



Cynllun Rheoli Traethlin Gorllewin Cymru 2

Grŵp Arfordirol Bae Ceredigion ac Ynys Enlli i'r Gogarth

Atodiad F
Arfarniad Economaidd

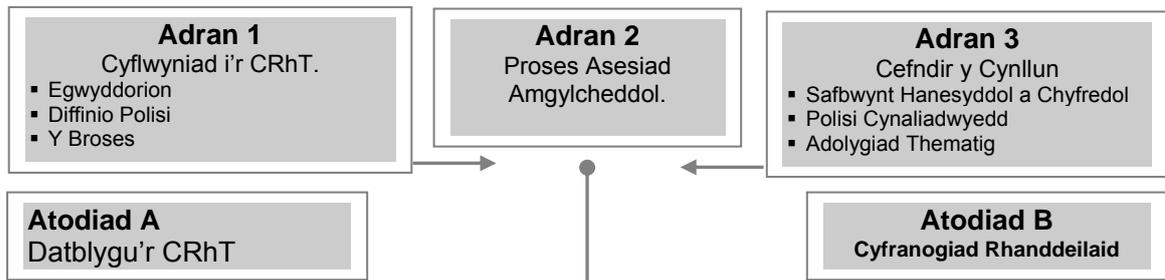
Tachwedd 2011
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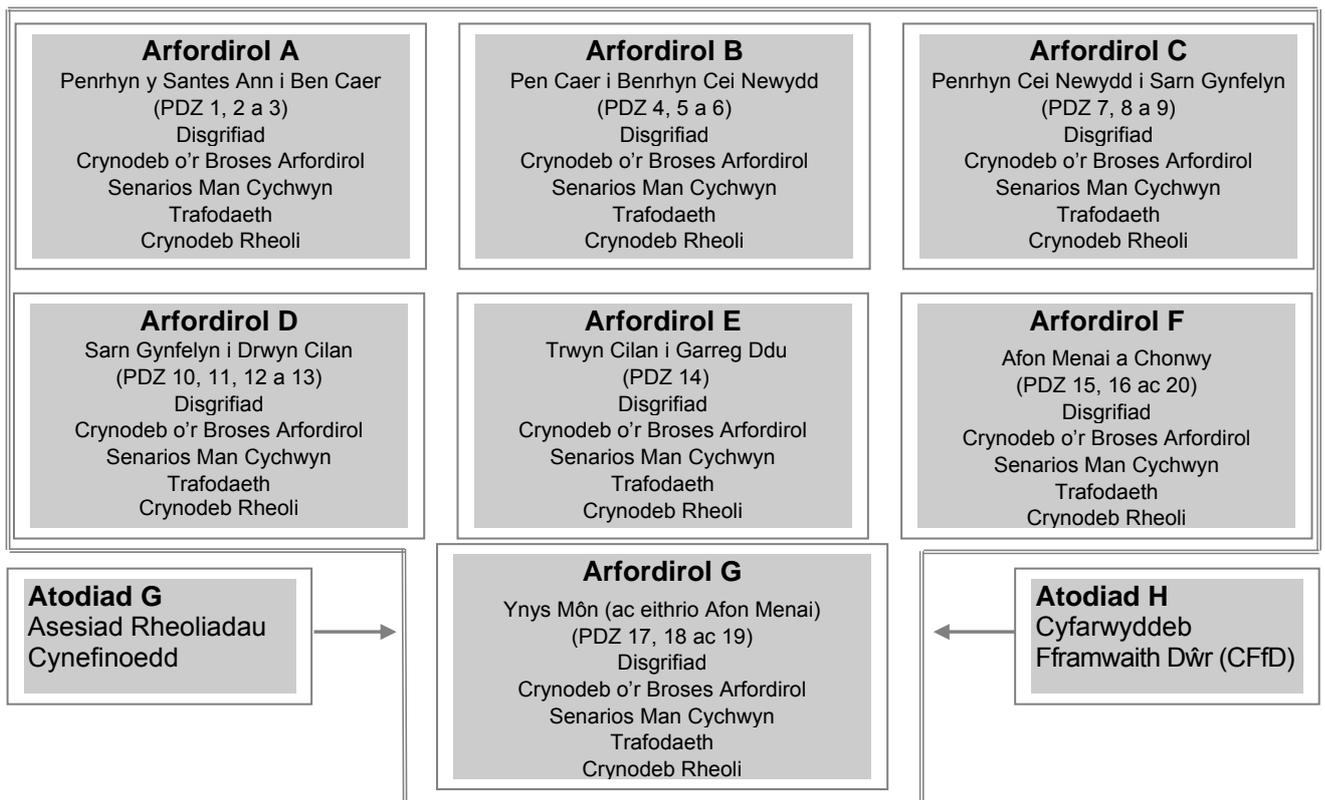
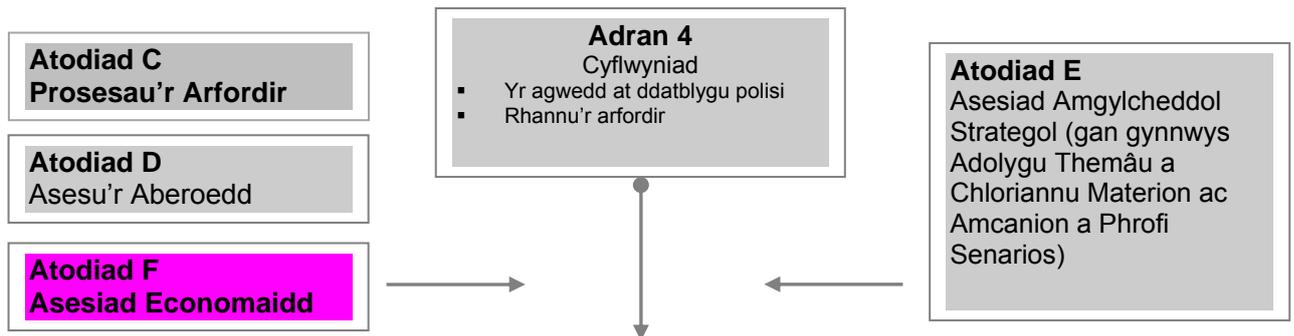
Enw'r ddogfen Cynllun Rheoli Traethlin Gorllewin Cymru 2
Grŵp Arfordirol Bae Ceredigion ac Ynys Enlli
i'r Gogarth
Enw byr y ddogfen CRhT2 Gorllewin Cymru
Statws Terfynol
Dyddiad Tachwedd 2011
Enw'r prosiect CRhT2 Gorllewin Cymru
Rhif y prosiect 9T9001
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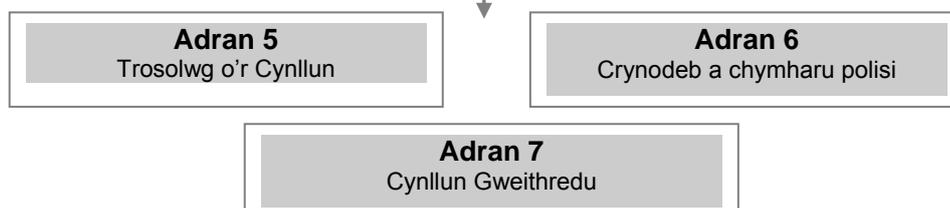
CYFLWYNIAD A PHROSES



DATBLYGU'R CYNLLUN A PHOLISI



TROSOLWG



CYNNWYS

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F1 CYFLWYNIAD

Gwnaed adolygiad o hyfywedd economaidd y cynllun dewisol ar gyfer pob ardal. Caiff yr adolygiad ei wneud yng nghyd-destun pob ardal reoli, gan ystyried y canlyniadau economaidd cysylltiedig â phob uned bolisi.

Dylid nodi y bydd angen dadansoddiad economaidd manwl ychwanegol wrth gyfiawnhau unrhyw gynllun penodol yn unol ag egwyddorion y Rhaglen Dulliau Newydd a'r canllawiau arfarnu.

Nod yr adolygiad presennol yw penderfynu i ba raddau y mae modd cyfiawnhau'r polisi dewisol mewn termau economaidd cysylltiedig â gwarchod yr arfordir neu amddiffynfa rhag y môr. Yn ogystal bwriad yr adolygiad yw edrych ar natur y cyfiawnhad economaidd; gan ystyried a yw'r cyfiawnhad hwnnw'n dibynnu'n gryf ar amddiffyn buddiannau uniongyrchol amlwg, o ran perygl llifogydd neu erydiad uniongyrchol i ased, neu'n deillio o iawndal cysylltiedig fel amwynder, adloniant, amharu ar draffig neu'n cael ei hybu gan nodau cynlluniau eraill.

Defnyddiwyd gwybodaeth amrywiol i ddatblygu'r adolygiad. Fel rhan o System Gwybodaeth Ddaearyddol a threfn ddadansoddi CRhT2, deilliodd iawndal o'r Fframwaith Cynnal Modelu a Phenderfynu (MDSF). Yn ogystal â hyn, gwnaed gwaith fel rhan o'r amrywiol strategaethau neu arfarniadau cynlluniau sy'n cwmpasu ardal y CRhT. Caiff defnyddio'r rhain ei drafod yn adran F2 a F3.

Caiff canlyniadau'r adolygiad eu cyflwyno mewn tablau cryno yn Helaethiad F1 a chaiff datblygiad y tablau hyn ei drafod yn adran F4.

Yn adran F5 mae trafodaeth ar sensitifedd ynghyd â nodi'r agwedd at asesu costau cynlluniau neu gynnal a chadw yn y dyfodol.

Yn y tablau cryno yn Helaethiad F1 mae cyfeiriadau at astudiaethau lleol.

F2 DEFNYDDIO GWYBODAETH BRESENNOL

Mewn amryw ardaloedd o gwmpas yr arfordir, datblygwyd strategaethau yn unol â'r argymhellion ac i roi sylw i ansicrwydd a nodwyd yn CRhT1.

Bu modd i'r astudiaethau hyn ystyried y canlyniad economaidd i gylchoedd penodol yn llawer manylach nag a fyddai'n briodol ar gyfer CRhT2. Yn arbennig, bu modd i'r strategaethau benderfynu iawndal penodol cysylltiedig â llifogydd oherwydd tonnau'n torri drosodd ac ystyried iawndal cysylltiedig ag agweddau fel amwynder a defnydd o'r arfordir. Yn ogystal mae'r strategaethau wedi datblygu agweddau penodol at amddiffyn ac, o hyn, bu modd iddynt asesu costau cynlluniau yn y dyfodol, o leiaf yn fras.

Fodd bynnag, mewn rhai ardaloedd, datblygwyd y strategaethau ar gyfer gorwel o 50 mlynedd yn unig (yn debyg i CRhT1) gan ddefnyddio ffactorau disgownt gwahanol i'r hyn sy'n cael ei argymhell bellach gan y Trysorlys. Ni ddatblygwyd y strategaethau o reidrwydd chwaith dros yr un ardal ddaearyddol â'r unedau polisi sy'n cael eu diffinio yn CRhT2 nac ystyried ymhob achos effaith lawn y cynnydd all fod yn lefel y môr dros y 100 mlynedd nesaf. Yn olaf, mewn rhai manau, mae CRhT2 erbyn hyn yn gwneud argymhelliad sy'n newid y dewisiadau ac argymhellion a ystyriodd y strategaeth.

Am y rhesymau hyn, bu angen addasu gwybodaeth o astudiaethau cynharach i ganiatáu defnyddio'r wybodaeth hon yn effeithiol yn CRhT2.

Proses barhaol yw rheoli'r arfordir. Yn ystod datblygu CRhT2, mae astudiaethau neu strategaethau manwl ychwanegol wedi bod ar y gweill. Tra ymgorfforwyd gwybodaeth wrth iddi ddod i law, mae'n amlwg nad oes modd cynnwys gwybodaeth fanwl o astudiaethau cyfredol heb eu gorffen ar adeg cwblhau'r ddogfen hon (Ionawr 2009). Caiff nodiadau eu cynnwys yn y tablau canlynol ac ym mhrif destun dogfen CRhT2 i dynnu sylw at wybodaeth ychwanegol sydd wedi neu a all ddod ar gael.

Mae proses CRhT yn barhaol, gan dderbyn rhagor o wybodaeth ac adolygu hyn yng nghyd-destun dogfen CRhT2.

F3 CYNHYRCHU DATA NEWYDD

F3.1.1 Penderfynu lawndal

Ymhob rhan o CRhT2 defnyddiwyd y dadansoddiad MDSF i roi man cychwyn gwerthusiad economaidd.

Yn syml, mae MDSF yn defnyddio'r wybodaeth sydd yn System Gwybodaeth Ddaeryddol CRhT2 i gynhyrchu'r asesiad economaidd hwn. Yn benodol, mae MDSF yn defnyddio mapiau perygl erydiad a llifogydd ac yn penderfynu amseriad colled neu debygolrwydd llifogydd ar gyfer holl asedau a nodwyd yn yr ardaloedd dan sylw.

Mae allbwn MDSF yn rhoi gwybodaeth mewn cysylltiad â cholled oherwydd erydiad, yn penderfynu pryd gaiff ased ei golli, yn rhoi gwerth ar yr ased hwnnw a gwerth economaidd gostyngedig. Caiff hwn ei hysbysu fel nifer a gwerth eiddo ar gyfer pob un o gyfnodau CRhT2.

O ran llifogydd ac erydiad cynyddol o dir, mae MDSF yn rhoi dadansoddiad o eiddo preifat a masnachol sy'n cael eu heffeithio ac yn pennu cyfartaledd gwerth blynyddol colled. Yna caiff hwn ei drosi'n werth presennol y golled dros gyfnod 100 mlynedd briodol i asesiad CRhT2. Wrth ddeillio cyfartaledd iawndal blynyddol gwelwyd nad oedd mapiau llifogydd sylfaenol Asiantaeth yr Amgylchedd yn rhoi digon o wybodaeth am debygolrwydd dychweliad llifogydd is. Felly, gwnaed mapiau ar wahân ar gyfer dychweliad llifogydd o 1:10 mlynedd, 1:50 mlynedd, 1:100 mlynedd, 1:250 mlynedd a 1:1000 o flynyddoedd. Cymrwyd lefelau dŵr ar sail gwerthoedd eithafol presennol.

Gwnaed y gwaith hwn ar gyfer pob ardal gan gymryd gwerthoedd lefelau dŵr disgwylidig ar ddiwedd pob cyfnod. Ar gyfer y cyfnod cyntaf, cymrwyd gwerth presennol lefelau dŵr ac iawndal llifogydd. Ar gyfer yr ail gyfnod, pennwyd iawndal dros y cyfnod fel cyfartaledd yr iawndal a bennwyd gyda lefelau dŵr presennol a'r iawndal a bennwyd erbyn diwedd yr ail gyfnod. Ar gyfer y trydydd cyfnod, cymrwyd cyfartaledd yr iawndal a bennwyd ar ddiwedd yr ail gyfnod a diwedd y trydydd cyfnod.

Hefyd ystyriwyd senario 2m o gynnydd yn lefel y môr wrth asesu polisi CRhT2. Tra pennwyd iawndal a cholled trwy erydiad ar gyfer y senario hwn fel ag i ysbrydoli'r broses benderfynu, nid yw'r gwerthoedd hyn yn cael eu hysbysu na'u hystyried yn yr atodiad hwn.

F3.1.2 Penderfynu Costau

Ar gyfer rhai darnau o'r arfordir, mae lle amddiffynfeydd yn bodoli, daw gwybodaeth o strategaethau neu arfarniad yn dangos costau amddiffyn yn y dyfodol. Pan fo CRhT2 yn argymhell addasu'r cynlluniau hyn, rhaid oedd gwneud asesiad o gostau posibl yn y dyfodol.

Ym mwyafrif yr ardaloedd bu'n rhaid penderfynu costau ar wahân i strategaethau, ar gyfer gwaith yn y tymor canolig i hir. Amlinellol iawn yw'r costau ar gyfer gwaith o'r fath.

Mewn rhai achosion nid yw strategaethau wedi nodi costau cynnal amddiffynfeydd presennol neu newydd neu ond wedi ystyried costau o'r fath dros y 50 mlynedd nesaf. Ymhob achos lle mae CRhT2 yn argymhell amddiffyn ychwanegwyd cost ychwanegol i ganiatáu ar gyfer cynnal a chadw rheolaidd dros gyfnod CRhT2. Mae'r costau cynnal yn ystyried y maint yr amddiffynfa bresennol ac, i raddau, cyflwr neu oed y gwaith.

Defnyddiwyd cyfartaledd costau man cychwyn wrth amcangyfrif gwaith. Yn nodweddiadol deilliodd y rhain o gyfres o dablau ar gyfer gwahanol fathau o adeiledd. Ar gyfer pob math o adeiledd y amcangyfrifwyd y gost fesul metr o amddiffynfa ar sail amlygrwydd i lanw a thonnau. Caiff y mathau adeiledd allweddol eu dangos yn y tablau sy'n dilyn.

Tablau cost nodweddiadol ar gyfartaledd, gan gynnwys tuedd i fod yn optimistaidd (60% yn nodweddiadol).

