



Cowbar Public Consultation Meeting



Agenda

- Introductions
- Presentation
- Q&A

Synopsis

- Staithes Coastal Strategy. Approved by the Environment Agency.
- The Council will deliver the Strategy as the Coast Protection Authority.
- Extensive optioneering was carried out, with phased realignment over 50 years being best economically, environmentally & socially.
- The October 2024 rockfall now means that Phase 1 needs to be delivered soon. Planned for 2026.
- Consultants are providing a detailed design & Outline Business Case needed for funding.
- We do not yet have funding. Current budget estimate is £1.2m.
- Without action, Cowbar Lane will be closed, utilities will need diverting & the lifeboat station/pumping station/quay wall will be cut off.



Staithes Coastal Defence Strategy



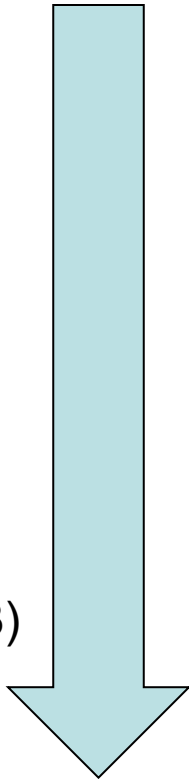
Current Strategy (approved 2023)

- Aim: to provide up to date assessment of risks to people and built, natural and historic environment from sea flooding and erosion (including coastal slope instability (e.g. coastal landslip) as well as recession due to coastal erosion)
- 100 year appraisal period to consider the risks in the short and long term, and takes into account the impacts of climate change
- It looks at how to implement the approved policies from the Shoreline Management Plan 2 (SMP2)
- Provides a strategic framework for coastal defence projects going forwards

