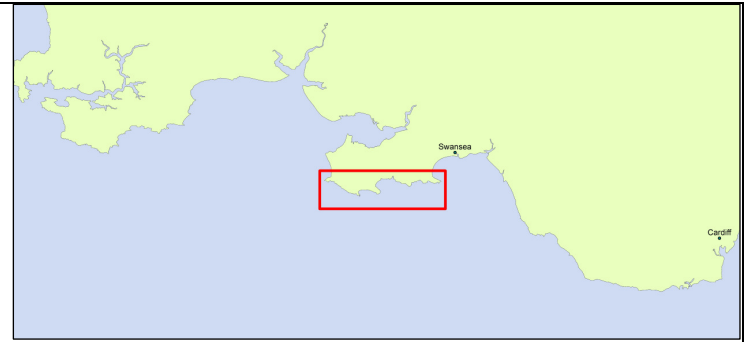


## Mumbles Head to Worms Head (10)



### Recommendations:

#### Long Term Plan

The plan is to manage and potentially enhance this important natural coastal heritage with minimal intervention, whilst maintaining the tourist value of the area and continuing to manage the risk of coastal erosion and flooding to local communities.

The preferred policy is to allow the shoreline to evolve naturally through no active intervention along much of the currently undefended frontage, with short stretches of defences typically confined to the back of the bays, often reducing the risk of coastal erosion and flooding to tourist/ amenity facilities or providing promenade areas. Managed realignment will allow the dunes to evolve naturally, and will enable dune management to be undertaken as required. Existing defences at Langland Bay, Caswell Bay and Port Eynon Bay will be maintained assets (and may be upgraded, subject to the availability of public funding for coastal erosion and flood risk management) due to the tourist value through a policy of hold the line. Due to the natural limited sediment linkages between the bays, these defences only tend to have a localised impact, but future maintenance will depend upon availability of funding and in some locations it is unlikely that the risk to assets would justify public spending on flood and coastal erosion defences.

Privately owned defences within Oxwich Bay and Port Eynon Bay could be maintained for as long as possible, before the shoreline is allowed to evolve naturally, since improvements are unlikely to attract public funding. Private landowners may be able to fund defence improvements subject to obtaining the necessary licences, permissions and consents

Location (Policy Unit)		Preferred SMP2 policy and proposed approach to implementing the Plan		
		0-20 years	20-50 years	50-100 years
10.1	Mumbles Head to Rothers Sker	The policy is to allow the coast to evolve and retreat naturally through <b>no active intervention</b> , to maintain geological and landscape value. In the long term there may be loss or damage to a local access road, therefore an alternative route will need to be considered.  This would not preclude maintenance or upgrading of existing localised defences, subject to obtaining necessary consents, licences and approvals, since these are not thought to be having a significant impact on wider scale coastal evolution. Over time defences may, however, become technically more difficult to sustain, due to sea level rise and associated beach narrowing.		
10.2	Langland Bay (Rothers Sker to Snapple Point)	Langland Bay is a key tourist resort on the Gower Peninsula, therefore the policy is to continue to <b>hold the line</b> through maintenance and upgrading existing defences to manage the risk of coastal flooding and erosion, subject to the future availability of public funding for coastal erosion and flood risk management. Construction of further defences or extension of existing defences is not recommended since beach coves are key landscape features of the Gower Area of Outstanding Natural Beauty.		
10.3	Snapple Point to Caswell Bay	This frontage is currently undefended and the policy is to continue to allow the coast to evolve and retreat naturally through <b>no active intervention</b> to maintain the landscape value of this shoreline and to ensure that designated geological exposures do not become obscured.		
10.4	Caswell Bay	Caswell Bay is a key tourist resort on the Gower Peninsula, supporting a number of tourist facilities. The policy is to continue to <b>hold the line</b> through maintenance and upgrading existing defences to manage the risk of coastal flooding and erosion, subject to the future availability of public funding for coastal erosion and flood risk management. Construction of further defences or extension of existing defences is not recommended since beach coves are key landscape features of the Gower Area of Outstanding Natural Beauty.		
10.5	Caswell Bay to Three Cliffs Bay	This frontage is currently undefended and the policy is to allow the coast to evolve and retreat naturally through <b>no active intervention</b> . This will maintain its geological and landscape value.		
10.6	Three Cliffs Bay	The policy is to enable the undeveloped beach and dune system to function naturally with minimal interference, through <b>managed realignment</b> .		
10.7	Tor Cliffs	This frontage is currently undefended and the policy is to allow the coast to evolve and retreat naturally through <b>no active intervention</b> . This will maintain its geological and landscape value.		
10.8	Oxwich Bay	A policy of <b>managed realignment</b> will allow this largely undeveloped extensive dune system to respond and evolve naturally, whilst enabling long term habitat management activities to be undertaken. As part of this policy realignment of the existing car park would need to be considered and adaptation, flood resilience or flood protection measures to the limited number of residential and non-residential properties and the church access road which are at risk may be required.  This would not preclude landowners from privately maintaining or upgrading existing defences, subject to obtaining the necessary consents, licences and approvals. Localised defences at the western end of the bay would have a limited impact on coastal processes in the wider shoreline and bay.		
10.9	Oxwich to Horton	This frontage is currently undefended and the long term policy is to allow the coast to evolve and retreat naturally through <b>no active intervention</b> . This will maintain its geological and landscape value.		
10.10	Port Eynon Bay (Horton to Port Eynon Point)	The <b>managed realignment</b> policy will enable this largely undeveloped beach and dune system to respond and evolve naturally.  Adaptation and property level flood protection or resilience measures should be considered to residential properties and heritage features at the western end of Port Eynon Bay including the youth hostel, cottages and the Salt House.  The row of residential properties at the eastern end of Horton could be at risk from coastal erosion as sea level rises		

