

Resource 3: Developing the Christchurch Bay FCERM strategy

Developing a strategic approach to manage flooding and coastal erosion takes several years and involves many experts, specialist research organisations and public consultations. The Christchurch Bay & Harbour Flood and Coastal Erosion Management (FCERM) Strategy is set within the context of the Poole and Christchurch Bays Shoreline Management Plan (SMP) (<https://twobays.net/project/christchurch-fcerm-strategy/>), a comprehensive document that considers every aspect of the coastline from its natural processes to the many demands associated with human activity.

A new coastal strategy

Bournemouth, Christchurch and Poole Council (BCP) and New Forest District Council (NFDC) are working together with the Environment Agency (EA) to produce a strategy for Christchurch Bay and Harbour (the Christchurch Bay & Harbour Flood and Coastal Erosion Management (FCERM) Strategy). It will identify where, when and broadly what type of works are needed to manage the risks of coastal flooding and erosion over the next century and roughly what they may cost. It will also consider the effects of predicted climate change on coastal communities, including sea level rise and the increased frequency of storms.



(Source: BCP Council)

In Autumn 2020, BCP Council secured a £525,000 government grant to produce the strategy on behalf of the partners. Specialist technical consultant AECOM (a major construction engineering company) were appointed to support the work. The final adopted strategy will enable BCP Council and NFDC to bid for government funding to deliver viable and realistic coastal protection schemes to implement the SMP policy.

Aim of the strategy

It (*the strategy*) will identify where, when and broadly what type of works are needed to manage the risks of coastal flooding and erosion and what they may cost. It will also consider the effects of predicted climate change on coastal communities, including sea level rise and increased levels of storminess.

A summary of flood and erosion risk is at <https://twobays.net/project/christchurch-fcerm-strategy/>.

Produced in collaboration with Geography Southwest (<https://www.geographysouthwest.co.uk/>) and the project partners.

Engagement phases

Public consultation to date has involved four phases:

- Engagement Phase 1 (12 July – 15 August 2021) – the project team raised public awareness of the issues associated with coastal management and sought local knowledge and issues of concern through an online survey and public meetings.
- Engagement Phase 2 (23 May – 26 June 2022) – these public engagement meetings involved feedback from Phase 1 and considered in detail the hypothetical ‘Do nothing’ approach . . . ‘What happens if we don’t defend our coast?’. Exhibition boards were created and full draft technical reports were presented covering coastal processes, coastal defences, environmental features and economics.
- Engagement Phase 3 (22 July 2022) – a workshop involving stakeholders to explore the options for each stretch of coastline and to introduce the multicriteria scoring/appraisal approach to be used to determine the short list of options from the long list.
- Engagement Phase 4 (28 November 2022 – 15 January 2023) – opinions sought on the short list of options for each stretch of coastline.

Following Engagement Phase 4, the final short list of measures will be appraised to ensure they are technically, economically and environmentally viable. In Summer 2023, (Phase 5) a statutory and formal consultation will take place to listen to views on the draft leading options for the strategy. The final preferred approach and next steps will be shared in Spring 2024 (Phase 6).

Poole and Christchurch Bays Shoreline Management Plan (SMP)

In England and Wales, a shoreline management plan (SMP) outlines strategies for managing flood and erosion risks for a stretch of coastline. The Poole and Christchurch Bays SMP covers the 190km (118 miles) of open coast, harbours, estuaries and headlands between Durlston Head in the west and Hurst Spit to the east.

The first local SMP (SMP1) was produced in 1999. SMP2, published late October 2010, was the first review of that document. SMP2 identifies management policies for the coastline for 20, 50 and 100 years, providing a timeline for objectives, policy and management changes from the present to the future.

SMP2 outlines policies for sustainable management of flood and erosion risks:

- *Hold the Line* – maintain / upgrade / replace coastal defences in their current position where funding permits.
- *Managed Realignment* – manage coastal processes to realign the ‘natural’ coastline configuration, either seaward or landward of its present position.
- *No Active Intervention* (do nothing) – a decision not to invest in providing or maintaining defences or management of the coast.
- *Advance the Line* – a decision to build new defences seaward of the existing defence line where significant land reclamation is considered.

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Christchurch Bay FCERM strategic options – from long list to short list

The following strategic options have been identified to deliver the policy for each of the SMZs:

- Do nothing to maintain current defences
- Do minimum maintenance to current defences
- Maintain current defences proactively
- Sustain current defences or construct new ones to keep pace with sea level rise
- Improve current defences or construct new ones to provide a higher standard of protection
- Realign defences further inland and/or actively manage erosion rates of the shoreline
- Help coastal communities adapt to impacts of climate change and provide local resilience.

A long list of coastal management measures was identified to implement each of the strategic options, e.g., 'improve current defences' could include constructing a new sea wall or timber groynes.

These measures were then assessed to ensure local suitability whilst complying with national guidance. If appropriate, they were further appraised by:

- Flood/erosion risk, indicative cost, technical complexity, and carbon impact
- Impacts on the natural environment, landscape / built environment
- The design life, maintenance / operational requirements, and broader outcomes that provide wider benefits to more than one area e.g., environmental enhancements.

If the remaining coastal risk management measures did not have a detrimental effect on neighbouring areas, they made it onto a preferred short list.



Example of short-list measures for Naish Cliff and Barton on Sea (Source: BCP Council).

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