

COASTWISE



Coastwise is a North Norfolk initiative working with coastal communities between Weybourne and Happisburgh, where the coast is eroding.

The Coastwise team is working with individuals, communities, businesses, infrastructure owners, the government and others to explore and demonstrate how coastal places can plan and take actions to prepare and transition from coastal erosion risk.

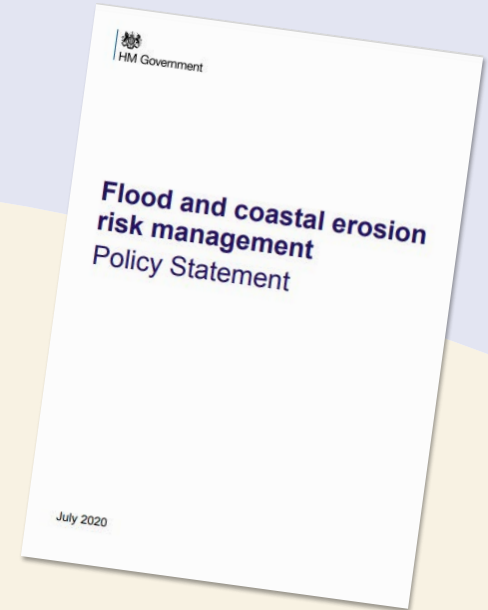
Coastwise aims to generate transferable learning to shape future government approaches to managing coastal erosion by supporting communities.

This project is funded by Defra as part of the £200 million Flood and Coastal Innovation Programmes, which is managed by the Environment Agency. The programmes will drive innovation in flood and coastal resilience and adaptation to a changing climate.

Government FCERM Policy Statement (2020)

“In areas facing significant coastal erosion and impacts from rising sea levels, to limit impacts and unlock the advantages our coastline brings, local areas may determine that a **managed transition away from high risk areas** is the most effective and practical response.”

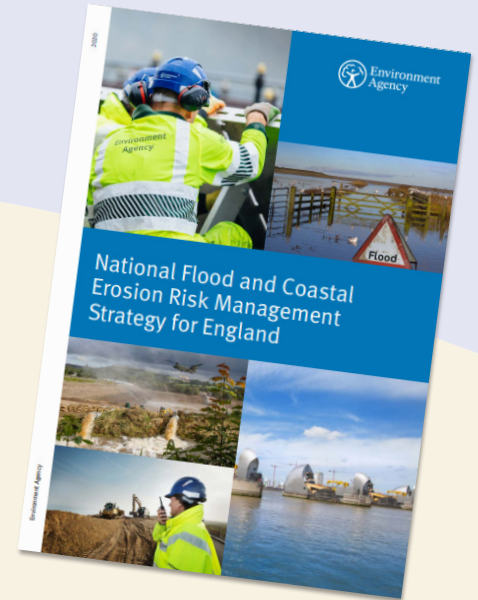
“The government is committed to enabling this transition by supporting local areas to help them to implement long-term plans.”



National Environment Agency FCERM Strategy

“In some places the scale and pace of change may be very significant that over a period of **time risk management authorities will need to support communities to transition and adapt to a changing climate.** In these places, the focus of resilience both now and in the future, will be on keeping people safe from harm and to develop resilience actions that minimise the impacts of flooding and coastal change on communities.”

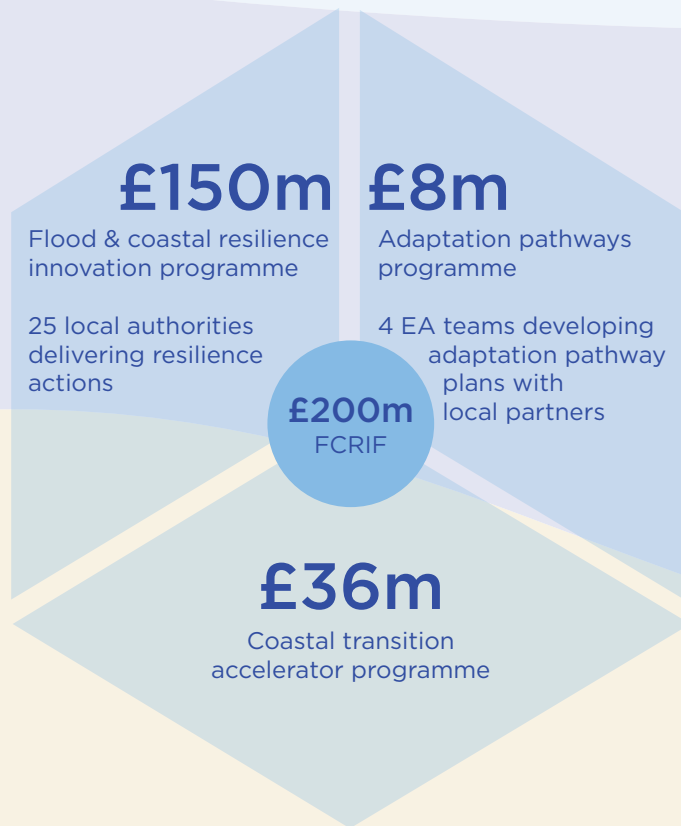
“**Strategic objective 1.3: Between now and 2050 risk management authorities will help coastal communities transition and adapt to a changing climate.**”



