Porthcawl to Sker Point (7)



Recommendations:

Long Term Plan

The long term plan for the developed frontage of Porthcawl (which extends between the northern boundary of Merthyr-mawr Warren and the southern boundary of Kenfig Burrows) is to continue to manage the risk of coastal erosion and flooding to Porthcawl, whilst allowing natural evolution of the undeveloped coastline.

Existing defences along the developed frontage of Porthcawl will be maintained and upgraded, subject to the availability of public funding for coastal erosion and flood risk management. Continuing to maintain and upgrade defences at Newton is unlikely to be socio-economically viable in the medium and long term due to the limited number of assets at risk. Recommended policies of no active intervention at Newton and Rest Bay however do not preclude future private investment in defences along these frontages, subject to obtaining the necessary consents, licences and approvals.

Location (Policy Unit)		Preferred SMP2 policy and approach to implementing the Plan				
		0-20 years	50-100 years			
7.1	Newton	To enable measures to be put in place to move towards the long term policy of no active intervention, the short term policy is to hold the line , through maintaining the existing defences, until they reach the end of their effective life. Given the medium and long term policy, no defence improvements would be undertaken, therefore there will be an increased risk of flooding to the residential properties and assets inshore.	The policy is to allow the coast to evolve and retreat naturally through no active intervention . Once defences are no longer maintained, they will deteriorate and eventually fail with an increased risk of flooding ove time. This policy would not preclude privately funded defence improvements or property flood protection/ resilience measures, subject to obtaining the necessary consents, licences and approvals. Extension of existing defences to the east would not, however, be acceptable due to the potential impact on the adjacent Methyr-mawr dune system.			
7.2	Newton Point to Rhych Point (Trecco Bay)	In order to manage the risk of coastal erosion and flooding to the Trecco Bay caravan park the policy is to hold the line through maintaining existing low grade defences in the short term. It is unlikely that maintenance of existing defences would attract public coastal erosion and flood risk management funding, since the majority of assets at risk are privately owned.	medium/ long term which will invalong this frontage under a policy the necessary consents, licences defences would attract public comanagement funding, since the owned. Due to the natural headlands dewould not be expected to have and it is unlikely that the relict dur	majority of assets at risk are privately fences along the existing backshore a significant impact on the shoreline nes would revert to naturally e was allowed to evolve naturally, due		
7.3	Rhych Point to Porthcawl Point (Sandy Bay)	hold the line through maintaining and upgrodunes along the eastern shore of Sandy Bay flood risk management and obtaining the ribe impacts on the wider shoreline as Sandy	of coastal erosion and flooding to Porthcawl, therefore the policy is to ading existing defences, including extending defences over the relict of subject to the availability of public funding for coastal erosion and ecessary consents, licences and approvals. There are not expected to Bay is bounded by the Western Breakwater and the resistant headland overwents would be undertaken as part of the future development of the Portheaud Harbour and Western Breakwater.			
7.4	Porthcawl (Porthcawl Point to Hutchwns Point)	The long term intent is to continue to protect through maintaining and upgrading existing and flood risk management, but not to con likely that defences will need to be rebuilt to	g defences, subject to the availabil struct defences along currently un	lity of public funding for coastal erosion defended parts of the frontage. It is		
7.5	Hutchwns Point to Sker Point (Rest Bay)	Future public funding for coastal erosion and flood risk management along this frontage is unlikely due to the limited value of socio-economic assets at risk. Therefore in the short term, the policy is to allow the coast to evolve and retreat naturally through no active intervention. However this policy does not preclude other sources of funding being used to maintain/ improve existing defences at Rest Bay lifeguard station/ slipway (tourist facilities/ assets) or Royal Porthcawl Links golf course (private funding from existing landowner), subject to obtaining necessary consents, licences and approvals. It may be more sustainable and cost-effective in the long term to relocate assets inshore.	retreat naturally through no activ This would not, however, preclude fund defence maintenance/ impresilience measures to their proper necessary consents, licences and may become technically more defined.	e the right of landowners to privately provement or flood protection/erties/ assets, subject to obtaining the dapprovals. Over time these defences lifficult to sustain, due to sea level rise g; however, there would be limited		

A review of the impacts of the preferred SMP2 policies on coastal evolution and behaviour is provided in Appendix E: Policy Development and Appraisal, Section E1.3.

Policy sensitivities and key uncertainties (further detail is included in Appendix K)

Policy unit 7.1 - The timing of the change in policy at Newton will depend upon when existing defences fail.

