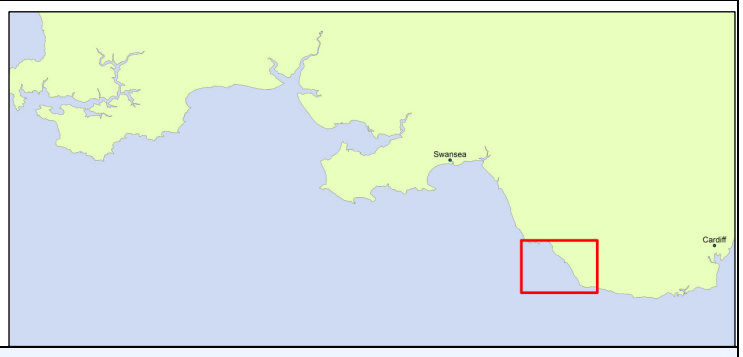
Nash Point to Porthcawl (6)



Recommendations:

Long Term Plan

The coast is characterised by cliffs, which are slowly eroding and designated for their geological value and as part of the Glamorgan Heritage Coast, and the large dune system of Merthyr-mawr Warren. This frontage is typically undeveloped, apart from the seawall adjacent to the car park at Dunraven Bay (Southerndown) and the village of Ogmore-by-Sea. The long term plan is to maintain the undeveloped nature of this coast. This will ensure that the high ecological and landscape value of this coastline is preserved.

Location (Policy Unit)		Preferred SMP2 policy and approach to implementing the Plan		
		0-20 years	20-50 years	50-100 years
6.1	Nash Point to Ogmore River	This coastline is currently undefended and the long term policy is to allow the coast to evolve and retreat naturally through **no active intervention**. This policy does not preclude the maintenance of the wall adjacent to the car park at Dunraven Bay (Southerndown), since this is not considered to be having a significant impact on the wider shoreline and would enable continued public access to the coast, subject to the availability of private or public funding for coastal erosion and flood risk management or provision of amenity/ tourist facilities. Any improvement/ upgrading works would be subject to obtaining the necessary consents, licences and approvals.		
6.2	Ogmore River to Newton (Merthyr Mawr)	To allow this largely undeveloped extensive dune system to respond and evolve naturally, a long term policy of **managed realignment** is proposed. This will enable long term habitat management and introduction of measures, as necessary, to manage and control recreational pressures.		

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 6.2 - minimal intervention would be the preferred management intervention at Merthyr Mawr, with management activities undertaken as necessary in response to the future development of the dune system. Dune complexes are sensitive to any changes in the wind/wave climate, including changes in frequency or severity of storms and sea level rise. However, these risks are currently poorly understood. Although the SMP boundary is downstream of the sewage works, if the risks to this asset increase, there could be a need for localised management to manage the risk of coastal erosion and/ or flooding to this critical infrastructure, subject to obtaining the necessary consents, licences and approvals.

Changes from present management / SMP1 policy[1]

The overall vision for the coastline has not changed significantly from SMP1 (although terminology used differs slightly) or current management practice.

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(this is a summary of impacts, for full details see **Appendix G SEA Report**)

