, you do what you can'. In these circumstances, as John reflected of his own family's experience, questions of how to pay for demolition or whether to carry it out independently become paramount.

> '[T]hat's a very expensive procedure [paying for professionals to demolish buildings], and we have neither resources and even if we had the resources, I don't think we'd have the will to pay out to get that done. It has changed slightly. We are now getting urged, for want of a better expression, to take down the remaining outbuildings, one of which is literally hanging over the edge.' (John)

Following eviction, residents continue to navigate loss of their home on the coast. Having moved to another part of the UK, Patricia became aware of a video on YouTube showing drone footage of the effects of erosion on the Holderness coastline, including footage of her old house that was due to be demolished. She would watch this video to feel connected to the house. Edward and his wife remained perplexed by the approach of the council in leaving houses empty when they had not yet been demolished.

> 'The old gentleman that lived there passed away, and the house has just stood there… [e]mpty. The council's got charge of it, because his wife's in a home. But they've done nothing with it. They've just let it stand there. It's been flooded because they didn't ever turn the water off for winter, so the pipes burst. … [S]omebody could have used it as a holiday home for, I reckon ten years, easy. … So it's rotting away.' (Edward)

The loss of land and buildings can impact not only people's housing but also work and income, taking shape over more immediate and longer-term timescales. Elaine and her family had been farmers prior to their farmhouse and land being lost to erosion. Around the time that they had to leave, they managed to buy 20 acres of land on the other side of the road further from the sea and start a garden centre. The same land has since been sold to be used as a caravan site. Rather than be rehoused by the local authority, for more than three and a half decades the family lived in a static caravan, with several of them passing away during that time. More recently, Elaine bought a bungalow in a village slightly further inland.

Sea defences and uneven, relational unsettlement

The future of residents' homes on one part of the coastline are connected through geological and policy processes to the future of homes on other parts of the coastline. Erosion in one place may even protect other places, as sand is moved and deposited by currents to bolster beaches further down the coast. At the same time, sea defences in one place can have a major impact on erosion further down the coastline, redirecting currents towards unprotected stretches of coastline. For this reason, sea defences elsewhere feature prominently in some residents' experiences of erosion. In one example, the removal of unauthorised sea defences was deemed by residents further down the coast to have slowed down erosion significantly in the following years (Michael and Pamela). Several interviewees living on NAI coastline highlighted the impact of authorised defences, especially the granite rock defences towards the south of Withernsea that were added in 2019, on their own prospects.

Whether this was deemed fair or acceptable varied between residents, including between Gillian and Patricia, both residents of old farmhouses, reflecting on how their relative isolation left them more vulnerable to lack of protection from erosion than more densely populated areas. For Gillian this reflected a clear imbalance in terms of how resources were distributed and decisions made, whereas for Patricia the unevenness was understandable on the basis of how many people's houses would be protected. An uneven, relational geographical sense of unsettlement therefore patterns how residents make sense of their own prospects in relation to other places, even when recognising this could involve looking at the situation in a somewhat 'selfish' way, as admitted to by Mark.

> '[W]hether [village]'s not going to be saved because it may then affect Withernsea … is also one of those things that's up for debate, that nobody will allow [village] to be saved, because it could then affect somewhere lower down the coast, that's a bigger place. But I think it's about [number] miles from here to Withernsea, so these places in between [village] and Withernsea have got … smaller communities, little villages that don't have roads that come right down to the cliff top, which could maybe afford to lose a little bit more [land]

> rather than losing a village that's got a community and got more people in it. That's probably a little bit selfish saying that.' (Mark)

The relational sense of unsettlement is not uniform. Some residents such as Paul and Lauren, living in different villages, perceived themselves as less vulnerable due to being further from or closer to the coast or due to geological variation of the coastline, even if they were living in an NAI area. Meanwhile, Elaine invoked framings of guilt and unaccountability to make sense of how residents in protected areas make sense of the relational impacts of sea defences further down the coast, where 'everybody sort of admits it [the relational impacts of sea defences] now, but … they don't want to admit it, obviously'. Part of the problem for people like Elaine and her family living in isolated farmhouses or relatively small villages is that as 'there's so few of you, you haven't got the voice', in contrast to settlements where 'you've got enough people … like Mappleton did', where two rock groynes were added in 1991. People living in isolated farmhouses can experience further isolation in the challenges faced during and after eviction, with Elaine recalling how 'nobody' helped when her family had to move out. The relative lack of funding for residents in smaller villages was understood in comparison to larger settlements like Withernsea, while Diane also made the comparison with funding available to other parts of East Riding of Yorkshire and of the UK.

