ENVIRONMENT AND PLACE OVERVIEW AND SCRUTINY COMMITTEE



Report subject	Cliff and Coastal Erosion Management across the BCP coast
Meeting date	9 July 2025
Status	Public Report
Executive summary	Since the late 19 th century we have been building coastal defences along the shoreline at the base of the cliff to prevent coastal erosion. However, whilst the introduction and evolution of coastal defences along the base of the cliffs have been very successful in stopping coastal erosion by marine action, they were not successful in stopping cliff instability landwards of the coastal defences.
	Consequently, borough engineers between the 1950s to 1990s undertook extensive cliff stabilisation works and ongoing maintenance of a variety of engineering measures. However, from the 1990s onwards, due to a loss of knowledge/experience as engineers left the local authorities and were not replaced, combined with a reduction in funding, the approach to cliff stabilisation works has been much more one of reacting to events rather than proactively intervening with cliff stabilisation works and maintaining those systems installed in the period 1950s-1990s.
	In recognition of the challenges of cliff instability, since 2022 the South West Flood & Coastal team have been leading the development of a new BCP Cliff Management Strategy (CMS) which aims to provide a single, consistent and integrated approach to managing each section of cliff along the BCP coast, such that decisions made by various service areas in BCP Council are based on a common understanding of the risks posed by future cliff erosion and instability which arise from a range of factors including the impacts of climate change. The CMS is due to complete by March 2026 and the paper provides details on what it will produce.
	After March 2026, there will need to be funding provided to enable the ongoing maintenance of the new systems and processes established by the CMS. In addition, there will be a need to provide funding for both maintenance of the various cliff management systems across the BCP coast and, in places, the construction of new cliff stabilisation works where we continue to have cliff slips and falls – such as at West Cliff.

Recommendations	 This paper has been prepared for the BCP Council Environment & Place Overview and Scrutiny Committee in response to a request from Councillor Richard Herrett, the Cabinet member for Destination, Leisure and Commercial Operations, to provide a deep dive into the following lines of enquiry: a) How BCP manages its coastal and cliff erosion now and into the future b) What are the challenges? c) How is this area of work funded and how will it be funded in the future? d) How is this work communicated to residents and wider public?
Reason for recommendations	Not applicable
Portfolio Holder(s):	Councillor Andy Hadley (Cabinet Member for Climate Response, Environment and Energy)
Corporate Director	Glynn Barton – Chief Operations Officer
Report Authors	Alan Frampton – Strategy, Policy & Environment Manager, FCERM Matt Hosey – Head of Service, FCERM Julian Case – FCERM Principal Geotechnical Engineer
Wards	Boscombe East & Pokesdown; Boscombe West; Bournemouth Central; Canford Cliffs; East Cliff & Springbourne; East Southbourne & Tuckton; Hamworthy; Highcliffe & Walkford; Mudeford, Stanpit & West Highcliffe; West Southbourne; Westbourne & West Cliff;
Classification	For Information

Introduction

- 1. This paper has been prepared for the BCP Council Environment & Place Overview and Scrutiny Committee in response to a request from Councillor Richard Herrett, the Cabinet member for Destination, Leisure and Commercial Operations, to provide a deep dive into the following lines of enquiry:
 - a) How BCP manages its coastal and cliff erosion now and into the future
 - b) What are the challenges?
 - c) How is this area of work funded and how will it be funded in the future?
 - d) How is this work communicated to residents and wider public?
- 2. The reason for this request is, following cliff slips in the BCP area over the last year, to ensure that the council is doing everything it can in relation to cliff and coastal erosion risk management and managing the impact on our residents, visitors and the area as a whole.

Key terminology to understand in reading this paper:

• **Coastal erosion** is a natural process where material (sediment, rocks and manmade features) is taken away from shorelines by the action of waves, tides and currents (often to be deposited along other parts of the coast or moved to offshore areas). This is not replaced by new material, resulting in the coastline being 'eroded'.

Waves, currents, tides, and wind can all contribute to coastal erosion.

Importantly, coastal erosion is driven by forces at the base of cliffs (i.e. along the shoreline), though the impacts result in retreat of the cliff top that in turn can lead to loss of properties and infrastructure located on top of cliffs.