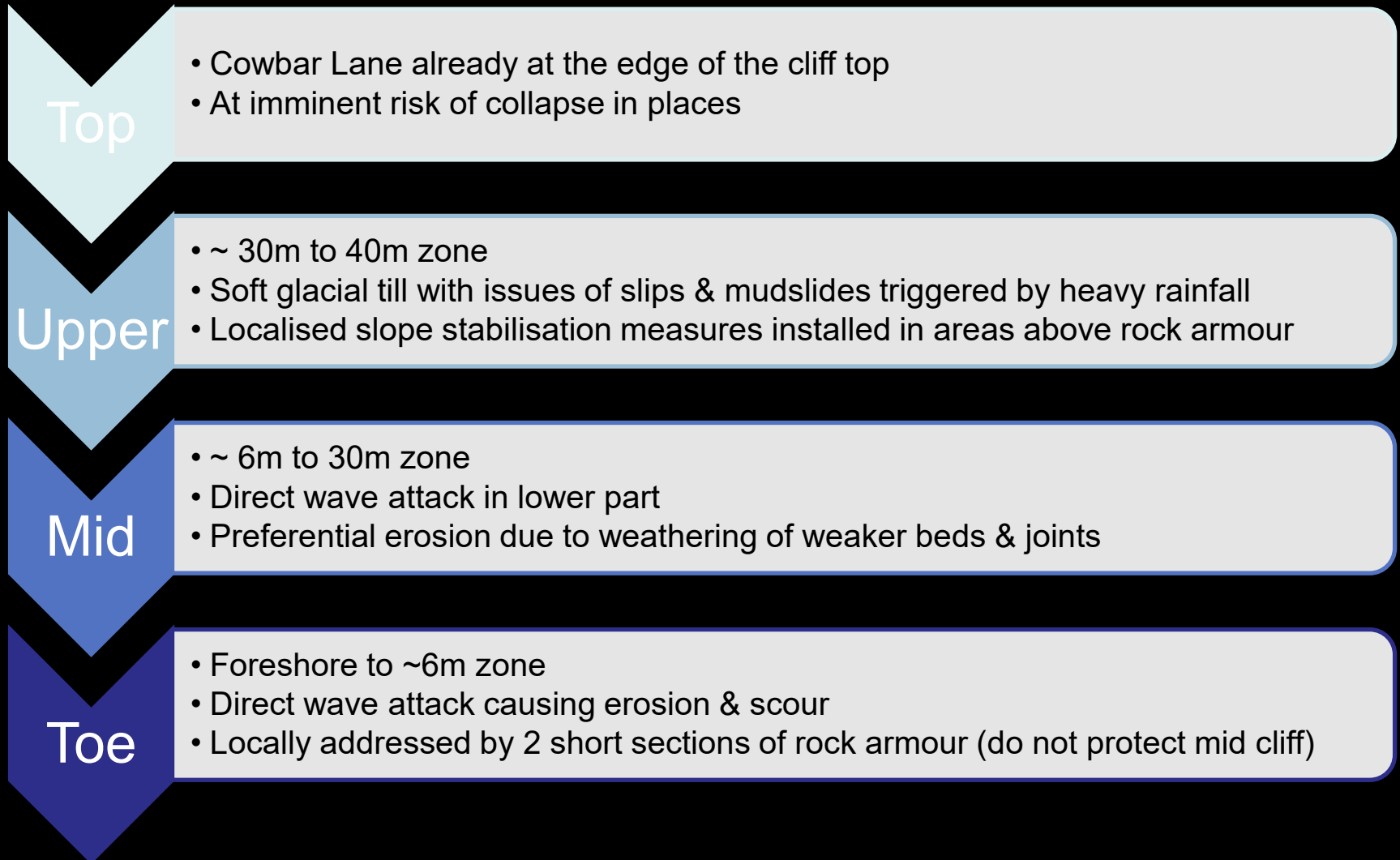


History

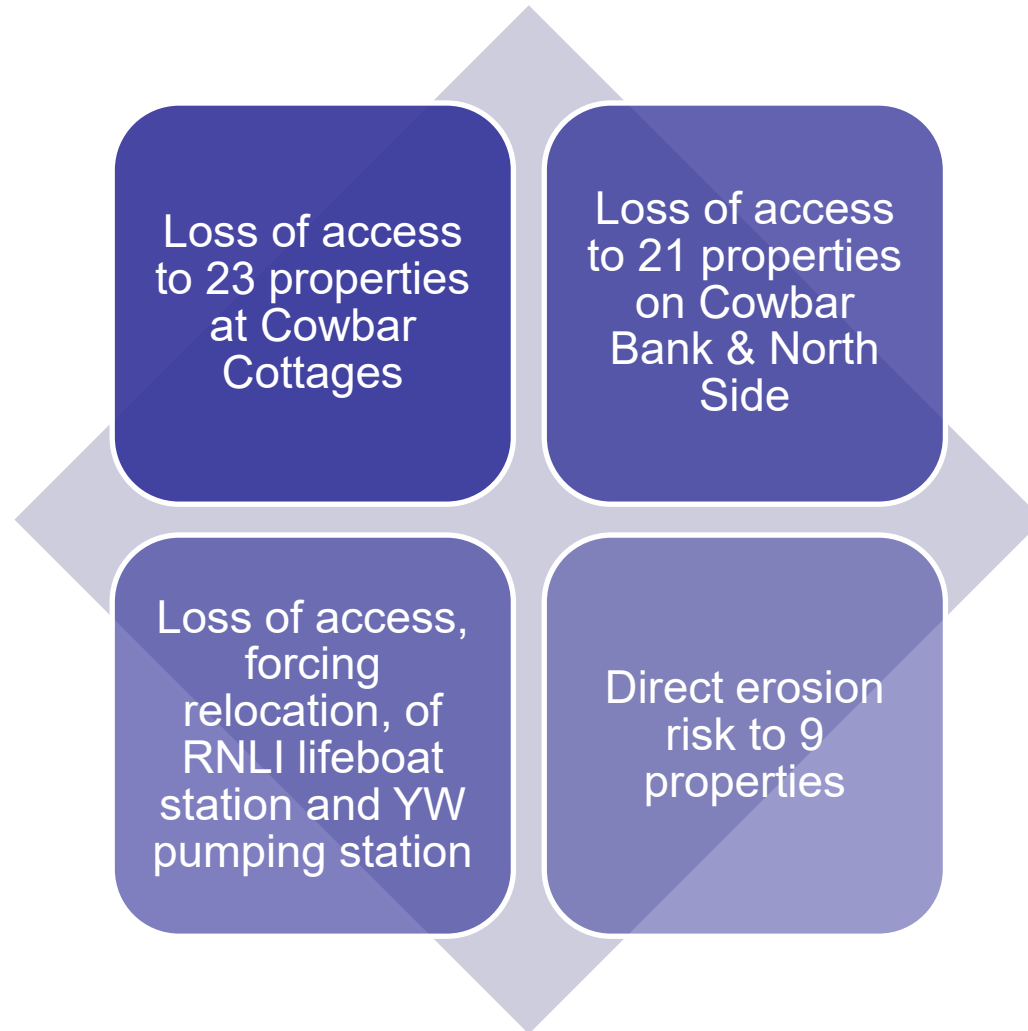
- 1987 Road realignment at Cowbar Cottages (1 cottage demolished)
- 1997 Shoreline Management Plan
- 1999 Cowbar Strategic Study
- 2002 Cowbar cliffs rock armour works
- 2006 Road realignment scheme 1km to west of Cowbar Cottages
- 2007 Shoreline Management Plan 2
- 2023 Staithes Coastal Defence Strategy (developed between 2019 & 2023)
- 2025 Cowbar Cottage Road Realignment Outline Business Case