Issue	Appraisal
Receptor: Property, population and human health Ogmore-by-Sea is the only significant settlement along this frontage, although there are isolated properties along the coast and the small village of Southerndown, which is set back from the coast.	
Will SMP policy maintain coastal settlements and manage the impact of coastal flood and erosion?	x Properties and assets at Ogmore-by-Sea are situated on high resistant rock cliffs and are therefore not at risk from coastal erosion or flooding; Southerndown is located inland and properties are not at risk from coastal erosion or flooding.
Will SMP policy directly increase the actual or potential coastal erosion or flood risk to communities?	+ There are no coastal communities within the area at risk from flooding and erosion.
Is SMP policy sufficiently flexible to take account of dynamic coastal change?	+ Dynamic coastal change is recognised, with a policy of no active intervention along the cliffed frontage and managed realignment of the dune system to allow continued natural coastal evolution.
Could there be a detrimental impact on the fabric of coastal communities?	x There are no coastal communities within the area at risk from flooding and erosion.
Receptor: Land use, infrastructure and material assets This coastline is generally undeveloped. In addition to the settlements at Ogmore-by-Sea and Southerndown, there is a car park and lifeguard station at Dunraven Bay, along with a car park, toilets and café at Ogmore-by-Sea. Ogmore sewage works is located by NTL on the northern bank of the Ogmore River.	
Will SMP policy maintain key industrial, commercial and economic assets and manage the impact of coastal flooding and erosion?	– There will be potential loss of the car park and lifeguard station at Dunraven Bay following failure of the existing defences.
Will the SMP policy ensure critical services and infrastructure remain operational, for as long as required?	– There is risk of increased tidal flooding to the Ogmore sewage works as sea level rises, which may affect its operation. Other than this there is no major infrastructure along this section of coast. – There is a future risk of coastal erosion to the access road to Dunraven Bay. This road has recently been set back to manage risk of coastal erosion.

[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.

Nash Point to Porthcawl (6) (this is a summary of impacts, for full details see **Appendix G SEA Report**)	
Issue	**Appraisal**
Will there be an impact on marine operations and activities?	x There are no large scale marine operations along this frontage.
Will SMP policy impact coastal flooding or erosion on agricultural activities?	− Risk of loss of small areas of cliff top agricultural land, although this would be dependent on erosion rates. Areas lost would not be expected to be significant.
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 The main recreational value of this coastline is in its natural and undeveloped nature. There is a popular beach and facilities at Dunraven Bay (Southerndown) and Ogmore-by-Sea. There is a coastal footpath along much of the cliffed frontage and at Merthyr-mawr, some of which is on the Valeways Millennium Heritage Trail.	
Could the SMP policy have an impact on tourism in the area?	− There is a risk of loss of beach access at Dunraven Bay, and associated facilities, if the car park seawall fails. Risk of coastal erosion leading to the loss of the Dunraven Bay access road in the medium or long term. + Generally the coast will be allowed to evolve naturally, thereby maintaining the natural landscape, which is an element of the tourist interest.
Will SMP policy affect coastal access along, or to, the coast?	− There is a small risk to the coastal footpath, due to cliff erosion or localised cliff falls. This risk is expected to increase over time. There is potential for the footpath to be relocated or realigned slightly inshore, if there is sufficient notice. There may also be beach access issues at Dunraven Bay if the car park seawall fails.
Receptor: Historic environment There are a range of cliff top Scheduled Monuments along this frontage including Nash Point Camp SM, Cwm Bach Camp SM and Dunraven Castle Hillfort SM. A large area of Merthyr-mawr Warren is designated Scheduled Monument for evidence of prehistoric occupation. There are several listed buildings, concentrated around Southerndown, and a number of wreck sites. Locally important archaeology includes World War II features.	
Will SMP policy maintain the fabric and setting of key historic listed buildings, cultural heritage assets and conservation areas?	− There are cliff top Scheduled Monuments, of national importance, at risk from coastal erosion. Parts of these sites are already eroding. As these are located on undeveloped frontages, the recommended policy is to allow continued natural evolution. − Risk to designated features within Merthyr-mawr Warren, dependent on dune evolution. − There is a risk of erosion or submergence of locally important archaeology, including wreck sites. The level of risk is dependent on erosion rates and rates of 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.	● Along currently undefended sections there is no intent to provide new defences for Scheduled Monuments, as this would not be economically justified and is considered unsustainable. However, erosion rates tend to be low which should allow time for monitoring, assessment and mitigation measures to be devised, where appropriate.
Receptor: Landscape character and visual amenity This frontage is part of the Glamorgan Heritage Coast, for its plunging cliffs and secluded coves, along with the presence of several Celtic hill forts on the cliff tops; the area is also noted for its dramatic rocky foreshores, and Merthyr-mawr Warren, an extensive sand dune system which includes some of the largest dunes in Europe.	
Will SMP policy maintain a range of key natural, cultural and social features critical to the integrity of the coastal landscape?	+ Allowing natural coastal evolution will enable the character of the coast to be maintained. − Abandonment of the car park seawall at Dunraven Bay (Southerndown) may adversely affect the visual landscape locally as the defences deteriorate and fail. The only requirement to remove the remains of defences 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 any additional defences.
Receptor: Biodiversity, flora and fauna There are a number of designated sites along this frontage: Monknash Coast SSSI, Southerndown Coast SSSI, Merthyr-mawr Warren SSSI and National Nature Reserve, Kenfig Special Area of Conservation and Dunraven Bay is also a Special Area of Conservation.	
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. Failure of the defences at Dunraven Bay would enable sustainable habitat management locally. + At Merthyr-mawr Warren a policy of managed realignment is considered sustainable and would allow natural coastal processes to continue, but with the option of implementing small-scale management techniques, if necessary, to improve or maintain the habitat.
Will SMP policy maintain or enhance any international, national or local sites of natural conservation interest?	● There could be natural loss of cliff top vegetation, including several rare species, designated as part of Monknash Coast SSSI, Southerndown Coast SSSI and Dunraven Bay SAC, but the low erosion rates means losses are likely to be small. − Failure of the car park wall at Dunraven Bay could lead to increased risk of periodic minor flooding up the valley, potential affecting habitats and species designated under Southerndown Coast SSSI. + The shoreline would become more natural at Dunraven following

