

NNDC Overview and Scrutiny 9 November 2022

Coastal Partnership East – Update Report

Cromer Phase 2 and Mundesley Coast Management Scheme

These schemes seek to deliver the adopted Hold the Line of risk management structures for the medium term (50 years) as set out in the Shoreline Management Plan.

Phase 1 of the Cromer scheme was completed between 2012-14 with a second phase planned in future years. Following phase 1 there has been a need to re-evaluate the structures required following ongoing attrition of the existing concrete structures and overtopping issues. As such the proposed scheme seeks to



complete capital maintenance on groyne structures, complete the steel sheet piling of the sea wall where this is required, installation of scour protection to the lower cliff in vulnerable areas alongside installation of rock armour directly to the west of the pier.

The Mundesley scheme will seek to complete capital maintenance on timber groynes, repair and improve sea walls, sea wall deck (prom), sea wall aprons and install rock armour to protect the Anglian Water pumping station, lifeboat, steel and concrete block structures and provide some rock to utilise as required on the western timber revetment.



The following progress has been made.

- Work has continued to progress finalising documents to be submitted for the necessary consents. Final works to Environmental Statement will be completed by December 2022.

- NNDC are still hoping to use the Coastal Concordat for our planning and marine licenses, ongoing discussions are being had with the Marine Management Organisation and the Local Planning Authority.
- Currently reviewing finalised design drawings and documents produced by Mott MacDonald.
- Balfour Beatty has been appointed through the SCAPE framework to begin the pre-construction activities in preparation for the scheme. A number of workshops have taken place with the NNDC and Balfour Beatty project management team alongside other relevant departments within NNDC.
- Discussions with the Environment Agency (EA) regarding the required level of funding are progressing. Due to wider economic factors and revised local needs for the schemes the funding require has increased. At present discussions with the EA are positive.

Budget

| | Mundesley Total £ (cash) including risk (10%), inflation (10%) | Cromer Phase 2 Total £ (cash) including risk (10%), inflation (10%) |
|--|--|--|
| Contributions - public (Parish Council) | £20,000 | £0 |
| Contributions - private (Anglian Water) (tbc) | £200,000 | £0 |
| Contributions - public (NNDC) | £300,000 | £0 |
| Contributions - Grant in Aid (tbc) | £6,374,628 | £7,229,722 |
| Project total (cash) | £6,894,628 | £7,229,722 |

Coastal Risk Asset Management

Maintenance works continue along the coast. Asset inspections continue year round. Post season beach access inspection was carried out between 15th September and 3rd October 2022. Signage audit has been started and will continue into the winter. Recent Maintenance examples below:

July:

- Beacon at the end of groyne 2 Cromer was replaced
- Repair works completed to the beacon stay at the end of groyne 1 Cromer
- Repair works to 2 sets of access steps at Ostend
- Inspections: all hand railing from Bacton to Ostend

**August:**

- Construction of 3 timber beach access steps with one positioned
- Repair works to an access step over a revetment in Sidestrand
- New hand railing installed on the beach access steps near kingfishers at Walcott
- Repair works to a fractured pile at Overstrand
- Repair works to block revetment at Overstrand
- Repair works to access steps at Overstrand
- East Runton anti-slip paint on ramp
- Cromer West anti-slip paint on ramp

September:

- Remedial works completed on access steps by Crown Inn, Sheringham
- Overstrand end of groyne removal
- Paint Nav Beacons at Overstrand
- FK undertook annual inspection with Trinity House for Navigation Beacons

**October:**

- Repair ongoing to block revetment structure at Overstrand
- Installation of an additional step in Overstrand to ease the use of the step
- Groyne 6 repair and repaint
- Groyne 2A plank fixed
- Groyne 2B repair works

Budget

Revenue Budget £175,000 annually, Capital budget 22/23=100k, 23/24= 150k, 24/25 =200k, 25/26 =250k

Coastal Transition Accelerator Programme

The North Norfolk coast has eroded for thousands of years and as identified in the Shoreline Management Plan, sections of the coasts will continue to erode. With sea levels rising this will become an ever-present challenge. NNDC and our

communities have been at the forefront of developing 'coastal adaptation' for many years although this has been focused where funding availability has enabled this to move forwards. It is clear that nationally a shift is needed in the wider coastal management approach to ensure that we are ready as a nation to not only protect the coast where we can, but to manage the impacts of coastal change where this is and will occur. This is now recognised in government policy and Environment Agency Strategy and from this NNDC has been selected as one of two authorities to lead the way in developing 'coastal transition' through the Coastal Transition Accelerator Programme (CTAP).

