



# COASTAL COMMUNITIES UNDER THREAT



When climate action group One Home studied the UK's shoreline-management plans it found gaps in both protections and information. Agencies must do more to protect people and places from rising seas, writes **Angela Terry**

**A**n interactive map has been released that gives the most up-to-date picture of the state of England's disappearing cliffs and the villages at risk of being lost to the sea, highlighting the devastating impacts of coastal erosion.

When One Home embarked on a shoreline-management-plan project, it was driven by a realisation that there were numerous communities that were

at risk of falling into the sea. No one was talking about it or putting financial support in place for the many people who would lose their homes.

As the project developed, the full scale of the problem began to emerge: 21 villages and hamlets around England will lose £584 million worth of residential property to coastal erosion by 2100. And that's the best-case scenario – the actual figures are likely to be even higher.

Climate change is accelerating coastal erosion and around 30 per cent of England's coastline is already suffering from erosion. The shoreline is being worn away as stronger storms create larger waves at higher elevations, which batter the coast.

Coastal communities are particularly exposed to the impacts of a changing climate, as demonstrated in Hemsby in March 2023, when eight metres of land were lost in just two weeks.





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Kent coastline

### UNDERSTANDING THE DATA

One Home's map uses publicly available datasets, specifically the Environment Agency's erosion predictions contained in the National Coastal Erosion Risk Map (NCERM) and the Climate Change Committee's (CCC) estimated end-of-century property losses.

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NCERM doesn't include climate-change projections and is therefore underestimating future erosion extents.

We examined 22 documents that set out how each strip of coastline should be defended – or not. These shoreline-management plans (SMPs) have been developed by the Environment Agency, local authorities and key stakeholders in each area.

They provide a pathway for future development on the coast, but they're not statutory documents, which means development can continue in unsuitable areas against SMP recommendations.

The SMPs highlight those stretches of coastline that will be left to naturally retreat if the cost – either financial or environmental – of protecting it outweighs the overall benefits.

A management designation has been given to each section of the coastline for the short (2005-2025), medium (2026-2055) and long term (2056-2100). These are:

- Hold the line (HTL) – maintain or upgrade the level of protection provided by sea defences
- Managed realignment – move or allow the shoreline to retreat or advance in a managed way and create tidal habitats where appropriate
- No active intervention (NAI) – no investment in providing or maintaining sea defences. More than a third of the coastline is already designated as NAI, a figure that will only increase as sea levels continue to rise.

### OUR FINDINGS

Through our research, we've found 21 communities that are at risk of losing a total of 2,218 homes by 2100. They are within Cornwall, Cumbria, Dorset, East Yorkshire, Essex, the Isle of Wight, Kent, Northumberland, Norfolk and Essex. Worst affected are those properties located in the soft-rocked coastlines of North Norfolk and Yorkshire.

Our map shows the best-case scenario, in which all planned defences are funded and delivered. In reality, this is unlikely to happen and managed realigned or NAI will occur instead. Smaller coastal villages won't be prioritised as funding will need to be allocated to protect larger populations and key infrastructure.

A managed-realignment policy has only been adopted in SMPs along about three per cent of coastline in England and Wales. However, the CCC recommends that this needs to increase to 16 per cent by 2105. This means much less of our coastline will be protected by hard walls or rock boulders, and land will be given up to the sea. There are thousands of people living under the false belief that their home will be protected.

### HOW REALISTIC IS IT TO CREATE MORE DEFENCES?

Sea walls and other measures are extremely expensive to build. To implement all of the proposed defences set out in the SMPs by 2100, the CCC estimates it will cost between £18 billion and £30 billion, depending on the rate of climate change.

As sea-level rise continues to accelerate, it's going to become financially and technically unfeasible to implement many HTL policies. An assessment by Sayers et al (2022) suggests that almost 2,000 kilometres (around 30 per cent) of England's shoreline designated as HTL, won't be cost-beneficial to deliver, putting an additional 160,000 properties at risk of coastal flooding by 2050.

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Even if funding was made available, it is simply not possible to protect every stretch of coast because hard defences can have damaging effects on the natural environment.

Allowing coastlines to return to their "natural" habitats, such as sand dunes and salt marshes, creates landscapes that protect against storm surges. However, these nature-based solutions must be accompanied by support for communities to move away from the coast.

### HOW CAN WE HELP AT-RISK COMMUNITIES?

First, government must develop feasible financial mechanisms that enable communities to move away from high-risk zones. This is known as "rollback" and some work on this is underway.

The government has allocated £36 million to the Coastal Transition Accelerator Programme (CTAP) – a five-year (2022-2027) programme to explore ways of adapting to a changing coastline. It's focused only on East Riding of Yorkshire and North Norfolk – the two local authorities with the highest erosion rates and number of homes at risk in England.

The aim is for learning captured in the programme to be shared and implemented in other vulnerable parts of the country but there isn't any funding for this.

CTAP is incorporating lessons learned from a rollback trial as part of the Coastal Change Pathfinder Project (2009-2012) in which homeowners on the cliff edge in Happisburgh, Norfolk, were offered funding by the government to resettle inland.