Rhagfur Craig £/m

Amlygrwydd i'r Llanw	Amlygrwydd i Donnau			
	Isel lawn	Isel	Cymedrol	Uchel
Isel lawn				
Isel		200	500	1000
Cymedrol		1000	2000	4000
Uchel		3000	7000	12500

Arglawdd Pridd £/m

Amlygrwydd i'r Llanw	Amlygrwydd i Donnau			
	Isel lawn	Isel	Cymedrol	Uchel
Isel lawn				
Isel		200	350	1500
Cymedrol		1500	2000	4000
Uchel		3000	3500	6000

Morglawdd Concridd £/m

Amlygrwydd i'r Llanw	Amlygrwydd i Donnau			
	Isel lawn	Isel	Cymedrol	Uchel
Isel lawn	100	150	250	500
Isel	200	300	500	1000
Cymedrol	1000	1500	2000	5000
Uchel	2500	4500	7000	12000

Mur o Stanciau Dolennog £/m

Amlygrwydd i'r Llanw	Amlygrwydd i Donnau			
	Isel lawn	Isel	Cymedrol	Uchel
Isel lawn				
Isel		200	400	600
Cymedrol		600	1000	2000
Uchel	600	1000	2000	3500

Morglawdd Craig £/m

Amlygrwydd i'r Llanw	Amlygrwydd i Donnau			
	Isel lawn	Isel	Cymedrol	Uchel
Isel lawn				
Isel		1500	1500	5000
Cymedrol		2000	4000	8000
Uchel		3000	6000	12500

Yn ogystal cymrwyd cost o £2,500 ar gyfer tynnu adeileddau presennol.

Dan amgylchiadau arbennig defnyddiwyd costau adeileddau unigol, yn cynrychioli posibilrwydd defnyddio math unigryw o adeiledd.

F4 TABL CRYNO'R ARFARNIAD ECONOMAIDD

Yn Helaethiad F1 mae tablau economaidd cryno. Caiff y canlyniadau o'r rhain eu crynhoi ymhellach ym mhrif destun CRhT2.

Cynhyrchwyd y tablau ar gyfer pob ardal reoli, gan gynnwys:

- Asesiad o'r iawndal yn deillio o MDSF. Caiff tri senario eu hystyried er mwyn cymharu, a chaniatáu asesu sensitifedd. Y tri senario yw Dim Ymyriad Gweithredol, Gyda Rheoli Presennol a'r Cynllun Dewisol. Cysylltiedig â phob adroddiad MDSF mae gwybodaeth berthnasol arall yn cael ei nodi; naill ai o ran gwybodaeth o astudiaethau eraill neu o ran ba iawndal ychwanegol y gellid ei ystyried mewn cysylltiad â'r senario penodol. Ar gyfer pob senario caiff cyfanswm iawndal ei hysbysu gyda nodiadau i esbonio sut y deilliwyd hyn o'r wybodaeth.
- Asesiad o'r costau. Caiff hyn ei ddarparu ar gyfer senario Gyda Rheoli Presennol a'r Cynllun Dewisol. Mewn llawer achos gall y ddau fod yr un fath. Fel yr uchod, caiff y cyfeiriad mewn perthynas â chostau ei nodi ynghyd ag esboniad cryno o sut y cafodd hyn ei ddefnyddio i ddeillio cost y Cynllun Dewisol.
- Yn olaf, mae'r tabl yn rhoi sylw byr neu drafodaeth mewn cysylltiad â dadansoddiad economaidd a chyfiawnhad dros y polisi dewisol. Os yw'n cael ei ddangos, yn unig o grynodedb y canlyniadau, nad oes modd cyfiawnhau'r Cynllun Dewisol yn economaidd, caiff hyn ei amlygu naill ai o ran manteision ychwanegol y gellid eu hystyried neu o ran gwerthoedd eraill y mae'r cynllun yn ceisio rhoi sylw iddynt.

F5 SENSITIFEDD

Caiff yr ansicrwydd allweddol mewn perthynas â pholisi eu hamlygu a'u trafod ym mhrif destun CRhT2. Mewn perthynas â'r economeg, mae ansicrwydd cydnabyddedig yn enwedig mewn cysylltiad â chyflymder erydu ac amseriad unrhyw waith gofynnol. Mae ansicrwydd o'r fath yn effeithio ar amseriad digwyddiad yr iawndal a phryd allai fod angen gwaith. Fel y cyfryw, mae'r agweddau hyn yn tueddu i gydbwysu yn yr economeg.

Yn bendant o fewn cwmpas y CRhT2, rhoddwyd cyfrif eisoes am faterion amseru o'r fath i asesu fforddiadwyedd tebygol a chynaliadwyedd polisïau at ei gilydd. O ran gwir golled a chynllunio sefyllfaoedd unigol, felly, mae'n amlwg y gall amseriad fod yn eithaf pwysig ac mae CRhT2 wedi argymhell arolygu er mwyn gwella gwybodaeth.

Pan fo'r polisi dewisol yn newid o reoli presennol, mae'r tablau yn Helaethiad F1 yn caniatáu cymharu'r economeg gysylltiedig â'r newid hwn. O safbwynt economaidd yn gyfan gwbl, mae hyn yn tynnu sylw at sensitifedd penderfyniadau sy'n cael eu gwneud.

Helaethiad F1 Data Ategol yr Arfarniad Economaidd – Iawndal / Buddiannau a Chostau

=0=0=0=

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 1

Policy Units (PU): 1.1, 1.2, 1.3

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.1

Economic Assessment

Policy Development Zone (PDZ): 1

Management Area (MA): 1

Location: South West Peninsula and Islands

Policy Units (PU): 1.1, 1.2, 1.3

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.04	0.1	0.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									0.1	
									Total preferred plan damages	0.1

Costs

Present Management Assessment		PV Value (£k)
Source:	NAI	0
Notes:		0
Preferred Pan		PV Value (£k)
Description:		
No Active Intervntion. Minor private works at St Martins Haven not included		0
Notes:		0

Reconciliation

Maintain natural behaviour of the coast.

Economic Assessment

Policy Development Zone (PDZ): 2
Location: Little Haven and Broad Haven

Management Area (MA): 2
Policy Units (PU): 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

Damages

Scenario: No Active intervention											
MDSF Assessment											
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
			0.30	3.8	1.02	7.4	107.87	340.8	351.9		
Erosion damages											
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd		
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)		
0	0.00	0.0	2	132.00	62.0	47	4,886.00	319.0	381		
Other information									PV Value (£k)		
Source: Little Haven Prefeasibility study. May 2002 outline damages determined over 50 years (6% discount rate). Only considered flood risk. No further information with respect to Broad Haven											
Notes: As determined by MDSF. Additional damages would occur due to wave overtopping and tidal locking.									<table border="1"> <tr> <td>Total NAI damages</td> <td>732.9</td> </tr> </table>	Total NAI damages	732.9
Total NAI damages	732.9										

Scenario: With Present Management											
MDSF Assessment											
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
			0.18	2.3	0.67	4.7	4.35	15.7	22.7		
Erosion damages											
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd		
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)		
0	0.00	0.0	0	0.00	0.0	1	134.00	7.0	7.0		
Other information									PV Value (£k)		
Source: Little Haven Prefeasibility study. May 2002 no residual damages assessed.											
Notes: As determined by MDSF, does not include increased risk to roads or loss of amenity beaches									<table border="1"> <tr> <td>Total WPM damages</td> <td>29.7</td> </tr> </table>	Total WPM damages	29.7
Total WPM damages	29.7										

Economic Assessment

Policy Development Zone (PDZ): 2

Location: Little Haven and Broad Haven

Management Area (MA): 2

Policy Units (PU): 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.18	2.3	0.67	4.7	4.35	15.7	22.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	610.00	40.0	40.0
Other damages									PV Value (£k)
Loss of road at Little Haven and Broad Haven. Properties lost due to erosion as defences are set back at Little Haven and Broad Haven.									
Notes: As determined by MDSF, additional loss of property due to realignment.								Total preferred plan damages	62.7

Costs

Present Management Assessment									
Source: Little Haven Prefeasibility study. May 2002									PV Value (£k)
Increasing height of defence at Little Haven. Maintain and improve defence at Broad Haven									
Notes:									1,081
Preferred Pan									
Description: Maintain defence at Little Haven and Broad Haven with managed realignment during epoch 2 and 3. Maintain flood defence at Nolton Haven.									PV Value (£k)
Notes:									784

Reconciliation

Additional cost associated with realignment to allow adaptation during epoch 2 and 3. Damages do not include wave overtopping and tidal locking or potential loss of amenity beaches at Little Haven and Broad Haven. Damages do not include disruption to road due to future flooding, with potential loss of access to property.

Economic Assessment

Policy Development Zone (PDZ): 2

Location: *Nolton Haven and Newgale*

Management Area (MA): 3

Policy Units (PU): 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			33.80	423.2	38.13	401.0	390.40	1341.3	2,165.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF.									
								Total NAI damages	2,188.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			6.97	87.3	38.13	251.4	46.90	266.1	604.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23.0
Other information									PV Value (£k)
Source: No detailed study Manage shingel ridge and reinforce in epoch 2									
Notes: As determined by MDSF									
								Total WPM damages	627.8

Economic Assessment

Policy Development Zone (PDZ): 2

Location: Nolton Haven and Newgale

Management Area (MA): 3

Policy Units (PU): 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	390.40	1341.3	1,341.3		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23.0	
Other damages										
Loss of road potentially in epoch 2. Manage shingle ridge until closure of the road, epoch 2									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		1,364.3	

Costs

Present Management Assessment									
Source: No detailed study Manage shingle ridge and reinforce in epoch 2									PV Value (£k)
Notes:									1,802
Preferred Pan									
Description: Loss of road potentially in epoch 2. Manage shingle ridge until closure of the road, epoch 2. Maintain defence to road to south.									PV Value (£k)
Notes:									101

Reconciliation

Allow roll back and overlapping shingle bank. Support adaptation of use during epochs 1 and 2. Maintain road to southern valley to support adaptive use of area.

Economic Assessment

Policy Development Zone (PDZ): 3

Location: St David's Peninsula to Strumble Head

Management Area (MA): 4

Policy Units (PU): 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3.75	47.0	9.09	71.6	169.91	560.3	678.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	3	178.00	36.0	36	
Other information									PV Value (£k)	
Source: No detailed study										
Damages do not take account of amenity damages or disruption to highway through Solva. Damages do not include loss of heritage at Porth Gain										
Notes: As determined by MDSF									Total NAI damages	714.8

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3.75	47.0	2.93	37.2	32.90	112.1	196.3	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	2	172.00	35.0	35.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	231.3

Economic Assessment

Policy Development Zone (PDZ): 3

Location: St David's Peninsula to Strumble Head

Management Area (MA): 4

Policy Units (PU): 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			3.75	47.0	2.93	37.2	100.00	322.2	406.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	2	172.00	35.0	35.0
Other damages									PV Value (£k)
Managed realignment at Solva would look to sustain community through adaptation, while maintaining road.									
Notes: As determined by MDSF								Total preferred plan damages	441.4

Costs

Present Management Assessment									
Source: Costs include for works to sustain harbour at Solva and raising defences to village, works to sustain defence at Whitesands, Abereiddi, Porth Gain, Abercastle and Porth Claise.									PV Value (£k)
Notes:									2,311
Preferred Pan									
Description: Initial raising of defence at Solva, followed by adaptation of community. Defences at Port Claise would require collaborative funding as would works at Porth Gain. Realignment at Whitesands, at A									PV Value (£k)
Notes:									1,076

Reconciliation

Damages determined by MDSF do not take account of disruption to road and community at Solva. The preferred plan would require collaborative funding particularly at Solva, Porth Claise and Porth Gain to support community adaptation and to sustain amenity and heritage values.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Fishguard and Goodwick

Management Area (MA): 5

Policy Units (PU): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.44	230.9	117.35	757.0	1147.06	3957.6	4,945.5
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	8.00	2.0	3	330.00	62.0	64
Other information									PV Value (£k)
Source: No detailed study									
Damages do not take account of harbour operations nor loss of opportunity for sustaining economic hub. Losses do not take account of disruption of transport at Fishguard or Lower Town.									
Notes: As determined by MDSF									
								Total NAI damages	5,009.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.67	121.1	16.29	144.7	50.48	209.0	474.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: No detailed study									
Notes: As determined by MDSF									
								Total WPM damages	474.8

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Fishguard and Goodwick

Management Area (MA): 5

Policy Units (PU): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.67	121.1	16.29	144.7	211.80	713.9	979.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Potential damages increase due realignment at Lower Town during epoch 3. This would need to be addressed through adaptive development of the area.									
Notes: As determined by MDSF							Total preferred plan damages		979.7

Costs

Present Management Assessment									
Source:									PV Value (£k)
No detailed study, costs estimated based on holding the existing defences.									
Notes:									2,218
Preferred Pan									PV Value (£k)
Description: Maintain defence to main harbour area. allow flooding to Goodwick moor by change in defence at the Parrog and taking road across by bridge (no allowed fro in the cost). Cost is allowed for a retired defence to Goodwick Realignment at Lower Town but holding the quay.									
Notes:									1,459

Reconciliation

Strong economic case for maintaining Fishguard Harbour and associated Development Hub around Goodwick. Significant additional cost associated with realignment not included in assessment to allow adaptation to a more sustainable defence system in epochs 2 and 3.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 6

Policy Units (PU): 4.9, 4.10, 4.11, 4.12, 4.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	197.00	48.0	5	858.00	122.0	170
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	170.0
Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	10.0	10.0
Other information									PV Value (£k)
Source: no detaile studies									
Notes: As determined by MDSF									
								Total WPM damages	10.0

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 6

Policy Units (PU): 4.9, 4.10, 4.11, 4.12, 4.13

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	10.0	10.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									10.0
Total preferred plan damages									10.0

Costs

Present Management Assessment		PV Value (£k)
Source:	no detailed studies, continue to maintain existing defences	
Notes:		321
Preferred Pan		PV Value (£k)
Description:	discontinue defence Pwllgwaelog in epoch 2 and adapt approach to defence at Cwm yr Eglwys	
Notes:		117

Reconciliation

Damages do not include loss of road and potential loss of important heritage value at Cwm Yr Eglwys. The plan approach recognises the importance of the Cwm Yr Eglwys community.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Nyfer Estuary and Newport Sands

Management Area (MA): 7

Policy Units (PU): 4.14, 4.15, 4.16, 4.17, 4.18, 4.19

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	801.10	4941.5	1092.14	5925.8	11,934.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	9	1,301.00	154.0	154
Other information									PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 estimated damages due to flooding capped at £13M									
Notes: As determined by MDSF									
								Total NAI damages	12,088.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	104.53	1058.1	133.63	745.4	2,871.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 estimated damages based on 0.5m sea level rise. £300k									
Notes: As determined by MDSF									
								Total WPM damages	2,871.0

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Nyfer Estuary and Newport Sands

Management Area (MA): 7

Policy Units (PU): 4.14, 4.15, 4.16, 4.17, 4.18, 4.19

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
		85.26	1067.5	300.00	2147.8	500.01	2504.0	5,719.3	
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 5,719.3

Costs

Present Management Assessment		PV Value (£k)
Source:	Newport Parrog Flood alleviation scheme PAR 2006 increase defence levels.	
Notes:		509
Preferred Pan		PV Value (£k)
Description:	sustain existing defence over epoch 1 and 2 but with the intent to accept higher levels of flooding in epoch mitigated by reduction in wave height.	
Notes:		509

Reconciliation

Despite the high economic benefit, there would be difficulty in maintaining an approach of raising walls in the future, without leading to damage to the community. The plan aims to provide a more adaptive approach while maintaining the general character of the area.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan Cliffs West

Management Area (MA): 8

Policy Units (PU): 5.1

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan Cliffs West

Management Area (MA): 8

Policy Units (PU): 5.1

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source: no works		0
Notes:		
Preferred Pan		PV Value (£k)
Description: No significant works planned. This would not preclude minor local works to support access.		0
Notes:		

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):5

Location: Teifi Estuary

Management Area (MA): 9

Policy Units (PU): 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.67	108.5	90.76	554.3	119.61	658.5	1,321.3	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total NAI damages	1,358.3

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.67	108.5	90.76	554.3	90.14	566.2	1,229.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	1,266.1

Economic Assessment

Policy Development Zone (PDZ):5

Location: Teifi Estuary

Management Area (MA): 9

Policy Units (PU): 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			8.67	108.5	43.02	288.2	63.75	334.2	730.9	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	767.9

Costs

Present Management Assessment		PV Value (£k)
Source: There is no detailed plan for mangement in this area. Costs have been estimated agisnt maintaining existing defences.		
Notes:		1,429
Preferred Pan		PV Value (£k)
Description: The core feature of the Plan is to sustain existing use use and cahracter of the area while minimising reliance on the need for on-going increased provison and hardening of defences. The intent would be to reduce flood risk to Poppit but there would still be significant risk in the longer term. Allowances have been made for mangement of the entrance to the estuary. However these are solely intended as indicative.		
Notes:		841

Reconciliation

The damages determined by the SMP do not fully reflect the important local and regional avalue of the estauy in terms of the fishing industry, tourism and recreation. The economic assessment can only provide indicative values that would need to be developed through a local mangement plan. There is however, identifid significant flood and erosion risk which needs to be addressed in such a local management plan.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan

Management Area (MA): 10

Policy Units (PU): 5.10, 5.11, 5.12, 5.13, 5.14

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			70.42	881.7	506.14	3214.3	509.17	3177.9	7,273.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	128.00	56.0	0	0.00	0.0	56
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	7,329.9

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.84	198.3	25.22	228.9	43.04	213.7	640.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	640.9

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 10

Policy Units (PU): 5.10, 5.11, 5.12, 5.13, 5.14

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			15.84	198.3	25.22	228.9	43.04	213.7	640.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages
									640.9

Costs

Present Management Assessment		PV Value (£k)
Source: Improvements to cardigan north are being considered.		
Notes:		1,718
Preferred Pan		PV Value (£k)
Description: Defences would generally be maintained around Cardigan and at St Dogmaels north. Upstream of Cardigan the plan would be to allow set back of defences.		
Notes:		1,718

Reconciliation

There is significant benefit in maintaining defences as set out in the plan. Even so consideration has to be given in reducing the long term flood risk by appropriate development control.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Mwnt and Aberporth Cliffs

Management Area (MA): 11

Policy Units (PU):5.15

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total NAI damages	0.0

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):5

Location: Mwnt and Aberporth Cliffs

Management Area (MA): 11

Policy Units (PU):5.15

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch		
0.00		0.0	0.00		0.0	0.00		0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description: No works identified.		
Notes:		0

Reconciliation

There are no significant assets at risk.