A relational sense of unsettlement also takes shape around financial costs. In some houses, demolition may cost more due to building types, materials, and conditions, for instance whether there is asbestos in some farm buildings. Asbestos is harmful in a relational sense, in that it can be harmful once disturbed. In these cases, as Elaine remarked, 'you've got to do things properly', but asbestos removal can be very costly and some residents may struggle with paying for it, with Elaine estimating that they've had to pay 'about 30 odd thousand to get rid of asbestos'.

A relational understanding of unsettlement directs attention towards the complex ways in which protection from erosion in one place and the impacts of erosion elsewhere are interwoven across time and space. It raises important questions regarding which houses and people receive protection, how decisions to protect in one case may impact another, how these impacts are distributed, the relationship between public spending on preventative infrastructures and individualised costs of lacking protection, and the basis on which support and solidarity can extend between differentially impacted people.

Resident responses to coastal erosion and policy

Grounded knowledge and practices

Residents interviewed as part of the research had often spent time trying to understand the environmental and institutional processes shaping erosion. Some were keen to apply this understanding, but often felt that their perspectives did not carry much weight when shaping coastal policy. Independent research took the form of reading local history books, taking photographs, and understanding geological processes surrounding the soft clay coastline. Several residents shared the understanding that erosion is caused both by waves hitting the bottom parts of the cliff and by rainwater running through the clay from above, even emphasising how the latter can be exacerbated by agricultural drainage systems in certain locations. Climate change is understood by some residents to be accelerating erosion on both fronts, through tidal waves and rainwater. For instance, Gillian reflected that 'erosion isn't just the sea, erosion is frost, erosion is rain, erosion is wind, you know, erosion is the moon when it brings up the tide … [a]nd there's no doubt that climate change will affect and is affecting everything.' Theories concerning erosion and its impacts gain local specificity. In one village, speculation has amounted over the possibility that the detonation of unexploded ordnance (bombs) lodged in the clay that emerge on the beach following erosion may contribute to erosion. Several interviewees suspected that dredging, a process by which sand is extracted from the coast and sold by the government as a source of revenue, could contribute to erosion, while bemoaning how dredging revenues were not reaching local people.

There is also considerable understanding of policy and legislation, concerning zoning, sea defences, demolitions, and options for rehousing. However, while at the time of interviews in 2024 some residents had heard something about the recent funding of the Coastal Transition Accelerator Programme (CTAP), many had not, despite announcements that East Riding of Yorkshire would be a pilot CTAP area in 2022 and the council beginning its outreach to local residents in late 2023. Residents scrutinised how the council made decisions about when to issue an eviction notice, including the question of measuring erosion and how to determine when erosion poses a threat to residents. John recalled how the council had previously had an employee who would manually measure erosion with a tape measure, before switching to using technologies such as sonar and more recently drone footage and 3D imaging. The latter has been part of the package put together as part of CTAP.

Some residents have been proactive in researching alternative strategies to protect the coastline, drawing on examples from across the UK and the wider global context. Alternatives considered include growing plants to prevent landslip, creating an offshore marine reserve, using the villages historically lost to the sea to create an artificial reef by planting seagrass, building an offshore concrete barrier, and attracting sea creatures, with the idea to create 'breakwaters to take some power out of the waves' (Edward). These residents have been disappointed by what they have understood as the local authority's reluctance to engage with alternatives strategies and in some cases have attempted to implement these independently, with limited success.