Progress to date:

- Project proposal form was accepted and initial DEFRA funding received.
- An introduction to CTAP was presented to the Norfolk Coastal Forum.
- Internal cross council officer and member workshops were held which helped to identify potential shared benefits, delivery options etc. to ensure the value of the opportunity is maximised.
- A CTAP Programme Manager has recently been appointed.
- To secure the full funds an Outline Business Case must be submitted to the Environment Agency by the end of the financial year, this is underway.
- A report will be developed for Cabinet approval regarding the governance arrangement of the project and delegation of specific items to ensure continued pace of development and delivery and to take advantage of opportunities as they are identified.

CTAP is a significant opportunity for NNDC and our communities to not only prepare, plan and develop options and solutions for our future, but also to shape and inform future government support and approaches.



Photo: Coastal change is ever present and with our communities and businesses we have a new opportunity through CTAP to prepare for the future.

Budget

Revenue received from DEFRA £405,000, Capital £1,000,000, further £12,595,000 grant to be finalised with Environment Agency.

Coastal Loss Innovative Funding and Finance

There are currently no established financial or funding mechanisms available to assist with the managed transition of communities in areas of coastal erosion and permanent flood inundation risk.

CLIFF is a study commissioned by Defra and North Norfolk District Council through the Coastal Partnership East (CPE) team to investigate potential solutions to this problem. CLIFF aims to develop funding and finance mechanisms which could offer the best solution to help residents to relocate from high-risk areas or provide financial protection to those at risk. This will support residents and communities in becoming more resilient to coastal change.

Risk advisors Marsh consulting were commissioned by NNDC/CPE to undertake the study. The first phase involved a holistic review of past research, case studies and interviews to gather expertise across several sectors including insurance and banking to inform the development of potential solutions. The five options explored were Coastal Accumulator Fund, Local Authority Coastal Adaptation Fund, Levy Model, Rollback Model, Compensation Model (detailed in the Phase 1a Report).

Of the options identified from the quick scoping review, three options were prioritised for further assessment: 1. Coastal Accumulator Fund, 2. Local Authority Coastal Adaptation Fund, 3. Levy Model.

Each of these options were assessed against several feasibility criteria including strategic scope, operational requirements, financial/economic viability, and social, commercial, political and legal requirements. The Rollback Model has been explored in other studies and compensation is not permitted by government at present so these were de-scoped from further analysis. The findings are included in the Phase 1b report – all reports and further details are available at [CLIFF | Coastal Partnership East \(coasteast.org.uk\)](http://CLIFF | Coastal Partnership East (coasteast.org.uk)) and will be include in the NNDC website shortly.

A workshop involving key national interested parties, as well as those who had worked on the project to date, was held to outline Phase 1 and to discuss the next steps. Further work is now underway to integrate taking the outputs forward through integrating with CTAP (see above) and CPE resilient Coast Project (GYBC and ESC), wider Local Authority projects and the Environment Agency.

Budget

Revenue £100,000 including £25,000 Defra grant.

Coastal Adaptation Supplementary Planning Document

NNDC, East Suffolk Council, Great Yarmouth Borough Council and The Broads Authority have a statement of common ground for planning matters on the coast. This has led to the co-development of a shared Coastal Adaptation Supplementary

Planning Document. The document does not create new planning policy but seeks to provide guidance to planning decision makers and developers about appropriate development in and near coastal erosion risk areas, whilst also seeking to support and stimulate proposals that seek to enable homes and businesses to adapt and roll back from coastal erosion risk.

A consultation draft of the SPD is near completion and will be presented to the Local Planning Authorities to seek approval to complete a public consultation at the end of 2022 or early 2023.