Economic Assessment

Policy Development Zone (PDZ):6

Location: Aberporth and Villages

Management Area (MA): 12

Policy Units (PU):6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	20	2,758.86	288.8	289
Other information									PV Value (£k)
Source: Damages resulting from loss of road and services not evaluated for any of the communities. Potential increased cliff slippage at Aberporth and Tresaith would result in significantly greater loss.									
Notes: As determined by MDSF									Total NAI damages 289.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	624.14	56.0	56.0
Other information									PV Value (£k)
Source: no detailed study									
Notes: As determined by MDSF									Total WPM damages 56.0

Economic Assessment

Policy Development Zone (PDZ):6

Location: Aberporth and Villages

Management Area (MA): 12

Policy Units (PU):6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs Pvd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs Pvd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	4	624.14	56.0	56.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 56.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		527
Preferred Pan		PV Value (£k)
Description: Mainatin defences at Aberporth. Realignment at Tresaith and at Llangrannog		
Notes:		403

Reconciliation

Damages evaluated do not fully reflect loss to communities in terms of access and potential risk due to landslippage. Defence at Aberporth is essential to maintain the core opf the community. Realignment at Tresaith would safeguard the main access but allow adaption and sustain beach. Realignment at Llangrannog would aim to retain village and allow development of important amenity beach.

Economic Assessment

Policy Development Zone (PDZ):7

Location: New Quay Bay

Management Area (MA): 13

Policy Units (PU):7.1, 7.2, 7.3, 7.4

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	7	1,080.00	332.0	47	5,074.62	434.3	766.3	
Other information									PV Value (£k)	
Source: No detailed study. Damages do not take account of loss of the harbour and central core of New Quay										
Notes: As determined by MDSF									Total NAI damages	766.3

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	7	1,080.00	332.0	21	2,796.99	232.0	564.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	564.0

Economic Assessment

Policy Development Zone (PDZ):7

Location: New Quay Bay

Management Area (MA): 13

Policy Units (PU):7.1, 7.2, 7.3, 7.4

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	7	1,080.00	332.0	27	3,518.71	307.4	639.4
Other damages									PV Value (£k)
Increased damages with MR along Rock Street									
Notes: As determined by MDSF									Total preferred plan damages 639.4

Costs

Present Management Assessment		PV Value (£k)
Source:	Takes costs of protecting Rock Street	
Notes:		1,051
Preferred Pan		PV Value (£k)
Description:	Minor works would be undertaken to maintain Rock Street but not to stop slow erosion of the frontage. Costs include an estimated cost of maintaining the stone pier and works to reinforce Llanina Point.	
Notes:		853

Reconciliation

Damages identified above do not take account of loss of harbour and consequential damage to the centre of New Quay. Costs associated with maintaining the Pier may require alternative funding sources and plans would need to be developed in consultation with the community in terms of the long term development of the town.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source: Damages may not fully reflect longer term risk to property on coastal slope above defences. This would require more detailed study.									
Notes: As determined by MDSF									Total NAI damages 0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages 0.0

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Damages may not fully reflect longer term risk to property on coastal slope above defences. This would require more detailed study.										
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source:	Present management continues to maintain the existing defences.	
Notes:		1,163
Preferred Pan		PV Value (£k)
Description:	The plan recognises that potential risk to property on the coastal slope. Some of the defence is privately owned. The intent would be to assist in management of defences subject to more detailed assessment of risk but in the long term to withdraw from management of the frontage. This would require agreed adaptation.	
Notes:		244

Reconciliation

There is a potential risk to property. This would need to be examined further. The intent would be to move away from defence of the frontage but over epoch 1 and 2 to examine risk in more detail.

Economic Assessment

Policy Development Zone (PDZ):8

Location: Aberaeron and Aberarth

Management Area (MA): 15

Policy Units (PU):8.1, 8.2, 8.3, 8.4, 8.5, 8.6

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			105.88	1325.6	60.94	930.0	5428.75	17182.7	19,438.4	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	149.00	36.0	74	9,025.00	852.0	888	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total NAI damages	20,326.4

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			55.72	697.6	69.37	697.4	124.25	606.0	2,001.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	7	1,375.00	91.0	91.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	2,092.0

Economic Assessment

Policy Development Zone (PDZ):8

Location: Aberaeron and Aberarth

Management Area (MA): 15

Policy Units (PU):8.1, 8.2, 8.3, 8.4, 8.5, 8.6

Damages (continued)

Scenario: Preferred Plan

MDSF Assessment

Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			55.72	697.6	69.37	697.4	124.25	606.0	2,001.0	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	7	1,375.00	91.0	91.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	2,092.0

Costs

Present Management Assessment

Source:

PV Value (£k)

Notes:

1,527

Preferred Pan

Description:

PV Value (£k)

Notes:

1,222

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):8

Location: Llanrhystud bay

Management Area (MA): 16

Policy Units (PU):8.7, 8.8, 8.9, 8.10

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	10.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	10.0

Economic Assessment

Policy Development Zone (PDZ):8

Location: Llanrhystud bay

Management Area (MA): 16

Policy Units (PU):8.7, 8.8, 8.9, 8.10

Damages (continued)

Scenario: Preferred Plan

MDSF Assessment

Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)			
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch				
		0.00	0.0	0.00	0.0	0.00	0.0	0.0			
Erosion damages		Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
		No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)		PV for epoch (£k)
		0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10.0
Other damages										PV Value (£k)	
Notes: As determined by MDSF										Total preferred plan damages	10.0

Costs

Present Management Assessment

Source:

PV Value (£k)

Notes:

0

Preferred Pan

Description:

PV Value (£k)

Notes:

0

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):9

Location: Aberystwyth

Management Area (MA): 17

Policy Units (PU):9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			401.96	5032.5	552.11	5318.9	4245.08	15015.2	25,366.7	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	182	19,929.00	2476.0	2476	
Other information										
<p>Source: Aberystwyth Coastal Defence Strategy 2006 damages assessed by strategy: Tan y Bwlch - £76k, Harbour - £6936k, South Marine Terrace - £3211, Victoria and Marine Terrace - £7629. Total damages estimates (excluding properties within the rheidol valley = £17, 852. damages assessed only with 0.5m sea level rise.</p>									PV Value (£k)	
<p>Notes: As determined by MDSF taking account of rheidol valley and additional sea level rise.</p>									Total NAI damages	27,842.7

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			213.05	2667.4	292.78	2820.0	499.18	2478.8	7,966.2	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	2	263.00	24.0	24.0	
Other information										
<p>Source: Aberystwyth Coastal Defence Strategy 2006 damages assessed by strategy: Tan y Bwlch - £31k, Harbour - £843k, South Marine Terrace - £1057, Victoria and Marine Terrace - £1297. Total damages estimates (excluding properties within the rheidol valley = £3,228. damages assessed only with 0.5m sea level rise.</p>									PV Value (£k)	
<p>Notes: As determined by MDSF taking account of rheidol valley and additional sea level rise.</p>									Total WPM damages	7,990.2

Economic Assessment

Policy Development Zone (PDZ):9

Location: Aberystwyth

Management Area (MA): 17

Policy Units (PU):9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			213.05	2667.4	292.78	2820.0	1104.67	4374.0	9,861.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	263.00	24.0	24.0
Other damages									PV Value (£k)
no allowance has been taken for loss of highways, services along the sea front and amenity use. No cost has been allowed for loss of railway. Increased flood risk at Glanrafon Terrace in epoch 3									
Notes: As determined by MDSF									
								Total preferred plan damages	9,885.4

Costs

Present Management Assessment									
Source: Aberystwyth Coastal Defence Strategy 2006									PV Value (£k)
Defence cost from strategy: Tan y bwch - £3,770, Harbour - £1260, South Marine Terrace - £1977, Victoria and Marine Terrace - £698. Total cost estimates (excluding Tan y bwch costs within the Rhiedol valley = £3,935.									
Notes:									4,961
Preferred Plan									
Description: Maintain all defences except at Tan y Bwlch and potential for realignment at Glanrafon Terrace in epoch 3. Includes for future cost of defence within the Rhiedol Valley									PV Value (£k)
Notes:									5,092

Reconciliation

strong economic case for continued management even without taking account of amenity values and potential loss of services. Long term risks in terms of sustainable management, with potential loss of amenity and increased flood risk in the Rhiedol Valley.

Economic Assessment

Policy Development Zone (PDZ):9

Location: Clarach and Wallog

Management Area (MA): 18

Policy Units (PU):9.11, 9.12, 9.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			40.87	511.7	49.03	501.2	491.72	1692.5	2,705.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	19.0	67
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,772.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			40.87	511.7	5.76	260.0	491.72	1557.1	2,328.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	17.0	65.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,393.8

Economic Assessment

Policy Development Zone (PDZ):9

Location: Clarach and Wallog

Management Area (MA): 18

Policy Units (PU):9.11, 9.12, 9.13

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	MDSF (£k)
40.87		511.7	5.76		260.0	491.72		1557.1	2,328.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	17.0	65.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 2,393.8

Costs

Present Management Assessment		PV Value (£k)
Source: Allowance made for costs associated with realignment during epoch 2		126
Notes:		
Preferred Pan		PV Value (£k)
Description: Allowance made for costs associated with realignment during epoch 2		126
Notes:		

Reconciliation

Significant improvement to flood defence would require works along the sea front and along the banks of the river. This would incur significant cost and set a precedent that would be unsustainable in the longer term.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			362.92	4543.8	536.23	5012.8	17519.38	56514.1	66,070.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	74	8,274.00	2687.0	247	30,055.00	2982.0	5669
Other information									PV Value (£k)
Source: Borth appriasl of options 2006 Damages determined for both sea front and potential flood risk at Ynyslas = £51,000K.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.									
								Total NAI damages	71,739.6

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			181.20	2268.6	210.80	2185.4	536.43	2338.8	6,792.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Borth appriasl of options 2006 Damages assessed for boryh frontage with proposed scheme = £2,000k.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.									
								Total WPM damages	6,792.9

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			181.20	2268.6	210.80	2185.4	536.43	2338.8	6,792.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	294	35,574.00	2644.0	2644.0
Other damages									PV Value (£k)
no allowance for damages associated with potential loss or relocation of railway.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.							Total preferred plan damages		9,436.9

Costs

Present Management Assessment									
Source: Borth appraisl of options 2006									PV Value (£k)
costs for mangement at Borth taken from appraisla, additionla cost added for defence at Dyfi Junction.									
Notes:									19,076
Preferred Pan									
Description: costs for mangement at Borth taken from appraisla, additionla cost added for defence at Dyfi Junction.									PV Value (£k)
Notes:									19,076

Reconciliation

The Borth Appraisal is approved with the intent of providing defence to the fronatge over the next 75 years taking account of sea level rise. Beyond 75 years the approach would be to allow a redcuton on defnce standard. Defence furtehr within the estaury would depend critically on future mangement of teh railway line, although there would still be seen as being justification for defence at Dyfi junction.

Economic Assessment

Policy Development Zone (PDZ):10

Location: Dyfi North, Tywyn and the Dysynni

Management Area (MA): 20

Policy Units (PU):10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			198.13	2480.6	368.77	3160.5	899.89	3970.9	9,612.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	10	1,085.00	319.0	84	9,952.00	1113.0	1432	
Other information									PV Value (£k)	
Source:										
Damages do not include fro loss of harbour, disruption to transport routes and loss of ammenity along the sea front at Tywyn.										
Notes: As determined by MDSF									Total NAI damages	11,044.0

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			35.98	450.5	56.81	517.3	216.10	854.2	1,822.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	1,822.0

Economic Assessment

Policy Development Zone (PDZ):10

Location: Dyfi North, Tywyn and the Dysynni

Management Area (MA): 20

Policy Units (PU):10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			35.98	450.5	56.81	517.3	216.10	854.2	1,822.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
There is incareded flood risk to Aberdyfi Golf course and to agricultural land within the Penllyn Marhs and Dysynni areas.									
Notes: As determined by MDSF								Total preferred plan damages	1,822.0

Costs

Present Management Assessment									
Source: works include for improvement to defnces at Aberdofi, continued defnce at Tywyn and to the railway line. Defences in the Pnllyn marhs area include fro a cross wall embankment to the southa nd set back defence to the road and railway.									PV Value (£k)
Notes:									9,039
Preferred Pan									
Description: works include for improvement to defnces at Aberdofi, continued defnce at Tywyn and to the railway line. Defences in the Pnllyn marhs area include fro a cross wall embankment to the southa nd set back defence to the road and railway.									PV Value (£k)
Notes:									9,039

Reconciliation

damages do not include for significant disruption to the transport network or the loss of important socio-economic factors at Tywyn and Aberdyfi. Whiel shown to be marginal these additional impacts on the area justiy continued management.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Southern Cliffs

Management Area (MA): 21

Policy Units (PU):11.1, 11.2, 11.3

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	764.00	43.0	43
Other information									PV Value (£k)
Source: damages do not include for disruption to transport net work									
Notes: As determined by MDSF									
								Total NAI damages	43.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: damages do not include for disruption to transport net work									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):11

Location: Southern Cliffs

Management Area (MA): 21

Policy Units (PU):11.1, 11.2, 11.3

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
damages do not include for disruption to transport net work									
Notes: As determined by MDSF									Total preferred plan damages
									0.0

Costs

Present Management Assessment									
Source: cost do not include for local mangement of defences to rialway line									PV Value (£k)
Notes:									0
Preferred Pan									
Description: cost do not include for local mangement of defences to rialway line									PV Value (£k)
Notes:									0

Reconciliation

The principal aim of the plan would be for continued defence of the railway. This has not been assessed in the above tables.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Entrance - South

Management Area (MA): 22

Policy Units (PU):11.4, 11.5, 11.6, 11.7, 11.8, 11.9

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2296.01	28746.0	2454.00	26481.3	23606.34	81568.9	136,796.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	22	3,596.00	276.0	276
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	137,072.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			224.55	2811.4	492.91	3999.8	2774.34	10226.5	17,037.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: incased defences.									
Notes: As determined by MDSF									
								Total WPM damages	17,037.7

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Entrance - South

Management Area (MA): 22

Policy Units (PU):11.4, 11.5, 11.6, 11.7, 11.8, 11.9

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			224.55	2811.4	1502.00	9625.5	23520.34	78319.9	90,756.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	22	3,596.00	276.0	276.0
Other damages									PV Value (£k)
relocation of community at Fairbourne, damages taken as for NAI in epoch 3.									
Notes: As determined by MDSF							Total preferred plan damages		91,032.8

Costs

Present Management Assessment		PV Value (£k)
Source: continued defence of fronatges		
Notes:		6,693
Preferred Pan		PV Value (£k)
Description: Costs associated with mangement during epoch 1 and 2.		
Notes:		4,429

Reconciliation

Despite significant potential benefits, long term defence is not considered to be sustainable.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Estuary

Management Area (MA): 23

Policy Units (PU):11.10, 11.11, 11.12, 11.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.44	5.5	0.62	5.9	8.88	29.7	41.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source: Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF									
								Total NAI damages	41.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	0.30	2.9	4.48	15.0	20.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF									
								Total WPM damages	20.6

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Estuary

Management Area (MA): 23

Policy Units (PU):11.10, 11.11, 11.12, 11.13

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	0.30	2.9	4.48	15.0	20.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF							Total preferred plan damages		20.6

Costs

Present Management Assessment		PV Value (£k)
Source: Local mangement of defences including Penmaenpool		
Notes:		980
Preferred Pan		PV Value (£k)
Description: Local mangement of defences including Penmaenpool		
Notes:		980

Reconciliation

The plan aims to allow adaption but still maintain the important transport network to Barmouth and critical defence at Penmaenpool.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Barmouth