- **Cliff stability** is the ability of inclined soil or rock slopes to withstand destabilising forces. This is related to conditions within the cliffs / slopes including the mass characteristics of the geology and groundwater conditions which on occasion may cause excessive destabilising pressures due to the build-up of water levels within the cliffs due to rainfall and/or other sources.
- Cliff instability occurs when the stabilising forces within the cliff are exceeded, leading to rockfalls, mudflows, landslips and landslides. These may be confined to the face of cliffs and slopes or they can be deep seated and cause damage/risk to life to people, property and infrastructure on or at the base of the slopes, or they may also result in retreat of the cliff top position in which case they can then also lead to loss of properties and infrastructure located on top of cliffs.

How BCP manages its coastal and cliff erosion now and into the future

3. Along the BCP coastline there is approximately 15.5 miles of sea cliffs and chines fronted by sandy beaches, extending from the boundary with New Forest District Council at Chewton Bunny in the east to the boundary with Dorset Council in Lytchett Bay in the west (see Figure 1).

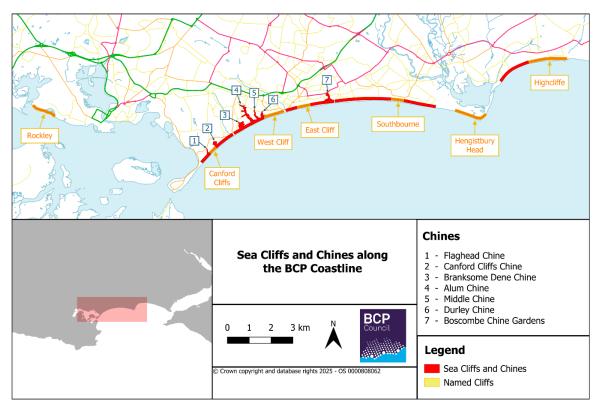


Figure 1 Extent of sea cliffs and chines along the BCP coast

4. The responsibility for much of the management of the sea cliffs and chines falls to BCP Council (either as landowner or leaseholder), however about 1.4 miles of sea cliffs and chines are in private ownership and so the responsibility for management lies with those private owners (see Figure 2). These private cliffs often have a relationship to adjacent sections of cliff, or assets at the top and bottom of the cliff, that are the responsibility of BCP Council, which poses challenges for integrated management.

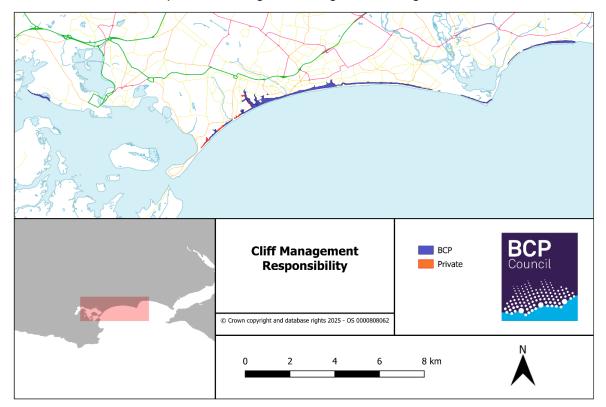


Figure 2 Sea cliffs and chines management responsibility along the BCP coast



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Figure 3 Bournemouth, From West Cliff 1897; Photo ref: 40553. The Francis Frith Collection.

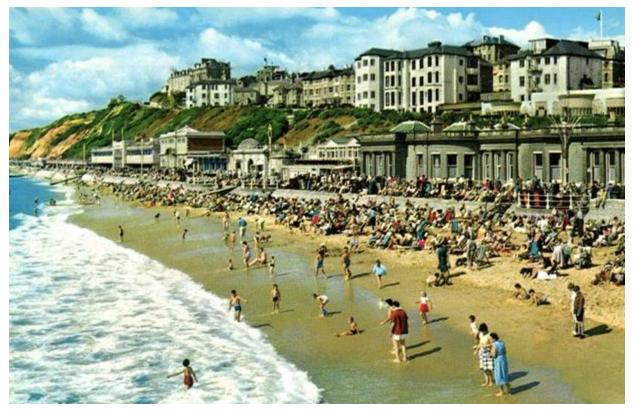


Figure 4 Bournemouth Beach prior to the first beach replenishment in 1974 (exact date unk nown).