		and the beach retreats. It is unlikely, however, that defence of the limited number of assets would be sufficient to attract public funding of coastal erosion and flood risk management measures and construction of new permanent defences would be detrimental to the natural landscape and SSSI designation of the area. Small scale works (which could include existing defences surrounding the Salt House and potential measures to reduce the risk of coastal erosion to properties at the western end of the Bay (youth hostel and cottages) and coastal residential properties at Horton) could be considered, as part of the managed realignment policy, which would allow some management to reduce the rate of coastal retreat, subject to obtaining the necessary consents, approvals and licences.
10.11	<b>Port Eynon Point to Worms Head</b>	The long term policy is to allow the coast to evolve and retreat naturally through <b>no active intervention</b> , to maintain its geological and landscape value.
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.		
<b>Policy sensitivities and key uncertainties (further detail is included in Appendix K)</b>		
Policies along the undeveloped cliffed frontages are considered of low sensitivity, but management of the coastal footpath could be better informed through improved monitoring of rates of cliff recession.		
Policy units 10.2 and 10.4 - justification for policies at Langeland Bay and Caswell Bay is based upon the tourist value of the resort and beaches. These policies are sensitive to availability of public funding for coastal erosion and flood risk management, since there are only a small number of residents, properties, amenity facilities (including cafes and beach huts) and car parks at risk.		
Policy unit 10.10 – Risk of erosion to the Salt House, which is a nationally important monument, it may be necessary to continue to maintain and to improve localised defences at this feature in the long term.		
<b>Changes from present management / SMP1 policy<sup>1</sup></b>		
Most of these policies represent a continuation of both current management and SMP1 policy. The key differences are as follows:		
10.1 – SMP1 suggested holding the existing defences, i.e. within Limeslade and Bracelet Bays. There would, however, be limited justification for public investment in defences, but this proposed SMP policy does not preclude maintenance/ upgrading of existing defences, subject to obtaining the necessary consents, licences and approvals.		
10.8 - Retreat with selective hold the line in the south west corner of the bay (at the Oxwich Bay hotel and church access road). Given the important nature conservation value of this stretch, the recommended SMP2 policy is for adaptation measures rather than hold the line, with managed realignment of the dunes.		
10.10 - SMP1 suggested 'Hold line – possible future retreat'. Given the important nature conservation value of this stretch, the recommended SMP2 policy is for adaptation or erosion-slowing measures rather than hold the line, with managed realignment of the dunes.		