'Our cliff, if we'd have known 20 years ago what was going to happen, it would be worth bulldozing our cliff to get less than 45 degrees, contouring it, even putting terracing, anything like that would have helped to protect the land, and then we could have planted it. Now, about five years ago, six years ago, I learned about a plant that was used all over the world to prevent landslip, and it was a very, very difficult exercise to persuade our neighbours at that time to contribute towards purchasing some of these plants to install them. It was just a trial thing that we were going to do it … and unfortunately we had the wettest summer we ever had. … Most of the people who helped to do it, we planted, and unfortunately because of the wet … the plants wouldn't take, and most of them died, unfortunately.' (Michael)

'I've bought grasses … [A]t the bottom of our field we've got the dyke in the road, in the field, and then, the sea. So, I then started looking at things that we could do to plant in things like oak trees … Sea grasses, all that kind of stuff, because it will shore up that bottom section of our field with the root system.' (Amanda)

Household responses to policy implementation

'[T]he government needs to weigh up the cost of doing the sea defences versus all these people losing their homes. Where are you going to put them? … How much is that going to cost you to then have to relocate these people? (Amanda)

'[I]f you settle on the Holderness coast, you know what you're in for. … [Y]ou know, if you build a home there, you know that it's not going to be forever. … [I]t would have been fantastic if they could have given us some sort of sea defences, but they never have, and it's just how it goes. … You just enjoy it in the here and now, that's what you do. … So there's so much emotional stuff tied up with all of it that I don't want it to go. I realise it will go. It has to go. It's Holderness coast. It'll go. But I don't want it to go at 9.36 metres. … If somebody's saying you've got some terrible illness and we can keep you alive for another three or four years, well, yes, I'll go for that, thank you.' (Sandra)

Residents of NAI coastline vary in the extent to which they are prepared to accept, understand, or tolerate the likelihood that their home will be lost. Ultimately, no residents wanted to be in a position where compromise felt necessary. However, some framed the situation pragmatically, like Patricia, who took what she felt was a 'realistic' approach to her predicament of having to move. For others, there was considerable frustration around the perceived arbitrariness of erosion policy and its implementation, for instance the 9.36 metres eviction rule and the lack of adequate support to stay put as they desired.

Decisions about what to do when faced with the real prospect of eviction are shaped by subjective preferences and constraints, as well as prospects of mobilising alongside neighbours. Gillian suggested that she could end up in 'a tent in the field some place', not wishing to move away from where she had been living. In contrast, Patricia felt ready to move back to the town where she had been born in a different region of the UK. But many residents would rather stay close to where they had been living, one way or another. Some people, including Edward and his wife and Elaine and her family, were offered council housing preferred not to take this option, as it would mean moving away. Edward and his wife first bought a local house in an auction on the same road further inland, then sold that house and began renting another house on the same road, where Elaine and her family moved into a caravan. In at least one known historical case, a whole road and row of bungalows were rebuilt further inland (Sandra). John and his family rebuilt their whole house further inland on the plot of land that they owned, and are considering the possibility of doing so again, although they would need to purchase more land on the other side of the road in order to do so.

'[T]here are three things, there's... there's no protection and there's no compensation, and there's no relocation. Those are the three issues, right, for anybody living on the coast. … [O]f those, I just want protection, you know? I understand people, if they want money to relocate, that's absolutely fine, I understand that. But to me, it's all about protecting what you have.' (Gillian)

Beyond rehousing, other forms of government support may not be straightforward to access, do not exist in the form that residents would like it to, and can be experienced as disempowering. Support has included help with 'roll back', through which subsidies are available to develop land further inland, and some financial assistance to subsidise the costs of demolishing buildings. Assistance with paying for demolition costs can offer critical support to those who could not otherwise afford them, as was the case for Patricia. However, in other cases, support is not available in a form that matches what people feel they need. For John, what was on offer could feel like an 'insult'. Edward and his wife received support through the 'Pathfinder' scheme to assist with demolition and relocation, but were unimpressed by the local authority, using 'scare tactics' and subcontracting demolition to a company that the couple felt did not do a good job.

