

North Yorkshire Council

Environment & Resources

28 March 2025

Permission to apply for Yorkshire Regional Flood and Coastal Committee Local Levy for Flat Cliffs Coastal Adaptation Plan and wider Filey Bay Coastal Change Management Area

Report of the Assistant Director – Regulation and Harbours

1.0 PURPOSE OF REPORT

- 1.1 Request approval from the Corporate Director of Environment and Corporate Director Resources (delegated to the Assistant Director Resources for Environment) to apply for funding from the Yorkshire Regional Flood and Coastal Committee Local Levy to undertake a Coastal Adaptation Plan for the community of Flat Cliffs and establish a wider Coastal Change Management Area for the undefended frontages within Filey Bay

2.0 BACKGROUND

- 2.1 North Yorkshire Council has inherited the role of Coast Protection Authority, historically undertaken by the former Scarborough Borough Council. In this role, the Council is responsible for carrying out coastal protection works and coastal erosion risk management activities. Coastal Protection Authorities are responsible for developing Shoreline Management Plans (SMPs) which provide a long-term holistic framework for managing coastal change on their section of coast. The Council's adopted Shoreline Management Plan is the River Tyne to Flamborough Head SMP2.
- 2.2 The Shoreline Management Plan 2 (2007) has a policy of No Active Intervention for the frontage covering Flat Cliffs, allowing the natural development of the coast. No coastal defences are in place to protect the community and none are planned across the 100-year horizon of the SMP.
- 2.3 This area is covered by the approved Filey and Cayton Bay Coastal Strategy (2018). The strategy sets out coastal intent, policy and how assets will be managed now and in the future. The strategy sets and confirms policy for the next 100 years. The action is to develop a plan for the adaptation of the communities at risk.
- 2.4 The Yorkshire Regional Flood and Coastal Committee (RFCC) comes together as a regional partnership to take an overview of flood and coastal erosion risk management. They also seek to promote investment and encourage innovation which is good value for money and benefits communities. RFCCs raise a Local Levy on Lead Local Flood Authorities, including North Yorkshire Council, which provides an invaluable resource to help fund local flood and coast priorities.
- 2.5 The Environment Agency's Flood and Coastal Erosion Risk Management (FCERM) National Strategy sets out the vision for a nation that is ready for, and resilient to, flooding and coastal change today, tomorrow and to the year 2100. One of the long-term ambitions is a nation ready to respond and adapt to flooding and coastal change.

2.6 To date, there isn't an example of a coastal adaptation plan adopted by a maritime Local Authority in England. North Yorkshire Council will apply to the YRFCC using their pilot study proforma with the intention of sharing knowledge and lessons learned with the Environment Agency and Local Government Association Coastal Special Interest Group. Other maritime Local Authorities in England could use this study as an example to follow and as a collective will deliver against the FCERM National Strategy in supporting their communities in adapting to coastal change.

3.0 DETAILED PRESENTATION OF THE SUBSTANTIVE ISSUE

- 3.1 At Flat Cliffs, the Strategy recommended an option of 'limited intervention prior to coastal adaptation'. Subsequently, a project was completed in 2018 to provide local management measures at the pinch point where the sole access road was at risk of imminent loss. The works are intended to prolong the duration before its loss, whilst acknowledging that recession processes would continue. The solution is a temporary one intended to 'buy some time' to allow the residents of the forty-five homes and Yorkshire Water to plan for adapting to coastal change and implement the necessary relocation and removal activities to withdraw themselves and their assets from the areas at risk.
- 3.2 North Yorkshire Council is looking to produce a Coastal Adaptation Plan to raise awareness of the coastal risks within the affected community and support residents and affected parties in planning for change in the future. This will build upon the previous Strategy to look at the community in greater detail. The focus of the Coastal Adaptation Plan will be on identifying the expected timescales of loss for individual properties utilising the Environment Agency's newly published NCERM2 data (see Appendix A), consultation with the affected residents and parties, and investigating and reaching a consensus on the way forward.
- 3.3 The Department for Environment, Food and Rural Affairs (DEFRA) is the policy lead for flood and coastal erosion risk management in England. New or revised policies are prepared with other parts of government such as the Treasury, the Cabinet Office (for emergency response planning) and the Department for Communities and Local Government (for land-use and planning policy). These national policies are then delivered by Risk Management Authorities (RMAs), which includes North Yorkshire Council as Coast Protection Authority, amongst other key statutory functions.
- 3.4 Relevant service areas within North Yorkshire Council, such as Planning, Emergency Planning, Housing and Highways will be prepared to support the community to adapt through an agreed sequence of actions with identifiable trigger and decision points.
- 3.5 With reference to Planning, The National Planning Policy Framework (NPPF) requires councils to identify Coastal Change Management Areas (CCMAs) where rates of shoreline change are expected to be significant over the next 100 years, taking into account impacts of climate change. There are no such designations on the North Yorkshire coast and the Local Planning Authority currently consults with coastal engineers on an ad-hoc basis in respect of managing any development within active coastal zones. In establishing a CCMA within the undefended areas of Filey Bay, planning policy will mitigate the risk posed by coastal change in safeguarding vulnerable areas from further development.

