Sker Point to Swansea Docks (8)



Recommendations:

Long Term Plan

This frontage comprises the heavily developed and modified shores of Port Talbot and the Neath Estuary, with various revetments, defences, breakwaters and structures associated with the Port of Port Talbot. Prior to development this coastline would have been characterised by extensive sand dune systems, although only two dune areas remain, Kenfig Burrows and Margam Burrows (to the south of Port Talbot) and the smaller Crymlyn Burrows (to the north of the Neath Estuary).

The plan is to continue to manage the risk of coastal erosion and flooding to industrial, residential, non-residential, commercial and amenity assets along the coast, whilst enabling natural evolution of the dunes.

There are significant linkages and interdependencies along this frontage and its future evolution, will be dependent upon future management strategies for Port Talbot steelworks, the Port of Port Talbot and the Neath Estuary, which includes the Port of Neath and various leisure functions.

Loca	ation (Policy Unit)	Preferred SMP2 policy and approach to implementing the Plan					
		0-20 years	20-50 years	50-100 years			
8.1	Sker Point to Afon Cynfig (Kenfig and Margam Burrows)	and evolve naturally with minimal	blicy of managed realignment is proposed to allow this largely undeveloped extensive dune system to respond evolve naturally with minimal interference. This will enable long term habitat management and introduction of issures to manage and control recreational pressures. There is little risk of breach or adverse impact on the wider eline or hinterland.				
8.2	Port Talbot steelworks	climate change/ sea level rise as	required. This will continue to manage	ces (privately funded) in response to future ethe risk of coastal erosion and flooding to the ial from being released into the coastal zone.			
8.3	Port of Port Talbot (including River Avan)		taining and upgrading the existing de sion and flooding to the industrial area	efences (privately funded) as required to a is managed.			
		and maintenance dredging) is the since they do not comprise coast	e responsibility of the port authority. Po	ed with the Port of Port Talbot (breakwaters ort structures are not considered by the SMP, sures. However since port structures provide a oughout the period of the SMP.			
8.4	Port of Port Talbot to Baglan Burrows (Aberavon Beach)	level rise, subject to the availability large number of socio-economic	y of public funding for coastal erosion	ices in response to future climate change/ sea a and flood risk management. There are a If flooding along this frontage along with the Il zone.			
8.5	Baglan Burrows	monitoring, with the option to con	nstruct a secondary set back defence sion and flooding to hinterland assets	ction naturally, with minimal interference and if there is a risk of the dunes breaching. This is, including a power station, industrial area			
8.6	Neath Estuary	flooding to assets and to manage coastal system. The maintenance and upgrading maintenance dredging of the navadjacent to the navigation chanr managed in future to ensure that	of structures and operations associate vigation channel and deposition of drawl) is the responsibility of the port author the port and other leisure functions a	to minimise the risk of coastal erosion and fill from being released in the estuary and red with the Port of Neath (training walls, redged material in areas within the Estuary hority and it has been stated that these will be re maintained. Port structures are not a risk management measures, but have been			
8.7	Crymlyn Burrows (River Neath to Former BP tank farm)	This is a largely undeveloped dune Crymlyn Bog. To allow this largely policy of managed realignment is	undeveloped extensive dune system proposed. This will enable long term I	tection to the nature conservation site of to respond and evolve naturally, a long term nabitat management and introduction of anage any potential risk to the A483, which			
8.8	Former BP tank farm	The short term policy is to hold the line by maintaining existing defences, whilst decontamination of the site is completed in advance of the proposed Bay Science and Innovation Campus development. It is unlikely that maintenance of existing defences would attract public coastal erosion and flood risk management funding, due to the limited number of socioeconomic assets which are currently at risk.	progressed in the medium/ long termodefences along this frontage under decontamination of the site and sulficences and approvals. It is unlikely coastal erosion and flood risk manar In advance of the development stupotential impacts of the development designated area of Crymlyn Burrow change in order to develop suitable outflanking of the development follows:	bject to obtaining the necessary consents, that these defences would attract public agement funding. Idies will need to be undertaken to identify the ent on the adjacent environmentally and potential impacts of future climate emitigation measures. The potential risk of owing failure of the existing defences along the development and Swansea Docks) also			

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)

All units: the interlinkages along this frontage mean that most of the shoreline would be sensitive to changes in the Neath Estuary, either natural or due to modifications in how the estuary is managed.