Management Area (MA): 24

Policy Units (PU):11.14, 11.15, 11.16

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	114.76	744.7	1878.82	6239.9	7,220.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	40	4,735.00	290.0	290
Other information									PV Value (£k)
Source: Damges do not include loss of harbour and sea front.									
Notes: As determined by MDSF									
								Total NAI damages	7,510.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	55.00	411.5	127.70	571.9	1,218.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,218.8

Economic Assessment

Policy Development Zone (PDZ):11

Location: *Barmouth*

Management Area (MA): 24

Policy Units (PU):11.14, 11.15, 11.16

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	44.00	350.2	100.00	450.7	1,036.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	10	1,180.00	364.0	0	0.00	0.0	364.0
Other damages									PV Value (£k)
Realignment may require relocation of properties to provide width for management. This relocation would reduce flood risk in the future.									
Notes: As determined by MDSF							Total preferred plan damages		1,400.4

Costs

Present Management Assessment		PV Value (£k)
Source: Costs are based on estimated cost of increasing defence on existing line.		
Notes:		4,686
Preferred Plan		PV Value (£k)
Description: Estimated costs derived for realignment of defences over the northern frontage at Barmouth.		
Notes:		1,852

Reconciliation

There is a strong economic benefit indicated for this area.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			8.00	100.2	19.04	150.7	29.00	150.4	401.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17
Other information									PV Value (£k)
Source: Potential flooding to railway not included.									
Notes: As determined by MDSF									
								Total NAI damages	418.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.00	37.6	5.00	44.6	29.00	106.4	188.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17.0
Other information									PV Value (£k)
Source: Potential flooding to railway not included.									
Notes: As determined by MDSF									
								Total WPM damages	205.6

Economic Assessment

Policy Development Zone (PDZ):11

Location: Dyffryn Ardudwy

Management Area (MA): 25

Policy Units (PU):11.17, 11.18, 11.19, 11.20

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.00	37.6	19.04	122.9	29.00	150.4	310.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17.0
Other damages									PV Value (£k)
Potential flooding to railway not included.									
Notes: As determined by MDSF							Total preferred plan damages		327.8

Costs

Present Management Assessment		PV Value (£k)
Source:	manage naturql flood defence and improve during epoch 2. Private defences not included	
Notes:		275
Preferred Pan		PV Value (£k)
Description:	manage nautrual bank for epoch 1. Private defences not included.	
Notes:		7

Reconciliation

Managed by private investment. Mainatin flood defence only over epoch 1.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Artro Estuary

Management Area (MA): 26

Policy Units (PU):12.1, 12.2, 12.3, 12.4, 12.5, 12.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	110.95	463.2	858.5
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	6	1,090.00	84.0	135
Other information									PV Value (£k)
Source: Damages do not include potential loss and disruption to transport.									
Notes: As determined by MDSF									
								Total NAI damages	993.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	45.68	258.9	654.2
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Damages do not include potential loss and disruption to transport.									
Notes: As determined by MDSF									
								Total WPM damages	654.2

Economic Assessment

Policy Development Zone (PDZ):12

Location: Arthro Estuary

Management Area (MA): 26

Policy Units (PU):12.1, 12.2, 12.3, 12.4, 12.5, 12.6

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	45.68	258.9	654.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
management would be subject to development of estuary mangement plan. Damags taken as for WPM									
Notes: As determined by MDSF							Total preferred plan damages		654.2

Costs

Present Management Assessment		PV Value (£k)
Source: Improvement to embankments within estuary and defence at shoreline.		
Notes:		2,506
Preferred Pan		PV Value (£k)
Description: The defence along the railway would be maintianed but mangement within the estuary would be subject to a mangements plan.		
Notes:		1,574

Reconciliation

defence along the rialway line and road would maintain the transport network. Defences would be realigned within the estuary subject to a detailed plan.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Harlech and Dwyryd Estuary

Management Area (MA): 27

Policy Units (PU):12.7, 12.8, 12.9, 12.10, 12.11, 12.12

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			201.63	2524.4	311.54	2860.9	3363.27	11502.2	16,887.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	16,978.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			31.84	398.6	64.40	536.5	159.14	699.7	1,634.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,725.9

Economic Assessment

Policy Development Zone (PDZ):12

Location: Harlech and Dwyryd Estuary

Management Area (MA): 27

Policy Units (PU):12.7, 12.8, 12.9, 12.10, 12.11, 12.12

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			31.84	398.6	64.40	536.5	159.14	699.7	1,634.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91.0
Other damages									PV Value (£k)
proposed realignment at Talsarnau may increase damages in this area. This would need to be examined in more detail.									
Notes: As determined by MDSF							Total preferred plan damages		1,725.9

Costs

Present Management Assessment		PV Value (£k)
Source: maintains all defences		
Notes:		3,701
Preferred Pan		PV Value (£k)
Description: potential for realignment at Talsarnau would need to be considered in detail.		
Notes:		1,135

Reconciliation

strong economic justification for continued defence. Potential for realignment could reduce costs but needs to be examined in more detail.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Porthmadog

Management Area (MA): 28

Policy Units (PU):12.13, 12.14, 12.15, 12.16

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7210.23	90272.1	8002.29	84809.8	75068.40	260011.3	435,093.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	213.0	14	1,565.00	546.0	92	10,311.00	928.0	1686
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	436,779.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			345.70	4328.2	503.67	4735.2	1129.35	5111.4	14,174.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	206.0	0	0.00	0.0	2	321.00	32.0	238.0
Other information									PV Value (£k)
Source: significant residual risk of flooding									
Notes: As determined by MDSF									
								Total WPM damages	14,412.8

Economic Assessment

Policy Development Zone (PDZ):12

Location: Porthmadog

Management Area (MA): 28

Policy Units (PU):12.13, 12.14, 12.15, 12.16

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			345.70	4328.2	503.67	4735.2	1129.35	5111.4	14,174.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
2	216.00	206.0	0	0.00	0.0	2	321.00	32.0	238.0	
Other damages as WPM									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	14,412.8

Costs

Present Management Assessment		PV Value (£k)
Source:	Maintenance and improvement	
Notes:		1,991
Preferred Pan		PV Value (£k)
Description:	As WPM	
Notes:		1,991

Reconciliation

Strong economic justification fro continued management. High residual risk needs to be examined in detail.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth East and Eastern Shingle Banks

Management Area (MA): 29

Policy Units (PU):12.17, 12.18, 12.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	6	577.00	173.0	35	3,599.00	454.0	627
Other information									PV Value (£k)
Source: disruption to transport network									
Notes: As determined by MDSF									
								Total NAI damages	627.0
Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Increased risk of overtopping not included in damages.									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth East and Eastern Shingle Banks

Management Area (MA): 29

Policy Units (PU):12.17, 12.18, 12.19

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Overtopping damages not included. Potential need to relocate or raise railway not included. Damages may occur associated with MR in each 3. This would be assessed in detail as the need arises. Damages as WPM									
Notes: As determined by MDSF									Total preferred plan damages
									0.0

Costs

Present Management Assessment									
Source: Maintain and raise defences.									PV Value (£k)
Notes:									1,580
Preferred Pan									
Description: Potential for realignment in epoch 3 to provide a more sustainable approach to defence. This would not necessarily incur loss of properties.									PV Value (£k)
Notes:									913

Reconciliation

Damages recorded by MDSF do not fully recognise the value of the Criccieth sea front. There is likely to be a need for collaborative funding in developing management approach in the future.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth West

Management Area (MA): 30

Policy Units (PU):12.20, 12.21, 12.22, 12.23, 12.24, 12.25

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	13.66	44.3	47.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	25	1,987.00	634.0	40	4,411.00	657.0	1291
Other information									PV Value (£k)
Source: Damages do not include for disruption to transport route.									
Notes: As determined by MDSF									
								Total NAI damages	1,338.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	8.26	27.4	30.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	161.00	25.0	25.0
Other information									PV Value (£k)
Source: Damages do not reflect fully risk to transport route.									
Notes: As determined by MDSF									
								Total WPM damages	55.6

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth West

Management Area (MA): 30

Policy Units (PU):12.20, 12.21, 12.22, 12.23, 12.24, 12.25

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
		0.02	0.3	0.50	2.9	8.26	27.4	30.6	
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	2	161.00	25.0	25.0
Other damages									PV Value (£k)
Damages do not reflect fully risk to transport route.									
Notes: As determined by MDSF							Total preferred plan damages		55.6

Costs

Present Management Assessment		PV Value (£k)
Source: These cost include for significant strengthening and raising of railway defence at Afon Wen in epoch 3 (estimated cost £12M)		
Notes:		4,157
Preferred Pan		PV Value (£k)
Description: costs include for realignemnet of revtment at Afon Wen in epoch 3, but do not include coasta associated with potential realignment of the railway.		
Notes:		3,012

Reconciliation

The priiopl costs asre associated with defnce of Criccieth where there is strong justification due to erosion damages. Realignment of defences at Afon Wen and Afon Dywfor, together with realignment of the railway would need to be considered in detail at a regional or national scale.

Economic Assessment

Policy Development Zone (PDZ):13

Location: Pwllheli Area

Management Area (MA): 31

Policy Units (PU):13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3005.67	37631.0	21157.51	134709.7	34197.14	173260.1	345,600.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	3	822.00	46.0	46	
Other information									PV Value (£k)	
Source: Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli										
Notes: As determined by MDSF									Total NAI damages	345,646.8

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			174.24	2181.5	405.63	3232.8	583.79	3096.9	8,511.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	3	822.00	42.0	42.0	
Other information									PV Value (£k)	
Source: Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli										
Notes: As determined by MDSF									Total WPM damages	8,553.1

Economic Assessment

Policy Development Zone (PDZ):13

Location: Pwllheli Area

Management Area (MA): 31

Policy Units (PU):13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			180.84	2264.1	405.63	3269.6	735.80	3572.7	9,106.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	822.00	42.0	42.0
Other damages									PV Value (£k)
Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli									
Notes: As determined by MDSF							Total preferred plan damages		9,148.4

Costs

Present Management Assessment									
Source:									PV Value (£k)
based on strategy									4,370
Notes:									
Preferred Plan									PV Value (£k)
Description: determined based on realignment at Traeth Crugan and Abererch.									
Notes:									2,362

Reconciliation

Strong economic justification for continued defence but high residual damages due to possible exceedance of standard of defence..

Economic Assessment

Policy Development Zone (PDZ):13

Location: Abersoch Area

Management Area (MA): 32

Policy Units (PU):13.10, 13.11, 13.12, 13.13, 13.14, 13.15

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			37.48	469.2	109.06	817.0	1132.53	3886.2	5,172.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	212.00	212.0	2	425.00	135.0	6	852.00	53.0	401
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	5,573.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			14.01	175.4	57.34	397.8	99.51	490.9	1,064.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	72.0	2	425.00	27.0	98.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,162.1

Economic Assessment

Policy Development Zone (PDZ):13

Location: Abersoch Area

Management Area (MA): 32

Policy Units (PU):13.10, 13.11, 13.12, 13.13, 13.14, 13.15

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			14.01	175.4	57.34	397.8	99.51	490.9	1,064.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	72.0	2	425.00	27.0	99.0
Other damages									PV Value (£k)
damages similar to WPM									
Notes: As determined by MDSF							Total preferred plan damages		1,163.1

Costs

Present Management Assessment		PV Value (£k)
Source: continued defence to the soch valley		
Notes:		1,133
Preferred Pan		PV Value (£k)
Description: manged realignment to the Soch valley with mangement of flood defences.priavte defence included at the Warren		
Notes:		485

Reconciliation

Continued flood defence at Abersoch provides strong benefits in addition to erosion protection

Economic Assessment

Policy Development Zone (PDZ):13

Location: Porth Ceriad Headland and St Tudwals Island

Management Area (MA): 33

Policy Units (PU):13.16, 13.17, 13.18, 13.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):13

Location: Porth Ceriad Headland and St Tudwals Island

Management Area (MA): 33

Policy Units (PU):13.16, 13.17, 13.18, 13.19

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages										
									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	
									0.0	

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description: No costs associated with this area									PV Value (£k)
Notes:									0

Reconciliation

No planned works

Economic Assessment

Policy Development Zone (PDZ):14

Location: Hells Mouth

Management Area (MA): 34

Policy Units (PU):14.1, 14.2, 14.3, 14.4, 14.5

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	49.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	49.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Hells Mouth

Management Area (MA): 34

Policy Units (PU):14.1, 14.2, 14.3, 14.4, 14.5

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49.0	
Other damages										
PV Value (£k)										
Notes: As determined by MDSF							Total preferred plan damages		49.0	

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description: No works to this area									PV Value (£k)
Notes:									0

Reconciliation

No planned management intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: Porth Ysgo

Management Area (MA): 35

Policy Units (PU):14.6

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Porth Ysgo

Management Area (MA): 35

Policy Units (PU):14.6

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description:		0	
Notes:		0	

Reconciliation

No planned intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: Aberdaron

Management Area (MA): 36

Policy Units (PU):14.7, 14.8, 14.9

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.05	0.6	0.66	4.0	21.57	69.6	74.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	7	459.00	148.0	21	2,258.00	192.0	340
Other information									PV Value (£k)
Source: Damages do not include disruption to road network or significant impact on the community and regional amenity value.									
Notes: As determined by MDSF									
								Total NAI damages	414.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.05	0.6	0.26	1.7	0.94	3.8	6.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	851.00	45.0	45.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	51.1

Economic Assessment

Policy Development Zone (PDZ):14

Location: Aberdaron

Management Area (MA): 36

Policy Units (PU):14.7, 14.8, 14.9

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.05	0.6	0.26	1.7	0.94	3.8	6.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	5	851.00	45.0	45.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	51.1

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		867
Preferred Pan		PV Value (£k)
Description: Reduction in cost to revetment to west of the village		
Notes:		683

Reconciliation

Damages do not include for the losst of community and signifcant regional amneity value. Mangement likely to be justified with potential for alternative funding.

Economic Assessment

Policy Development Zone (PDZ):14

Location: Ynys Enlli

Management Area (MA): 37

Policy Units (PU):14.10

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Ynys Enlli

Management Area (MA): 37

Policy Units (PU):14.10

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	
									0.0	

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description:									PV Value (£k)
Notes:									0

Reconciliation

No intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: South West Ileyn

Management Area (MA): 38

Policy Units (PU):14.11

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: South West Ileyn

Management Area (MA): 38

Policy Units (PU):14.11

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description:		0	
Notes:		0	

Reconciliation

No intervention

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Bays

Management Area (MA): 39

Policy Units (PU):15.1, 15.2, 15.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.85	48.2	8.29	67.7	44.52	165.3	281.2
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	260.00	218.0	6	1,787.00	696.0	16	4,205.00	496.0	1410
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,691.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.73	21.7	1.77	19.5	8.65	32.6	73.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	216.00	216.0	2	641.00	308.0	3	641.00	34.0	559.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	632.8

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Bays

Management Area (MA): 39

Policy Units (PU):15.1, 15.2, 15.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.73	21.7	8.29	55.9	8.65	53.0	130.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	216.00	216.0	2	641.00	308.0	10	1,476.00	310.0	834.0
Other damages									PV Value (£k)
Protection would be maintained to properties at Porth Dinllaen and Mofa Nefyn through to epoch 3. Damages do not include for loss of the community at Dinaelli									
Notes: As determined by MDSF							Total preferred plan damages		964.5

Costs

Present Management Assessment		PV Value (£k)
Source: estimated cost for reinforcing and raising all defences.		
Notes:		436
Preferred Pan		PV Value (£k)
Description: Costs include fro future improvement to defnces at Porth Nefyn and at the access point at Nefyn.		
Notes:		162

Reconciliation

Despite signifcant economic loss identified at Porth Dinllaen, raising defences to the village is not considered sustainable in the long term with sea level rise.

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Shoreline

Management Area (MA): 40

Policy Units (PU):15.4, 15.5, 15.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	17	3,609.00	230.0	288
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	288.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	0	0.00	0.0	58.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	58.1

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Shoreline

Management Area (MA): 40

Policy Units (PU):15.4, 15.5, 15.6

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.02	0.1	0.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	2	340.00	58.0	17	3,609.00	230.0	288.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	288.1

Costs

Present Management Assessment		PV Value (£k)
Source: Includes costs of maintaining private works along the frontage		
Notes:		332
Preferred Pan		PV Value (£k)
Description: Management of the Pier at Trefor		
Notes:		95

Reconciliation

Policy for this area is for Managed Realignment, cots are associated with management at Trefor, managing the pair.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Outer Estuary West

Management Area (MA): 41

Policy Units (PU):16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.23	115.6	18.11	152.4	171.16	592.4	860.4
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	234.00	56.0	8	1,430.00	139.0	195
Other information									PV Value (£k)
Source: damages do not consider loss of amenity nor loss of the airfield									
Notes: As determined by MDSF									
								Total NAI damages	1,055.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.34	91.9	12.42	110.2	49.44	193.6	395.7
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	2	425.00	54.0	104.0
Other information									PV Value (£k)
Source: damages do not consider impact on amenity on the airfield									
Notes: As determined by MDSF									
								Total WPM damages	499.7

Economic Assessment

Policy Development Zone (PDZ):16

Location: Outer Estuary West

Management Area (MA): 41

Policy Units (PU):16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
		7.34	91.9	12.42	110.2	91.41	325.0	527.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	212.00	50.0	2	425.00	54.0	104.0	
Other damages										
Increased risk of flooding over epoch 3. Continued protection to properties from erosion at Dinas Dinlle.										
PV Value (£k)										
Notes: As determined by MDSF							Total preferred plan damages		631.0	

Costs

Present Management Assessment									
Source: Increased defence at Dinas Dinlle and within Foryd Bay									
PV Value (£k)									
Notes:									
2,423									
Preferred Plan									
Description: management of defences over epoch 1 and through epoch 2 with a reduced level of protection.									
PV Value (£k)									
Notes:									
867									

Reconciliation

Policy for HTL within epoch 1 but costs associated with managed realignment over epochs 2 and 3.