Cowbar – Cliff Instability Risk



Cowbar - Impacts



Strategy Recommendation

Option

- Phased Road Realignment
- Most economically viable option
- Environmentally preferred option
- Cottages retained longer than single intervention

Timescales

- 3 phases anticipated gradually moving road back
- Timing dependent on frequency & severity of erosion episodes experienced in future

Monitoring

- Current monitoring & inspections to remain ongoing

Phase 1 Road Realignment - Funding



- Cost for Phase 1 of the scheme is currently estimated to be in region of £1.2 million
- Cost will be refined as the design of the works is developed further
- Funding is not yet secured but is being sought from several sources

Partnership Funding e.g.

Grant in Aid Funding (Environment Agency)	Local Levy (RFCC)	Redcar & Cleveland Borough Council	Yorkshire Water
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Cowbar Update Following Recent Rockfall

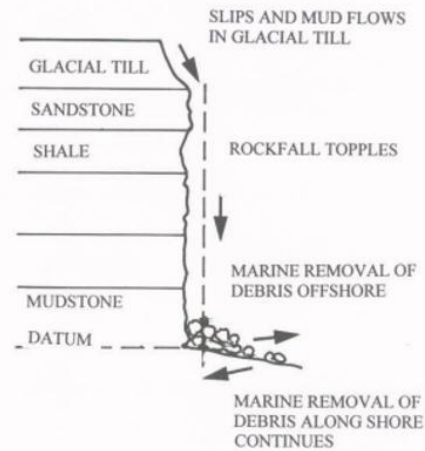
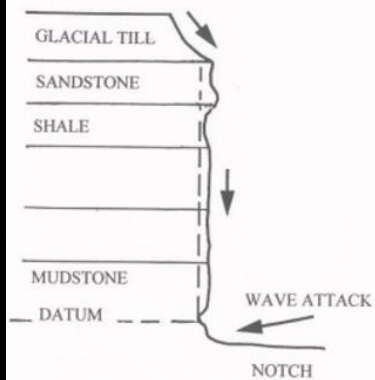
October 2024 Rockfall Event

- On the 22nd a significant rockfall occurred on the sea cliffs, towards the northern end of Cowbar Cottages