<b>Mumbles Head to Worms Head (10)</b> (this is a summary of impacts, for full details see <b>Appendix G SEA Report</b> )	
<b>Issue</b>	<b>Appraisal</b>
<b>Receptor: Property, population and human health</b>	
This frontage is generally undeveloped, with key settlements at Langeland, Caswell, Oxwich and Port Eynon, although there are a number of isolated properties along the coast. Most of the coast is undefended, although there are defences in some of the bays which manage the risk of coastal erosion and flooding to various residential areas and tourist facilities.	
Will SMP policy maintain coastal settlements and manage the impact of coastal flood and erosion?	<ul style="list-style-type: none"> <li>+ Due to the isolated settlements and resistant nature of much of this coastline there is typically a low risk of coastal erosion and flooding to residential properties along this frontage.</li> <li>- Properties adjacent to the shore at Oxwich, Horton and Port Eynon are at risk from coastal erosion and flooding. It is unlikely that there would be sufficient socio-economic justification to construct new defences in these locations due to the low number of properties, and potential impacts on the natural dune systems. Therefore there will be an increased risk of coastal erosion and flooding to these residential properties. There will be a risk of coastal erosion to a small number of residential properties at Limeslade Bay if existing defences are allowed to fail. Inshore at these locations the land rises steeply reducing the future risk of coastal erosion and flooding to the wider community.</li> </ul>
Will SMP policy directly increase the actual or potential coastal erosion or flood risk to communities?	+ Along the majority of this shoreline there are currently no defences, and new defences would not be constructed. Maintaining existing defences at Langeland and Caswell will continue to manage the risk of coastal erosion and flooding to tourist/ amenity facilities at these locations, subject to the future availability of public funding for coastal erosion and flood risk management.
Is SMP policy sufficiently flexible to take account of dynamic coastal change?	+ The SMP policy recognises dynamic coastal change, with policies of no active intervention along the majority of the frontage. However, this has been balanced against the need to maintain existing defences to manage the risk of coastal erosion and flooding to key tourist/ amenity assets, subject to the future availability of public funding for coastal erosion and flood risk management.
Could there be a detrimental impact on the fabric of coastal communities?	<ul style="list-style-type: none"> <li>x Typically there will be no significant impact on coastal communities due to the undeveloped nature of the shoreline, resistant nature of the cliffs and because the land typically rises steeply from the coast reducing the future risk of coastal erosion and flooding to the wider communities.</li> <li>- At Oxwich, Port Eynon and Horton there are a number of residential properties and assets at risk from coastal erosion and flooding. Whilst there are limited numbers of residential properties at risk, there may</li> </ul>

<sup>1</sup> 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.