5. Since the late 19th century, we have been building coastal defences along the shoreline at the base of the cliff to prevent coastal erosion. Whilst the introduction and evolution of coastal defences along the base of the cliffs have been very successful in stopping coastal erosion by marine action, they were not successful in stopping cliff instability landwards of the coastal defences. Cliff slips and falls were still occurring throughout the 20th century and into the 21st century, with notable events being as follows:

- Canford Cliffs and Branksome Dene Chine:
 - Two cliff slips at Canford Cliffs in 1970's which caused a block of beach huts to be demolished.
 - One slip at Canford Cliffs in 1993.
 - In November 2014 a landslip occurred in Branksome Dene Chine which sent a section of a residents garden crashing down into the car park below.
 - In February 2017 a section of sea cliff approximately 10m wide and 0.5m deep slipped half-way down the cliff face at Canford Cliffs. The slip undermined a section of footpath on Cliff Drive.
 - In December 2019/January 2020 a section of cliff adjacent to the 2017 fall also slipped. Both of these events put the beach huts below at risk of damage.
- West Cliff:
 - Localised failures occurred in the 1950's despite the cliff line having been regraded back as a result of unexpected water flows.
 - In 2001 there was a large cliff fall that occurred near the West Cliff Lift. This
 occurred as a result of a localised injection of groundwater due to an illegally
 constructed soakaway at the top of the cliff.
 - In April 2016, a small washout failure occurred to the western end of the cliffs above Happyland Amusements.



• West Cliff slip of 9th and 19th October 2024 (see Figure 5).

Figure 5

West Cliff Slip on 19th October 2024 (from Bournemouth Daily Echo).

- East Cliff:
 - A large cliff fall in January 1952, and after heavy rains in December 1956 a further cliff fall covered the rails of the East Cliff Lift in debris.
 - A large cliff fall in January 1965 that cut into the Overcliff Drive footpath and took down fencing, requiring diversion of East Overcliff Drive and sewer and water infrastructure.

- A cliff fall occurred between the East Zig Zag and East Cliff Lift in 1995 following wet weather.
- A small landslide occurred in 2010 which resulted in the demolition of the original toilet block at the base of the cliff lift at the time.
- In late April 2016 a major failure on the eastern side of East Cliff occurred resulting in extensive damage to several council owned assets, including the cliff lift, access footpath to the upper tollhouse, lower tollhouse and café/toilet blocks at the toe of the slope (see Figure 6). The landslip contained saturated earth and falling debris, the lower promenade was also affected by soil material flowing directly onto the pavement.



• East Cliff slips of 28th November 2024 and 30th January 2025.

Figure 6 Before and after photographs of the East Cliff Lift slip in 2016 (images courtesy of Andrew Emery, 2016).

- A landslide occurred in 1925 between the Portman Ravine Zig Zag and fisherman's Walk.
- A major cliff fall occurred near Toft Steps, Boscombe in 1956 and a further fall in 1965.
- In December 2013 a section of cliff between Gordon's steps and Fisherman's Walk collapsed, approximately 30x30m across. The landslide occurred following days of strong winds and persistent rain and resulted in the destruction of 6 beach huts.
- A landslide has occurred at Gordon's Corner, to the East of Gordon's Zig Zag, in 2016. Another occurred in 2020 just to the West of Gordon's Zig Zig which damaged an ice cream kiosk on the promenade.
- 6. In response to these ongoing cliff instability issues, between the 1950s to 1990s, borough engineers undertook extensive cliff stabilisation works and ongoing maintenance of a variety of engineering measures which included:
 - Reinforced concrete apron walls with counterforts (a buttress, or a strengthening structure, built against a wall to provide support).
 - Cliff slope regrading which aimed to achieve a minimum slope angle of 35 degrees but in places only achieved 40-45 degrees due to spatial constraints. Often supported by planting of vegetation such as heather turfing.
 - Soil nailing and erosion control matting / steel netting.