Policy unit 8.1 – although the policy is unlikely to change, the long term risk to the M4 motorway, if the dunes become significantly more mobile, should be considered.

Policy unit 8.2 - the policy is sensitive to future private investment in maintaining and improving defences along the Port Talbot steelworks industrial site, if existing defences are allowed to fail there is a risk of potentially contaminated fill being eroded and released into the coastal zone.

Policy unit 8.3 – hold the line involves continued maintenance and upgrading of structures (breakwaters) and operations (maintenance dredging of navigation channel) for the Port of Port Talbot, which is subject to future management plans for these ports, future investment and the availability of private funding, since these structures/ operations are not covered by public funding of coastal erosion and flood risk management.

Policy units 8.4 and 8.5 – maintaining and upgrading existing defences (in response to future climate change/ sea level rise) is subject to the future availability of public funding for coastal erosion and flood risk management. Along these frontages the cost of implementing the preferred policy could be sensitive to future climate change (sea level rise, increased storminess) which would affect exposure of defences, and also result in changes to the sediment regime. The sediment regime could be affected by changes in management practices elsewhere within Swansea Bay (e.g. maintenance dredging of navigation channnels) and bathymetric changes.

Policy unit 8.6 – hold the line involves continued maintenance and upgrading of structures (training walls) and operations (maintenance dredging of the navigation channel) for the Port of Neath, which is subject to future management plans for this port, future investment and the availability of private funding, since these structures/ operations are not covered by public funding of coastal erosion and flood risk management. It has been assumed that training walls would be maintained/ improved and regular maintenance dredging of the navigation channel undertaken. Without maintenance the training walls would be expected to continue to fail in the short-term (0-20 years). It is likely they would continue to have some influence beyond this as they are substantial structures which would degrade slowly. Ultimately, however, the channel could break through and be free to meander across the intertidal zone, potentially impacting on the adjacent shorelines, policy units 8.5 and 8.7, and it is therefore recommended that the feasibility of these policy options is reviewed as part of the next SMP review. Although policy decisions along adjacent stretches of coast are unlikely to change, the implementation measures may also need to be reviewed at this stage.

Policy unit 8.7 – The future evolution of this frontage and the long term sustainability of this policy is dependent upon the future evolution and policy within adjacent policy units PU 8.6: Neath Estuary (continued maintenance dredging of the navigation channel and deposition of dredged material onto Crymlyn Burrow) and PU 8.8: Former BP tank farm.

Policy unit 8.8 This policy is sensitive to the future development plan, which is likely to involve private funding of defence improvements, subject to consideration of the potential impact on the adjacent shorelines and obtaining the necessary consents, licences and approvals.

Changes from present management / SMP1 policy¹

Overall, these policies have not changed significantly since SMP1.

Policy unit 8.5 – Rather than hold the line (as proposed in SMP1), managed realignment is proposed, but this could involve provision of set back defences and the aim remains the same, namely to manage the risk of coastal erosion and flooding to the industrial area.

Policy unit 8.6 – SMP1 stated the need for a strategy study to develop and examine a range of future management options for Neath Estuary. The SMP2 proposes a hold the line policy in advance of undertaking this study.

Policy unit 8.7 – SMP1 stated that the anticipated long term policy was unknown and currently the present management is hold the line.

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.