Economic Assessment

Policy Development Zone (PDZ):16

Location: *Malltraeth and Cefni*

Management Area (MA): 42

Policy Units (PU):16.8, 16.9, 16.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			30.64	383.6	172.18	1130.7	271.07	1387.4	2,901.7
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,961.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.90	199.1	20.35	202.1	60.33	252.5	653.7
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60.0
Other information									PV Value (£k)
Source:									
Potential long term loss of properties to village									
Notes: As determined by MDSF									
								Total WPM damages	713.7

Economic Assessment

Policy Development Zone (PDZ):16

Location: *Malltraeth and Cefni*

Management Area (MA): 42

Policy Units (PU):16.8, 16.9, 16.10

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			15.90	199.1	20.35	202.1	60.33	252.5	653.7	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60.0	
Other damages									PV Value (£k)	
Potential long term loss of properties to village										
Notes: As determined by MDSF									Total preferred plan damages	713.7

Costs

Present Management Assessment		PV Value (£k)
Source:	Maintain embankment	
Notes:		452
Preferred Pan		PV Value (£k)
Description:	Maintain embankment	
Notes:		452

Reconciliation

Strong economic case for maintaining defence

Economic Assessment

Policy Development Zone (PDZ):16

Location: Inner Western Section of the Menai Strait

Management Area (MA): 43

Policy Units (PU):16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.16	189.8	43.31	326.0	82.78	394.7	910.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	32	2,853.00	952.0	68	6,388.00	725.0	1677
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,587.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.51	94.0	10.55	100.7	36.28	146.6	341.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	740.00	18.0	18.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	359.3

Economic Assessment

Policy Development Zone (PDZ):16

Location: Inner Western Section of the Menai Strait

Management Area (MA): 43

Policy Units (PU):16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.32	129.2	20.93	174.2	62.58	261.4	564.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	740.00	18.0	18.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages
									582.8

Costs

Present Management Assessment									
Source: Genarl maintence and raising defences									PV Value (£k)
Notes:									1,895
Preferred Pan									
Description: Maintain defence generally with futre improvements to main settlements in epoch 3.									PV Value (£k)
Notes:									604

Reconciliation

Signifcant economic value in HTL to main settlements.

Economic Assessment

Policy Development Zone (PDZ):16

Location: South Eastern Shore to Ynys Mon

Management Area (MA): 44

Policy Units (PU):16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			139.29	1743.9	186.92	1818.6	2015.73	6894.3	10,456.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	296.00	290.0	4	817.00	198.0	51	5,150.00	426.0	914
Other information									
Source:									PV Value (£k)
damages do not include disruption due to loss of highway.									
Notes:									
As determined by MDSF									
								Total NAI damages	11,370.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			20.15	252.3	28.50	271.2	109.41	431.7	955.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	149.00	145.0	4	817.00	333.0	17	2,405.00	200.0	678.0
Other information									
Source:									PV Value (£k)
Notes:									
As determined by MDSF									
								Total WPM damages	1,633.2

Economic Assessment

Policy Development Zone (PDZ):16

Location: South Eastern Shore to Ynys Mon

Management Area (MA): 44

Policy Units (PU):16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			23.22	290.7	39.59	350.2	201.70	755.2	1,396.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	149.00	145.0	2	409.00	161.0	17	2,405.00	200.0	506.0
Other damages									PV Value (£k)
Potential damages due to loss of highway and regular flooding of the road to Beaumaris.									
Notes: As determined by MDSF							Total preferred plan damages		1,902.1

Costs

Present Management Assessment		PV Value (£k)
Source: Includes fro defence of private frontages and increased defence to existing line at Beaumaris		
Notes:		1,941
Preferred Pan		PV Value (£k)
Description: costs do not include private defence. Costs take fro potential realignment of flood defence to Beaumaris.		
Notes:		1,641

Reconciliation

Strong economic case for continued defence to main settlements.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Bangor

Management Area (MA): 45

Policy Units (PU):16.26, 16.27, 16.28, 16.29, 16.30

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			76.11	952.9	170.42	1374.4	1011.13	3698.3	6,025.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	15	1,337.00	414.0	13	1,189.00	128.0	543
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	6,568.6

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			35.31	442.1	39.50	417.1	106.88	458.2	1,317.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	84.0	0	0.00	0.0	84.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,401.3

Economic Assessment

Policy Development Zone (PDZ): 1

Location: Bangor

Management Area (MA): 45

Policy Units (PU):16.26, 16.27, 16.28, 16.29, 16.30

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		35.31	442.1	39.50	417.1	1005.86	3272.0	4,131.1		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	1	212.00	84.0	0	0.00	0.0	84.0	
Other damages										
Damages include increased flood risk at Hiracl as a proxy value for potential relocation.									PV Value (£k)	
Notes: As determined by MDSF						Total preferred plan damages		4,215.1		

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									436
Preferred Pan									
Description: Costs take as WPM but with the intent of MR at Hiracl.									PV Value (£k)
Notes:									436

Reconciliation

Despite high economic values for defence at Hiracl the policy would be for MR in epoch 3 due to the highrisk as reflected by the high residual damages.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Traeth Lafan and Llanfarifechan

Management Area (MA): 46

Policy Units (PU):16.231, 16.32, 16.33

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			6.23	78.0	31.80	212.0	37.14	215.8	505.8	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	12.00	3.0	3	639.00	39.0	43	
Other information									PV Value (£k)	
Source: loss of sea front not included in damages. No values have been taken for damage and disruption as a result of the loss of A55and main railway line.										
Notes: As determined by MDSF									Total NAI damages	548.8

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3.08	38.6	6.67	54.4	37.14	137.1	230.0	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	230.0

Economic Assessment

Policy Development Zone (PDZ):16

Location: Traeth Lafan and Llanfairfechan

Management Area (MA): 46

Policy Units (PU):16.231, 16.32, 16.33

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.08	38.6	6.67	54.4	24.00	96.0	188.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	12.00	3.0	3	639.00	39.0	42.0
Other damages									PV Value (£k)
Potential wave overtopping damages not included									
Notes: As determined by MDSF							Total preferred plan damages		230.9

Costs

Present Management Assessment		PV Value (£k)
Source: costs associated with raising existing defences		
Notes:		1,965
Preferred Pan		PV Value (£k)
Description: Mainatin defence at Llanfairfechan and realigenmnt of embankment to the west.		
Notes:		1,846

Reconciliation

Continued management at Llanfairfechan partly as a result of potential damaes to transport net wrok bur also in support of amenity values of the frontage. There is likely to be a need for collbaorative funding.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.76	47.1	22.38	145.7	51.89	232.5	425.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	186.00	13.0	13
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	438.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.14	14.3	3.44	25.5	11.33	46.2	86.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	86.0

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.14	14.3	3.44	25.5	51.89	173.2	213.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	213.0

Costs

Present Management Assessment		PV Value (£k)
Source:		50
Notes:		
Preferred Pan		PV Value (£k)
Description:	Costs associated with local defence to village and road	50
Notes:		

Reconciliation

Good justification for local defence measures

Economic Assessment

Policy Development Zone (PDZ):17

Location: Rhosneigr

Management Area (MA): 48

Policy Units (PU):17.5, 17.6, 17.7, 17.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.63	32.9	28.58	174.0	138.13	521.8	728.7
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	9	218.00	90.0	11	1,529.00	143.0	230
Other information									PV Value (£k)
Source: Potential risk of flooding to the road and access to the town.									
Notes: As determined by MDSF									
								Total NAI damages	958.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.89	23.7	7.78	53.9	19.67	85.9	163.5
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	763.00	55.0	54.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	217.5

Economic Assessment

Policy Development Zone (PDZ):17

Location: Rhosneigr

Management Area (MA): 48

Policy Units (PU):17.5, 17.6, 17.7, 17.8

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.89	23.7	7.78	53.9	19.67	85.9	163.5	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	7	763.00	55.0	55.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	218.5

Costs

Present Management Assessment		PV Value (£k)
Source: Present management is with a policy for selectively holding the line. Costs are taken fro protection of all properties along the frontage.		
Notes:		1,144
Preferred Pan		PV Value (£k)
Description: The focus for mangement would be at Roshniegr. Cost are allowed for this and for maintaining access to the town. In other areas private defence might be acceptable, subject to norml approvals. Cost for private works are not included.		
Notes:		864

Reconciliation

Local defence to small groups of properties to the south of Rhosniegr are not considered to be economically justified. Sustaining the sea front to Rhosniegr is imporantnt, together with maintaining the access to the town. There would be additional damges associated with loss of access that are not taken in to account in the above assessment. The plan is considered to be viable in terms of potential damages and with respect the the broader social amenity benefits. There may be the need to look towards collaborative funding.

Economic Assessment

Policy Development Zone (PDZ):17

Location: West Holy Island

Management Area (MA): 49

Policy Units (PU):17.9, 17.10, 17.11, 17.12, 17.13, 17.14

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			49.53	620.1	245.13	1642.7	812.57	3310.6	5,573.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	408.00	252.0	1	204.00	103.0	6	1,658.00	105.0	460
Other information									
Source: Trearddur Bay Coastal study PAR damages assessed at Trearddur Bay amount to £4.4M. This included amenity damages that were addressed through the recent scheme. Other damages generally assessed by SMP include damages to other areas potentially impacted along the southwest shoreline of Holy Island.									PV Value (£k)
Notes: As determined by MDSF									Total NAI damages 6,033.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			25.89	324.1	50.71	427.0	100.29	472.6	1,223.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	13.0	13.0
Other information									
Source: Reduction in damages take account of recent scheme at Trearddur Bay.									PV Value (£k)
Notes: As determined by MDSF									Total WPM damages 1,236.8

Economic Assessment

Policy Development Zone (PDZ):17

Location: West Holy Island

Management Area (MA): 49

Policy Units (PU):17.9, 17.10, 17.11, 17.12, 17.13, 17.14

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			25.89	324.1	50.71	427.0	100.29	472.6	1,223.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0	0	0	0	0	1	204	13	13
Other damages									PV Value (£k)
residual damages due to flooding. No account is taken for potential disruption to road.									
Notes: As determined by MDSF							Total preferred plan damages		1,236.8

Costs

Present Management Assessment									
Source:									PV Value (£k)
Costs associated with general management of walls along the frontage.									202
Notes:									
Preferred Plan									
Description:									PV Value (£k)
Costs taken for holding existing defences but with the intent for some realignment in epoch 3									149
Notes:									

Reconciliation

The area contains important small communities. Access is via the coastal road, which is at risk in specific areas. The intent is to sustain the communities and associated with this the need to maintain the road.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Holyhead and Penrhos

Management Area (MA): 50

Policy Units (PU):17.15, 17.16, 17.17, 17.18

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			94.63	1184.8	500.76	3319.3	580.98	3385.8	7,889.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	3.00	0.0	0
Other information									PV Value (£k)
Source: Long term risk fo erosion to property									
Notes: As determined by MDSF									
								Total NAI damages	7,889.9

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			46.32	579.9	49.81	535.9	118.37	526.4	1,642.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,642.3

Economic Assessment

Policy Development Zone (PDZ):17

Location: Holyhead and Penrhos

Management Area (MA): 50

Policy Units (PU):17.15, 17.16, 17.17, 17.18

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			46.32	579.9	49.81	535.9	118.37	526.4	1,642.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									
									PV Value (£k)
Notes: As determined by MDSF							Total preferred plan damages		1,642.3

Costs

Present Management Assessment		PV Value (£k)
Source:	Maintain general defence to Holyhead and potential retired flood defence at Penrhos	
Notes:		777
Preferred Pan		PV Value (£k)
Description:	Maintain general defence to Holyhead and potential retired flood defence at Penrhos	
Notes:		777

Reconciliation

Avoids significant damage to Holyhead area, supporting important regional town.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Inland Sea

Management Area (MA): 51

Policy Units (PU):17.19, 17.20

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			111.82	1400.0	618.52	4071.6	848.85	4592.9	10,064.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	32.0	32
Other information									PV Value (£k)
Source: significant flood risk to the village of Valley.									
Notes: As determined by MDSF									
								Total NAI damages	10,096.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			56.90	712.4	66.70	689.1	178.66	768.0	2,169.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	32.0	32.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,201.4

Economic Assessment

Policy Development Zone (PDZ):17

Location: Inland Sea

Management Area (MA): 51

Policy Units (PU):17.19, 17.20

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			56.90	712.4	66.70	689.1	178.66	768.0	2,169.4	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	2,169.4

Costs

Present Management Assessment		PV Value (£k)
Source: SMP 1 did not include for defence to Valley as this flood risk was not assessed. This assessment allows for this defence.		
Notes:		137
Preferred Pan		PV Value (£k)
Description: local defence within In Land Sea and to the village of Valley.		
Notes:		137

Reconciliation

strong economic justification for maintaining defence to Valley. Local defence included to maintain flood defence to the rear of Treaddur and to maintain access.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Newlands and Afon Alaw

Management Area (MA): 52

Policy Units (PU):17.21, 17.22, 17.23

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.26	3.3	1.95	12.3	23.59	79.9	95.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	204.00	67.0	5	572.00	74.0	140
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	235.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	1.11	7.4	7.60	27.3	37.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
SMP 1 policy is for selectively holding the line. Under this scenario this assumed defence to new property									
Notes: As determined by MDSF									
								Total WPM damages	37.4

Economic Assessment

Policy Development Zone (PDZ):17

Location: Newlands and Afon Alaw

Management Area (MA): 52

Policy Units (PU):17.21, 17.22, 17.23

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	1.11	7.4	7.60	27.3	37.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	572.00	72.0	72.0
Other damages									PV Value (£k)
SMP 2 assessment indicates risk to property at Newlands. The approach would be to manage potential loss over time.									
Notes: As determined by MDSF							Total preferred plan damages		109.4

Costs

Present Management Assessment		PV Value (£k)
Source: Significant costs associated with full defence at newlands		
Notes:		1,107
Preferred Plan		PV Value (£k)
Description: The plan is for managed realignment.		
Notes:		391

Reconciliation

Longer term adjustment and adaptation in defence approach.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northwest Ynys Mon

Management Area (MA): 53

Policy Units (PU):18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.90	98.9	12.93	116.1	111.83	390.5	605.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	734.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.99	37.4	12.93	88.8	19.25	100.7	226.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	355.9

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northwest Ynys Mon

Management Area (MA): 53

Policy Units (PU):18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
		2.99	37.4	12.93	88.8	50.25	197.8	323.9	
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129.0
Other damages									PV Value (£k)
Potential increased damages to western bays. Management of flood risk at Cemlyn Bay									
Notes: As determined by MDSF						Total preferred plan damages		452.9	

Costs

Present Management Assessment		PV Value (£k)
Source: No costs associated with Cemlyn Bay		
Notes:		55
Preferred Pan		PV Value (£k)
Description: Need for management at Cemlyn Bay to allow adaption.		
Notes:		235

Reconciliation

Managing the increasing flood risk at Cemlyn Bay while allowing natural development of the coast. Cost allowed for continued defence at Wylfa Power Station.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Cemaes Bay

Management Area (MA): 54

Policy Units (PU):18.8, 18.9, 18.10, 18.11, 18.12

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.23	15.4	3.43	26.0	23.31	83.7	125.1	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	5	320.00	137.0	6	884.00	107.0	254	
Other information									PV Value (£k)	
Source: Damages do not take account of disruption to road and access to the town, nor with respect to loss associated with harbour										
Notes: As determined by MDSF									Total NAI damages	379.1

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.69	8.6	1.95	14.7	4.79	21.1	44.5	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	44.5

Economic Assessment

Policy Development Zone (PDZ):18

Location: Cemaes Bay

Management Area (MA): 54

Policy Units (PU):18.8, 18.9, 18.10, 18.11, 18.12

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
		0.69	8.6	1.95	14.7	4.79	21.1	44.5	
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	1	128.00	10.0	10.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 54.5

Costs

Present Management Assessment		PV Value (£k)
Source: Linear approach to defence raising and reinforcing existing defence line.		
Notes:		515
Preferred Pan		PV Value (£k)
Description: Adpat defence approach particulalrly during epoch 3 to realign defence.		
Notes:		482

Reconciliation

Relatively good economic justification based solely on direct loss of property and flood risk. Damages do not take account of additional benefits in sustaining important access and operation of the harbour.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northeast Ynys Mon