- Installation of in excess of 700 sand drains typically to depths of 25-40m that form a curtain that intercepts ground water and diverts to sea level to prevent water levels building up in the upper cliffs above clay layers. Many of these sand drains are located along West Overcliff Drive and East Overcliff Drive.
- Banning of soakaways in cliff top areas to prevent additional water entering the cliff top areas.
- Cliff face erosion controls through vegetation management and propagation, including sowing of grass seed, and removing invasive species. Latterly this has included use of goats under High Level Stewardship agreements with Natural England.
- Extensive slope stabilisation and drainage, including a diaphragm cut off wall and shoreline defences at Highcliffe.
- 7. From the 1990s onwards, due to a loss of knowledge/experience as engineers left the local authorities and were not replaced, combined with a reduction in funding, the approach to cliff stabilisation works has been much more one of reacting to events rather than proactively intervening with cliff stabilisation works and maintaining those systems installed in the period 1950s-1990s. An example of more recent works is the stabilisation scheme at Canford Cliffs in 2020/21. This scheme involved the installation of over 1600 soil nails and erosion control matting with high tensile steel netting to stabilise the cliff and soil (see https://twobays.net/project/canford-cliffs-stabilisation-works/).
- 8. On forming BCP Council, the South West Flood & Coastal¹ team was created and recognised the ongoing challenges of cliff instability along the BCP coast. In response, in January 2022 we successfully bid for £404,000 of Local Levy funding from the Wessex Regional Flood & Coastal Committee and have since been leading the development of a new BCP Cliff Management Strategy (CMS). This aims to provide a single, consistent and integrated approach to managing each section of cliff along the BCP coast, such that decisions made by various service areas in BCP Council are based on a common understanding of the risks posed by future cliff erosion and instability which arise from a range of factors including the impacts of climate change (see also section below on "What are the challenges?").
- 9. The CMS aims to complete by end of March 2026. It is being delivered in-house by the South West Flood & Coastal team who have recruited a Principal Geotechnical Engineer to lead on the technical aspects of the project with support from others in the team. Development of the CMS is broadly following the approach set out in *Cliff Instability and Erosion Management in Great Britain: A Good Practice Guide*², but which adds in additional elements for BCP needs/situation, as illustrated in Figure 7.

¹ South West Flood & Coastal is a shared service between BCP Council and East Devon District Council
² McInnes, R.G. and Moore, R. 2011. Cliff Instability and Erosion Management in Great Britain – A Good Practice Guide. Halcrow Group Ltd, Birmingham.

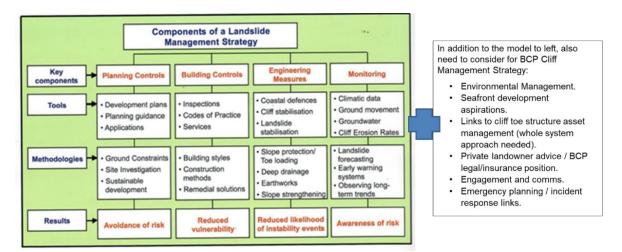
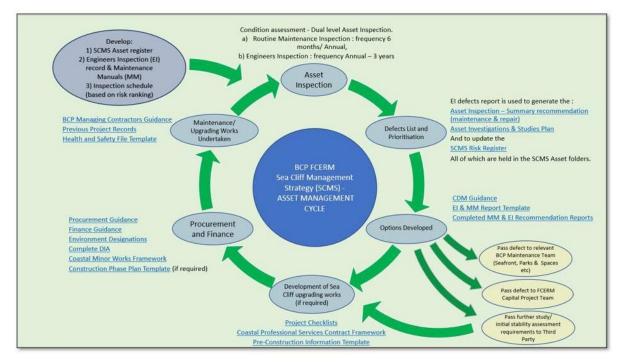
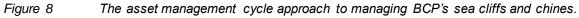


Figure 7 The basis of the approach to developing a new BCP wide Cliff Management Strategy.

10. A key part of developing the CMS is treating the cliffs as an asset system and applying an asset management system approach to their management, as illustrated in Figure 8. This involves establishing systematic and repeated inspections to assess whether cliff stability issues are present and whether existing cliff stability measures are functioning as they were designed to do. In addition, we undertake regular inspections across the seafront, to report any signs of cliff instability that may develop. Regular inspections of cliff drainage systems built into the cliffs also take place to identify any maintenance and/or monitoring requirements.





- 11. The data from these inspections is then captured and stored in a new cliff asset database being developed as part of the CMS. Inspection data is then reviewed each time to assess if any issues are identified and where they are, a process of reporting areas of cliff thought to be at risk. Risk assessments, required actions and details of actions once taken are also captured so as to build a consistent history of work in each part of the cliffs and chines.
- 12. On commencing the CMS, the scale of risk and integrated impacts across BCP became much clearer. To better deal with these integrated issues, a new Cliff Management Working Group (CMWG) was formed. This CMWG regularly brings together officers from

all services in BCP that have a role in managing aspects of the sea cliffs and chines, and includes:

- the Seafront service who are responsible for managing things like beach huts, concessions and access, and
- Environment service who undertake things like cliff vegetation management under the Natural England approved Higher Level Stewardship scheme to systematically remove invasive species and reintroduce native species to enhance ground cover and cliff stability.
- 13. The focus of the CMWG is to review and discuss the latest cliff inspection findings and recommendations and to prioritise actions to address issues identified. Actions recommended may range from communicating with private landowners and establishing cliff monitoring works, to enlisting geotechnical consultants to undertake detailed stability assessments and if necessary, the detailed design of stabilisation measures. On occasion it may also be necessary to suspend the use of beach huts or parts of the seafront, promenade and access routes for safety reasons. Actions taken following this process in the last 2 years, funded by BCP Council at a cost in excess of £750,000, include:
 - GPS cliff monitoring by the South West Flood & Coastal team at:
 - Manor Steps Zig Zag & Platforms
 - East Cliff Lift and adjacent western cliff flank
 - East Cliff Zig Zag
 - Portman Ravine Zig Zag
 - Tofts Zig Zag
 - Warren Street Car Park
 - Warren Street Zig Zag
 - West Cliff Zig Zag
 - Pinecliff Gardens Zig Zag.
 - Commissioning expert advice such as stability assessments, structural assessments and / or detailed design of stabilisation measures at:
 - East Cliff Lift and adjacent western cliff flank
 - Happylands Building, Cliff & Beacon Steps
 - Manor Steps Beach Lodges Sea Cliff East
 - o Sea cliff to rear and west of Durley Chine innovation hub
 - West Cliff Lift & cliff up to West Cliff Zig Zag
 - o West cliff emergency works
 - Toft Zig Zag.
 - Cliff maintenance work including:
 - Honeycombe Chine cliff drainage inspection and clearance works
 - o East Overcliff Drive sand drain rehabilitation trials.
 - Sea Cliff west of Portman Ravine Emergency Works involving physical intervention to remove partial slip and stabilise cliff face.

- 14. It should be noted that the works to stabilise East Cliff Lift are not included in the list above, as those are funded by external Levelling Up Fund monies and have the following costs (to illustrate the typical costs of such works):
 - Consultancy costs for detailed remediation design = £286,429.
 - SSE Transformer relocation cost = £160,779.
 - Estimated consultancy fee for tendering and remediation supervision = £77,000.
 - Estimated remediation construction cost = £3.5 4.0 million. (for comparison, the Canford Cliffs Stabilisation Scheme cost £2.5 million).
- 15. In due course, the co-ordination provided by the CMWG will be aided by development of a new BCP Cliff Management Manual, which will be the other key output produced at the end of the CMS project in March 2026 (alongside the Sea Cliff and Chine Asset Database and inspection/reporting regime). This new BCP Cliff Management Manual will provide the guidance document for everyone in BCP involved in managing the cliffs going forwards, and will include the following content:
 - 1) About BCP's sea cliffs & chines (including an overview of the geology & geomorphology of the cliffs and the history of sea cliff and chine management).
 - 2) The BCP Sea Cliff & Chine Asset Database.
 - 3) Roles & Responsibilities (including those of different BCP services and those of private landowners).
 - 4) Monitoring & Inspection Regime.
 - 5) Maintenance, Capital & Emergency Works (setting out the steps to follow and consenting requirements to undertake such works, including capturing lessons learnt following the October 2024 falls at West Cliff).
 - 6) Environmental Management (including the requirements of various environmental stewardship schemes and tree management).
 - Planning Policy & Guidance (including the proposed coastal erosion and cliff stability policies and guidance developed to support the new BCP local plan – see Section 5 and Appendix A of <u>TCC9 FCERM Background Paper June 2024</u>).
 - 8) Emergency Planning & Incident Response.
 - 9) Engagement & Communication (including how BCP communicates cliff management issues with the public see also section below on "How is this work communicated to residents and wider public?").

What are the challenges?

16. There are a number of challenges faced in the ongoing management of sea cliff and chine stability across the BCP coast, many of which are inter-related. The following elaborates on these points in turn.

Funding

- 17. All sea cliff and chine management, including ongoing inspection, maintenance and capital schemes etc. has to be funded by BCP Council unless specific funding sources are made available from central Government (for example, as has been the case with Levelling Up Funding enabling stabilisation works at East Cliff Lift to be progressed). The section below on "How is this area of work funded and how will it be funded in the future? discusses the reasons for this further.
- 18. The only external funding BCP Council receives to manage the cliffs is the Higher Level Stewardship funding from Natural England to deal with invasive species etc. This funding includes paying for the management of the goats along parts of BCP's cliffs, which were

introduced under the stewardship scheme to help manage the cliff vegetation and removal of invasive species.