Sker Point to Swansea Docks (8) (this is a summary of impacts, for full details see Appendix G SE	A Report)
Issue	Appraisal
Receptor: Property, population and human health Aberavon is the only residential area along this heavily industrialised frontage Burrows and Crymlyn Burrows.	ge. The coast is defended except at Kenfig and Margam Burrows, Baglan
Will SMP policy maintain coastal settlements and manage the impact of coastal flood and erosion?	The plan will continue to manage flood and erosion risk to Aberavon through managing and upgrading of existing defences, subject to the availability of public funding for coastal erosion and flood risk management.
Will SMP policy directly increase the actual or potential coastal erosion or flood risk to communities?	There is little proposed change to existing policy along this frontage, reducing the risk of coastal erosion and flooding to residential areas is a key policy driver.
Is SMP policy sufficiently flexible to take account of dynamic coastal change?	Maintenance and upgrading of existing defences (subject to the availability of public funding for coastal erosion and flood risk management) along the majority of this frontage would fix the shoreline position, reducing the potential for future dynamic coastal change. However this frontage has been highly modified in the past, since prior to development it would have been characterised by extensive sand dune systems.
	 Areas of undeveloped dunes would be allowed to develop and respond naturally.
Could there be a detrimental impact on the fabric of coastal communities?	Ongoing maintenance and upgrading of existing defences will continue to manage risk of coastal erosion and flooding to coastal communities.
Receptor: Land use, infrastructure and material assets This frontage is highly industrialised and includes Port Talbot steelworks, the Port of Neath.	Port of Port Talbot, Baglan Bay power station and industrial estate and the
Will SMP policy maintain key industrial, commercial and economic assets and manage the impact of coastal flooding and erosion?	The Plan will manage the risk to key assets through maintenance of existing defences. Defences would be upgraded as required to continue to provide a suitable standard of protection, subject to the availability of funding.
Will the SMP policy ensure critical services and infrastructure remain operational, for as long as required?	The risk of coastal erosion and flooding to critical services and infrastructure would continue to be managed. The recommended policy at Baglan Burrows is managed realignment to enable the dune systems to function naturally with minimal interference. However the development of the dunes will be monitored and if there was a sufficient rick of a breach in the dunes, secondary defences would be provided inshore of the dunes to manage the risk of coastal erosion and flooding to industrial assets.
	There would be no risk to critical marine, road and rail linkages.
Will there be an impact on marine operations and activities?	It is assumed that the port structures (breakwaters and training walls) would be maintained and maintenance dredging of navigation channels would be continued to enable marine operations and activities to continue at the Port of Port Talbot, the Port of Neath and within the Neath Estuary.
Will SMP policy impact coastal flooding or erosion on agricultural activities?	X There are no agricultural activities along this shoreline.
Will the SMP policy ensure that MoD (Qinetiq) ranges remain operational? Receptor: Amenity and recreational use The coastal settlement at Aberavon includes a range of leisure, amenity ar	x There are no MoD (Qinetiq) assets along this shoreline. nd recreational facilities including a wide promenade, and an amenity
beach.	
Could the SMP policy have an impact on tourism in the area?	 Continued maintenance and upgrading of defences along Aberavon will manage the risk of coastal erosion and flooding to leisure, amenity and recreation facilities.
	 Defences will prevent natural roll-back of the beach, therefore beach narrowing and steepening will occur in response to sea level rise.
Will SMP policy affect coastal access along, or to, the coast?	X There is limited public coastal access along approximately half of this coastline as a result of industrial development. The public can access the coast at Aberavon and through the following dune systems: Kenfig and Margam Burrows, Baglan Burrows and Crymlyn Burrows.
Receptor: Historic environment	
Kenfig Castle and Medieval Town Scheduled Monument is located near th Aberavon and numerous wreck sites on the foreshore and in the intertidal	
Will SMP policy maintain the fabric and setting of key historic listed buildings, cultural heritage assets and conservation areas?	X Kenfig Castle and Medieval Town SM is not at risk, due to its position inland.
	No risk to listed buildings at Aberavon due to maintenance of the existing defences.
	 Listed buildings associated with the Port of Port Talbot are likely to suffer periodic flood risk due to overtopping as sea level rises.
	There is a risk of erosion or submergence of the various wreck sites. The level of this risk is dependent on erosion rates and rates of sea level rise.