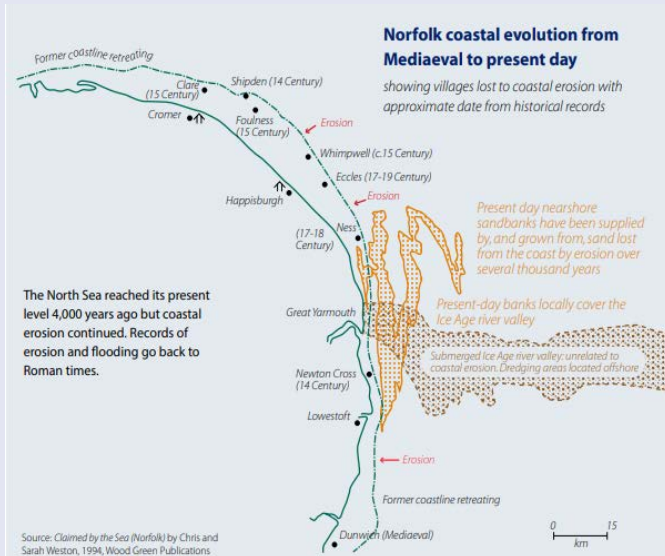
Flood & Coastal Innovation Programmes (FCIP)

Coastwise is part of the £36m Coastal Transition Accelerator Programme (CTAP) running from 2021-2027.

"We will drive innovation in flood and coastal resilience and adaptation to a changing climate. We're investing £200 million to test and develop new ways to create a nation resilient to flooding and coastal change."



Coastal erosion is not new



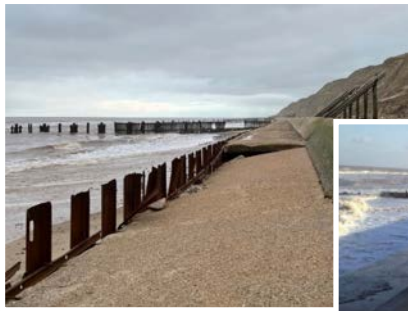
1611 “large portions of land washed away....”



Coastal transition is not new



Home physically being moved away from erosion following the 1953 surge.