'[T]his Pathfinder Scheme, they [the council] come in more or less all guns blazing, and basically "We're going to block the road off below your bungalow. You won't be able to get your car to your bungalow" … Plus, they used the scare tactics of "It's going to cost you so much for demolition" …

[T]o be honest, when I saw how they demolished it, I were appalled. If that were going to cost £12,000 to demolish it, I were ashamed, because I could have done a better job. … [T]hey played upon the asbestos being a cost factor in demolition. … They did give us three and a half thousand pound, they have like a bitumen roof, an asphalt roof, and on the one [another house further inland] I bought at auction, it needed re-roofing, so I stripped all the roof off. We got a professional roofer in, and the council paid for the roof doing.' (Edward)

Challenges facing local community mobilisations

'They need to do more. They need to be more proactive. This problem isn't going to go away. It's not going to resolve itself. There needs to be some sort of intervention. And it's kind of like, you know, rallying the troops, but nobody seems to care.' (Amanda)

Residents have responded to erosion and coastal policy through media appearances, legal challenges, attending meetings with officials, writing to members of parliament, and community mobilisations. Mobilisations remain, however, more of an exception than a rule.

Experiences of unsuccessful mobilisations may play some role here. Amanda started a petition to increase funding for alternative forms of sea defences, but was not able to get enough signatures, any media coverage, or interest from the local member of parliament. Residents who have attended community meetings with local authority officials have felt disempowered after these have not appeared to lead anywhere. Residents involved in local mobilisations at the scale of a village or street may end up moving, or in some cases dying (reflecting local demographics), making mobilisations harder to sustain over time. Elaine took the local authority to court but was ultimately unsuccessful. She understands that 'it has to come from the government itself to set up a fund' as additional compensation directly from the local authority would have 'opened the floodgates for other people'. They 'got plenty of publicity', but no compensation. She felt that she had done her share of campaigning, and that it's up to other residents to pick up the fight.

'It was a lot of toing and froing and lots of people getting round and "What are we going to do about it?" But they haven't done anything, and that was about four years ago. … That was when there was all the hoo-hah, with all the people who turned out … There was a meeting, yes, there was a meeting, but it wasn't much … It wasn't very helpful for anybody. … There was some talk about moving us, but there wasn't any talk about where.' (Julie)

'[A]t that time in 2009, 2012, the council came up with a plan of eviction. … Well, I just think that we've been let down totally by the council … What's significant is the fact that they've not really consulted us in any way or shape or form. … [T] here were about maybe ten, twelve of us there representing the community here [at the earlier meetings], of which maybe eight have died.' (Michael)

The demographics and geography of the coastline areas make it difficult to sustain community mobilisations. In addition, in the UK, housing and welfare tend to be individualised through private property ownership and the shift towards asset-based welfare. There remain questions as to the strategies and objectives of local mobilisations, the extent to which demands are framed in terms of what the local authority could be doing in wider contexts of austerity, widespread housing precarity, and climate adaptation, and the extent to which struggles for protection, compensation, and satisfactory rehousing are likely to have traction when directed at the individual or local scale towards local officials, politicians, or national government actors. One strategy has been to try to connect with people facing erosion in other coastal regions such as Norfolk as well as with non-governmental organisations such as One Home (Michael and Pamela). However, even these attempts to scale up struggles have had limited impact in improving the prospects of those Holderness residents most at threat of erosion on NAI coastline.