Policy units 7.2 and 7.3 - It is recognised that these policies are sensitive to future development plans, which are likely to involve private funding of defence improvements at Trecco Bay and Sandy Bay, subject to consideration of the potential impact on the adjacent shorelines and obtaining the necessary consents, licences and approvals.

Policy units 7.3 and 7.4 - The hold the line policy is subject to the availability of public funding for coastal erosion and flood risk management to maintain, improve or replace existing defences, in response to future climate change/ sea level rise. There is a risk that public funding will not be available to maintain the existing standard of protection in line with future sea level rise, which will result in an increased risk of overtopping and flooding, over time, whilst the risk of coastal erosion will continue to be managed.

Changes from present management / SMP1 policy¹

Policy units 7.1 and 7.4 – no change from SMP1.

Policy units 7.2 and 7.3 – The SMP1 policy was for 'Hold or possibly advance subject to development proposals'.

Policy unit 7.5 – The SMP1 policy was for selective hold the line. SMP2 requires other sources of funding to enable existing defences to be maintained/improved.

(this is a summary of impacts, for full details see Appendix G S Issue	Appraisal
Receptor: Property, population and human health	T Appliated:
Porthcawl is the key settlement along this frontage, which extends to inclu	ude Newton village to the east.
Will SMP policy maintain coastal settlements and manage the impact of coastal flood and erosion?	The main town frontage of Porthcawl would continue to be protected to manage flood and erosion risk, through maintenance of the existing defences.
	At Newton, although the defences would be maintained for as long as possible, it is unlikely that there would be sufficient socio- economic justification to justify public coastal erosion and flood risk management investment to improve/ replace existing defences in the medium and long term. Therefore, these defences will no longer be maintained and would be allowed to fail. This would result in increased flood and erosion risk and potential loss of frontal properties.
Will SMP policy directly increase the actual or potential coastal erosion or flood risk to communities?	 Risk to communities would generally be managed through maintenance and upgrading of existing defences. However, there will be an increased risk of coastal erosion and flooding at Newton.
Is SMP policy sufficiently flexible to take account of dynamic coastal change?	Protection of socio-economic assets and local communities is the main policy driver along this frontage and therefore along much of the frontage, the policy is to maintain defences which would limit dynamic coastal change. However within Rest Bay and Trecco Bay public investment in defence improvement/ replacement is unlikely to be viable and therefore the coastline would be allowed to evolve naturally once defences have failed.
Could there be a detrimental impact on the fabric of coastal communities?	 Along most of this shoreline, there will be no impact on coastal communities since the risk of coastal erosion and flooding will continue to be managed.
	The loss of defences at Newton would lead to potential loss of fronto properties.
	nmercial properties and also includes a number of tourist facilities, including ent Park (western end of Sandy Bay) and the Trecco Bay caravan park are
Will SMP policy maintain key industrial, commercial and economic assets and manage the impact of coastal flooding and erosion?	The risk of coastal erosion and flooding to Porthcawl town, key assets and associated infrastructure will continue to be managed.
	There is likely to be the loss of some residential properties at Newton and coastal erosion to part of the Trecco Bay caravan park and some residential properties, dependent on future rates of coastal erosion and sea level rise.
Will the SMP policy ensure critical services and infrastructure remain operational, for as long as required?	 Continued maintenance of defences at Porthcawl would ensure that risk of coastal erosion and flooding to critical services and infrastructure is managed.
	Whilst defences remain at Newton, local services will be unaffected; however, from the medium term there would be an increased risk of flooding and erosion, as defences deteriorate and are allowed to fail. Many of these assets will, however, be lost at the same time as the properties they serve. Similarly, at Trecco Bay, loss of assets would be likely to occur at the same time as the caravans, holiday properties and residential properties they serve.
	There is a potential risk to the access road at Rest Bay, and to the lifeguard station, as defences fail. However, the defences should remain effective for long enough to enable alternative options to be developed and implemented.

¹ The SMP1 documents should be referred to for more details as unit boundaries do not always align with SMP2 policy units and the policies refer to different time periods.