Sker Point to Swansea Docks (8)	Policy Statement – Sket Politi to Swansed Docks (6)
(this is a summary of impacts, for full details see Appendix G SEA	
Issue	Appraisal
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	Maintenance of defences at Aberavon will ensure that archaeological assets will continue to be managed.
and future erosion.	 Where there are wreck sites on the foreshore and in the intertidal areas, there is risk of flooding and erosion, which would not be affected by SMP policy. Monitoring and mitigation measures would be dependent on rates of natural erosion and sea level rise.
Receptor: Landscape character and visual amenity The landscape of this frontage is varied. The dune systems, particularly Kenfi majority of the frontage is heavily industrialised.	
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 would enable the natural and industrialised landscapes to be maintained, and the visual contrast between them.
	Defences may need to be raised in response to future climate change and sea level rise to continue to provide a suitable standard of protection with respect to coastal erosion and flooding. Providing raised defences may affect visual amenity, particularly along the promenade at Aberavon.
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 any currently undefended sections of this frontage, other than set-back defences at Baglan Burrows.
	+ Although there may be a need to construct set-back defences at Baglan Burrows, these would not be expected to adversely affect the character of the landscape due to its industrial nature.
Receptor: Biodiversity, flora and fauna Although this shoreline is largely industrialised, there are a number of designational Nature Reserve and Kenfig Special Area of Conservation.	ated sites: Kenfig SSSI, Crymlyn Burrows SSSI, Kenfig Pools and Dunes
Will SMP policy enable a sustainable approach to habitat management?	There are no new defences proposed in currently undefended areas, other than set-back defences at Baglan Burrows, therefore this is considered a sustainable approach to natural evolution of the coastline and its habitats.
	+ At both Kenfig Burrows and Crymlyn Burrows 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 habitats.
Will SMP policy maintain or enhance any international, national or local sites of natural conservation interest?	 Natural erosion of foredunes at Kenfig Burrows and Crymlyn Burrows could occur as sea level rises. There may also be some change in habitats within the dunes if flood risk increases. However, dune systems would be expected to maintain their overall integrity.
	Local dune management techniques could be implemented, as required, at Kenfig Burrows and Crymlyn Burrows in order to maintain or enhance the dune systems.
	The recommended policy of hold the line within the Neath Estuary assumes that the training walls would be maintained and that maintenance dredging of the navigation channel would continue. The training walls would continue to trap sediment on the west and manage the risk of coastal erosion to Crymlyn Burrows. Material dredged from the navigation channel has previously been deposited onto Crymlyn Burrows to enhance the habitat, and this could be repeated in future.
Will SMP policy <u>accelerate</u> intertidal narrowing (coastal squeeze) and will this affect designated habitats?	These dune systems 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?	 Loss of peat exposure with and without piddock evidence due to MR at Kenfig Burrows and due to sea level rise at Port Talbot Steelworks. This would occur in the short term, medium and long term.
	 Narrowing of intertidal habitat at Neath Estuary due to provision of defences.
Receptor: Earth heritage, soils and geology Crymlyn Burrows SSSI is noted for its geomorphology and geology.	
Does SMP policy work with natural processes and enhance or maintain natural features?	The SMP plan is to allow natural coastal evolution along the designated frontage, thereby working with natural coastal processes.
Will SMP policy maintain or enhance the visibility of coastal geological exposures, where designated? Receptor: Water	X There are no designated geological exposures.
There are numerous coastal, freshwater, transitional (areas of water near rive	
and groundwater bodies in the SMP2 area that have the potential to be aff Will SMP policy manage the risk of pollution from contaminated sources?	
<u> </u>	1 Solotion, the policy allows for the construction of set back actelices

Halcrow

Issue	Appraisal
	should the risk of coastal erosion and flooding to Baglan Bay power station and the industrial hinterland increase. The former BP tank farm at the western end of the frontage is currently being decontaminated, and the policy is to hold the line at least until this process is complete.
Will SMP policy adversely affect water bodies in the coastal zone?	Increased extents of naturally functioning coastline will result in the Swansea Bay water body from MR at the burrows at Kenfig and Margam (PU8.1), Baglan (PU8.5) and Crymlyn (PU8.7), which supports WFD objectives.
	Elsewhere, HTL is likely to result in loss of intertidal habitats with sea level rise, and may have consequences for biological quality elements and risk failure of the WFD objective related to future achievement of good potential in the Swansea Bay water body (currently bad potential).
	 HTL at PU8.3 is unlikely to affect WFD objectives for the Afan water body, which is already at good potential. HTL at the PU8.6 should benefit biological quality elements in the Neath water body (already at good potential) since the channel training walls encourage sedimentation and intertidal habitat.
	 The Swansea Southern Carboniferous Limestone and Swansea Carboniferous Coal Measures groundwater bodies and river and lake surface water bodies will be unaffected.