<b>Mumbles Head to Worms Head (10)</b> (this is a summary of impacts, for full details see <b>Appendix G SEA Report</b> )	
<b>Issue</b>	<b>Appraisal</b>
	be greater impact on the communities in terms of insuring properties, and economic losses if tourist assets are adversely affected.
<b>Receptor: Land use, infrastructure and material assets</b> The south coast of the Gower Peninsula is a key tourist destination primarily due to the natural beauty of the coast, beaches and countryside. In addition to the various villages, farmland and associated infrastructure there are a number of camping and caravan sites.	
Will SMP policy maintain key industrial, commercial and economic assets and manage the impact of coastal flooding and erosion?	<ul style="list-style-type: none"> <li>- There will be potential loss of assets at Oxwich, Horton and Port Eynon. Assets located along the top of the cliffs are not likely to be affected due to resistant nature of the cliffs and low rates of cliff erosion.</li> </ul>
Will the SMP policy ensure critical services and infrastructure remain operational, for as long as required?	<ul style="list-style-type: none"> <li>X There is no major infrastructure along this section of coast, except for a potential risk of tidal flooding to the A4118 (locally important access route along south Gower) some distance inland at Parkmill and Knelston during extreme flood events. This flood risk would need to be reviewed in light of flood risk from other sources (including surface water flooding) and it is likely that this could be mitigated by localised flood risk measures.</li> <li>- Local services at Oxwich and Port Eynon may be at risk from coastal erosion and flooding. The future risk is dependent upon future sea level rise and dune evolution.</li> <li>- There is a potential risk of coastal erosion to a local access road at Limeslade Bay if existing defences are allowed to fail. However, alternative routes are available. Low lying roads adjacent to the shoreline at Oxwich and Port Eynon may also be at increased risk of tidal flooding, dependent upon rates of future sea level rise and dune evolution.</li> <li>X Low risk of coastal erosion or flooding to Tutt Head Coastguard Station (adjacent to Mumbles Head) since it is located on a high resistant rock headland.</li> </ul>
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?	<ul style="list-style-type: none"> <li>- Risk of loss of small areas of cliff top agricultural land, dependent on future rates of coastal erosion. Areas lost would not be expected to be significant.</li> </ul>
Will the SMP policy ensure that MoD (Qinetiq) ranges remain operational?	X There are no MoD (Qinetiq) assets along this shoreline.
<b>Receptor: Amenity and recreational use</b> This coastline includes a number of caravan and camping sites and recreational, amenity and tourist facilities within the various settlements. The south coast of the Gower Peninsula is a popular recreation, amenity and tourist destination. The undeveloped coast, beaches and landscape are used for a range of activities including walking, bathing and surfing.	
Could the SMP policy have an impact on tourism in the area?	<ul style="list-style-type: none"> <li>+ The risk of coastal erosion and flooding to amenity and recreational facilities at Langland Bay and Caswell Bay would continue to be managed through maintenance of existing defences, subject to the future availability of public funding for coastal erosion and flood risk management.</li> <li>- The future risk to assets at Oxwich and Port Eynon including low-lying camping and caravan sites, car parks, and associated facilities, is dependent upon future rates of sea level rise and dune evolution.</li> <li>+ The remainder of the coast will be allowed to remain undisturbed, thereby maintaining the natural landscape, which is vital to the tourist interest.</li> <li>+ Beach retreat or narrowing may occur as sea level rises, potentially affecting recreational/ amenity use.</li> </ul>
Will SMP policy affect coastal access along, or to, the coast?	<ul style="list-style-type: none"> <li>- There is a continued risk to the coastal footpath, due to cliff erosion and/ or localised cliff falls, which is expected to increase over time. There is potential for the footpath to be relocated or realigned slightly inshore, if there is sufficient notice.</li> <li>- In the long term, the causeway to Worms Head may become permanently submerged, as a result of sea level rise. This is due to natural processes and is not considered a direct impact of the proposed policy.</li> </ul>
<b>Receptor: Historic environment</b> There are a range of designated archaeological and historic sites including Caswell Cliff Fort, Oxwich Bay Low Radar Station, Port Eynon Salthouse, and Lewes Castle Promontory Fort Scheduled Monuments, and listed buildings. There are also wreck sites on the foreshore, peat deposits at Port Eynon and evidence of prehistoric cave occupation.	
Will SMP policy maintain the fabric and setting of key historic listed buildings, cultural heritage assets and conservation areas?	<ul style="list-style-type: none"> <li>- There is a risk to cliff top Scheduled Monuments including Paviland Camp and Lewes Castle Promontory Fort. This risk is dependent on future rates of cliff erosion and/ or localised cliff falls.</li> <li>- Locally important foreshore archaeology would be at risk of erosion or submergence, dependent on future rates of coastal erosion and sea level rise. Sea level rise may also lead to loss of access into the sea caves and submergence of archaeological sites.</li> <li>- The Salthouse Scheduled Monument on the seafront at Port Eynon would be at increased risk of coastal erosion and flooding.</li> </ul>