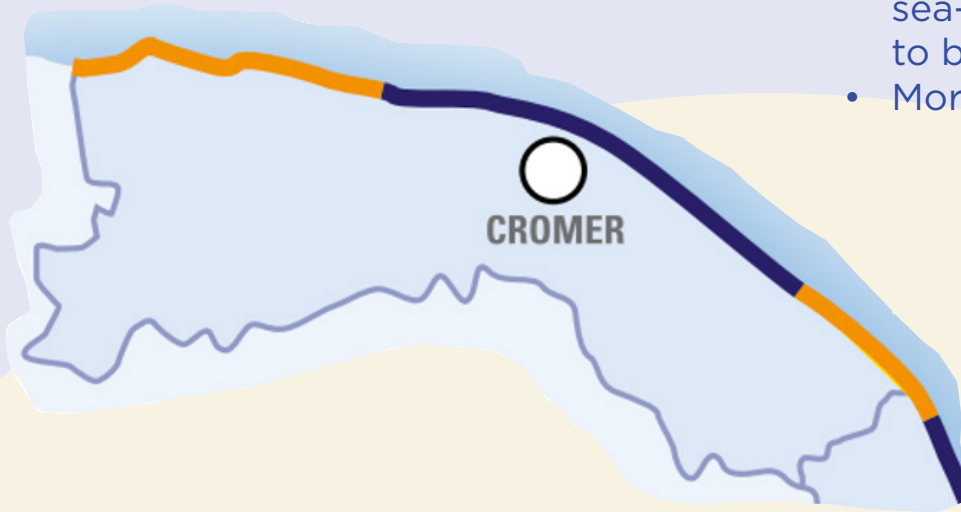


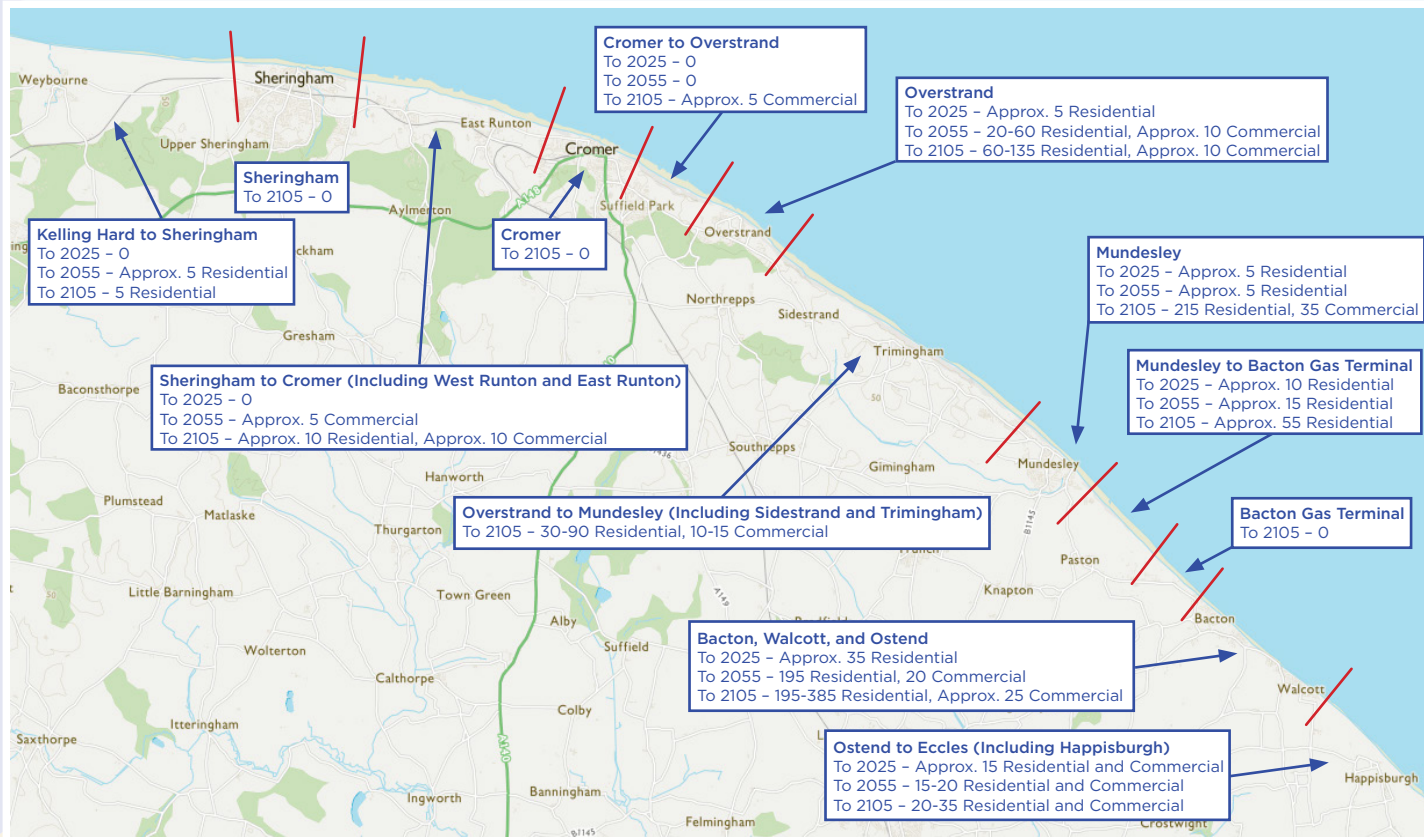
The Challenge:

- 21 miles of dynamic, eroding coast
- Aging sea defences
- Reducing beach volumes

Accelerating coastal challenges:

- By 2100 sea levels could rise by over a metre
- Extreme once-a-century sea-level events are expected to become annual
- More frequent, intense rainfall





Indicative Property Losses

To 2025 - Approx. 90 Residential and Commercial
 To 2055 - Approx. 360 Residential and Commercial
 To 2105 - Approx. 1030 Residential and Commercial

The scale of the challenge

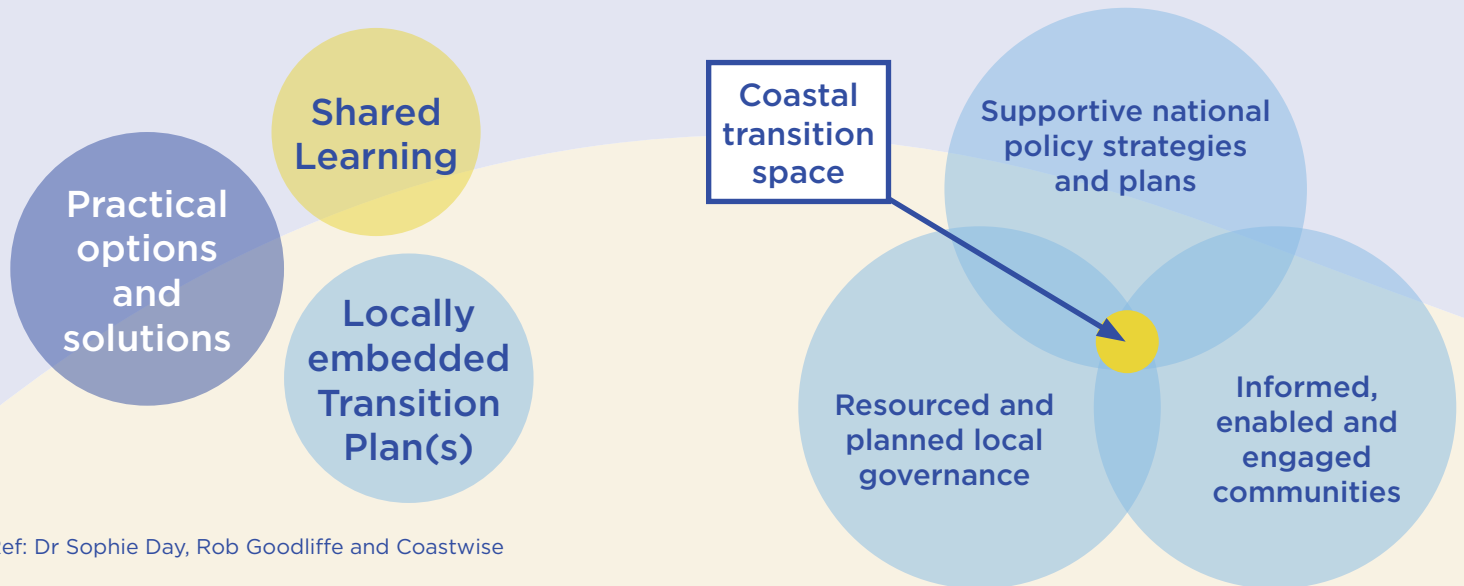


Up to 2105, approximately 1030 residential and commercial properties are predicted to be lost.

- Multiple locations with different needs and characteristics
- Accelerating erosion – acute and long-term solutions needed
- Need for transferable options and approaches nationally
- Little precedent. What does a coastal transition plan look like?