Halcrow

ACTION PLAN	. ,					
Action	Action Ref	Policy Unit	Action Description (to be approved)	Potential source for funding (subject to approval)	Responsibility Lea (partner * (supporting partner)	When by (subject to funding)
1. Studies for Scenario Area			-			
2. Studies for Policy Units	2.1	8.2	Engage with and encourage Tata Steel to undertake a study to identify the current and future risk of coastal erosion and flooding to Port Talbot steelworks and associated infrastructure to enable groung term sustainable flood and coastal erosion risk management plan to be developed for the site. This abould include a study into the nature of the potentially contaminated land which is potentially at risk from coastal erosion. Ensure that any future management plans are monitored and used to inform and, where are ropriate, update the 14P.	Tata Six N	Tata Steel Cleath Port Talbot County Boroug Council and EAW)	0 to 20 years
	2.2	8.3	Engage with and encourage ABP to undertake a study to identify the covent and future risk of coast and stone and flooding to the Port of Port Talbot and associated infrastructure to enable a long term sustainable mod and coastal erosion risk management plan to be developed for the rise. Ensure that any fit are management plan to be developed for the rise. Ensure that any fit are management plan to be developed for the rise. Ensure that any fit are management plan to be developed for the rise and the rise an	AL	ABP (Neath Por Talbot County Borough Council apple AW)	0 to 20 years
	2.3	8.4, 8.6 and 8.8	Undertake a scoping assessment to identify when a flasibility study of the agrading improvement options to existing defences needs to be carried out and/or dentify the criteria/facts, that could trigg that feasibility study. The timing of this feasibility study will be artiuenced by facts as the assemble of flooding risk of coastal erosion, type of receptors at risk appths and velocity callooding, residual assemble and consideration of alternative funding options where it is not possible to justify pulling invention at in the call erosion analytical risk management.	S VAG	Neath Port Talbot County Borough Council & City and County of Swansea	0 to 20 years
	2.4	8.6	Ensure that any future management plans for the fort of North including foure maintenance dedging and proposals wrt the training stalls are monitored and used to afform declarate appropriate, update the SM	WAG/ Private developer	Neath Estuary Group (Neath Port Talbot County Borough Council)	Ongoing
	2.5	8.8	Undertake Judies to identify the note dial is pacts of the proposed Bay Stience and Innocation Campus development on the adjace of expanding the control of the development from the undefended frontage to the vest also needs to be considered and addressed.	Private developer	ABP (Private developer, City and County of Swansea)	0 to 20 years
3. Strategy	3.1	8.6	Undertake Neath Estatry state gy study to consider the fechnical, socio-economic and environmental viability of a wide range of alteriative is magement options to identify a long test sustainable solution for the management of the Neath Estatry and the adjacent Eaglan Burrer's and Crymlyn Burrows. The study should consider the allowing exacting and future coastally estuarine processes and sediment regime under a range of faure climate manage so marios, current and future coastallerosion and flood risks, future climate change in pacts environment assues, constraints and opportunities, Port of Neath current operations and future complete aspirations, leisure and amenity uses of the estuary, alternatives for managing the training walls and the maintenance dredging regime, socio-economic issues, alternative sources of funding to enable management, sources of potential investment in the area and the nature of potentially contamination areas at risk from erosion.	WAG/ Private developer	Neath Estuary Group (Neath Port Talbot County Borough Council)	0 to 5 years
4. Scheme work	4.	8.4	Continued maintenance and upgroung of existing defences along the Aberavon seafront to continue to manage the risk of coastal erosion and flooding to the hinterland, subject to the future availability of public funding for coastal erosion and flood risk management	WAG	Neath Port Talbot County Borough Council	0 to 20 years
	4.2	8.5	Develop a scheme for provision of a set-back defence to manage the risk of coastal erosion and flooding to the industrial area inshort of Baglan Burrows which could be implemented quickly if dune monitoring identifies that there is a potential risk of a breach in the dunes.	WAG	Neath Port Talbot County Borough Council	0- to 20 years
	4.3	8.6	Implement recommendations of the Neath Estuary strategy study.	WAG	Neath Estuary Group	0 to 100 years
5. Monitoring (data collection)	5.1	8.5	Develop a bi-annual monitoring regime (in advance of winter and following winter) to assess the condition of the dunes at Baglan Burrows (and the surrounding area including Neath Estuary and Crymlyn Burrows) to enable the	WAG	Neath Port Talbot County Borough	ASAP

Policy Statement – Sker Point to Swansea Docks (8)