19. A consequence of the funding required for sea cliff and chine management largely having to come from BCP Council is that, as this is not a statutory requirement and as budgetary pressures have grown, it has in the past not always been prioritised. To address this, part of the work of the CMWG is to identify future costs for cliff management and put in place measures to improve funding for cliff management works. This is no simple task, with costs for cliff management along the BCP frontage over the next 20 years currently estimated to be in excess of £41m (and rising).

Resources

- 20. Since BCP Council formed and established the South West Flood & Coastal team, that team has been seeking to get to grips with the challenge of sea cliff and chine management. Initially this was reliant on external consultant support, but as a result of securing the funding for the CMS the team has been developing greater in house knowledge and capability, meaning a reduction in the use of consultants which costs a lot more than using in-house expertise.
- 21. The team now has a Principal Geotechnical Engineer and Graduate Geotechnical Engineer in post to lead on sea cliff and chine management across BCP. Consultants are still utilised as these two staff cannot do everything required, but they are able to better manage the consultants to provide clear work specifications and ensure value for money is being achieved.
- 22. The Principal Geotechnical Engineer and Graduate Geotechnical Engineer are supported by several other members of the team who are trained to undertake inspections and surveys, as well as Seafront rangers who have been given training on signs to look out for what should be reported to the Geotechnical Engineers in case they signify emerging issues with regard to slope stability.

Maintenance of existing stabilisation systems

- 23. As a consequence of the loss of knowledge over time from the legacy authorities, and budgetary pressures, there has been a lack of maintenance of stabilisation systems for many years.
- 24. There is a need to fund ongoing maintenance of stabilisation systems in the future, guided by an evidence-based approach informed by regular inspections and surveys as is being established by the CMS and overseen by the Principal Geotechnical Engineer and Graduate Geotechnical Engineer in the South West Flood & Coastal team.

Sudden failures (emergency situations)

- 25. When sudden failures of sections of cliff occur, these put an unplanned strain on resources both in terms of staff being diverted from other work and creating additional inyear budgetary pressure.
- 26. Once the initial response has been dealt with and the area made as safe as possible, work then transitions to the recovery stage that requires scoping, managing and delivering first more detailed investigations and then developing detailed remediation designs, alongside seeking funding to implement a remediation and gaining all necessary planning and environmental approvals, before construction works can occur. As can be seen from recent experience including Canford Cliffs and East Cliff Lift, this "recovery" stage can take many years and require a lot of resource dedicated to it.

Impact on visitors and revenue

27. When a cliff failure occurs, in order to make the area safe there is a need to close off in part or in totality, sections of the promenade, cliff top roads/parking and/or cliff access routes (e.g. lifts, steps, zig zags). These may be temporary whilst assessment of further

risk is made following a failure, or may be longer-term and only be removed once a remediation scheme has been constructed.

- 28. Closures such as these impact the ability of BCP to generate revenue from various activities and businesses along the seafront. They also impact the ability to:
 - Undertake operations such bin emptying as efficiently as possible if, for example, the vehicles used to do this have to take an inland diversion because they are not able to transit along the promenade un-impeded; and
 - Mean emergency services have to be informed and plan to respond differently when they need to access certain parts of the seafront if, for example, they cannot get to a particular location from the direction they would normally if the promenade was unimpeded.

Impacts of climate change

- 29. The impacts of climate change are projected to include significant increases in the amount of rainfall across BCP. This means that the sea cliffs and chines along the BCP coast will be subject to greater amounts of water entering the cliffs that will need to be dealt with via well maintained drainage systems with appropriate capacity. Failure to do so will likely lead to an increase in the number and frequency of cliff failures such as those experienced historically along the BCP coast.
- 30. In addition to rainfall, it is expected that the area will experience hotter, drier summers. These conditions lead to increased risk of fires along the vegetated areas of cliff. To deal with these fires, large volumes of water are typically used and this water enters the cliffs that can in turn lead to stability issues that are exacerbated by the loss of stabilising vegetation due to the initial fire, so South West Flood & Coastal monitor such areas more closely for the days following such events. Beyond the immediate fire event, the reduction in vegetation is likely to make this area more susceptible to infiltration from rain for a period of time until the vegetation is able to re-grow.