<b>Mumbles Head to Worms Head (10)</b> (this is a summary of impacts, for full details see <b>Appendix G SEA Report</b> )	
<b>Issue</b>	<b>Appraisal</b>
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.	<ul style="list-style-type: none"> <li>● Along currently undefended frontages there is no intent to provide new defences, as this would not be socio-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. The risk of coastal erosion and/ or flooding to assets on the foreshore and in the intertidal zone is likely to increase over time, but there is likely to be time for appropriate measures to be undertaken.</li> </ul>
<b>Receptor: Landscape character and visual amenity</b>	
This frontage is part of the Gower Area of Outstanding Natural Beauty (AONB) for its landscape and range of landforms. The frontage west from Caswell Bay is also part of the Gower Heritage Coast, with the wide range of habitats, historic assets and geological exposures.	
Will SMP policy maintain a range of key natural, cultural and social features critical to the integrity of the coastal landscape?	<ul style="list-style-type: none"> <li>+ Allowing natural coastal evolution along the majority of the frontage will enable the character of the coast to be maintained.</li> <li>● As sea level rises, there is a risk that the causeway to Worms Head could become permanently submerged.</li> </ul>
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.
<b>Receptor: Biodiversity, flora and fauna</b>	
This undeveloped and renowned landscape has a range of SSSIs: Caswell Bay SSSI, Pwll-Du Head and Bishopston Valley SSSI, Pennard Valley SSSI, Nicholaston Wood SSSI, Oxwich Bay SSSI, Horton, Eastern and Western Slade SSSI and Gower Coast: Rhossili to Port Eynon SSSI. Pwlldu Head, Oxwich Point and west of Port Eynon are designated as part of the Limestone Coast of South West Wales Special Area of Conservation (SAC), and the coastline west of Oxwich Bay is designated as part of the Carmarthen Bay and Estuaries SAC, SPA and Ramsar site.	
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?	<ul style="list-style-type: none"> <li>● There is likely to be natural loss of cliff top habitats and areas of woodland, designated as part of many of the designated sites, but low erosion rates mean that losses are likely to be small. Newly exposed cliff faces could be colonised by interesting new species.</li> <li>● As sea level rises, there may be natural beach and dune erosion in Oxwich Bay which may affect the nature and extent of designated habitats. Foreshore and intertidal habitats would also be affected, particularly where the resistant cliffs prevent retreat.</li> </ul>
Will SMP policy <u>accelerate</u> intertidal narrowing (coastal squeeze) and will this affect designated habitats?	<ul style="list-style-type: none"> <li>+ The plan is to allow the coast to evolve naturally, typically with no artificial backshore constraints (other than locally within some of the bays). In places natural intertidal narrowing may still occur as the resistant cliffs or dune systems may not retreat at the same rate as the sea level rises. This is dependent upon future rates of sea level rise.</li> <li>- Maintenance of defences at Langland Bay and Caswell Bay could lead to intertidal narrowing. However, the defences are backed by resistant/ rising land which would result in intertidal narrowing even without man-made defences.</li> </ul>
Will there be a net loss of BAP habitat within the SMP timespan as a result of SMP policy?	<ul style="list-style-type: none"> <li>+ Potential extension of <i>Sabellaria alveolata</i> beds at Caswell Bay in the short, medium and long term.</li> <li>+ Extension of intertidal habitat at Oxwich Bay in the short, medium and long term due to provision of realigned defences.</li> <li>- Loss of clay exposure with and without piddock evidence due to natural evolution of the coastline in the short, medium and long term.</li> </ul>
<b>Receptor: Earth heritage, soils and geology</b>	
This frontage features a range of sites designated for earth heritage and geological interest including: Bracelet Bay SSSI, Langland Bay (Rotherslade) SSSI, Caswell Bay SSSI, Pwlldu Head and Bishopston Valley SSSI, Minchin Hole SSSI, Horton, Eastern and Western Slade SSSI and Gower Coast: Rhossili to Port Eynon SSSI.	
Does SMP policy work with natural processes and enhance or maintain natural features?	+ The policy for these designated sites is for no active intervention, which will enable natural coastal processes to continue.
Will SMP policy maintain or enhance the visibility of coastal geological exposures, where designated?	<ul style="list-style-type: none"> <li>+ There is no intention to build new defences along the undeveloped coastline where these sites are located, and therefore geological exposures in the cliffs will be maintained. The intention to allow defences at Bracelet Bay to fail may also enhance the SSSI status of the shoreline in this area.</li> <li>● Natural sea level rise may, in the long term, reduce visibility of foreshore exposures, and lead to submergence of geological interest in caves, such as at Minchin Hole SSSI.</li> </ul>
<b>Receptor: Water</b>	
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 Outer North and Carmarthen Bay water bodies are both likely to experience some improvement in biological quality elements where MR is proposed which would allow the development of further dune wetland habitats, i.e. Oxwich Dunes PU10.8 in Bristol Channel Outer North and Port Eynon Bay PU10.10 in

**Mumbles Head to Worms Head (10)**

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

Issue	Appraisal
	Carmarthen Bay. This will support WFD objectives. <ul style="list-style-type: none"> <li>● Elsewhere, the combined NAI and HTL policies will have no net effect on the WFD objectives for these two coastal water bodies.</li> <li>● The Gower Carboniferous Limestone groundwater body and river water bodies will be unaffected.</li> </ul>