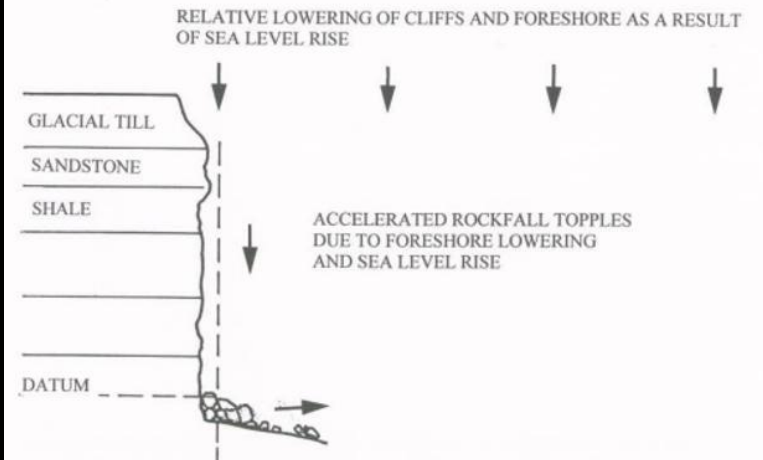


Post rockfall inspection findings

PRESENT SCENARIO



FUTURE SCENARIO



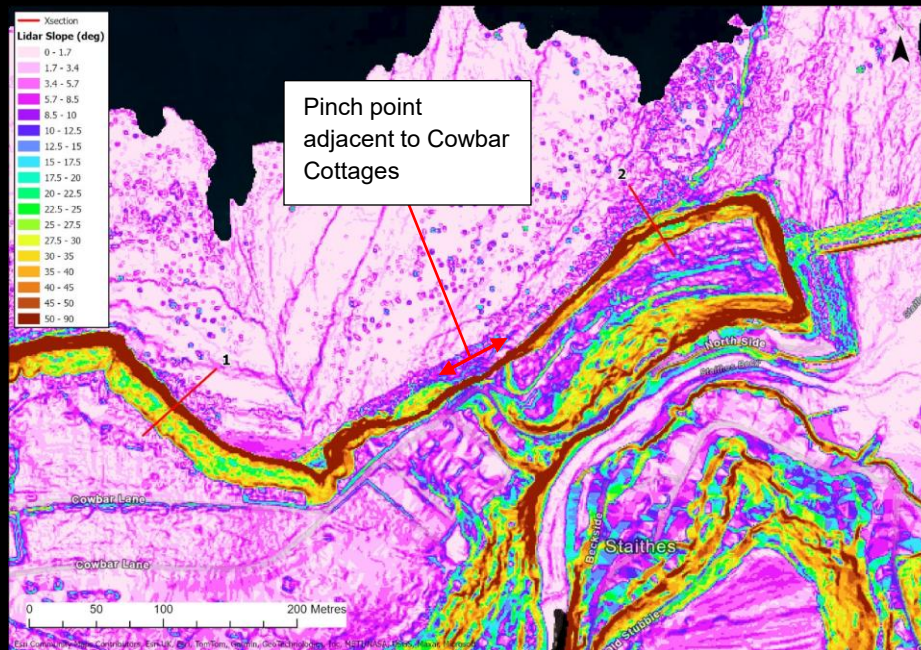
Post rockfall inspection findings

- Any remaining previous soil stabilisation measures to upper glacial till layer appear to no longer be providing any support.



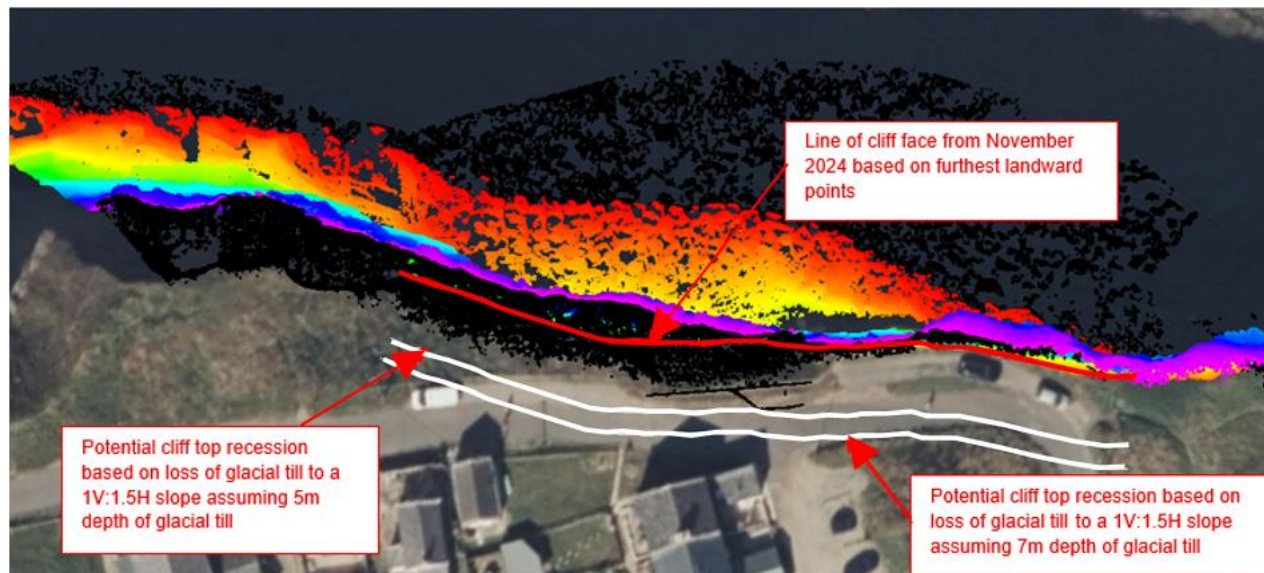
Review of pre & post rockfall survey data

- Material at top section of cliff adjacent to pinch point alongside Cowbar Cottages (50 - 90° to the horizontal) is much steeper than that on the upper till sections of cliff to the east and west (20 - 40° to the horizontal) where section markers 1 and 2 are shown below.



Review of pre & post rockfall survey data

- The shallower angle of the upper soft material at the top of the cliffs on the sections to the east and west of Cowbar Cottages, where vegetation is established, provides an indication of the more stable angle of the material.
- The over steepened soft material alongside the pinch point at Cowbar Cottages is at risk of recession to the shallower more stable angle in the short term.





LEGEND

Cliff top erosion lines

- Baseline Nov 2024
- - - Potential glacial till recession
- 25 years
- 50 years
- 100 years
- 3m buffer

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Client:	Project:
North Yorkshire Council	Cowbar Rockfall

Title: Updated linear extrapolation erosion rates near Cowbar Cottages of 0.1m /year rate (long term average)

Figure:3

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
0	27/03/2025	TC	AH	A3	1:800

Co-ordinate system: British National Grid



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Figure: 4

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
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