Interface with planning 8.1 All continue with risk-based improvements to flood risk maps to provide an appraisal of likely future projected sea WAG EAW 0 to 20 years					10	blicy statement - sker Point to s	Wallised Docks
particular, estudy morphology and dutine secessor rates, should be manifested and on a company of the future coation imprograment, but does particular to pest and future coation imprograment. As the future coation imprograment are provided intermediated to the views should company of the future coation imprograment and provided intermediated to the views should company of the future coation intermediated posted intermediated to the future rate of should be companyed and analysis. Use beach profile data to identify the future rate of demanding and which well as a should be companyed and analysis. Use beach profile data to identify the future rate of demanding and which well as a should be companyed and analysis. Use beach profile data to identify the future rate of demanding and which well as a should be companyed and analysis. Use beach profile data to identify the future rate of demanding and which well as a should be companyed by the future rate of the companyed of the future rate of the companyed of the future rate of the companyed of the co						Council	
be used in future coastal management but dos to assist in ateleholder losson by use of otatic in public estantian. 5.3 All Confirms with estangling except profite monitoring programme and provide information to the Walds excluded. Coasts (aloug) (Sertical) (Serti		5.2	All		WAG	· ·	0 to 100 years
composigns. 5.3 All Confine with editing beach profile monitoring programme and provide information to the Wass elected. 5.4 Confine with editing beach profile monitoring programme and provide information to the Wass elected. 5.4 So 2 to Undertake periods deferred. 5.5 All Undertake periods deferred involving programme and programme and programme and programme and with the profile data to dentify the future into confirm during. 5.5 All Undertake periods deferred involving condition assessment and programme. WAC Undertake periods deferred involving a condition and programme and programme and programme. WAC Undertake care levels. 5.5 All Undertake periods deferred involving a condition assessment and programme periods. WAC Undertake deferred in the condition and programme					\	•	
S.3 All Continue with existing beach profile monitoring programme and provide information to the Wassenbadal WAG Coastal Coupt (Wales Coastal Monitoring Centre for storage and analysis. Lise beach profile data to identify the future risk or identified periodic design defences with properties of the future risk or identified periodic design defences impection, including condition assessment and child engagins. Confirm details. S.5 All Underfalse further studies, and associated modelling, to better use alrained sediment regime in the large of the control information of the coastal management. Underfalse monitoring of or left velocifies within spin in large. WAG Need Estuary Coastal for position of the coastal footpoth and investigated potential revokults of the part where depotition with a large of coastal footpoth and investigated potential revokults of the part where depotition. WAG Need Front Tablet Coastal Monitoring Need Front Need Front Need Front Need Front Need Front Need Fron				· · · · · · · · · · · · · · · · · · ·			
Monitoring Centre for stratage and analysis. Use beach profile data to identify the future risk of information of controlling of control overforping of exting platforms. A 3-10							
Communication Communicatio		5.3	All		WAG		0 to 100 years
4.4 8.2 to 8.5 kg. 10 Indicriote periodic defence inspection, including condition assessment and photographs. Confirm on mose WAAG creat levels. 8.8 8.8				Monitoring Centre for storage and analysis. Use beach profile data to identify the future risk of indermining and		(Wales Coastal	
5.4 8.7 to School of the least factor of				overtopping of existing defences,		Monitoring	
5.4 8.7 to School of the least factor of						Centre)	
8.8 kg crest levels S.5 All Undertoke further studies and associated modelling, to better undersonal sediment regime in the MP oreside WAG Cut to Cu		5.4	8.2 to	Undertake periodic defence inspection, including condition assessment and photographs. Confirm defince	WAG		0 to 20 years
Secondary Seco							,
Linetrace with planning			8.8				
Second							
Inform future coastal management. Undertake maniforing of queent velocities within vary. Country Romough (Romough Country Romough		5.5	All	Undertake further studies, and associated modelling, to better undertake further studies, and associated modelling, to better undertake further studies, and associated modelling, to better undertake further studies.	WAG		0 to 100 years
Solution		0.0	/	, , , , , , , , , , , , , , , , , , ,			0 10 100 70010
Social County Cou				international designation of desiration and an arrangement of the contract with the			
Solution							
Asset management 6.1 All Ensure that the extent of public and shiredly owned does not started a got the part where appropriate. WAG Neath Port Taibot County Brough Council and City and County of Swansea Wales Coastal Monitoring Centre) 6.2 All Undertake an appraisal of gasen spin and making a profile monitoring data to usess the existing and future (submit undermining as over public of existin structures.) 6.2 All Undertake an appraisal of gasen spin and making a profile monitoring data to usess the existing and future of the extent of public data and city and whenever submit and spin and public during the development of the extent of the extent of spin and spin							