4.0 ALTERNATIVE OPTIONS CONSIDERED

- 4.1 Under the **Do-Nothing** option, awareness of the coastal erosion risk amongst residents may remain low. There would be no forward planning for managing the consequences of coastal erosion. Residents would be unprepared for the loss of properties creating difficulties for the Risk Management Authority to manage the process when the time comes for residents to have to leave. Significant mental health burden for residents becoming suddenly aware of the risks in an emergency situation, and with no forward plan for dealing with the risks residents may be left feeling unsupported and isolated. Whilst the cost of this option is zero in the present day, it may increase the costs to the Risk Management Authorities for dealing with the issue as the properties become at imminent risk of loss.
- 4.2 North Yorkshire Council is the lead Authority of the Environment Agency funded Cell 1 Regional Coastal Monitoring Programme. Under the option of Do-Minimum, North Yorkshire Council will continue to monitor coastal change from the ongoing Cell 1 Regional Coastal Monitoring Programme to inform the likely remaining life span of the properties. The cost of this option would be minimal because the monitoring data is funded and so only RMA staff time for reviewing timescales would be required. However, this option poses the same risks as the Do-Nothing option in terms of community preparedness, and increased costs to the RMAs for dealing with the issue as the properties become at imminent risk of loss.

5.0 FINANCIAL IMPLICATIONS

- 5.1 If the bid is successful, it will secure capital funding of £90,000 to deliver a Coastal Adaptation Plan for Flat Cliffs. The project costs, including NYC staff time and consultant fees, will be fully funded through Yorkshire Regional Flood and Coastal Committee Local Levy. No match funding would be required from NYC.
- 5.2 If successful, the terms and conditions of the grant will be reviewed ahead of acceptance by NYC, this will include the financial years in which the grant must be spent and any clawback arrangements.
- 5.3 Should the bid be unsuccessful; North Yorkshire Council will continue under the Do-Minimum option outlined above in Section 4.2. This option currently presents as 'business as usual' as the Cell 1 Regional Coastal Monitoring Programme is well established and is likely to continue into its next phase.

6.0 LEGAL IMPLICATIONS

- 6.1 Coastal protection authorities and the Environment Agency have permissive powers to protect against coastal flooding and to carry out erosion defence works. However, this is not a legal obligation.
- 6.2 The Council does however have well-being powers under the Local Government Act 2000. granting local authorities' power to promote the well-being of their area and inhabitants. It also places authorities under a duty to develop community strategies, together with other local bodies, for this purpose. These provisions are intended to give local authorities increased opportunities to improve the quality of life of their local communities.

7.0 EQUALITIES IMPLICATIONS

- 7.1 None

8.0 CLIMATE CHANGE IMPLICATIONS

- 8.1 The proposed funding bids if successful will lead to adaptation to climate change. A key avoidance action will be the integration of a Coastal Change Management Area into the Local Plan to safeguard land within Filey Bay that may be subject to future coastal erosion risk from development. The project will form a key part of NYC's emerging Climate Adaptation Strategy as nowhere are the effects of climate change felt more acutely than on the coast.

9.0 REASONS FOR RECOMMENDATIONS

- 9.1 As Risk Management Authority, North Yorkshire Council, under the Flood and Water Management Act 2010, is required to act in a manner that is consistent with the National Flood and Coastal Erosion Risk Management Strategy for England and work collaboratively with other RMAs. Climate resilient places and communities that are ready to adapt to flooding and coastal change are at the core of the Strategy. The plans aim to discharge our responsibilities as RMA and work with other stakeholders in supporting the affected communities to plan and adapt to coastal change. The Coastal Adaptation Plan and Coastal Change Management Area will form a key part of the emerging NYC Climate Change Adaptation Strategy.