A further problem concerns the extent to which residents' view their plight as common. The relational sense of unsettlement along the coastline also points towards questions of how to distinguish between problems that are individual or collective, who should pay for any costs (protection, compensation, demolition, rehousing), and whether this is fair or is perceived to be fair. People facing eviction and demolition costs were often disappointed and dismayed by the lack of support they received, especially when decisions to protect certain parts of coastline but not the parts that they lived on were seen to be a key factor contributing to the loss of their home. Answers to questions about responsibility, costs, and fairness are likely to be shaped by how people think about geography, longevity of residency, the relationship between housing security and wealth, motivations and choices, and perceptions of other people's motivations and choices. Anthony didn't have 'a great deal of sympathy' with people asking for compensation and claiming that they had been let down unless they could demonstrate how 'local authority interference' had had an impact on their circumstances, viewing each individual homeowner as having taken on risk when buying along the coastline. Elaine noted how she knew people who had bought 'a bungalow that's on the edge so they get a council house', something she felt was 'totally unacceptable', standing in contrast to her own situation as a longstanding local resident and farmworker. She framed these differences in terms of both use and finances, arguing that '[y]ou've had ten years out of it and you paid £10,000, £1,000 a year', and adding that '[y]ou couldn't even put a caravan on a pitch for that kind of money'. By this reasoning, '[y]ou've got no right to grumble there'.

Envisaging coastal housing futures

What kind of future is being imagined by Holderness residents in the context of land lost to erosion? While there are subjective differences, there is a shared experience premised on the loss of land and a capacity to see the impacts of environmental change firsthand. Security through homeownership is furthermore understood as provisional in the context of erosion. The Holderness coastline therefore speaks to wider issues and imaginaries concerning the future of housing and home in the UK and questions of how to organise individual and collective security across landscapes impacted by environmental change.

An important question concerns what is being valued and what is therefore worth protecting. Living in a 'Victorian farmhouse', Gillian proposed seeing dwellings not in terms of their financial value as private property but their broader significance in terms of heritage and the environment. Mark drew attention to particular social infrastructures such as pubs that support local communities to continue to thrive. These perspectives tap into the idea of the use-value of housing and buildings over their financial value. While such perspectives about the use-value of housing are not sufficient alone to address the challenges posed by environmental, institutional, and economic processes that contextualise the housing precarity of those living in smaller settlements, they raise important material and political concerns.

Meanwhile, the construction and renovation of housing along NAI coastline happens on an ad hoc basis. However, there is a broader question of how new construction fits into governmental policy. Residents' views of this were not uniform, with Edward, who had already had to move due to erosion, decrying the lack of new housing being built, and Alison, whose house was not at risk, objecting to the idea of further construction. Interviewees generally did not discuss ideas around alternative financial or funding models for housing development, for instance community-led approaches to housing, which CTAP officials in East Riding of Yorkshire identified as one policy area to explore. It is possible that there would be interest in alternative housing delivery and ownership models if there was more information available to residents and effective engagement. Since interviews took place, in February 2025 East Riding of Yorkshire Council announced that it would spend £800,000 as part of its Changing Coast East Riding project to develop new housing on 'the site of derelict agricultural buildings' just inland from where a row of houses is at risk from erosion to rehouse people who have been displaced. The plan for the development encompasses two- and three-bedroom housing for social rent or shared ownership.[23] Meanwhile, the presence of caravan parks as a lucrative and flexible business with respect to coastal land speaks to a different kind of housing future, with caravans used increasingly as primary homes for those seeking low-cost housing alternatives.

Underlying future imaginaries is the question of what kind of future is possible in the context of climate change. The place of Holderness within this wider picture opens up questions about the extent to which risks facing some people and places are treated as collective political and economic concerns. Another possibility is to reframe erosion as part of a broader set of processes by which the present becomes the past and certain social and material formations are lost. Envisaging coastal futures can then be reframed by considering the point at which it is necessary to let go of ideas about preservation and to think more about what change and adaptation look like. This may point towards the importance of historical work and even building more extensive archives alongside housing development and service provision.[24] There are no straightforward answers here, in the environmental context of the uneven impacts of climate change and in the political and economic context of austerity, housing insecurity, and inequalities in wealth and power.

Ideological perspectives also play a role in how residents envisage the future and connect this to the present. For instance, while Diane viewed change along the coastline as largely caused by the exploitation of the environment, Amanda emphasised the strain caused by 'mass migration' on the allocation of resources in the UK, how the state is 'hellbent on sort of net zero and all the rest of it' with little support for farmers, and how the Covid-19 pandemic showed that '[i] t was every man for himself'. Yet despite these ideological differences, Diane and Amanda could reach for similar imaginaries as to the future of the Holderness coastline, with Diane imagining a region that 'is going to be cut off eventually, and it will become a little island', and Amanda wondering whether 'they eventually want this to become like a bay'. For residents, the significance of the disappearance of this land is understood to be less keenly felt by those who do not see it or experience its impacts as directly as them. As Elaine put it, people who don't live along the coast and see the impacts of erosion 'don't realise just how much of England's going'.