Planning and development management

31. Historically the legacy local authorities of Poole, Bournemouth and Christchurch had versions of what can be best described as "soakaway" exclusion zones. As part of developing the new BCP local plan, and in line with the CMS framework being implemented (see above), these legacy approaches were reviewed and a new approach proposed as part of the proposed coastal erosion and cliff stability local plan policies. This has resulted in the proposal to define a "Cliff and Chine Stability Consultation Zone" along with guidance on what evidence and information – including geotechnical risk assessment – should be provided for any planning application within this zone to demonstrate appropriate consideration of cliff and chine stability issues. Further information on this proposed new approach is provided in Section 5 and Appendix A of <u>TCC9 FCERM Background Paper June 2024</u> published as part of the BCP Local Plan examination library.

Environmental designations and stewardship agreements

- 32. Many sections of BCP's sea cliffs and chines are designated for their environmental interest and importance, which are both ecological and geological in nature. Designations include Special Areas of Conservation, Sites of Special Scientific Interest, Local Nature Reserves and, in the case of Hengistbury Head, Scheduled Ancient Monument.
- 33. These various designations mean that where, when and how works on the sea cliffs and chines can occur can be constrained, introducing additional time and costs as designs need to be developed to avoid or minimise impacts and environmental assessment and consents need to be produced and approved by statutory bodies such as Natural England. The recent introduction of the requirement to also then provide Biodiversity Net Gain when doing cliff works further adds to the complications.

- 34. In addition, because of these various designations, and the fact that they are in places considered to be in an unfavourable condition due to things such as being covered in vegetation and/or that vegetation being in the form of invasive non-native species, BCP Council is in receipt of environmental stewardship funding from the likes of Natural England. This funding is aimed at improving the condition of the designated sites and pays for things like removal of trees from cliff slopes, and for the goats that are used along section of cliff to remove invasive non-native species such as sour fig which is a more cost effective approach to this activity which otherwise has to be done by costly rope-access manual human effort.
- 35. The removal of trees from cliff slopes and of invasive non-native species such sour fig is also beneficial from a cliff stability point of view. For example:
 - Matts of sour fig add weight to the cliff face and lead to surface level slides of cliff material that end up at the base of the cliffs and sometime onto the promenade and/or beach huts below that then need to be dealt with.
 - Tree roots can break into slope drainage system networks and/or cause pressure on retaining walls and access paths designed to stabilise cliff and chine slopes, thus reducing their effectiveness and increasing the risk of sudden failure.

Land ownership

- 36. As noted above, BCP Council is responsible for the management of much of the sea cliffs and chines across the coast. In places BCP is also the landowner, but in other places BCP is a leaseholder in these locations whenever BCP Council wishes to undertake investigations and/or works on the cliffs, permission to access the land and do these works needs to be obtained from the relevant landowners such as Meyrick Estates and Cooper-Dean Estates. This is not always forthcoming in a timely manner which, particularly when trying to deal with a sudden failure and progress with remedying it as soon as possible, causes delays and additional time and effort to resolve.
- 37. Also as noted above, a portion of the sea cliffs and chines are not the responsibility of BCP Council. Rather they are the responsibility of private landowners. A challenge here is that not all private landowners seem to be aware of the responsibilities and liabilities that places upon them, and there is a need to raise awareness which is something the CMS work is seeking to achieve (see the section below on "How is this work communicated to residents and wider public?).

How is this area of work funded and how will it be funded in the future?

- 38. Unlike with the coastal defences designed to prevent coastal erosion along the base of many of BCP's sea cliffs and chines, there is no national funding available from central Government to manage the cliff stability issues faced along much of BCP's sea cliffs and chines.
- 39. As such, the funding of sea cliff and chine stabilisation works and maintenance falls solely on the landowner or organisation responsible for managing these issues. For most of the BCP coast this responsibility is on BCP Council, with only a small amount of the coast being the responsibility of private landowners.
- 40. From a BCP Council perspective, there is no statutory duty to undertake such works (works are undertaken under permissive powers) and so given the long-standing budgetary challenges faced by local authorities (pre-dating the formation of BCP Council), the funding to maintain the legacy slope stabilisation systems constructed at greater expense decades ago has not been occurring to the scale and frequency it would ideally have been.
- 41. However, even if a more pro-active approach can be taken , there will remain a risk of a sudden failure placing budgetary pressures on council finances if only to do initial works

to make an area safe even if that is not then able to be progressed quickly into recovery and remediation – and the consequence and challenges that brings as outlined above.