Porthcawl to Sker Point (7)	Policy Statement – Portneawl to Sker Point (7,
(this is a summary of impacts, for full details see Appendix G SE	A Report)
Issue	Appraisal
Will there be an impact on marine operations and activities?	It is assumed that the harbour structures would be maintained and therefore the limited operations and activities which are currently undertaken from Porthcawl Harbour would continue.
Will SMP policy impact coastal flooding or erosion on agricultural	X There are no agricultural activities along this shoreline.
activities? Will the SMP policy ensure that MoD (Qinetiq) ranges remain operational?	X There are no MoD (Qinetiq) assets along this shoreline.
Receptor: Amenity and recreational use Porthcawl is a popular tourist destination and this frontage includes: the slip caravan and holiday park, Sandy Bay amenity beach, Coney Beach Amu Western Breakwater, Porthcawl Town Beach and promenade, Rest Bay amenity beach, Coney Beach Bay amenity beach, Coney Beach Amu	sement Park (at the western end of Sandy Bay), Porthcawl Harbour and
Could the SMP policy have an impact on tourism in the area?	Continued coastal erosion and flood risk management to Porthcawl will ensure that the risk of loss of the various tourist facilities is managed.
	Without investment in defences at Trecco Bay, there is a continued risk of coastal erosion and loss of assets along the edge of the holiday park, including adjacent residential properties. The rate of coastal erosion is likely to increase over time.
	Allowing localised defences to deteriorate and fail at Rest Bay could have a negative visual impact and affect tourist value and recreational use of the beach. It may also lead to loss of assets including the access road and lifeguard station, and parts of the golf course. However, these assets could be relocated inshore and the golf course redesigned.
Will SMP policy affect coastal access along, or to, the coast?	There is a risk of erosion to the coastal footpath at Rest Bay, which is expected to increase over time. There may also be vehicular access issues here if the road was severed as a result of coastal erosion.
Receptor: Historic environment There are numerous listed buildings within Porthcawl, including a number of foreshore.	ssociated with the harbour, as well as a number of wrecks on the
Will SMP policy maintain the fabric and setting of key historic listed buildings, cultural heritage assets and conservation areas?	The risk of coastal erosion and flooding to archaeological assets within Porthcawl would continue to be managed. However, listed buildings associated with harbour structures will be at increased risk of flooding during storms as a result of future sea level rise.
	There is a potential risk of erosion or submergence of wreck sites on the foreshore. The level of risk is dependent on future rates of erosion and sea level rise.
Will the SMP provide sustainable protection of archaeological and palaeo-environmental features or ensure adequate time for monitoring, assessment and mitigation measures to be devised in response to ongoing and future erosion.	 Continued maintenance and improvement of defences along much of this frontage would continue to manage the risk of loss of historic assets.
	 Wrecks on the foreshore would be subject to increased risk of flooding and erosion, although rates would be dependent on foreshore evolution and future rates of sea level rise and would not be affected by SMP policy.
Receptor: Landscape character and visual amenity There are no specific landscape designations along this frontage; howeve Sandy Bay is popular for the wide sandy intertidal beach. Porthcawl is a type of the sandy intertidal beach.	
Will SMP policy maintain a range of key natural, cultural and social features critical to the integrity of the coastal landscape?	 For much of this shoreline there is no proposed change from existing policy, therefore minimal change to the landscape, particularly in the short term. This includes the main tourist resort of Porthcawl.
	From the medium term, abandonment of defences at Newton may adversely affect the visual landscape, as the defences deteriorate and fail. The only requirement to remove the remains of defences would be if they represented a safety risk to the public.
Could SMP policy lead to the introduction of features which could be unsympathetic to the character of the landscape?	There is no intent to provide defences along lengths of shore which are currently undeveloped, apart from along the eastern half of Sandy Bay.
Receptor: Biodiversity, flora and fauna There are no specific designations along this frontage.	
Will SMP policy enable a sustainable approach to habitat management?	There are no new defences proposed in currently undefended areas, therefore this is considered a sustainable approach to natural evolution of the coastline and its habitats.
Will SMP policy maintain or enhance any international, national or local sites of natural conservation interest?	 Future sea level rise is likely to lead to a natural reduction in the width of intertidal beaches at Newton, Trecco Bay, Sandy Bay, Town Beach and Rest Bay.
	 There could be natural loss of cliff top scrub and grassland at Lock's Common, but low erosion rates means that losses are likely to be small.
Will SMP policy <u>accelerate</u> intertidal narrowing (coastal squeeze) and will this affect designated habitats?	There is likely to be intertidal narrowing at Sandy Bay and Town Beach where defences would prevent shoreline retreat. However, this is not expected to be significantly greater than that which would occur if defences were abandoned, due to the resistant nature of