23 East Riding of Yorkshire Council (4 February 2025) https://www.eastriding.gov.uk/news/article/?entry=2808

24 See Dan Hancox's article on Holderness, which captures longstanding engagement with the historical disappearance of land in the Holderness region and interrogates the question of how to let go of home in this context https://aeon.co/essays/how-to-live-on-the-edge-of-a-disappearing-coastline

Conclusion

Implications

Rather than suggest a set of concrete policy recommendations, the aim of this report has been to assess how residents make sense of erosion, the impacts of erosion, and coastal policy. Nevertheless, certain implications can be drawn out, accounting for the situation in Holderness and wider concerns about housing, the environment, and the changing geography of the UK.

The impermanence of housing and the environment

The prospect of houses falling into the sea, while unusual, speaks to a much more generalisable, yet often understated, feature of housing, that it is impermanent. At some point all housing will likely sustain damage, decay, and become unsafe or unfit for human habitation. In general, as housing has emerged increasingly in the global economy as a financial asset, housing is abstracted from its concrete reality as composed of materials (bricks, windows, asbestos) located in a physical environment (soft clay cliffs). Evidence from local residents has shown how such concrete realities of housing are at the core of how housing is constituted as home, but also to processes of unsettlement, how these are navigated, and who ends up losing out financially and emotionally when there is no land left for a house to stand on. The situation in Holderness therefore points to vital questions around climate adaptation and housing.

The future of home beyond precarious homeownership

Since the 1980s, there has been a systematic coupling of private homeownership and security. Security here includes personal finances, ontological security (having a place to call home), and intergenerational security (securing a family's future through inheritance), all bound up together through the promise of homeownership. The threat of erosion with regards to private property ownership is simultaneously a threat to each of these senses of security. The sudden dispossession of many homeowners globally who had defaulted on their mortgages following the 2007 subprime mortgage crisis and 2008 global financial crisis revealed that homeownership did not in practice guarantee any of these forms of security.[25] At the same time, widespread housing precarity among private renters, poor housing conditions for social renters, large numbers of people sleeping outdoors or living in temporary accommodation, and empty houses owned by wealthy investors have demonstrated how to a great extent housing has been decoupled from its social use-value as home.

The case of elderly homeowners whose security is threatened by erosion adds weight to the case that there is a growing social need to decouple financial security from ontological security, guaranteeing safety and suitable, secure housing as a priority. Interviewees referred implicitly to the asset-based welfare system, in which present and future welfare is devolved to the individual. Making adaptations in relation to climate change is a collective challenge concerning everyone's safety and security, which cannot be responded to on an individual basis. Meeting this challenge requires investment in infrastructures of social support, including alternative models for affordable, secure, suitable housing, while also reinvigorating social solidarity among those contending with the impacts of environmental change. Decoupling home from financial logics also reinvigorates the question of the basis on which home is valued. Questions of value may look different in semi-urban, semi-rural contexts, with low population density and relative isolation of residents. In addition to their value framed in terms of local ecology and heritage, residents see their disconnectedness and isolation as something valuable, while at the same time reckoning with their limited power due to being a relatively small group of people.

Engagement with slow and fast unsettlement

Dynamics of slow and fast unsettlement play into how residents assess their prospects, options, and what they feel is fair for themselves and others in terms of support. A key insight from this report is how government policy and interventions often fail to hit the mark when engaging with the timeframes and geographies of people's sense of how erosion impacts their lives. Regarding key issues such as eviction, demolition, and relocation, a more proactive approach could be taken to engage residents on their specific needs in the preceding years, working alongside residents to develop alternative approaches to the future of the coastline, for instance developing alternative models for land use and community-led housing development, while also making more of residents' interests in and expertise concerning local and regional history, ecology, and geology.