Asset management 6.1 All Ensure that the extent of public and, windfely owned destrices are also and any apped to Inferit ribrule 6.2 All Undegrate on approisal of asset repeated and any apped to Inferit ribrule 6.2 All Undegrate on approisal of asset repeated and any approisal growth profile monitoring and transfer structures. 6.2 All Undegrate on approisal of asset repeated and any approisal of asset the existing and future destriction and any approisal of asset the existing and future destriction. 6.2 All Undermining as well approisable community (repeated sea and acceptable approach is development of the approisable undermining and repeated profile monitoring denoted and acceptable approach is developed and adopting the acceptable approach is developed and adopting and repeated profile to estate an acceptable approach is developed and adopting and repeated profile approach is developed and acceptable approach is d		5.6	ΔΙΙ	Monitor risk to the coastal footpath and investigate potential re-router of the parawhere exprendiate	WAC		Ongoing
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.		0.0		World hisk to the coastal toolpath and investigate potential re-tool ag of the part where appropriate.	VVAO		Origonia
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.							
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.	Asset management	6.1	ΔII	Ensure that the extent of public and a vately expend do specific designed and expend to inform thit ye	WAC		O to 20 years
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.	. Assermanagemeni	0.1	All	management decisions	WAG		0 10 20 years
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.				management decisions.			
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.							
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.							
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.							
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.						*	
6.2 All Undertake an appraisal of asset spot in and black profile moliforning data to issess the existing and future (Wales Coastal Group Centre)) 7.1 All Undertake condition of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 7.2 All Unit of the Neath Estuary Strill egy and whenever semi-opticate to existe an acceptable approach is developed and adopt. 8.1 All Continuously his kis-based improvements to float risk maps to provide an appraisal of likely future projected sea level its. 8.2 All SMP policies are most of the Neath Post of the provide in the next revisions of land use plans in order to help manage residual risks from sostal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Development, monitorist and review of emergency response plans to prepare for storm events which are likely to exceed existing denice standards of protection or lead to failure of existing defences (for example following breach or overtra poing). 8.4 & Continuous with sisk-based improvements to flood risk maps and inundation modelling to provide improved flood wards service.							
risk of undermining across exportance structures. Wales Coastal Monitoring Centres			A.II		14/40		0.100
Monitoring Centre) Communication 7.1		6.2	All		WAG		0 to 20 years
Communication 7.1 All Undertake constitative with legacy and whenever real propriete to each an acceptable approach is developed and adoptive. 7.2 All Undertake constitative with legacy and whenever real propriete to each an acceptable approach is developed and adoptive. 7.2 All Undertake constitative with legacy and whenever real propriete to each an acceptable approach is developed and adoptive. 7.2 All Undertake the propriete with planning and interpretable approach is developed and adoptive. 8.1 All Continue with risk-based improvements to 80 of risk maps to provide an appraisal of likely future projected sea level ris. 8.2 All SMP policies are put into practice. 8.3 All SMP policies are accounted for in the next revisions of land use plans in order to help manage residual risks from adstall erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitoring and review of emergency response plans to prepare for storm events which are likely to exceed existing alreace standards of protection or lead to failure of existing defences (for example following breach or overtre plans). 8.5 Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warming service. 8.6 EAW 0 to 20 years counted flood warming service.				risk of undermining and over application existing structures.			
Communication 7.1							
of the Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and adoption. The Neath Estutiv Sitr egy and whenever sentrepriate to easter an acceptable approach is developed and approach of acceptable approach of acceptable approach is developed and acceptable approach is developed and acceptable approach of acceptable approach in the next revisions of land use plans in order to acceptable and approach of acceptable and approach of acceptable and acceptable approach of acceptable and provide an approach of acceptable and acceptable acceptable and acceptable acceptable and acceptable accepta							
adoption All Use of the incoming and management of Action Plans to ensure SMP policies are put into practice. All Use of the incoming and management of Action Plans to ensure SMP policies are put into practice. B.1 All Use of the incoming and management of Action Plans to ensure SMP policies are put into practice. B.2 All SMP policies and flood and a sign risk maps to provide an appraisal of likely future projected sea level its B.2 All SMP policies and flood and a sign risks are accounted for in the next revisions of land use plans in order to help manage residual risks from postal erosion and flooding, and to inform future planning decisions. Emergency response B.3 All Development, monitoring and review of emergency response plans to prepare for storm events which are likely to exceed existing disfence standards of protection or lead to failure of existing defences (for example following breach or overlapping). D. Adaptation/ resilience 1. Flood forecasting and aming 2. Habitat creation and novironmental mitigation All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood worning service. Port Talbot Coastal Group Oto 20 years WAG Neath Port Talbot County Borough Council Danning WAG Neath Port Talbot County Borough Council Danning Oto 20 years County Borough Council Danning WAG EAW Oto 20 years Oto 20 years All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood worning service.	. Communication	7.1			WAG		0 to 20 years