10.0 RECOMMENDATION

- 10.1 That the Corporate Director of Environment and Corporate Director Resources (delegated to the Assistant Director Resources for Environment) agrees to the Council bidding for £90,000 from the Yorkshire Regional Flood and Coastal Committee Local Levy to produce a Coastal Adaptation Plan for Flat Cliffs.

APPENDICES:

Appendix A – National Coastal Erosion Risk Mapping 2 (NCERM2) Coastal Erosion Projections

BACKGROUND DOCUMENTS:

None

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Presenter of Report – Stewart Rowe, Principal Coastal Officer

National Coastal Erosion Risk Mapping 2 (NCERM2) Coastal Erosion Projections

The Environment Agency has a duty to update their understanding of current and future flood and coastal erosion risk as part of our statutory 'strategic overview' role for all sources of flood and coastal erosion risk. This is described in the 2010 Flood and Water Management Act.

The EA have spent the last four years working with coastal local authorities across England to develop the second iteration of a National Coastal Erosion Risk Map (NCERM). They use the best available data, information and modelling from both the Environment Agency and local authorities. For the first time the data is displayed through lines on maps which are available on gov.uk for open access to the public.

The below screenshots from the gov.uk website show erosion maps for two time periods for the three communities with the Shoreline Management Plan delivered:

- Medium term to the year 2055
- Long term to the year 2105

Erosion risk zones are shown for three climate change scenarios:

- **Present Day (2020)** –uses historical erosion rates to provide future projections without calculating any additional impacts of climate change and rising sea levels. The year 2020 is taken as the baseline year for the erosion projections.
- **Climate Change Higher Central** –uses sea level rise data from 70th percentile UK Climate Projections 2018 (UKCP18) Representative Concentration Pathway 8.5 climate projection.
- **Climate Change Upper End** –uses sea level rise data from 95th percentile UKCP18 Representative Concentration Pathway 8.5 climate projection.

The map does not show the area of land that will definitely be lost to erosion. The absolute extent of future erosion could lie anywhere within the risk zone, or in extreme cases beyond it. The rate of erosion can be highly variable. It may be relatively consistent over time or could involve periods of faster or sudden erosion. Due to the complexity of predicting the location, timing and extent of erosion events, it is possible for the projections shown on the map to be exceeded.






Flat Cliffs 2055



Legend



Coastal erosion risk projections

-  Shoreline Management Plan Delivered, Present Day Climate (2020 data), 2055
-  Shoreline Management Plan Delivered, Climate Change (Higher Central), 2055
-  Shoreline Management Plan Delivered, Climate Change (Upper End), 2055
-  Flood frontage
-  Erosion Feature Line






Flat Cliffs 2105



Legend



Coastal erosion risk projections

-  Shoreline Management Plan Delivered, Present Day Climate (2020 data), 2105
-  Shoreline Management Plan Delivered, Climate Change (Higher Central), 2105
-  Shoreline Management Plan Delivered, Climate Change (Upper End), 2105
-  Flood frontage
-  Erosion Feature Line

The area at risk of coastal erosion is shown in metres measured from the position of the coast in 2020 (the red erosion feature line).

Shoreline Management Plan Delivered		
	2055	2105
Present Day Climate (2020 data)	7m	16m
Climate Change (Higher Central)	11m	35m
Climate Change (Upper End)	12m	40m
No Future Intervention		
	2055	2105
Present Day Climate (2020 data)	7m	16m
Climate Change (Higher Central)	11m	35m
Climate Change (Upper End)	12m	40m

The 'Shoreline Management Plan (SMP) delivered' scenario means the coastal erosion risk assuming the SMP management approach is followed. The 'No future intervention' scenario means the coastal erosion risk with no future investment in building or maintaining coastal defences. Note for this frontage the SMP policy is to not intervene and therefore the figures are identical.

The effect of climate change on coastal erosion is provided in the 'Higher Central' and 'Upper End' projections in the table and on the map. They use the UK Climate Projections Representative Concentration Pathway 8.5 (RCP8.5) 70th percentile (Higher Central) and 95th percentile (Upper End) sea level rise projections