Coastal Transition Accelerator Programme Ambitions

- Co-creating local transition plans – accelerate strategic planning
- Practical projects on the ground – trial innovative actions
- Transferable learning – supporting other locations
- Shaping government policy – FCERM policy and investment



Coastal Transition Accelerator Programme

Eligible Actions



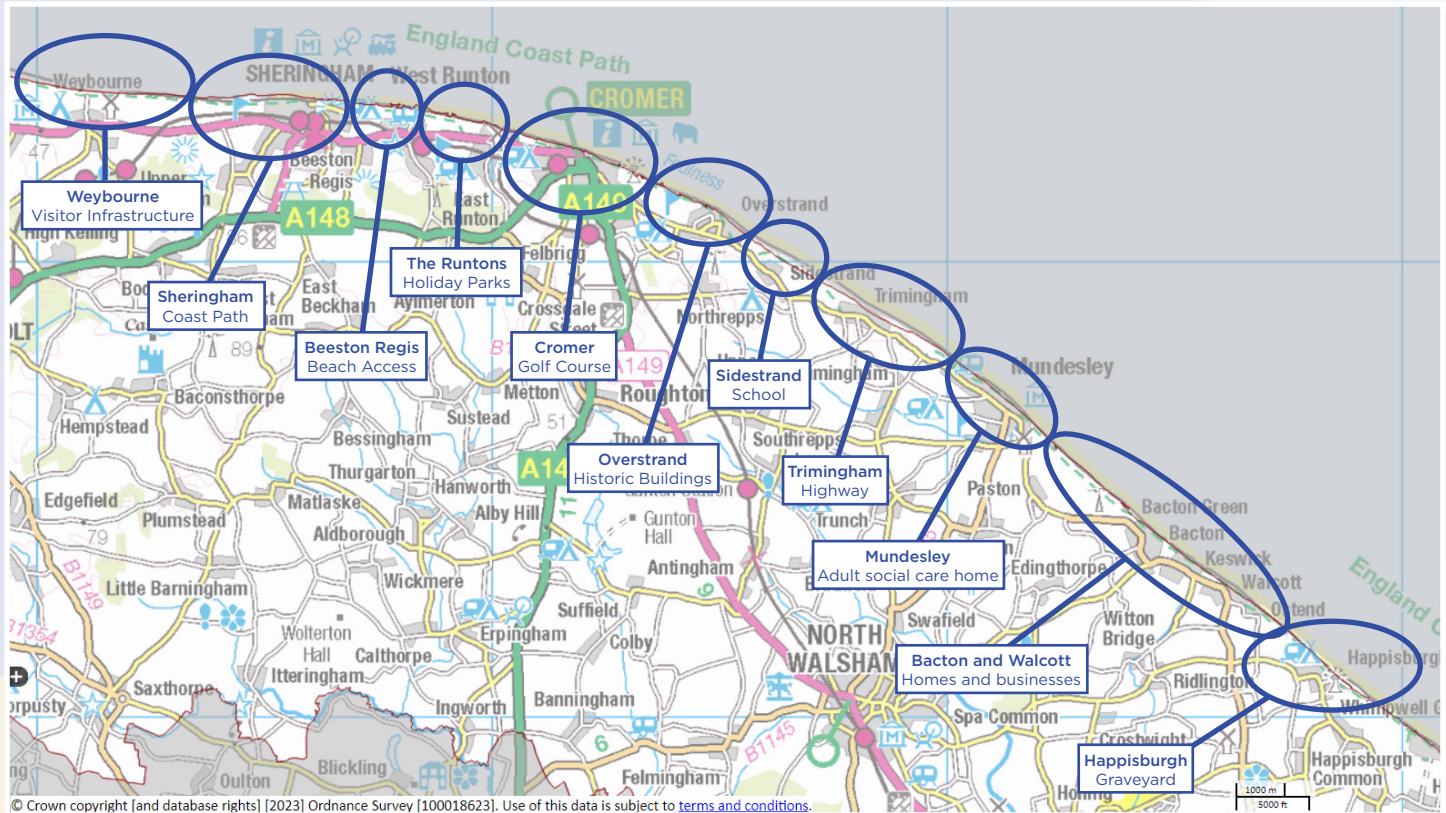
Exclusions

- Traditional Coastal Risk Management Structures
- Compensation
- Normal Local Authority functions (e.g. Emergency Planning)

Coastal Outputs




- Strategic North Norfolk Transition plan
- Place based transition plans
- Community transition plans
- Practical transition activities
- Dissemination of transition learning to support other locations
- Options for Gov policy recommendations, evidence and data to inform
- Options for future funding