Management Area (MA): 55

Policy Units (PU):18.13, 18.14, 18.15, 18.16, 18.17, 18.18

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.44	18.0	3.17	25.7	19.31	70.4	114.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	9	762.00	239.0	8	1,633.00	149.0	387
Other information									PV Value (£k)
Source:									
Dmages do not fully refelct the potential damage resulting from loss of access and harbour opertaion at Amlwch									
Notes: As determined by MDSF									
								Total NAI damages	501.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.65	8.1	1.56	12.3	4.32	18.4	38.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
As determined by MDSF									
								Total WPM damages	38.9

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northeast Ynys Mon

Management Area (MA): 55

Policy Units (PU):18.13, 18.14, 18.15, 18.16, 18.17, 18.18

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.65	8.1	1.56	12.3	4.32	18.4	38.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	612.00	48.0	48.0
Other damages									PV Value (£k)
There may be loss of property at Porth Llechog in epoch 3.									
Notes: As determined by MDSF							Total preferred plan damages		86.9

Costs

Present Management Assessment		PV Value (£k)
Source: Costs include for continuing management of existing defence at Porth Llechog and Porth Elian		
Notes:		407
Preferred Pan		PV Value (£k)
Description: Costs are based on realignment at Porth Llechog and Porth Elian.		
Notes:		380

Reconciliation

The plan would continue to maintain defence at Amlech, moving towards realignment in other areas. There is a reasonable economic justification for the approach, with costs associated with adaption of defences.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Dulas Bay

Management Area (MA): 56

Policy Units (PU):19.1, 19.2, 19.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			11.66	146.0	59.42	396.3	67.27	396.5	938.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,154.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			5.63	70.5	5.87	64.1	13.92	61.9	196.5
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	412.5

Economic Assessment

Policy Development Zone (PDZ):19

Location: Dulas Bay

Management Area (MA): 56

Policy Units (PU):19.1, 19.2, 19.3

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages		Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
		5.63	70.5		5.87	64.1	63.70	217.8	352.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 568.4

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description: scope for local management of erosion and flood risk through private funding		
Notes:		0

Reconciliation

No strong justification for defence. The plan allows for local private defence.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Moelfre

Management Area (MA): 57

Policy Units (PU):19.4, 19.5, 19.6, 19.7, 19.8

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.95	11.9	2.20	17.6	17.26	60.9	90.4	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	2	184.00	60.0	9	976.00	119.0	179	
Other information									PV Value (£k)	
Source:										
Damages do not include for disruption to road and community at Porth Moelfre and potential amenity loss at Treath Bychna										
Notes: As determined by MDSF									Total NAI damages	269.4

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.43	5.4	0.59	5.7	2.60	10.0	21.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	2	184.00	60.0	9	976.00	109.0	170.0	
Other information									PV Value (£k)	
Source:										
As determined by MDSF										
Notes: As determined by MDSF									Total WPM damages	191.1

Economic Assessment

Policy Development Zone (PDZ):19

Location: Moelfre

Management Area (MA): 57

Policy Units (PU):19.4, 19.5, 19.6, 19.7, 19.8

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.43	5.4	0.59	5.7	2.60	10.0	21.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	9	976.00	119.0	119.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	140.1

Costs

Present Management Assessment		PV Value (£k)
Source:	no management.	
Notes:		0
Preferred Pan		PV Value (£k)
Description:	allow adaption to Prth Moelfre and Treath Bychan	
Notes:		33

Reconciliation

Potential significant loss to communities. The plan allows time for adaptation.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Traeth Coch

Management Area (MA): 58

Policy Units (PU):19.9, 19.10, 19.11, 19.12, 19.13, 19.14, 19.15, 19.16, 19.17

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			14.49	181.4	77.60	513.4	112.27	594.3	1,289.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	4	551.00	214.0	12	1,601.00	148.0	362
Other information									PV Value (£k)
Source: Damages do not take account of disruption to road and access at Benllech and at Red Wharf Bya									
Notes: As determined by MDSF									
								Total NAI damages	1,651.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.69	96.3	9.16	93.9	24.65	105.8	296.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	332.00	129.0	7	1,165.00	202.0	331.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	627.0

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 58

Policy Units (PU):19.9, 19.10, 19.11, 19.12, 19.13, 19.14, 19.15, 19.16, 19.17

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.69	96.3	30.00	210.1	50.00	250.4	556.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	332.00	129.0	7	1,165.00	202.0	331.0
Other damages									PV Value (£k)
incarsed flood risk at Afon Nodwydd									
Notes: As determined by MDSF							Total preferred plan damages		887.8

Costs

Present Management Assessment		PV Value (£k)
Source: Costs take account of continued incarese and strengthening flood defences		
Notes:		703
Preferred Pan		PV Value (£k)
Description: Costs allow for continued defence during epochs 1 and 2 but with costs associated with adaptation in epoch 3.		
Notes:		463

Reconciliation

General justification fro continued management throughout the area but with the inetnt to adapt defences with incarsed flood risk during epoch 3.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Southern Shoreline

Management Area (MA): 59

Policy Units (PU):20.1, 20.2

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			16.88	211.3	88.52	587.6	140.72	717.5	1,516.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	6.00	3.0	0	0.00	0.0	3
Other information									PV Value (£k)
Source: daamges do not include for loss of A55 and railway line									
Notes: As determined by MDSF									
								Total NAI damages	1,519.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			8.85	110.8	20.57	164.0	117.69	432.8	707.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	707.6

Economic Assessment

Policy Development Zone (PDZ):20

Location: Southern Shoreline

Management Area (MA): 59

Policy Units (PU):20.1, 20.2

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.85	110.8	20.57	164.0	117.69	432.8	707.6	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	707.6

Costs

Present Management Assessment		PV Value (£k)
Source:	continued defence to frontage	
Notes:		3,364
Preferred Pan		PV Value (£k)
Description:	continued defence to frontage	
Notes:		3,364

Reconciliation

Policy justified by need to maintain the A55 and railway line

Economic Assessment

Policy Development Zone (PDZ):20

Location: Inner Estuary and Associated shoreline

Management Area (MA): 60

Policy Units (PU):20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 20.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			391.94	4907.1	1432.63	10172.0	4377.80	18186.6	33,265.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	16	2,349.00	682.0	61	7,642.00	1003.0	1684
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	34,949.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			136.25	1705.9	243.68	2118.1	679.59	2889.8	6,713.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	6,713.8

Economic Assessment

Policy Development Zone (PDZ):20

Location: Inner Estuary and Associated shoreline

Management Area (MA): 60

Policy Units (PU):20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 20.10

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		136.25	1705.9	243.68	2118.1	2996.60	10142.1	13,966.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages										
Damages include increased flood damage at Deganwy as proxy for potential adaption of defences									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		13,966.0	

Costs

Present Management Assessment		PV Value (£k)	
Source: Maintaing and raising defences .			
Notes:		4,487	
Preferred Pan		PV Value (£k)	
Description: mainatin and raise defences but with intent to adapt mangement at Morfa Conwy.			
Notes:		3,108	

Reconciliation

Strong economic and social argument for continued mangement of the area.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Outer Estuary East

Management Area (MA): 61

Policy Units (PU): 20.11, 20.12, 20.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2253.08	28208.6	2542.95	26737.9	29940.99	101674.7	156,621.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	156,910.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1053.91	13195.0	1179.33	12450.3	3033.84	13187.2	38,832.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289.0
Other information									PV Value (£k)
Source:									
potential long term loss of property at Gogarth in epoch 3									
Notes: As determined by MDSF									
								Total WPM damages	39,121.5

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 61

Policy Units (PU): 20.11, 20.12, 20.13

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1053.91	13195.0	1179.33	12450.3	3033.84	13187.2	38,832.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289.0
Other damages									PV Value (£k)
potential long term loss of property at Gogarth in epoch 3									
Notes: As determined by MDSF							Total preferred plan damages		39,121.5

Costs

Present Management Assessment		PV Value (£k)
Source: maintain defences		
Notes:		2,782
Preferred Pan		PV Value (£k)
Description: Potential realignment to more sustainable position		
Notes:		2,841

Reconciliation

Strong economic and social argument for continued management.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Upper Estuary

Management Area (MA): 62

Policy Units (PU):20.14, 20.15, 20.16, 20.17, 20.18, 20.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			164.32	2057.3	235.26	2227.7	2717.28	9241.5	13,526.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	772.00	62.0	62
Other information									PV Value (£k)
Source: Loss of railway and disruption to road. Potential extensive flooding around Llandudno Junction									
Notes: As determined by MDSF									
								Total NAI damages	13,588.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			80.28	1005.1	107.78	1048.4	428.49	1678.5	3,732.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	3,732.1

Economic Assessment

Policy Development Zone (PDZ):20

Location: Upper Estuary

Management Area (MA): 62

Policy Units (PU):20.14, 20.15, 20.16, 20.17, 20.18, 20.19

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			80.28	1005.1	107.78	1048.4	428.49	1678.5	3,732.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									
Potential costs for relocation of the railway line not included.									PV Value (£k)
Notes: As determined by MDSF							Total preferred plan damages		3,732.1

Costs

Present Management Assessment		PV Value (£k)
Source: High costs associated with raising defence to Llandudno Junction and in defence of railway line from GlanConwy		
Notes:		11,646
Preferred Pan		PV Value (£k)
Description: Reduced costs associated with Llandudno junction and for only medium term investment in railway.		
Notes:		7,866

Reconciliation

Important economic and social costs associated with Llandudno Junction and Glan conwy. Costs associated with realignment within estuary.

Annex F1 Supporting Economic Appraisal Data – Damages/Benefits and Costs

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Economic Assessment

Policy Development Zone (PDZ): 1

Management Area (MA): 1

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Location: South West Peninsula and Islands

Policy Units (PU): 1.1, 1.2, 1.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.1

Economic Assessment

Policy Development Zone (PDZ): 1

Management Area (MA): 1

Location: South West Peninsula and Islands

Policy Units (PU): 1.1, 1.2, 1.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									0.1
									Total preferred plan damages
									0.1

Costs

Present Management Assessment		PV Value (£k)
Source:	NAI	0
Notes:		0
Preferred Pan		PV Value (£k)
Description:	No Active Intervntion. Minor private works at St Martins Haven not included	0
Notes:		0

Reconciliation

Maintain natural behaviour of the coast.

Economic Assessment

Policy Development Zone (PDZ): 2
Location: Little Haven and Broad Haven

Management Area (MA): 2
Policy Units (PU): 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.30	3.8	1.02	7.4	107.87	340.8	351.9	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	2	132.00	62.0	47	4,886.00	319.0	381	
Other information									PV Value (£k)	
Source: Little Haven Prefeasibility study. May 2002 outline damages determined over 50 years (6% discount rate). Only considered flood risk. No further information with respect to Broad Haven										
Notes: As determined by MDSF. Additional damages would occur due to wave overtopping and tidal locking.									Total NAI damages	732.9

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.18	2.3	0.67	4.7	4.35	15.7	22.7	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	1	134.00	7.0	7.0	
Other information									PV Value (£k)	
Source: Little Haven Prefeasibility study. May 2002 no residual damages assessed.										
Notes: As determined by MDSF, does not include increased risk to roads or loss of amenity beaches									Total WPM damages	29.7

Economic Assessment

Policy Development Zone (PDZ): 2

Location: Little Haven and Broad Haven

Management Area (MA): 2

Policy Units (PU): 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.18	2.3	0.67	4.7	4.35	15.7	22.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	610.00	40.0	40.0
Other damages									PV Value (£k)
Loss of road at Little Haven and Broad Haven. Properties lost due to erosion as defences are set back at Little Haven and Broad Haven.									
Notes: As determined by MDSF, additional loss of property due to realignment.								Total preferred plan damages	62.7

Costs

Present Management Assessment									
Source: Little Haven Prefeasibility study. May 2002									PV Value (£k)
Increasing height of defence at Little Haven. Maintain and improve defence at Broad Haven									
Notes:									1,081
Preferred Pan									
Description: Maintain defence at Little Haven and Broad Haven with managed realignment during epoch 2 and 3. Maintain flood defence at Nolton Haven.									PV Value (£k)
Notes:									784

Reconciliation

Additional cost associated with realignment to allow adaptation during epoch 2 and 3. Damages do not include wave overtopping and tidal locking or potential loss of amenity beaches at Little Haven and Broad Haven. Damages do not include disruption to road due to future flooding, with potential loss of access to property.

Economic Assessment

Policy Development Zone (PDZ): 2

Location: *Nolton Haven and Newgale*

Management Area (MA): 3

Policy Units (PU): 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			33.80	423.2	38.13	401.0	390.40	1341.3	2,165.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF.									
								Total NAI damages	2,188.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			6.97	87.3	38.13	251.4	46.90	266.1	604.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23.0
Other information									PV Value (£k)
Source: No detailed study Manage shingel ridge and reinforce in epoch 2									
Notes: As determined by MDSF									
								Total WPM damages	627.8

Economic Assessment

Policy Development Zone (PDZ): 2

Location: *Nolton Haven and Newgale*

Management Area (MA): 3

Policy Units (PU): 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	390.40	1341.3	1,341.3		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23.0	
Other damages										
Loss of road potentially in epoch 2. Manage shingle ridge until closure of the road, epoch 2									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		1,364.3	

Costs

Present Management Assessment									
Source: No detailed study Manage shingle ridge and reinforce in epoch 2									PV Value (£k)
Notes:									1,802
Preferred Pan									
Description: Loss of road potentially in epoch 2. Manage shingle ridge until closure of the road, epoch 2. Maintain defence to road to south.									PV Value (£k)
Notes:									101

Reconciliation

Allow roll back and overtopping shingle bank. Support adaptation of use during epochs 1 and 2. Maintain road to southern valley to support adaptive use of area.

Economic Assessment

Policy Development Zone (PDZ): 3

Location: St David's Peninsula to Strumble Head

Management Area (MA): 4

Policy Units (PU): 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.75	47.0	9.09	71.6	169.91	560.3	678.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	178.00	36.0	36
Other information									PV Value (£k)
Source: No detailed study									
Damages do not take account of amenity damages or disruption to highway through Solva. Damages do not include loss of heritage at Porth Gain									
Notes: As determined by MDSF									
								Total NAI damages	714.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.75	47.0	2.93	37.2	32.90	112.1	196.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	172.00	35.0	35.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	231.3

Economic Assessment

Policy Development Zone (PDZ): 3

Location: St David's Peninsula to Strumble Head

Management Area (MA): 4

Policy Units (PU): 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.75	47.0	2.93	37.2	100.00	322.2	406.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	172.00	35.0	35.0
Other damages									PV Value (£k)
Managed realignment at Solva would look to sustain community through adaptation, while maintaining road.									
Notes: As determined by MDSF							Total preferred plan damages		441.4

Costs

Present Management Assessment									
Source:									PV Value (£k)
Costs include for works to sustain harbour at Solva and raising defences to village, works to sustain defence at Whitesands, Abereiddi, Porth Gain, Abercastle and Porth Claise.									
Notes:									2,311
Preferred Pan									
Description:									PV Value (£k)
Initial raising of defence at Solva, followed by adaptation of community. Defences at Port Claise would require collaborative funding as would works at Porth Gain. Realignment at Whitesands, at A									
Notes:									1,076

Reconciliation

Damages determined by MDSF do not take account of disruption to road and community at Solva. The preferred plan would require collaborative funding particularly at Solva, Porth Claise and Porth Gain to support community adaptation and to sustain amenity and heritage values.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Fishguard and Goodwick

Management Area (MA): 5

Policy Units (PU): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.44	230.9	117.35	757.0	1147.06	3957.6	4,945.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	8.00	2.0	3	330.00	62.0	64
Other information									
Source: No detailed study									PV Value (£k)
Damages do not take account of harbour operations nor loss of opportunity for sustaining economic hub. Losses do not take account of disruption of transport at Fishguard or Lower Town.									
Notes: As determined by MDSF							Total NAI damages		5,009.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.67	121.1	16.29	144.7	50.48	209.0	474.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									
Source: No detailed study									PV Value (£k)
Notes: As determined by MDSF							Total WPM damages		474.8

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Fishguard and Goodwick

Management Area (MA): 5

Policy Units (PU): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.67	121.1	16.29	144.7	211.80	713.9	979.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Potential damages increase due realignment at Lower Town during epoch 3. This would need to be addressed through adaptive development of the area.									
Notes: As determined by MDSF							Total preferred plan damages		979.7

Costs

Present Management Assessment									
Source:									PV Value (£k)
No detailed study, costs estimated based on holding the existing defences.									
Notes:									2,218
Preferred Pan									PV Value (£k)
Description:									
Maintain defence to main harbour area. allow flooding to Goodwick moor by change in defence at the Parrog and taking road across by bridge (no allowed fro in the cost). Cost is allowed for a retired defence to Goodwick Realignment at Lower Town but holding the quay.									
Notes:									1,459

Reconciliation

Strong economic case for maintaining Fishguard Harbour and associated Development Hub around Goodwick. Significant additional cost associated with realignment not included in assessment to allow adaptation to a more sustainable defence system in epochs 2 and 3.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 6

Policy Units (PU): 4.9, 4.10, 4.11, 4.12, 4.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	197.00	48.0	5	858.00	122.0	170
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	170.0
Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	10.0	10.0
Other information									PV Value (£k)
Source: no detaile studies									
Notes: As determined by MDSF									
								Total WPM damages	10.0