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Issue	**Appraisal**
	defence deterioration and failure, and this could improve conservation interest locally. ● Natural erosion of foredunes at Merthyr-mawr Warren could occur as sea level rises. There may also be some change of habitats within the dunes if flood risk increases. However, the dune system would be expected to maintain its integrity overall. ✚ Local dune management techniques could be implemented, if required, at Merthyr-mawr Warren SSSI and NNR in order to maintain or enhance the dune system.
Will SMP policy <u>accelerate</u> intertidal narrowing (coastal squeeze) and will this affect designated habitats?	✚ The cliffed coast along the designated frontages would be allowed to evolve naturally, with no artificial backshore constraints, except at Dunraven Bay where they would be allowed to fail. 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. However, the resistant nature of the cliffs is such that intertidal narrowing would not be expected to increase cliff erosion rates and therefore this would not affect the designated cliff top and valley vegetated habitats ✚ At Merthyr-mawr Warren, the dunes would be allowed to evolve naturally, leading to natural coastal narrowing as sea level rises, if the stable vegetated dunes prevent retreat.
Will there be a net loss of BAP habitat within the SMP timespan as a result of SMP policy?	✚ Potential extension of *Sabellaria alveolata* reefs at Southerndown and at the mouth of the River Ogmore as the shoreline is allowed to move inland through natural evolution. This extension would be allowed in the short, medium and long term. – Loss of Sabellaria alveolata reefs at Trecco Bay due to the provision of defences resulting in coastal narrowing.
Receptor: Earth heritage, soils and geology This coastline features nationally important geology and earth heritage as is designated as: Monknash Coast SSSI and Southerndown Coast SSSI.	
Does SMP policy work with natural processes and enhance or maintain natural features?	✚ The plan is to allow natural coastal evolution, to enable coastal processes to continue.
Will SMP policy maintain or enhance the visibility of coastal geological exposures, where designated?	✚ Where the shoreline is currently undefended, there is no intention to build new defences, therefore geological exposures in the cliffs will be maintained, which will maintain the status of Monknash Coast SSSI and Southerndown Coast SSSI. ● At the Southerndown Coast SSSI, sea level rise may, in the long term, reduce visibility of geological exposures and lead to submergence of intertidal rock platforms and sea caves.
Receptor: Water There are numerous coastal, freshwater, transitional (areas of water near river mouths, which are partially saltwater but are influenced by freshwater) and groundwater bodies in the SMP2 area that have the potential to be affected by SMP2 policies.	
Will SMP policy manage the risk of pollution from contaminated sources?	x There are no known contamination issues along this shoreline.
Will SMP policy adversely affect water bodies in the coastal zone?	✚ The Bristol Channel Inner North and Ogmore water bodies are both already at good status. NAI will allow continued natural evolution of the coastline whilst MR at Ogmore River (PU6.2) has the potential for new habitats to develop in the dune complex, with a positive impact on biological quality elements. WFD objectives are supported by this policy. ● The Swansea Jurassic Lias and Swansea Southern Carboniferous Limestone groundwater bodies and river water bodies will be unaffected.