However, CTAP hasn't yet translated into actionable policies and this must be done so that financial assistance is given to affected individuals.

The situation is urgent. In March 2023, three homes close to the cliff edge in Hemsby, Norfolk (one of the areas identified as at-risk in our research), had to be demolished after high tides cut into sandy cliffs.

But it's not just in Hemsby. Homeowners along the east coast who lost their homes this winter and spring have received no compensation. It's even possible for owners to be asked to pay to demolish their homes, while still paying off their mortgage.

### BETTER COMMUNICATION OF CLIMATE IMPACTS IS ESSENTIAL

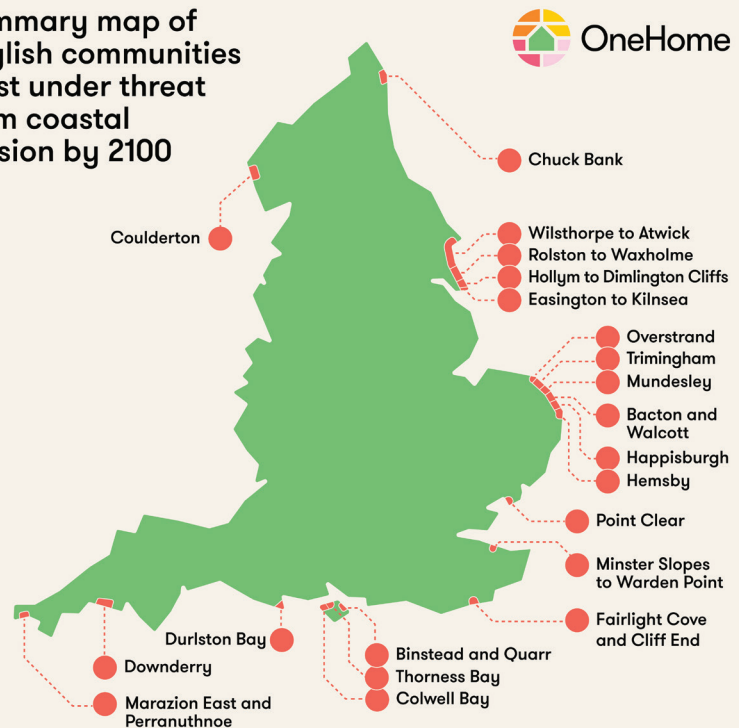
Coastal communities must be made explicitly aware of the decisions that apply to their areas. Our findings generated significant publicity, with articles in more than 400 publications and appearances across radio and TV, including *BBC Breakfast*.

This coverage goes some way towards informing communities of their risk, but we know that a much bigger conversation is required about future impacts of climate change on coastal communities. One surprising outcome of our research is the number of people who've reached out to share their concerns and frustration that they've been unable to get politicians to take action.

Transparent conversations with the communities affected are essential. People must know the risks they face, who to go to and what the pathway is for support, which is currently none. A minister for the coast and a support group for communities impacted to share experiences are essential.

The SMPs aren't accessible documents, often hundreds of pages long. The Environment Agency is creating an online digital platform, called SMP Explorer, so that SMP information for the whole country, including local summaries for each stretch of coastline, will be in one place.

### Summary map of English communities most under threat from coastal erosion by 2100



The information provided on this map is for general interest only. It is for guidance and discussion purposes and does not constitute specific advice. Please see full map, sources and caveats at [onehome.org.uk/coast](https://onehome.org.uk/coast)

Our map doesn't give an entirely up-to-date picture. Work is currently underway to better reflect the reality on the ground. The Environment Agency is launching an updated NCERM, in 2024, which will give more accurate predictions of long-term erosion risks using climate change projections and datasets from national and local sources.

### LOOKING TO FUTURE DEVELOPMENT

Planning authorities need to be more robust when making planning decisions in areas that have vulnerable coastlines. SMPs should be made statutory, rather than advisory, to prevent unsuitable development taking place as seas rise and cliffs collapse.

England does have a policy that identifies areas of high coastal change – known as Coastal Change Management Areas (CCMAs). Planning authorities are encouraged to identify coastlines as a CCMA to prevent inappropriate development in erosion zones.

However, a recent study by Plymouth University found that only 5.7 per cent of the English coastline has been designated a CCMA.

### COMPENSATION FOR CLIMATE REFUGEES

We can't hold back the tide or build a wall around the entire country so help must be given to seaside communities and climate refugees. Unfortunately, it's purely the individuals directly impacted who are shouldering the financial and emotional cost of losing their homes and businesses.

Government must develop proper and binding support. And, crucially, we mustn't lose sight of the ultimate cause behind devastating climate change: burning coal, oil and gas. There's an awful irony that, collectively, Shell and BP reported profits of £55 billion in 2022 alone.

Diverting some of these staggering profits into a climate reparation fund for coastal communities would seem a logical step. Coastal flooding and erosion are striking reminders of the effects of climate change on this country.

We must let them act as an urgent reminder of the work we all have ahead of us to tackle climate change and protect the places we love. ●

*This research was developed by climate action social enterprise One Home. Angela Terry is One Home's chief executive*