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Porthaguel to Sker Point (7)	Policy Statement – Portneawl to Sker Point (7
Porthcawl to Sker Point (7) (this is a summary of impacts, for full details see Appendix G SE	A Report)
Issue	Appraisal
	the underlying geology and presence of rocky outcrops.
	At Newton, Trecco Bay and Rest Bay, the intent is to allow the coast to evolve naturally, with no artificial backshore constraints. In places natural intertidal narrowing may still occur as the resistant cliffs may not retreat at the same rate as the sea level rises. This is dependent upon future rates of sea level rise.
Will there be a net loss of BAP habitat within the SMP timespan as a result of SMP policy?	 Narrowing of Sabellaria alveolata reefs at Porthcawl due to the provision of defences. This would occur in the short, medium and long term.
Receptor: Earth heritage, soils and geology	
There are no specific designations along this frontage. Does SMP policy work with natural processes and enhance or maintain	
natural features?	 Along much of this frontage, maintenance of defences would restrict natural processes.
	Allowing defences to fail would enable reactivation of the dune system. However, they have been so heavily modified that the relict dunes are likely to erode rather than revert to a naturally functioning dune system.
	There are numerous rocky outcrops along the main Porthcawl frontage, and in these areas it is assumed that a policy of no active intervention would apply, enabling natural features to be maintained.
Will SMP policy maintain or enhance the visibility of coastal geological exposures, where designated?	X There are no designated exposures along this frontage.
Receptor: Water	
and groundwater bodies in the SMP2 area that have the potential to be a	ver mouths, which are partially saltwater but are influenced by freshwater) iffected by SMP2 policies.
Will SMP policy manage the risk of pollution from contaminated sources?	Maintaining the defences within Porthcawl would manage risk of erosion to the potentially contaminated material that was used to infill the former inner harbour (Salt Lake car park).
Will SMP policy adversely affect water bodies in the coastal zone?	Considered jointly, the NAI and HTL policies are considered unlikely to prevent WFD objectives being achieved in the Bristol Channel Outer North water body. HTL at PU7.2 is unlikely to have any effect as the relict dunes would not revert to natural functioning even if the frontage was allowed to evolve naturally, and HTL at PU7.3 may result in loss of sandy beach habitat for invertebrate biological quality elements but this would be localised.
	 The Swansea Southern Carboniferous Limestone groundwater body will be unaffected. There are no surface freshwater bodies.

Impact colour key	+ Positive Neutral - Negative X Not applicable
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Porthcawl to Sker Point	(/)					
ACTION PLAN		D. "	A-Ray Baradakan	Datas III I	D	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Action	Action Ref	Policy Unit	Action Description (to be approved)	Potential source for funding (subject to approval)	Responsibility Lead partner * (supporting partners)	When by (subject to funding)
1. Studies for Scenario Area			-			
2. Studies for Policy Units	2.1	7.1	Undertake community engagement to develop a coastal erosion and flood risk management plan which the ideally be supported by the local community, This will involve consideration of alternative coastal erosion and flood risk management options (including wide ranging adaptation options) and alternative funding options when it is not possible to justify public investment in coastal erosion and flood risk management. This may it volve individual flood resilience or flood protection measures and/ or the provision of an inhanced flood warning service.	VAG	EALV	0 to 5 years
	2.2	7.2	Future development of Trecco Bay is likely to include defence improvements which shaped to manage the risk of coastal erosion to this site whilst minimising impacts alongshore	Private developer	Private developer (P-BC)	0 to 20 years
	2.3	7.3	Future development of Sandy Bay, Coney Beach Amusemant Park, Eastern prome adde and former are narbour (Salt Lake car park), Porthcawl Harbour and Western Brakwater which should be a veloped to reduce impacts on the amenity beach and to manage the risk of cognal erosion and flooring inshore we st minimaling impacts alongshore. Continue to undertake works to instruct the condition of, and to enture the other my of, the Western Breakwater which provides an important he alland control to the beach within Sandy Bay.	WAG/ Private developer	Private developer (BCBC)	0 to 20 years
	2.4	7.4	Develop a long term sustainable flood and coastal erosion of management plan for Porthcawl Town Reach seawall, promenade and revetment to continue to manage the risk of code all custon and floodting to Porthcawl response to future climate change sea level rise, subject to availability counting for coastal erosion and flood risk management.	WAG	BCBC	0 to 20 years
	2.5	7.5	Subject to the availability of funding developed long team sustainable cool and coastal brosion risk management plan for coastal asset within Rest Bay including the life ward station, slipway and coess road.	WAG	BCBC	0 to 20 years
	2.6	7.5	Develop a long term sustainable floor, and coal rerosions, management class for assets which are at risk of future coaster erosion along the vately owned any all Porthcawl links got course.	Private landowner	Private landowner (BCBC)	0 to 20 years
3. Strategy						
4. Scheme work						
5. Monitoring (data collection)	5.1	All	Undertake beach and toastal defencement monitoring to inform further addies and future SMP reviews. In particular, beach evels are defence condition at Newton, Trecco Bay candy Bay, Porthcawl Town Beach, Marine Drive and Rest Bay, hould be monitored. This includes continuing your the annual survey of dunes at Newton to assess the risk of 'bak door looding'. This information should provonly be used in future coastal management, but also to assess in stakeholder liuison by use of settle in public education campaigns.	WAG	BCBC (Wales Coastal Monitoring Centre)	0 to 20 years
	5.2	All	Continue we existing leach profile monitoring programme and provide information to the Wales Coastal Monitoring Central Storage and analysis. Use begin profile data to identify the future risk of undermining and hopping of existing defendes.	WAG	Coastal Group (Wales Coastal Monitoring Centre)	0 to 100 years
	5.3	All	Unsertate periodic défence inspection a cluding condition assessment and photographs. Confirm defence crest leveis.	WAG	BCBC (Wales Coastal Monitoring Centre)	0 to 100 years
	5.4	All	Undertake further studies and associated modelling, to better understand sediment regimes in the SMP area and inform future coastal management.	WAG	Coastal Group	0 to 20 years
	5.5	All	Monitor risk to the coastal footpath and investigate potential re-routing of the path where appropriate.	WAG	BCBC	Ongoing
6. Asset management	6.1		Ensure that atents of public and privately owned defences are defined and mapped to inform future management decisions.	WAG	BCBC (Wales Coastal Monitoring Centre)	0 to 20 years