The politics of climate adaptation in coastal rural communities

The situation and perspectives of homeowners presented in this report demonstrates the complexity of how to allocate support in the form of protection, compensation, or relocation. Even among elderly homeowners living close to the coast, there can be disagreement over who deserves support, what kind of support, and on what basis. Among the variables that

25 See, for instance Aalbers, M. B. (2009). The sociology and geography of mortgage markets: Reflections on the financial crisis. International Journal of Urban and Regional Research, 33(2), 281-290.

animated how residents evaluated the appropriateness and fairness of support were length of residency, finances, reasons for living on the coast, degree of isolation, the idea that buyers should have known what they were getting themselves into, the impact of government decision-making and policy such as NAI zoning, and the role of unpredictable factors that have accelerated rates in specific locations such as changing weather patterns, tides, and new sea defences up the coast. Interestingly, there was resistance among some elderly homeowners to being rehoused in council housing, even as investment in council housing is one of the most widely held demands by housing campaigners in larger urban areas. This poses an additional democratic challenge of how to address diverse preferences in relation to state expenditure and housing provision across rural and urban contexts.

In addition, the spatial unevenness of coastal erosion and its impacts and distribution and density of settlements, as well as how interventions in one place can accelerate erosion further down the coast, often indirectly pits residents' interests against each other, even as residents along the coast are making similar claims to want to protect the coast and their home. Many residents are engaged with debates around coastal erosion and policy but feel the restrictions of their relative isolation in building a coalition to enact meaningful change. At the same time, where there are rationales against building sea defences in certain locations, these are not either understood or accepted by some residents. While this may be chalked off as inevitable, it also suggests the possibility of and perhaps need for more meaningful forms of democratic engagement. Currently many approaches from government agencies are experienced by some residents as at best technocratic and at worst seriously lacking in care.

Developing more empowering forms of engagement for residents to shape coastal futures would not be without challenges and yet also would need not point in any particular policy direction. This is a democratic challenge to dealing with environmental change that needs to be viewed as social and political rather than merely technocratic. Greater attempts could be made to offer space for community members from different parts of the coastline to come together to discuss key issues around sea defences, planning, and relocation, to build more space for understanding the advantages and disadvantages of different kinds of intervention, and to envisage collective futures. While there would likely be disagreement among residents and with officials, there is currently a democratic gap that is easily filled by resentment and a sense of injustice for those largely left to fend for themselves.

Contributions

This report has made three contributions to understandings of housing and home. First, the report provides evidence of how home is experienced, made, and unmade on an eroding coastline. The report has paid particular attention empirically to the case of older homeowners, setting their predicaments within the wider British housing context of security promised through homeownership, albeit recognising how many coastal homeowners prioritise their quality of life over financial considerations. Second, the report identifies the distinctive temporalities and spatially relational dimensions of unsettlement in the context of housing at risk due to erosion, in which uncertain dynamics of erosion and sudden processes of eviction intersect with residents' speculation and calculations about their own and their family's future financial security and home. Third, the report addresses wider implications for how to think about the material, spatial, temporal, economic, and political dimensions of housing and home in relation to environmental change and climate adaptation.

Directions for future research

Regarding research on housing, home, and coastal erosion, this report was limited by its focus on homeowners, especially older homeowners, although some did have experience of other housing tenures, including at the time at which they were interviewed. Other groups that could be interviewed include private tenants, council tenants, people rehoused following a period of statutory homelessness, and travellers, as well as ethnically minoritised residents, residents without British citizenship, and younger people, including younger families with children. The research also largely focused on areas of coastline currently with No Active Intervention coastal policy governing likely interventions from local authorities, especially regarding non-introduction of coastal defences, eviction, demolition, and lack of compensation. Accounting for the history of parts of coastline where defences have been introduced would provide evidence of the impact of coastal defences on residents' sense of home and unsettlement. These are evidence gaps that could provide the basis for future research.