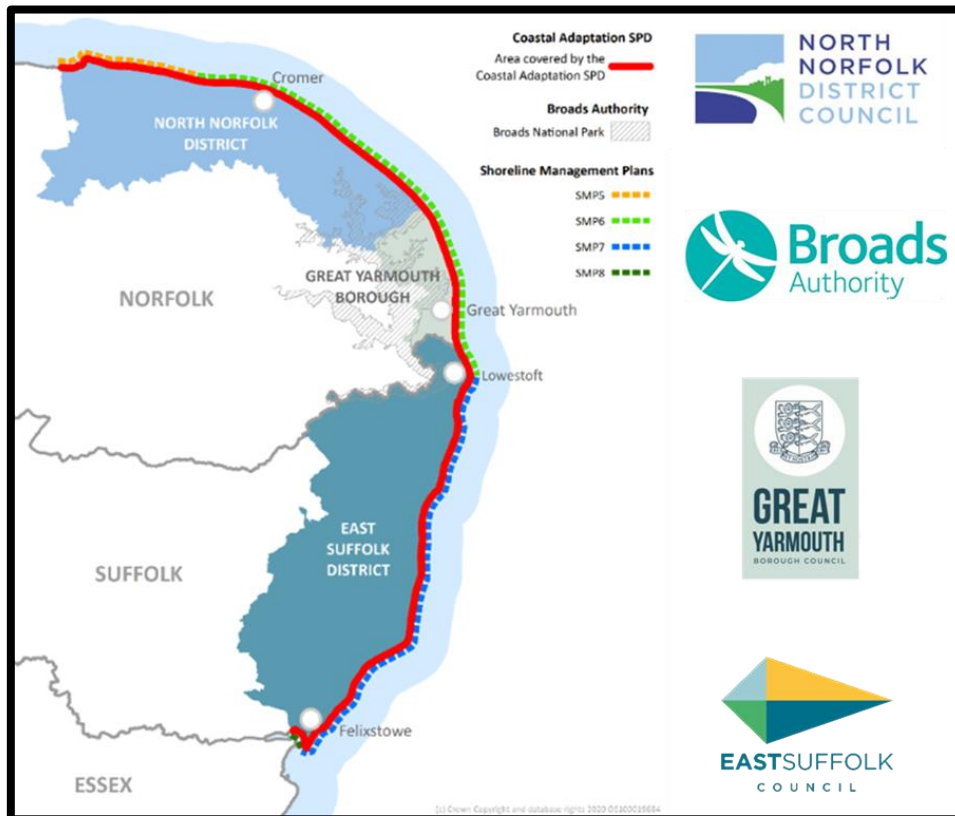


Diagram to show area covered by Collaborative Coastal Adaptation SPD

Resources

Officer time from NNDC, Great Yarmouth Borough Council, East Suffolk Council, Broads Authority teams (Planning and CPE)

Shoreline Management Plan Refresh

Shoreline Management Plans are non-statutory documents which provide strategic assessment of the risks associated with coastal erosion. The SMPs provide estimates of how the coast is likely to change over the next 100 years, taking into account the future implementation of coastal policies, geology, likely impacts of climate change and the existing condition of the coast including coastal defences. They set out policies which indicate the intent of how erosion and flood risk on the coastal will be managed, although this is subject to matters such as funding availability.

Currently the SMPs (in North Norfolk SMP5 Hunstanton to Kelling Hard and SMP6 Kelling Hard to Lowestoft Ness) are part of a national refresh process. To date progress has been made on national requirements as follows:

- A status tracker which clarifies policy intent has been completed with Natural England and Environment Agency agreement.
- Governance has been revitalised with SMP (Statutory Stakeholder) Management Groups reformed. Elected member oversight is being explored with the Norfolk Strategic Flood Alliance.
- The SMP Action Plans are being updated in line with the updated guidance and to consider recommendations from nationally completed health checks of each SMP.
- A new national SMP Explorer web platform is being developed to improve public accessibility to SMP information.

Resources

SMP Co-ordinator role for region employed via NNDC and funded from Environment Agency Grant. Input from wider CPE team.

National Coastal Erosion Risk Mapping

Erosion risk mapping is essential for those working and living on the coast to understand what the indicated erosion is likely to be in coming years. Currently in North Norfolk we rely on the SMP risk mapping which is now 17 years old (but adopted in 2012) and an earlier 2018 phase of the NCERM project.