				Policy :	Statement – Porthcawl to	o Sker Point (7)
	6.2	All	Undertake an appraisal of asset inspection and beach profile monitoring data to assess the existing and future risk of undermining and overtopping of existing structures.	WAG	Coastal Group (Wales Coastal Monitoring Centre)	0 to 20 years
7. Communication	7.1	coastal erosion and flood risk management plans and suitable mitigation preasures. Private landowner/ Private developer 7.2 All Undertake monitoring and management of Action Plans to ensure SMP policies are part into fractice. WAG Coastal Group 0 to 10 to	0 to 20 years			
	7.2	All	Undertake monitoring and management of Action Plans to ensure SMP policies all put into tractice.	WAG	Coastal Group	0 to 100 years
8. Interface with planning and land management	nagement rise.	EAW	0 to 20 years			
	8.2	All	Ensure SMP policies and flood and erosion risks are accounted for in the next revisions of large use plans in order to help manage residual risks from coastal erosion and flooding and to intermediate plans decisions.	WAG	BCBC planning	0 to 20 years
9. Emergency response	9.1	7.1	Development, monitoring and review of extergency remans to prepare for Gorm events which are likely to exceed existing defence standards of protection arread to failure of existing defences (for example following coastal erosion, breach or overtopping).	r to WAG EAW	EAW	O to 20 years
	9.2	7.2	Development, monitoring and eview of emargency insponse plans to be pare for storm events which are likely to exceed existing defence standards of protection or lead to failure of existing defences (for example following coastal erosion, breach or overtopping).	Private landowner	Private landowner (BCBC)	0 to 20 years
	9.3	7.3	Development, monitoring and review of amergancy response plans to prepare for storm events which are likely to exceed existing defence standard of protection or lead to failure of existing defences (for example following coastal erosion, breach or diertopping).	WAG (Private developer)	BCBC (Private developer)	0 to 20 years
	9.4	7.4	Development, monitoring and review of emergency response plans to prepare for storm events which are likely to exceed existing defences. Indicate of protection or lead to failure of existing defences (for example following coasta erosion, breach or overtopping).	WAG	BCBC	0 to 20 years
10. Adaptation/ resilience			-			
11. Flood forecasting and warning	11.1	All	Continue With risk-based improvements to flood risk maps and inundation modelling to provide improved flood warning service.	WAG	EAW	0 to 20 years
12. Habitat creation and environmental mitigation			-			

^{*} Note: It is recommended that the lead partner/s investigate the polyntial or local partnerships and alternative sources of funding.