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 6

Policy Units (PU): 4.9, 4.10, 4.11, 4.12, 4.13

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	10.0	10.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									10.0
Total preferred plan damages									10.0

Costs

Present Management Assessment		PV Value (£k)
Source:	no detailed studies, continue to maintain existing defences	
Notes:		321
Preferred Pan		PV Value (£k)
Description:	discontinue defence Pwllgwaelog in epoch 2 and adapt approach to defence at Cwm yr Eglwys	
Notes:		117

Reconciliation

Damages do not include loss of road and potential loss of important heritage value at Cwm Yr Eglwys. The plan approach recognises the importance of the Cwm Yr Eglwys community.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Nyfer Estuary and Newport Sands

Management Area (MA): 7

Policy Units (PU): 4.14, 4.15, 4.16, 4.17, 4.18, 4.19

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	801.10	4941.5	1092.14	5925.8	11,934.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	9	1,301.00	154.0	154
Other information									PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 estimated damages due to flooding capped at £13M									
Notes: As determined by MDSF									
								Total NAI damages	12,088.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	104.53	1058.1	133.63	745.4	2,871.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 estimated damages based on 0.5m sea level rise. £300k									
Notes: As determined by MDSF									
								Total WPM damages	2,871.0

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Nyfer Estuary and Newport Sands

Management Area (MA): 7

Policy Units (PU): 4.14, 4.15, 4.16, 4.17, 4.18, 4.19

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
		85.26	1067.5	300.00	2147.8	500.01	2504.0	5,719.3		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages										
PV Value (£k)										
Notes: As determined by MDSF							Total preferred plan damages		5,719.3	

Costs

Present Management Assessment									
Source: Newport Parrog Flood alleviation scheme PAR 2006 increase defence levels.								PV Value (£k)	
Notes:								509	
Preferred Pan									
Description: sustain existing defence over epoch 1 and 2 but with the intent to accept higher levels of flooding in epoch mitigated by reduction in wave height.								PV Value (£k)	
Notes:								509	

Reconciliation

Despite the high economic benefit, there would be difficulty in maintaining an approach of raising walls in the future, without leading to damage to the community. The plan aims to provide a more adaptive approach while maintaining the general character of the area.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan Cliffs West

Management Area (MA): 8

Policy Units (PU): 5.1

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan Cliffs West

Management Area (MA): 8

Policy Units (PU): 5.1

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source:	no works	
Notes:		0
Preferred Pan		PV Value (£k)
Description:	No significant works planned. This would not preclude minor local works to support access.	
Notes:		0

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):5

Location: Teifi Estuary

Management Area (MA): 9

Policy Units (PU): 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.67	108.5	90.76	554.3	119.61	658.5	1,321.3	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total NAI damages	1,358.3

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.67	108.5	90.76	554.3	90.14	566.2	1,229.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	1,266.1

Economic Assessment

Policy Development Zone (PDZ):5

Location: Teifi Estuary

Management Area (MA): 9

Policy Units (PU): 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			8.67	108.5	43.02	288.2	63.75	334.2	730.9	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	767.9

Costs

Present Management Assessment		PV Value (£k)
Source: There is no detailed plan for mangement in this area. Costs have been estimated agisnt maintaining existing defences.		
Notes:		1,429
Preferred Pan		PV Value (£k)
Description: The core feature of the Plan is to sustain existing use use and cahracter of the area while minimising reliance on the need for on-going increased provison and hardening of defences. The intent would be to reduce flood risk to Poppit but there would still be significant risk in the longer term. Allowances have been made for mangement of the entrance to the estuary. However these are solely intended as indicative.		
Notes:		841

Reconciliation

The damages determined by the SMP do not fully reflect the important local and regional avalue of the estauy in terms of the fishing industry, tourism and recreation. The economic assessment can only provide indicative values that would need to be developed through a local mangement plan. There is however, identifid significant flood and erosion risk which needs to be addressed in such a local management plan.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			70.42	881.7	506.14	3214.3	509.17	3177.9	7,273.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	128.00	56.0	0	0.00	0.0	56
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	7,329.9

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.84	198.3	25.22	228.9	43.04	213.7	640.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	640.9

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 10

Policy Units (PU): 5.10, 5.11, 5.12, 5.13, 5.14

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			15.84	198.3	25.22	228.9	43.04	213.7	640.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 640.9

Costs

Present Management Assessment		PV Value (£k)
Source: Improvements to cardigan north are being considered.		
Notes:		1,718
Preferred Pan		PV Value (£k)
Description: Defences would generally be maintained around Cardigan and at St Dogmaels north. Upstream of Cardigan the plan would be to allow set back of defences.		
Notes:		1,718

Reconciliation

There is significant benefit in maintaining defences as set out in the plan. Even so consideration has to be given in reducing the long term flood risk by appropriate development control.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Mwnt and Aberporth Cliffs

Management Area (MA): 11

Policy Units (PU):5.15

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total NAI damages	0.0

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):5

Location: Mwnt and Aberporth Cliffs

Management Area (MA): 11

Policy Units (PU):5.15

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch		
0.00		0.0	0.00		0.0	0.00		0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description: No works identified.		
Notes:		0

Reconciliation

There are no significant assets at risk.

Economic Assessment

Policy Development Zone (PDZ):6

Location: Aberporth and Villages

Management Area (MA): 12

Policy Units (PU):6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	20	2,758.86	288.8	289	
Other information									PV Value (£k)	
Source: Damages resulting from loss of road and services not evaluated for any of the communities. Potential increased cliff slippage at Aberporth and Tresaith would result in significantly greater loss.										
Notes: As determined by MDSF									Total NAI damages	289.0

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	4	624.14	56.0	56.0	
Other information									PV Value (£k)	
Source: no detailed study										
Notes: As determined by MDSF									Total WPM damages	56.0

Economic Assessment

Policy Development Zone (PDZ):6

Location: Aberporth and Villages

Management Area (MA): 12

Policy Units (PU):6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs Pvd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs Pvd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	4	624.14	56.0	56.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	56.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		527
Preferred Pan		PV Value (£k)
Description: Mainatin defences at Aberporth. Realignment at Tresaith and at Llangrannog		
Notes:		403

Reconciliation

Damages evaluated do not fully reflect loss to communities in terms of access and potential risk due to landslippage. Defence at Aberporth is essential to maintain the core opf the community. Realignment at Tresaith would safeguard the main access but allow adaption and sustain beach. Realignment at Llangrannog would aim to retain village and allow development of important amenity beach.

Economic Assessment

Policy Development Zone (PDZ):7

Location: New Quay Bay

Management Area (MA): 13

Policy Units (PU):7.1, 7.2, 7.3, 7.4

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	7	1,080.00	332.0	47	5,074.62	434.3	766.3
Other information									PV Value (£k)
Source: No detailed study. Damages do not take account of loss of the harbour and central core of New Quay									
Notes: As determined by MDSF									
								Total NAI damages	766.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	7	1,080.00	332.0	21	2,796.99	232.0	564.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	564.0

Economic Assessment

Policy Development Zone (PDZ):7

Location: New Quay Bay

Management Area (MA): 13

Policy Units (PU):7.1, 7.2, 7.3, 7.4

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	7	1,080.00	332.0	27	3,518.71	307.4	639.4	
Other damages									PV Value (£k)	
Increased damages with MR along Rock Street										
Notes: As determined by MDSF									Total preferred plan damages	639.4

Costs

Present Management Assessment		PV Value (£k)
Source: Takes costs of protecting Rock Street		
Notes:		1,051
Preferred Pan		PV Value (£k)
Description: Minor works would be undertaken to maintain Rock Street but not to stop slow erosion of the frontage. Costs include an estimated cost of maintaining the stone pier and works to reinforce Llanina Point.		
Notes:		853

Reconciliation

Damages identified above do not take account of loss of harbour and consequential damage to the centre of New Quay. Costs associated with maintaining the Pier may require alternative funding sources and plans would need to be developed in consultation with the community in terms of the long term development of the town.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source: Damages may not fully reflect longer term risk to property on coastal slope above defences. This would require more detailed study.									
Notes: As determined by MDSF									Total NAI damages 0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages 0.0

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Damages may not fully reflect longer term risk to property on coastal slope above defences. This would require more detailed study.										
Notes: As determined by MDSF								Total preferred plan damages		0.0

Costs

Present Management Assessment		PV Value (£k)
Source: Present management continues to maintain the existing defences.		
Notes:		1,163
Preferred Pan		PV Value (£k)
Description: The plan recognises that potential risk to property on the coastal slope. Some of the defence is privately owned. The intent would be to assist in management of defences subject to more detailed assessment of risk but in the long term to withdraw from management of the frontage. This would require agreed adaptation.		
Notes:		244

Reconciliation

There is a potential risk to property. This would need to be examined further. The intent would be to move away from defence of the frontage but over epoch 1 and 2 to examine risk in more detail.

Economic Assessment

Policy Development Zone (PDZ):8

Location: Aberaeron and Aberarth

Management Area (MA): 15

Policy Units (PU):8.1, 8.2, 8.3, 8.4, 8.5, 8.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			105.88	1325.6	60.94	930.0	5428.75	17182.7	19,438.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	149.00	36.0	74	9,025.00	852.0	888
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	20,326.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			55.72	697.6	69.37	697.4	124.25	606.0	2,001.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	1,375.00	91.0	91.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,092.0

Economic Assessment

Policy Development Zone (PDZ):8

Location: Aberaeron and Aberarth

Management Area (MA): 15

Policy Units (PU):8.1, 8.2, 8.3, 8.4, 8.5, 8.6

Damages (continued)

Scenario: Preferred Plan

MDSF Assessment

Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
		55.72	697.6	69.37	697.4	124.25	606.0	2,001.0	
Erosion damages		Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd MDSF (£k)	
		No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
		0	0.00	0.0	0	0.00	0.0	91.0	
						7	1,375.00	91.0	
Other damages								PV Value (£k)	
Notes: As determined by MDSF								Total preferred plan damages	2,092.0

Costs

Present Management Assessment

Source:

PV Value (£k)

Notes:

1,527

Preferred Pan

Description:

PV Value (£k)

Notes:

1,222

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):8

Location: Llanrhystud bay

Management Area (MA): 16

Policy Units (PU):8.7, 8.8, 8.9, 8.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	10.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	10.0

Economic Assessment

Policy Development Zone (PDZ):8

Location: Llanrhystud bay

Management Area (MA): 16

Policy Units (PU):8.7, 8.8, 8.9, 8.10

Damages (continued)

Scenario: Preferred Plan

MDSF Assessment

Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)			
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch				
		0.00	0.0	0.00	0.0	0.00	0.0	0.0			
Erosion damages		Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
		No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)		PV for epoch (£k)
		0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10.0
Other damages										PV Value (£k)	
Notes: As determined by MDSF										Total preferred plan damages	10.0

Costs

Present Management Assessment

Source:

PV Value (£k)

Notes:

0

Preferred Pan

Description:

PV Value (£k)

Notes:

0

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):9

Location: Aberystwyth

Management Area (MA): 17

Policy Units (PU):9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			401.96	5032.5	552.11	5318.9	4245.08	15015.2	25,366.7	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	182	19,929.00	2476.0	2476	
Other information										
Source: Aberystwyth Coastal Defence Strategy 2006									PV Value (£k)	
damages assessed by strategy: Tan y Bwlch - £76k, Harbour - £6936k, South Marine Terrace - £3211, Victoria and Marine Terrace - £7629. Total damages estimates (excluding properties within the rheidol valley = £17,852. damages assessed only with 0.5m sea level rise.										
Notes: As determined by MDSF taking account of rheidol valley and additional sea level rise.									Total NAI damages	27,842.7
Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			213.05	2667.4	292.78	2820.0	499.18	2478.8	7,966.2	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	2	263.00	24.0	24.0	
Other information										
Source: Aberystwyth Coastal Defence Strategy 2006									PV Value (£k)	
damages assessed by strategy: Tan y Bwlch - £31k, Harbour - £843k, South Marine Terrace - £1057, Victoria and Marine Terrace - £1297. Total damages estimates (excluding properties within the rheidol valley = £3,228. damages assessed only with 0.5m sea level rise.										
Notes: As determined by MDSF taking account of rheidol valley and additional sea level rise.									Total WPM damages	7,990.2

Economic Assessment

Policy Development Zone (PDZ):9

Location: Aberystwyth

Management Area (MA): 17

Policy Units (PU):9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			213.05	2667.4	292.78	2820.0	1104.67	4374.0	9,861.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	263.00	24.0	24.0
Other damages									PV Value (£k)
no allowance has been taken for loss of highways, services along the sea front and amenity use. No cost has been allowed for loss of railway. Increased flood risk at Glanrafon Terrace in epoch 3									
Notes: As determined by MDSF									
								Total preferred plan damages	9,885.4

Costs

Present Management Assessment									
Source: Aberystwyth Coastal Defence Strategy 2006									PV Value (£k)
Defence cost from strategy: Tan y bwch - £3,770, Harbour - £1260, South Marine Terrace - £1977, Victoria and Marine Terrace - £698. Total cost estimates (excluding Tan y bwch costs within the Rhiedol valley = £3,935.									
Notes:									4,961
Preferred Plan									
Description: Maintain all defences except at Tan y Bwlch and potential for realignment at Glanrafon Terrace in epoch 3. Includes for future cost of defence within the Rhiedol Valley									PV Value (£k)
Notes:									5,092

Reconciliation

strong economic case for continued management even without taking account of amenity values and potential loss of services. Long term risks in terms of sustainable management, with potential loss of amenity and increased flood risk in the Rhiedol Valley.

Economic Assessment

Policy Development Zone (PDZ):9

Location: Clarach and Wallog

Management Area (MA): 18

Policy Units (PU):9.11, 9.12, 9.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			40.87	511.7	49.03	501.2	491.72	1692.5	2,705.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	19.0	67
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,772.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			40.87	511.7	5.76	260.0	491.72	1557.1	2,328.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	17.0	65.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,393.8

Economic Assessment

Policy Development Zone (PDZ):9

Location: Clarach and Wallog

Management Area (MA): 18

Policy Units (PU):9.11, 9.12, 9.13

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)		
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch		AAD (£k)		PVd for epoch	
40.87		511.7	5.76		260.0		491.72		1557.1	
2,328.8										
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	1	198.00	48.0	3	163.00	17.0	65.0	
Other damages										
PV Value (£k)										
Notes: As determined by MDSF								Total preferred plan damages		2,393.8

Costs

Present Management Assessment									
Source: Allowance made for costs associated with realignment during epoch 2									PV Value (£k)
Notes:									126
Preferred Pan									
Description: Allowance made for costs associated with realignment during epoch 2									PV Value (£k)
Notes:									126

Reconciliation

Significant improvement to flood defence would require works along the sea front and along the banks of the river. This would incur significant cost and set a precedent that would be unsustainable in the longer term.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			362.92	4543.8	536.23	5012.8	17519.38	56514.1	66,070.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	74	8,274.00	2687.0	247	30,055.00	2982.0	5669
Other information									PV Value (£k)
Source: Borth appriasl of options 2006 Damages determined for both sea front and potential flood risk at Ynyslas = £51,000K.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.									
								Total NAI damages	71,739.6

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			181.20	2268.6	210.80	2185.4	536.43	2338.8	6,792.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Borth appriasl of options 2006 Damages assessed for boryh frontage with proposed scheme = £2,000k.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.									
								Total WPM damages	6,792.9

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			181.20	2268.6	210.80	2185.4	536.43	2338.8	6,792.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	294	35,574.00	2644.0	2644.0
Other damages									PV Value (£k)
no allowance for damages associated with potential loss or relocation of railway.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.							Total preferred plan damages		9,436.9

Costs

Present Management Assessment									
Source: Borth appraisl of options 2006									PV Value (£k)
costs for mangement at Borth taken from appraisla, additionla cost added for defence at Dyfi Junction.									
Notes:									19,076
Preferred Pan									
Description: costs for mangement at Borth taken from appraisla, additionla cost added for defence at Dyfi Junction.									PV Value (£k)
Notes:									19,076

Reconciliation

The Borth Appraisal is approved with the intent of providing defence to the fronatge over the next 75 years taking account of sea level rise. Beyond 75 years the approach would be to allow a redcution on defnce standard. Defence furtehr within the estaury would depend critically on future mangement of teh railway line, although there would still be seen as being justification for defence at Dyfi junction.