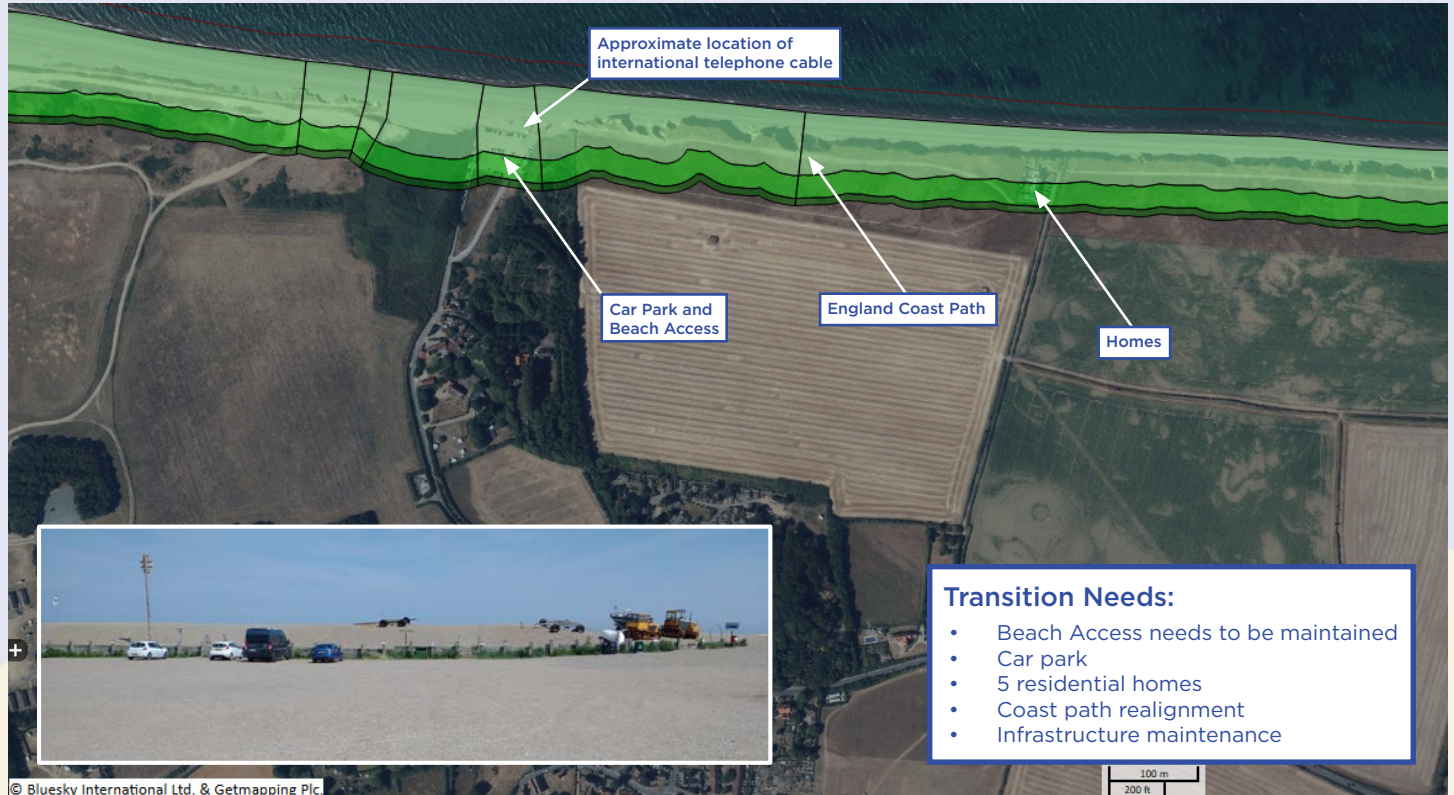
Examples of assets impacted by erosion



Weybourne

Legend

-  Shoreline Management Plan erosion distance for 2105 without climate change
-  Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 70th
-  Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 95th



Sheringham

Legend

- Shoreline Management Plan erosion distance for 2105 without climate change
- Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 70th
- Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 95th



Beeston and West Runton

Legend

- Shoreline Management Plan erosion distance for 2105 without climate change
- Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 70th
- Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 95th



Transition Needs:

- Holiday parks
- Community assets at risk - car park and beach access
- Cafe
- Coast path

East Runton

Legend

- Shoreline Management Plan erosion distance for 2105 without climate change
- Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 70th
- Shoreline Management Plan erosion distance for 2105 with climate change UKC918 RCP8.5 95th



Transition Needs:

- Many holiday parks
- Beach access

Cromer




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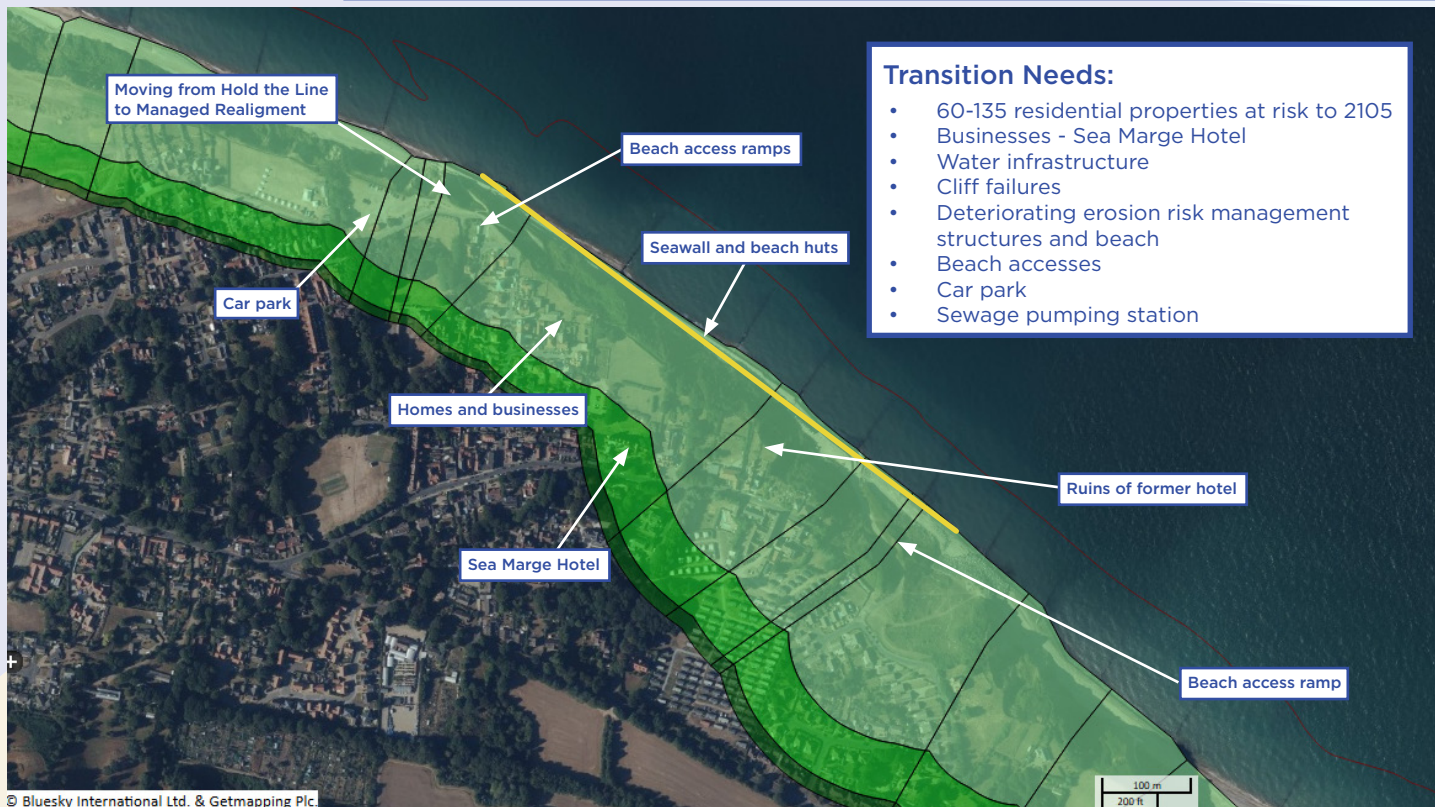
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Overstrand

Legend

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Example of hotel loss and hotel adaptation



The former Overstrand Hotel, which first burnt down in 1947, then collapsed down the cliff, continues to subside down onto the beach access ramp.



The Sea Marge Hotel – Transition Planning

- Historic permission for two storey bricks and mortar extension to rear of hotel
- Hotel is in Epoch 2 (indicative erosion up to 2055)
- Applied for permission to site seven movable lodges in grounds instead of extension
- This was seen as a pragmatic approach to the risk of coastal erosion and in line with an adaptation approach

Sidestrand

Legend

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A school, farmland and coast path impacted by coastal erosion at Sidstrand



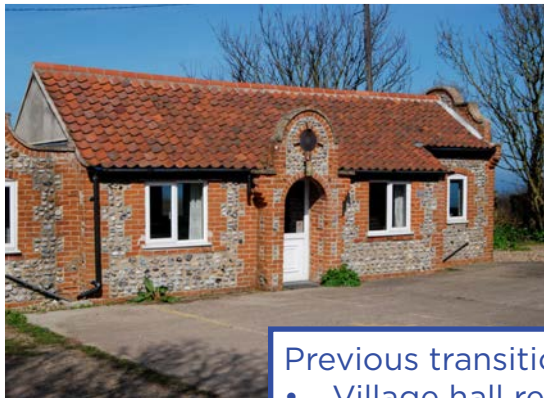
Complex cliffs along North Norfolk coast

Trimingham

Legend

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Previous transition measures:

- Village hall relocated
- Properties privately rolled back



Mundesley

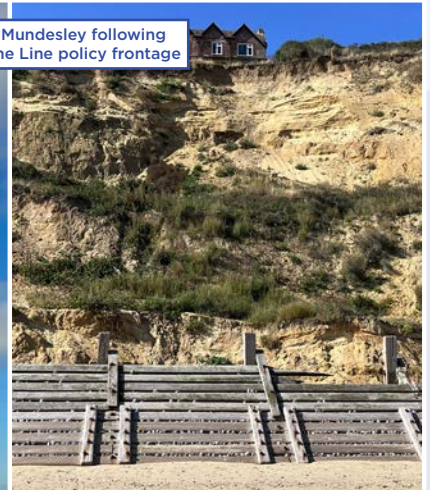
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Properties at risk at Mundesley following a cliff slip on Hold the Line policy frontage



Damage caused to defences

Bacton

Legend

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Transition Needs:

- Major infrastructure - 1/3 of UK's gas
- 195-385 Residential properties in Bacton and Walcott
- Coast Road
- Businesses
- Erosion risk management structures

Bacton to Walcott Sandscaping

Transitional defence scheme

Outcomes to date

- Transformational change to look and feel of the coastal frontage
- Business confidence and social uplift
- Stronger ongoing relationships between partner organisations
- Health and wellbeing benefits
- A national example to learn from
- Improved community relations
- Hope for the future
- Scientific learning and potential environmental benefits
- Recreation and tourism benefits

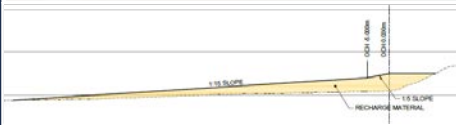
1.8 million m³ of sediment

TERMINAL:

- Very high protection level
- Re-nourishment interval 15-20 years

VILLAGES:

- Higher beaches and slower erosion
- Time for adaptation/transition
- Beaches fed by terminal frontage over time