The current phase of the National Coastal Erosion Risk Mapping (NCERM) initiative is seeking to update the methodology of how such erosion assessments are made to ensure that the most recent climate data is utilised, incorporation of best practice, inclusion of user requirements and to ensure that it is completed consistently across England whilst improving accessibility.

North Norfolk District Council/Coastal Partnership East is inputting into this national project at Technical Review Group and Project Board level as the project is essential to our future understanding of the coast.

It is anticipated that the outputs of the project will be available in late 2023 and will be published on the SMP Explorer website that is being developed nationally. We anticipate that the mapping should then be used to update/supersede the current and adopted SMP risk maps.

Resources

Project funded and managed via Environment Agency national. CPE inputting time of existing staff.

Strategic Coastal Monitoring - Sandscaping

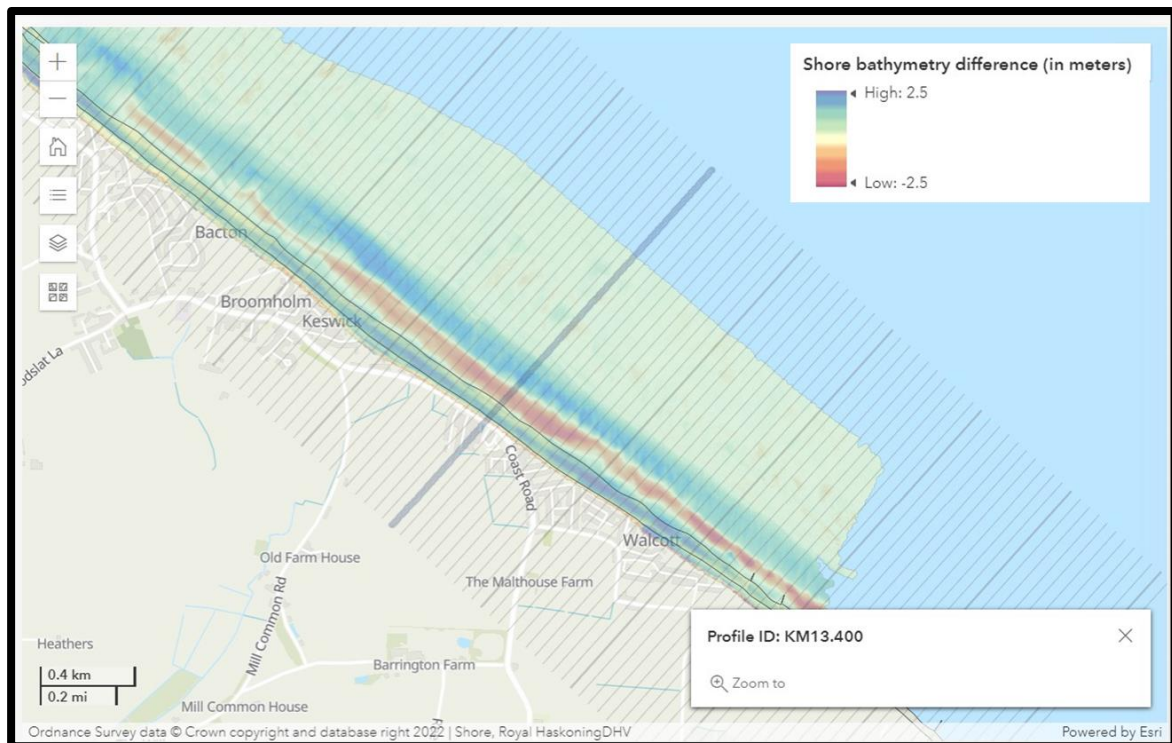
The Sandscaping scheme is an innovative UK first whereby 1.8 million cubic metres of sediment was placed on the foreshore at Bacton Gas Terminal, Bacton and Walcott. It is a collaboration between the Bacton Gas Terminal Owners, NNDC and the Environment Agency in order to seek to protect critical national gas infrastructure whilst having a positive impact on down drift communities and extending the functioning life of village coastal management risk structures.