County Borough Council and EAWy 7.2 All Upt Ne in Lening and management interface with planning and land management in land ma							
Council and EAW Council and				adopta			
Council and EAW Council and							
All Continue with risk-based imployments to fload risk maps to provide an appraisal of likely future projected sea WAG EAW 0 to 20 years							
All Continue with risk-based imployments to fload risk maps to provide an appraisal of likely future projected sea WAG EAW 0 to 20 years		7.2	All	Up the kein soring and management of Action Plans to ensure SMP policies are put into practice.	WAG	Coastal Group	0 to 100 years
Evel ris	3. Interface with planning	8.1	All	continut with risk-based improvements to food risk maps to provide an appraisal of likely future projected sea	WAG	EAW	0 to 20 years
8.2 All CoSMP policies and 1100 and design risks are accounted for in the next revisions of land use plans in order to help manage residual risks from postal erosion and flooding, and to inform future planning decisions. 8.4 & Development, monitoring and review of emergency response plans to prepare for storm events which are likely to exceed existing chaence standards of protection or lead to failure of existing defences (for example following breach or overtrapping). 9.1 Adaptation/ resilience 1. Flood forecasting and arring 2. Habitat creation and national mitigation 1. All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 1. Flood forecasting and arring arring arrived integration and notion modelling to provide improved flood warping service. 1. Flood forecasting and arring arrived integration and notion modelling to provide improved flood warping service.	and land management						
help manage residual risks from postal erosion and flooding, and to inform future planning decisions. County Borough Council planning Between Port Talbot to exceed existing at ence standards of protection or lead to failure of existing defences (for example following breach or overtre-ping). D. Adaptation/ resilience 1. Flood forecasting and arring 2. Habitat creation and navironmental mitigation help manage residual risks from postal erosion and flooding, and to inform future planning decisions. County Borough Council WAG Neath Port Talbot County Borough Council O to 20 years O to 20 years O to 20 years O to 20 years		8.2	All		WAG	Neath Port Talbot	0 to 20 years
Council planning 8.4 & 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 overtexpling). 9. Adaptation/ resilience 1. Flood forecasting and rarning 2. Habitat creation and navironmental mitigation Council planning WAG Neath Port Talbot County Borough Council 0 to 20 years 0 to 20 years 0 to 20 years O to 20 years O to 20 years							,
Emergency response 8.4 & Development, monitoring and review of emergency response plans to prepare for storm events which are likely to exceed existing divence standards of protection or lead to failure of existing defences (for example following breach or overtexpling). 9. Adaptation/ resilience 1. Flood forecasting and rarning 2. Habitat creation and navironmental mitigation 9. Adaptation review of emergency response plans to prepare for storm events which are likely to exceed existing defences (for example following breach or overtexpling). 9. Council 9. All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warp's g service. 9. All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warp's g service. 9. All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warp's g service.				, 3			
8.5 to exceed existing defence standards of protection or lead to failure of existing defences (for example following breach or overtex ping). Council Council In Flood forecasting and varing Lead to failure of existing defences (for example following breach or overtex ping). Council Council Council All Continue with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. Lead to exceed existing defences (for example following breach or existing defences (for existing defences) (fo	Emergency response		8.4 &	Development, monitoring and review of emergency response plans to prepare for storm events which are likely	WAG		0 to 20 years
breach or overtexping). D. Adaptation/ resilience 1. Flood forecasting and arrning 2. Habitat creation and nvironmental mitigation Discreption of the provided in provided					, .		5 10 20 yours
1. Flood forecasting and rarning 2. Habitat creation and nvironmental mitigation 2. Habitat mitigation 3. Flood forecasting and rarning 4. Continuo with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 5. Habitat creation and nvironmental mitigation 5. Continuo with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 6. Continuo with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 7. Continuo with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 8. Continuo with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 9. Continuo with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service.			0.0				
1. Flood forecasting and rarning 2. Habitat creation and nvironmental mitigation 11.1 All Continual with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 2. Habitat creation and nvironmental mitigation 11.1 All Continual with risk-based improvements to flood risk maps and inundation modelling to provide improved flood warping service. 2. Habitat creation and number of mitigation warping service.					+	Courien	
varning warping service. 2. Habitat creation and nitigation warping service.		111	ΔII	Continue with risk-hased improvements to flood risk maps and inundation modelling to provide improved flood	WAG	ΕΔ\Λ/	Oto 20 years
2. Habitat creation and nvironmental mitigation		11.1			1 ** 10		0 10 20 96018
nvironmental mitigation			+	walking solvice.	+		