Impact colour key	+ Positive	● Neutral	- Negative	x Not applicable
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Mumbles Head to Worms Head (10)						
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	1.1	All	Review current and future risk of future coastal erosion and/ or localised cliff falls to the coastal footpath to inform the maintenance of a long term sustainable route along the south coast of the Gower Peninsula.	WAG	City and County of Swansea	0 to 20 years
2. Studies for Policy Units	2.1	10.2 and 10.4	Undertake a scoping assessment to identify when a feasibility study of the upgrading/improvement options to existing defences needs to be carried out, and/or identify the criteria/factors that would trigger this feasibility study. The timing of the feasibility study will be influenced by factors such as: existing frequency of flooding, type of receptors at risk, depths and velocity of flooding and residual asset life. Consider alternative funding options where it is not possible to justify public investment in coastal erosion and flood risk management.	WAG	City and County of Swansea	0 to 20 years
	2.2	10.8	Develop coastal erosion and flood risk management plan for Oxwich Bay dunes to confirm management objectives and triggers for intervention, in order to confirm the best approach to deliver the managed realignment policy. Undertake community engagement to develop coastal erosion and flood risk management plans which are ideally 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 where it is not possible to justify public investment in coastal erosion and flood risk management.	WAG	City and County of Swansea (EAW)	0 to 5 years
	2.3	10.10	Develop coastal erosion and flood risk management plan for Pon Elyon Bay dunes to confirm management objectives and triggers for intervention, in order to confirm the best approach to deliver the managed realignment policy. Undertake community engagement to develop coastal erosion and flood risk management plans which are ideally 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 where it is not possible to justify public investment in coastal erosion and flood risk management.	WAG	City and County of Swansea	0 to 5 years
3. Strategy			-			
4. Scheme work			-			
5. Monitoring (data collection)	5.1	All	Undertake beach and coastal defence asset monitoring to inform further studies and future SMP reviews. In particular beach levels and cliff erosion rates should be monitored. This information should not only be used in future coastal management, but also to assist in public liaison by use of data in public education campaigns.	WAG	City and County of Swansea (Wales Coastal Monitoring Centre)	0 to 100 years
	5.2	All	Continue with existing beach profile monitoring programme and provide information to Wales Coastal Monitoring Centre for storage and analysis.	WAG	Coastal Group (Wales Coastal Monitoring Centre)	0 to 100 years
	5.3	10.1, 10.2, 10.4, 10.8 and 10.10	Undertake periodic defence inspection, including condition assessment and photographs. Confirm defence crest levels, use beach profile data to identify the future risk of undermining and overtopping of existing defences.	WAG	City and County of Swansea (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	City and County of Swansea	Ongoing

SUPERSEDED

Contact CBCEG for current action plan

<b>6. Asset management</b>	6.1	All	Ensure that extents of public and privately owned defences are defined and mapped to inform future management decisions.	WAG	City and County of Swansea (Wales Coastal Monitoring Centre)	0 to 20 years
	6.2	10.1, 10.2, 10.4, 10.8 and 10.10	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	City and County of Swansea (Wales Coastal Monitoring Centre)	0 to 20 years
<b>7. Communication</b>	7.1	All	Undertake consultation with the local community, key stakeholders and general public during the development of coastal erosion and flood risk management plans and suitable mitigation measures.	WAG	City and County of Swansea (EAW)	0 to 20 years
	7.2	All	Undertake monitoring and management of Action Plans to ensure SMP policies are put into practice.	WAG	Coastal Group	0 to 100 years
<b>8. Interface with planning and land management</b>	8.1	All	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	All	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	City and County of Swansea planning	0 to 20 years
<b>9. Emergency response</b>	9.1	10.2, 10.4, 10.6 & 10.8	Development, monitoring and review of emergency response plans to prepare for storm events which are likely to exceed existing defence standards of protection or lead to failure of existing defences (for example following breach or overtopping).	WAG	City and County of Swansea	0 to 20 years
<b>10. Adaptation/ resilience</b>	10.1	10.8 & 10.10	Develop suitable property level flood resilience, flood protection and adaptation measures in consultation with property owners at Port Eynon and Oxwich. These measures are currently unlikely to obtain public funding for coastal erosion and flood risk management. However a number of Defra pilot studies are currently underway which should be monitored closely.	WAG	City and County of Swansea (EAW, residents and private landowners)	0 to 20 years
<b>11. Flood forecasting and warning</b>	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
<b>12. Habitat creation and environmental mitigation</b>	12.1	All	Welsh Assembly Government instructed Environment Agency Wales to scope out the scale of potential coastal habitat gains and losses for Wales. The scoping exercise was completed in February 2011 and identified potential options for implementation of a National Habitat Creation Programme for Wales. How this programme is to be delivered and funded has yet to be decided.	WAG	TBC	Ongoing

\* Note: It is recommended that the lead partner/s investigate the potential for local partnerships and alternative sources of funding.