Following the delivery of the Sandscaping scheme in 2019, monitoring on performance has continued with detailed and high tech methods. This has included land based LIDAR and subsea bathymetry coupled with the development of a digital twin of the scheme to enable efficient analysis.

To date and as expected beaches have reprofiled and will continue to fluctuate dependent on the weather, but the sediment is behaving broadly as expected.

It is estimated that when measured in September 2021 84% of the sediment placed on the beach was still retained within the project area, with some moving south with longshore drift. Some has moved towards the sea, creating a sub-tidal bar which in turn protects the beach and defences.

Monitoring has just been collected for 2022 and we will await the details of this for more current analysis. Early indications are that there remain significant volumes (including the sub tidal bar) on the beach and nearshore profile as would be expected and the scheme continues to perform. It is also noted that this past year has seen significant improvements to beach levels north of the placement at Mundesley.



Example of difference analysis of sediment at Bacton, denotes reprofiling of sediment into the lower sub tidal near shore.

Budget

Funded to date via Dutch Government and Environment Agency grant. Currently transitioning to Environment Agency funded Anglian Coastal Monitoring Programme and discussion to be completed with Bacton Gas Terminal operators for analysis contributions.

Coastal Monitoring

Coastal monitoring is undertaken as part of the wider Anglian Coastal Monitoring Programme led by the Environment Agency. This includes annual aerial photography and LIDAR, focused bathymetry (seabed monitoring), wave data and regular topographic transects. This information is utilised by the team in assessing changes to the coast and to also inform the development and design of coastal schemes.

Details of the monitoring programme are included at [National Coastal Monitoring - Welcome](#)

LGA Coastal Special Interest Group

- The LGACSIG adaptation working group is chaired by NNDC's Cllr Fitch-Tillett supported by CPE's Head of Partnership as the national LGACSIG technical lead. We are progressing a range of strategic activities nationally with EA Defra and Welsh Government to support the delivery of the EA FCERM Strategy Action Plan
- We aim to meet every 2 months to share good practice on adaptation and raise up issues we face to the LGACSIG for political discussion across the membership and with Government. Our CPE FCRIP funded projects Resilient Coasts and CTAP- will break new ground on adaptation issues and opportunities and this work will be fed back into the LGACSIG network to support other coastal authorities nationally that are also facing adaptation issues.
- CPE are seen as national exemplars for coastal adaptation and resilience work.
- Most recently we held a successful place-making workshop at the Flood and Coast Conference in June 2022 developed and supported by CPE officers. The workshop focused on the viability of our coasts in the face of climate and coastal change and what we thought a resilient viable coast might look like or need in place to happen. We undertook the workshop with EA colleagues and ran it jointly with CGN who also considered the coastal planning issues and opportunities following the SMPR. The workshops were well attended and we captured over 800 years of experience across the event. We have some excellent feedback on the approach we took and the majority of attendees also made pledges to do their part for adaptation in their roles.

- A report will be available in early November and this will inform upcoming APPG discussions about coast and climate change as well as be used for broader cross-government discussions about who else needs to be involved in creating resilient coasts.

National Capital Programme

the EA's £5.2B capital programme for flood and coastal erosion risk management (FCERM) began in 2021 and runs for 6 years to 2027. CPE have a number of significant capital projects in the national programme including the ESC Lowestoft Flood Risk Management Project (circa £150M) and for NNDC the Cromer and Mundesley scheme. Nationally risk management authorities are being asked to feed into discussions about the challenges facing the national programme delivery due to significant inflationary increases and the rising costs of supplies and resources. The Head of Partnership at CPE has attended national discussions as East Anglian Coastal Group Chair to discuss the challenges we face delivering our schemes with other Coastal Chairs and RFCC chairs from around the country. We have recommended a number of initiatives to support Defra's ask of us all to facilitate delivery through accelerated programmes of work. These include making additional funds available to flood and coastal schemes that support the new Government's Growth agendas and cutting 'red tape' to permissions and consents processes- like the MMO licence to ensure legal but proportionate approaches are taken that do not hamper scheme delivery. We are currently awaiting a national paper on recent interviews with coastal authorities by the Infrastructure Project Authority to see which of our recommendations will be carried forward by EA and Defra to support the delivery of our capital schemes to 2027.