Walcott beach shortly after sea wall construction



Pre-Sandscaping 2015-2018



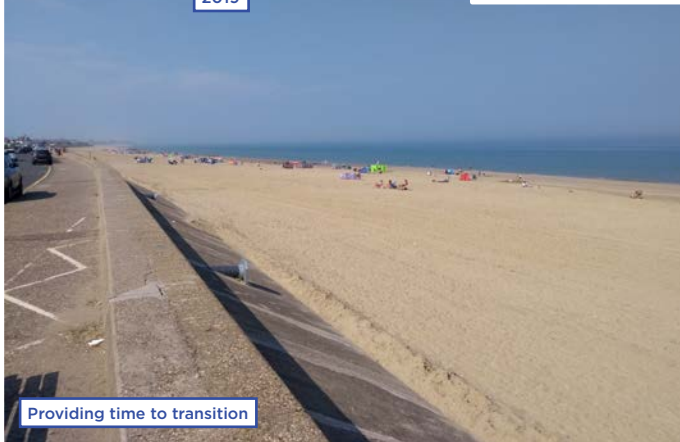
Post-Sandscaping



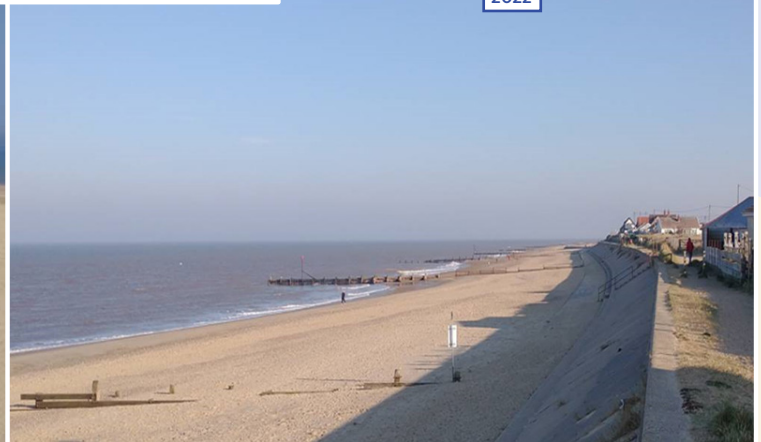
2019



2022



Providing time to transition



Walcott

Legend

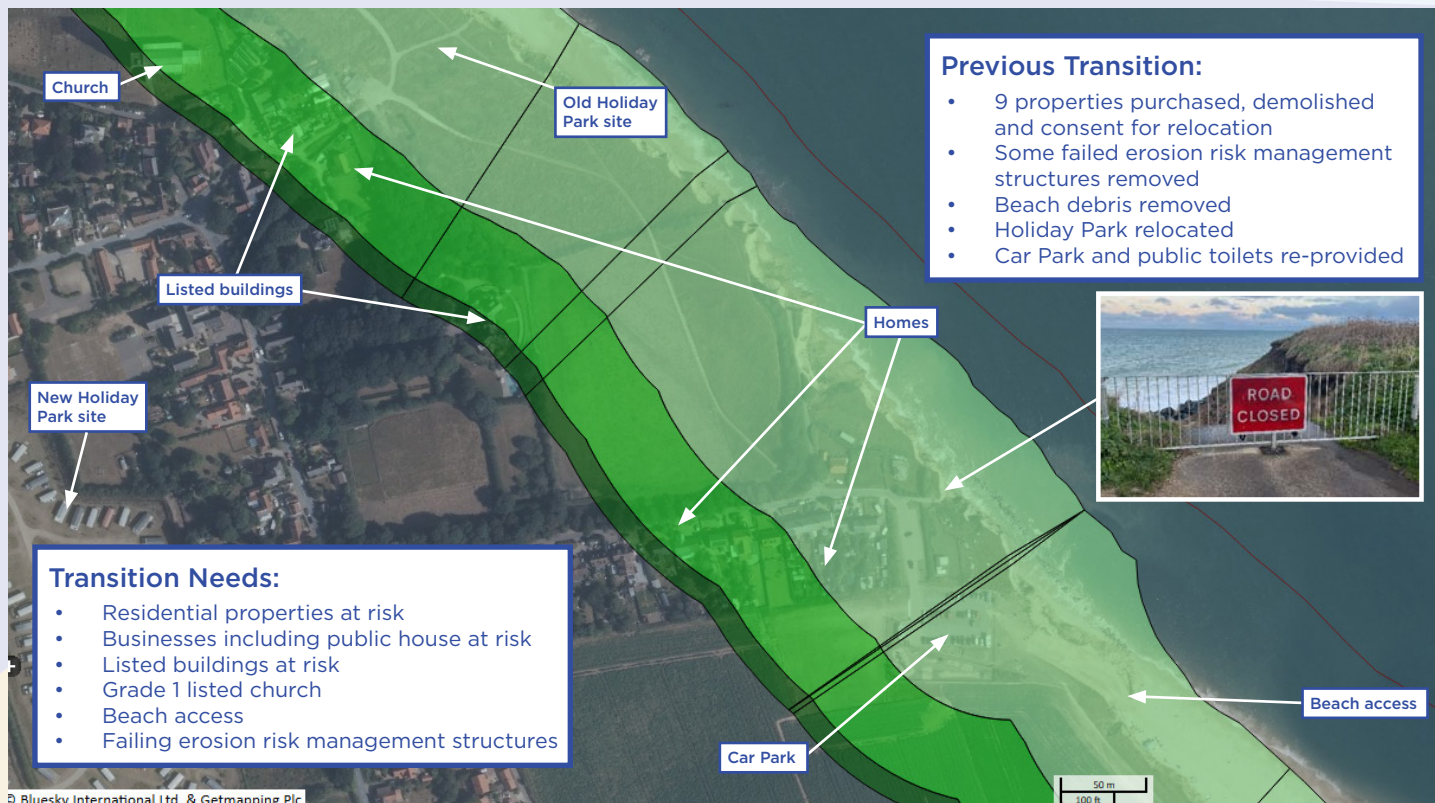
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Happisburgh