Impact colour key	✚ Positive	● Neutral	– Negative	x Not applicable

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ACTION PLAN

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	6.2	Develop a management strategy for Merthyr Mawr dunes to enable this largely undeveloped and extensive dune system to respond and evolve naturally whilst recognising the possible need to manage visitor pressure. Identify and confirm management objectives and triggers for intervention.	WAG	BCBC/CCW)	0 to 20 years
	2.2	6.2	Engage with and encourage Dŵr Cymru Welsh Water to identify the existing and future risk of coastal erosion and flooding to Ogmore sewage treatment works to inform the development and management plan, taking into consideration future climate change (sea level rise) and potential alternative flood mitigation/ protection/ resilience and adaptation measures.	Dŵr Cymru Welsh Water	Dŵr Cymru Welsh Water (Coastal Group)	0 to 5 years
3. Strategy			-			
4. Scheme work			-			
5. Monitoring (data collection)	5.1	6.1 & 6.2	Monitor cliff erosion rates and dune evolution. This information should not only be used for future coastal management, but also to assist in stakeholder liaison by use of data in public education campaigns.	WAG	VoG/ BCBC (Wales Coastal Monitoring Centre)	0 to 20 years
	5.2	6.1 & 6.2	Continue with existing beach profile monitoring programme and provide information to the Wales Coastal Monitoring Centre for storage and analysis. Use beach profiles to identify the future risk of undermining and overtopping of existing defences,	WAG	Coastal Group (Wales Coastal Monitoring Centre)	0 to 100 years
	5.3	6.1 & 6.2	Undertake periodic defence inspection including condition assessment and photographs. Confirm defence crest levels.	WAG	Coastal Group	0 to 20 years
	5.4	6.1	Monitor risk of coastal erosion to the coastal footpath and investigate potential re-routing of the path where appropriate.	WAG	Coastal Group	Ongoing
	5.5	6.2	Monitor flood risk to Ogmore sewage works	Dŵr Cymru Welsh Water	Dŵr Cymru Welsh Water (Coastal Group)	0 to 100 years
			-			
7. Communication	7.1	6.2	Ensure that extents of public and privately owned defences are defined and mapped to inform future management decision	WAG	BCBC	0 to 20 years
	7.2	6.1 & 6.2	Undertake monitoring and management of Action Plans to ensure SMP policies are put into practice.	WAG	Coastal Group	0 to 20 years
	7.3	6.2	Undertake a campaign to educate the public as to the impacts of human activities on dune systems.	WAG	Coastal Group	0 to 100 years
8. Interface with planning and land management	8.1	6.2	Continue with risk-based improvements to flood risk maps to provide an appraisal of likely future projected sea level rise	WAG	EAW	0 to 20 years
	8.2	6.1 & 6.2	Ensure SMP policies and flood and erosion risks are accounted for in the next revisions of land use plans in order to help manage residual risks from coastal erosion and flooding, and to inform future planning decisions.	WAG	BCBC planning/ VoG planning	0 to 20 years
9. Emergency response			-			
10. Adaptation/ resilience			-			
11. Flood forecasting and warning	11.1	6.2	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 potential for local partnerships and alternative sources of funding.