How is this work communicated to residents and wider public?

- 42. As part of developing the CMS, the South West Flood & Coastal team are working with the Dorset Coast Forum to develop a new Cliff Management Guide, who have previously developed similar such guides for other locations along the Dorset coast including <u>North Swanage</u>. This guide will be a resource designed to inform and assist landowners, homeowners, businesses and residents living near cliffs in BCP, providing essential information on managing cliff environments, ensuring safety, and understanding the responsibilities involved in maintaining these unique landscapes. Key components of the guide will include:
 - i. How and why cliff falls occur on the BCP Coast?
 - ii. How to spot the signs of cliff instability and erosion? What to do if you see any of these signs?
 - iii. Who manages the cliffs and why?
 - iv. Where do the responsibilities lie?
 - v. What can householders do to maintain and preserve the cliffs?
- 43. To help inform development of this guide, Dorset Coast Forum have run an online survey, webinar and in-person drop-in events during May and June 2025. The purpose of this engagement is to ask local stakeholders, landowners, householders, residents and members of the community about their understanding of coastal erosion risk and instability along the BCP Coast. This is intended to understand current levels of knowledge and what gaps in knowledge / questions people have that can be addressed within the new guide. This is ongoing work and will be completed and published later in 2025/early 2026.
- 44. Alongside developing the householder guide, we have established a new website dedicated to cliff and chine management along the BCP coast see https://twobays.net/project/cliff-management/. This will include the householder guide once it is produced, and be kept up-to-date with other information about how and why the cliffs and chines are managed, as well as when any works etc. are being undertaken.
- 45. The website will also be a key resource that can be sign-posted to from press releases, social media posts etc., when there are any cliff slips and falls which invariably lead to increased public and media enquiries.

Summary

- 46. Along the BCP coastline there is approximately 15.5 miles of sea cliffs and chines fronted by sandy beaches, extending from the boundary with New Forest District Council at Chewton Bunny in the east to the boundary with Dorset Council in Lytchett Bay in the west.
- 47. Since the late 19th century, we have been building coastal defences along the shoreline at the base of the cliff to prevent coastal erosion. However, whilst the introduction and evolution of coastal defences along the base of the cliffs have been very successful in stopping coastal erosion by marine action, they were not successful in stopping cliff instability landwards of the coastal defences. Cliff slips and falls were still occurring throughout the 20th century and into the 21st century.
- 48. In response to these ongoing cliff instability issues, between the 1950s to 1990s, borough engineers undertook extensive cliff stabilisation works and ongoing maintenance of a variety of engineering measures. However, from the 1990s onwards, due to a loss of knowledge/experience as engineers left the local authorities and were not replaced, combined with a reduction in funding, the approach to cliff stabilisation

works has been much more one of reacting to events rather than proactively intervening with cliff stabilisation works and maintaining those systems installed in the period 1950s-1990s.

- 49. On forming BCP Council, the South West Flood & Coastal team was created and recognised the ongoing challenges of cliff instability along the BCP coast, so since 2022, the South West Flood & Coastal team have been leading the development of a new BCP Cliff Management Strategy (CMS) which aims to provide a single, consistent and integrated approach to managing each section of cliff along the BCP coast, such that decisions made by various service areas in BCP Council are based on a common understanding of the risks posed by future cliff erosion and instability which arise from a range of factors including the impacts of climate change.
- 50. At the heart of the CMS is development of a new Sea Cliff and Chine Asset Database and establishing new processes for the systematic and repeated inspection of cliff assets to assess condition and identify signs of instability and other cliff management related issues. These are then reported to a new Cliff Management Working Group of senior officers from across different BCP Council services that has been established as part of the CMS to enable review and discussion of the latest cliff inspection findings and recommendations and to prioritise actions to address issues identified.
- 51. The CMS is due to complete by March 2026 and having developed the Sea Cliff and Chine Asset Database and inspection/reporting regime and established the Cliff Management Working Group, will also produce a new BCP Cliff Management Manual that will provide the guidance document for everyone in BCP involved in managing the cliffs going forwards.
- 52. After March 2026, there will need to be funding provided to enable the ongoing maintenance of the new systems and processes established by the CMS especially the Sea Cliff and Chine Asset Database. In addition, there will be a need to provide funding for both maintenance of the various cliff management systems across the BCP coast and, in places, the construction of new cliff stabilisation works where we continue to have cliff slips and falls such as at West Cliff.