Legend

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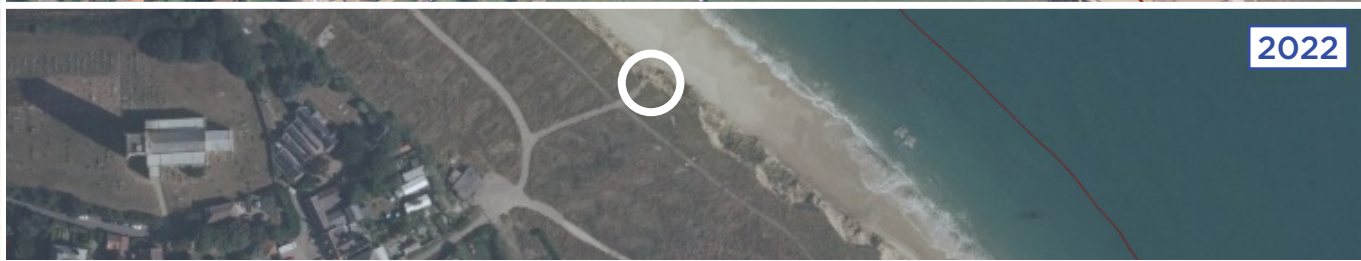
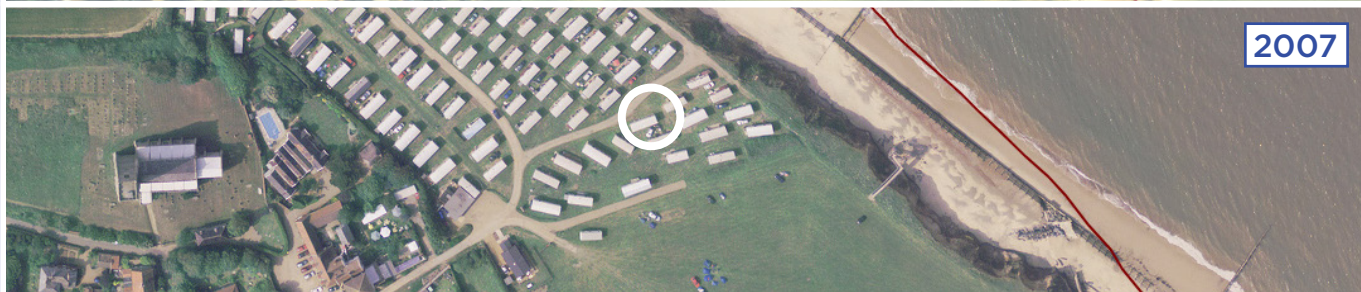




- Deteriorated risk management structures and beach debris removed over time
- Rock berm to 'buy time'



Coastal change at Happisburgh





Homes at risk



Happisburgh

As part of a previous trial, these homes in Happisburgh were purchased and a replacement site identified and secured



Happisburgh

At risk homes replaced or 'rolled back' with new housing away from the erosion risk zone



Happisburgh

Transition in action – examples of successful adaptation



Relocation of holiday park –
the coast is now open grassland



Relocation of a car park
and public toilets

Coastal Loss Innovative Funding and Financing (CLIFF)

Transition in action – examples of successful adaptation

- Flood risk properties which would otherwise not have affordable insurance, have insurance due to the success of Flood-Re (up to 2036). Most coastal erosion is not considered insurable.
- There are some options which could work to help fund coastal transition.
- Better data is essential.
- Any option works best at scale.
- There is a need to consider pay-outs and pay in mechanisms and scales.
- Further work on appetite, equitability and acceptability – politically, providers and end users.

What could eligible properties receive?				
		Tenanted property / shared ownership / affordable housing	Private resident property / land ownership	Cash
Who are the main financial contributors?	Individual homeowners			Coastal Accumulator Fund (1) Homeowners pay into a fund which allows them to recover depreciated property value
	Direct contribution from public or private fund (e.g. tax, levy)	Local Authority Coastal Adaptation Fund (2) Local Authorities build fund to support coastal adaptation amongst the most at risk coastal properties	Levy Model (3) Levy raised which is specifically allocated to pay out a cash sum once the property is lost	
	Government (local and/or central)		Rollback Model (4) Demolition of at risk properties and provision of homeowners with the right to develop a plot of land	Compensation Model (5) At risk residents are provided with a like-for-like replacement once their property is lost

There are options that could be explored further.

Coastwise Cafes

At the project outset, we needed to:

- **Meet local people** and start building relationships
- **Raise awareness** of the project and initiate / invite ongoing participation
- **Share information** and local knowledge (two-way)
- **Gather data to inform next steps** (project priorities, ways of working)



Project focussed community listening events to understand context: perceptions, concerns, ideas



An effective first step in co-creating future transition plans and actions



Cafés will be tri-annual to enable regular local engagement - input and feedback



COASTWISE



Scan the QR or visit
www.north-norfolk.gov.uk/coastwise

Or to contact the Coastwise team,
please email
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