Economic Assessment

Policy Development Zone (PDZ):10

Location: Dyfi North, Tywyn and the Dysynni

Management Area (MA): 20

Policy Units (PU):10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			198.13	2480.6	368.77	3160.5	899.89	3970.9	9,612.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	10	1,085.00	319.0	84	9,952.00	1113.0	1432
Other information									PV Value (£k)
Source: Damages do not include fro loss of harbour, disruption to transport routes and loss of ammenity along the sea front at Tywyn.									
Notes: As determined by MDSF									
								Total NAI damages	11,044.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			35.98	450.5	56.81	517.3	216.10	854.2	1,822.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,822.0

Economic Assessment

Policy Development Zone (PDZ):10

Location: Dyfi North, Tywyn and the Dysynni

Management Area (MA): 20

Policy Units (PU):10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			35.98	450.5	56.81	517.3	216.10	854.2	1,822.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
There is incareded flood risk to Aberdyfi Golf course and to agricultural land within the Penllyn Marhs and Dysynni areas.									
Notes: As determined by MDSF							Total preferred plan damages		1,822.0

Costs

Present Management Assessment									
Source: works include for improvement to defnces at Aberdofi, continued defnce at Tywyn and to the railway line. Defences in the Pnllyn marhs area include fro a cross wall embankment to the southa nd set back defence to the road and railway.									PV Value (£k)
Notes:									9,039
Preferred Pan									
Description: works include for improvement to defnces at Aberdofi, continued defnce at Tywyn and to the railway line. Defences in the Pnllyn marhs area include fro a cross wall embankment to the southa nd set back defence to the road and railway.									PV Value (£k)
Notes:									9,039

Reconciliation

damages do not include for significant disruption to the transport network or the loss of important socio-economic factors at Tywyn and Aberdyfi. Whiel shown to be marginal these additional impacts on the area justiy continued management.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Southern Cliffs

Management Area (MA): 21

Policy Units (PU):11.1, 11.2, 11.3

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	764.00	43.0	43
Other information									PV Value (£k)
Source: damages do not include for disruption to transport net work									
Notes: As determined by MDSF									
								Total NAI damages	43.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: damages do not include for disruption to transport net work									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):11

Location: Southern Cliffs

Management Area (MA): 21

Policy Units (PU):11.1, 11.2, 11.3

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
damages do not include for disruption to transport net work									
Notes: As determined by MDSF									Total preferred plan damages
									0.0

Costs

Present Management Assessment									
Source: cost do not include for local mangement of defences to rialway line									PV Value (£k)
Notes:									0
Preferred Pan									
Description: cost do not include for local mangement of defences to rialway line									PV Value (£k)
Notes:									0

Reconciliation

The principal aim of the plan would be for continued defence of the railway. This has not been assessed in the above tables.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Entrance - South

Management Area (MA): 22

Policy Units (PU):11.4, 11.5, 11.6, 11.7, 11.8, 11.9

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2296.01	28746.0	2454.00	26481.3	23606.34	81568.9	136,796.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	22	3,596.00	276.0	276
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	137,072.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			224.55	2811.4	492.91	3999.8	2774.34	10226.5	17,037.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: incased defences.									
Notes: As determined by MDSF									
								Total WPM damages	17,037.7

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Entrance - South

Management Area (MA): 22

Policy Units (PU):11.4, 11.5, 11.6, 11.7, 11.8, 11.9

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			224.55	2811.4	1502.00	9625.5	23520.34	78319.9	90,756.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	22	3,596.00	276.0	276.0
Other damages									PV Value (£k)
relocation of community at Fairbourne, damages taken as for NAI in epoch 3.									
Notes: As determined by MDSF							Total preferred plan damages		91,032.8

Costs

Present Management Assessment		PV Value (£k)
Source: continued defence of fronatges		
Notes:		6,693
Preferred Pan		PV Value (£k)
Description: Costs associated with mangement during epoch 1 and 2.		
Notes:		4,429

Reconciliation

Despite significant potential benefits, long term defence is not considered to be sustainable.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Estuary

Management Area (MA): 23

Policy Units (PU):11.10, 11.11, 11.12, 11.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.44	5.5	0.62	5.9	8.88	29.7	41.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source: Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF									
								Total NAI damages	41.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	0.30	2.9	4.48	15.0	20.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF									
								Total WPM damages	20.6

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Estuary

Management Area (MA): 23

Policy Units (PU):11.10, 11.11, 11.12, 11.13

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.22	2.8	0.30	2.9	4.48	15.0	20.6		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.										
Notes: As determined by MDSF							Total preferred plan damages		20.6	

Costs

Present Management Assessment									
Source: Local mangement of defences including Penmaenpool									PV Value (£k)
Notes:									980
Preferred Pan									
Description: Local mangement of defences including Penmaenpool									PV Value (£k)
Notes:									980

Reconciliation

The plan aims to allow adaption but still maintain the important transport network to Barmouth and critical defence at Penmaenpool.

Economic Assessment

Policy Development Zone (PDZ):11

Location: *Barmouth*

Management Area (MA): 24

Policy Units (PU):11.14, 11.15, 11.16

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	114.76	744.7	1878.82	6239.9	7,220.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	40	4,735.00	290.0	290
Other information									PV Value (£k)
Source: Damges do not include loss of harbour and sea front.									
Notes: As determined by MDSF									
								Total NAI damages	7,510.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	55.00	411.5	127.70	571.9	1,218.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,218.8

Economic Assessment

Policy Development Zone (PDZ):11

Location: *Barmouth*

Management Area (MA): 24

Policy Units (PU):11.14, 11.15, 11.16

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	44.00	350.2	100.00	450.7	1,036.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	10	1,180.00	364.0	0	0.00	0.0	364.0
Other damages									PV Value (£k)
Realignment may require relocation of properties to provide width for management. This relocation would reduce flood risk in the future.									
Notes: As determined by MDSF							Total preferred plan damages		1,400.4

Costs

Present Management Assessment		PV Value (£k)
Source: Costs are based on estimated cost of increasing defence on existing line.		
Notes:		4,686
Preferred Plan		PV Value (£k)
Description: Estimated costs derived for realignment of defences over the northern frontage at Barmouth.		
Notes:		1,852

Reconciliation

There is a strong economic benefit indicated for this area.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			8.00	100.2	19.04	150.7	29.00	150.4	401.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17
Other information									PV Value (£k)
Source: Potential flooding to railway not included.									
Notes: As determined by MDSF									
								Total NAI damages	418.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.00	37.6	5.00	44.6	29.00	106.4	188.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17.0
Other information									PV Value (£k)
Source: Potential flooding to railway not included.									
Notes: As determined by MDSF									
								Total WPM damages	205.6

Economic Assessment

Policy Development Zone (PDZ):11

Location: Dyffryn Ardudwy

Management Area (MA): 25

Policy Units (PU):11.17, 11.18, 11.19, 11.20

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.00	37.6	19.04	122.9	29.00	150.4	310.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17.0
Other damages									PV Value (£k)
Potential flooding to railway not included.									
Notes: As determined by MDSF							Total preferred plan damages		327.8

Costs

Present Management Assessment		PV Value (£k)
Source: manage naturql flood defence and improve during epoch 2. Private defences not included		
Notes:		275
Preferred Pan		PV Value (£k)
Description: manage nautrual bank for epoch 1. Private defences not included.		
Notes:		7

Reconciliation

Managed by private investment. Mainatin flood defence only over epoch 1.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Artro Estuary

Management Area (MA): 26

Policy Units (PU):12.1, 12.2, 12.3, 12.4, 12.5, 12.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	110.95	463.2	858.5
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	6	1,090.00	84.0	135
Other information									PV Value (£k)
Source: Damages do not include potential loss and disruption to transport.									
Notes: As determined by MDSF									
								Total NAI damages	993.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	45.68	258.9	654.2
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Damages do not include potential loss and disruption to transport.									
Notes: As determined by MDSF									
								Total WPM damages	654.2

Economic Assessment

Policy Development Zone (PDZ):12

Location: Arthro Estuary

Management Area (MA): 26

Policy Units (PU):12.1, 12.2, 12.3, 12.4, 12.5, 12.6

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	45.68	258.9	654.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
management would be subject to development of estuary mangement plan. Damags taken as for WPM									
Notes: As determined by MDSF							Total preferred plan damages		654.2

Costs

Present Management Assessment		PV Value (£k)
Source: Improvement to embankments within estuary and defence at shoreline.		
Notes:		2,506
Preferred Pan		PV Value (£k)
Description: The defence along the railway would be maintianed but mangement within the estuary would be subject to a mangements plan.		
Notes:		1,574

Reconciliation

defence along the rialway line and road would maintain the transport network. Defences would be realigned within the estuary subject to a detailed plan.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Harlech and Dwyryd Estuary

Management Area (MA): 27

Policy Units (PU):12.7, 12.8, 12.9, 12.10, 12.11, 12.12

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			201.63	2524.4	311.54	2860.9	3363.27	11502.2	16,887.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	16,978.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			31.84	398.6	64.40	536.5	159.14	699.7	1,634.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,725.9

Economic Assessment

Policy Development Zone (PDZ):12

Location: Harlech and Dwyryd Estuary

Management Area (MA): 27

Policy Units (PU):12.7, 12.8, 12.9, 12.10, 12.11, 12.12

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		31.84	398.6	64.40	536.5	159.14	699.7	1,634.9		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91.0	
Other damages										
proposed realignment at Talsarnau may increase damages in this area. This would need to be examined in more detail.									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		1,725.9	

Costs

Present Management Assessment		PV Value (£k)	
Source: maintains all defences			
Notes:		3,701	
Preferred Pan		PV Value (£k)	
Description: potential for realignment at Talsarnau would need to be considered in detail.			
Notes:		1,135	

Reconciliation

strong economic justification for continued defence. Potential for realignment could reduce costs but needs to be examined in more detail.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Porthmadog

Management Area (MA): 28

Policy Units (PU):12.13, 12.14, 12.15, 12.16

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7210.23	90272.1	8002.29	84809.8	75068.40	260011.3	435,093.1
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	213.0	14	1,565.00	546.0	92	10,311.00	928.0	1686
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	436,779.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			345.70	4328.2	503.67	4735.2	1129.35	5111.4	14,174.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	206.0	0	0.00	0.0	2	321.00	32.0	238.0
Other information									PV Value (£k)
Source:									
significant residual risk of flooding									
Notes: As determined by MDSF									
								Total WPM damages	14,412.8

Economic Assessment

Policy Development Zone (PDZ):12

Location: Porthmadog

Management Area (MA): 28

Policy Units (PU):12.13, 12.14, 12.15, 12.16

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			345.70	4328.2	503.67	4735.2	1129.35	5111.4	14,174.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	206.0	0	0.00	0.0	2	321.00	32.0	238.0
Other damages as WPM									PV Value (£k)
Notes: As determined by MDSF							Total preferred plan damages		14,412.8

Costs

Present Management Assessment		PV Value (£k)
Source: Maintenance and improvement		
Notes:		1,991
Preferred Pan		PV Value (£k)
Description: As WPM		
Notes:		1,991

Reconciliation

Strong economic justification fro continued management. High residual risk needs to be examined in detail.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth East and Eastern Shingle Banks

Management Area (MA): 29

Policy Units (PU):12.17, 12.18, 12.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	6	577.00	173.0	35	3,599.00	454.0	627
Other information									PV Value (£k)
Source: distruption to transport network									
Notes: As determined by MDSF									
								Total NAI damages	627.0
Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Increased risk of overtopping not included in damages.									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth East and Eastern Shingle Banks

Management Area (MA): 29

Policy Units (PU):12.17, 12.18, 12.19

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Overtopping damages not included. Potential need to relocate or raise railway not included. Damages may occur associated with MR in each 3. This would be assessed in detail as the need arises. Damages as WPM									
Notes: As determined by MDSF									Total preferred plan damages
									0.0

Costs

Present Management Assessment		PV Value (£k)
Source: Maintain and raise defences.		
Notes:		1,580
Preferred Pan		PV Value (£k)
Description: Potential for realignment in epoch 3 to provide a more sustainable approach to defence. This would not necessarily incur loss of properties.		
Notes:		913

Reconciliation

Damages recorded by MDSF do not fully recognise the value of the Criccieth sea front. There is likely to be a need for collaborative funding in developing management approach in the future.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth West

Management Area (MA): 30

Policy Units (PU):12.20, 12.21, 12.22, 12.23, 12.24, 12.25

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	13.66	44.3	47.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	25	1,987.00	634.0	40	4,411.00	657.0	1291
Other information									PV Value (£k)
Source: Damages do not include for disruption to transport route.									
Notes: As determined by MDSF									
								Total NAI damages	1,338.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	8.26	27.4	30.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	161.00	25.0	25.0
Other information									PV Value (£k)
Source: Damages do not reflect fully risk to transport route.									
Notes: As determined by MDSF									
								Total WPM damages	55.6

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth West

Management Area (MA): 30

Policy Units (PU):12.20, 12.21, 12.22, 12.23, 12.24, 12.25

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	8.26	27.4	30.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	161.00	25.0	25.0
Other damages									PV Value (£k)
Damages do not reflect fully risk to transport route.									
Notes: As determined by MDSF							Total preferred plan damages		55.6

Costs

Present Management Assessment		PV Value (£k)
Source: These cost include for significant strengthening and raising of railway defence at Afon Wen in epoch 3 (estimated cost £12M)		
Notes:		4,157
Preferred Pan		PV Value (£k)
Description: costs include for realignemnet of revtment at Afon Wen in epoch 3, but do not include coasta associated with potential realignment of the railway.		
Notes:		3,012

Reconciliation

The priiopl costs asre associated with defnce of Criccieth where there is strong justification due to erosion damages. Realignment of defences at Afon Wen and Afon Dywfor, together with realignment of the railway would need to be considered in detail at a regional or national scale.

Economic Assessment

Policy Development Zone (PDZ):13

Location: Pwllheli Area

Management Area (MA): 31

Policy Units (PU):13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3005.67	37631.0	21157.51	134709.7	34197.14	173260.1	345,600.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	3	822.00	46.0	46	
Other information									PV Value (£k)	
Source: Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli										
Notes: As determined by MDSF									Total NAI damages	345,646.8

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			174.24	2181.5	405.63	3232.8	583.79	3096.9	8,511.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	3	822.00	42.0	42.0	
Other information									PV Value (£k)	
Source: Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli										
Notes: As determined by MDSF									Total WPM damages	8,553.1

Economic Assessment

Policy Development Zone (PDZ):13

Location: Pwllheli Area

Management Area (MA): 31

Policy Units (PU):13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			180.84	2264.1	405.63	3269.6	735.80	3572.7	9,106.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	822.00	42.0	42.0
Other damages									
Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli									PV Value (£k)
Notes: As determined by MDSF							Total preferred plan damages		9,148.4

Costs

Present Management Assessment		PV Value (£k)
Source:	based on strategy	
Notes:		4,370
Preferred Plan		PV Value (£k)
Description:	determined based on realignment at Traeth Crugan and Abererch.	
Notes:		2,362

Reconciliation

Strong economic justification for continued defence but high residual damages due to possible exceedance of standard of defence..

Economic Assessment

Policy Development Zone (PDZ):13

Location: Abersoch Area

Management Area (MA): 32

Policy Units (PU):13.10, 13.11, 13.12, 13.13, 13.14, 13.15

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			37.48	469.2	109.06	817.0	1132.53	3886.2	5,172.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	212.00	212.0	2	425.00	135.0	6	852.00	53.0	401
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	5,573.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			14.01	175.4	57.34	397.8	99.51	490.9	1,064.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	72.0	2	425.00	27.0	98.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,162.1

Economic Assessment

Policy Development Zone (PDZ):13

Location: Abersoch Area

Management Area (MA): 32

Policy Units (PU):13.10, 13.11, 13.12, 13.13, 13.14, 13.15

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			14.01	175.4	57.34	397.8	99.51	490.9	1,064.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	212.00	72.0	2	425.00	27.0	99.0	
Other damages									PV Value (£k)	
damages similar to WPM										
Notes: As determined by MDSF									Total preferred plan damages	1,163.1

Costs

Present Management Assessment		PV Value (£k)
Source: continued defence to the soch valley		
Notes:		1,133
Preferred Pan		PV Value (£k)
Description: manged realignment to the Soch valley with mangement of flood defences.priavte defence included at the Warren		
Notes:		485

Reconciliation

Continued flood defence at Abersoch provides strong benefits in addition to erosion protection

Economic Assessment

Policy Development Zone (PDZ):13

Location: Porth Ceriad Headland and St Tudwals Island

Management Area (MA): 33

Policy Units (PU):13.16, 13.17, 13.18, 13.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):13

Location: Porth Ceriad Headland and St Tudwals Island

Management Area (MA): 33

Policy Units (PU):13.16, 13.17, 13.18, 13.19

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	
									0.0	

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description: No costs associated with this area		0	
Notes:		0	

Reconciliation

No planned works

Economic Assessment

Policy Development Zone (PDZ):14

Location: Hells Mouth

Management Area (MA): 34

Policy Units (PU):14.1, 14.2, 14.3, 14.4, 14.5

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	49.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	49.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Hells Mouth

Management Area (MA): 34

Policy Units (PU):14.1, 14.2, 14.3, 14.4, 14.5

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	49.0

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description: No works to this area		0	
Notes:		0	

Reconciliation

No planned management intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: Porth Ysgo

Management Area (MA): 35

Policy Units (PU):14.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Porth Ysgo

Management Area (MA): 35

Policy Units (PU):14.6

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description:		0	
Notes:		0	

Reconciliation

No planned intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: Aberdaron

Management Area (MA): 36

Policy Units (PU):14.7, 14.8, 14.9

Page 1 of 2

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.05	0.6	0.66	4.0	21.57	69.6	74.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	7	459.00	148.0	21	2,258.00	192.0	340
Other information									PV Value (£k)
Source: Damages do not include disruption to road network or significant impact on the community and regional amenity value.									
Notes: As determined by MDSF									
								Total NAI damages	414.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.05	0.6	0.26	1.7	0.94	3.8	6.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	851.00	45.0	45.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	51.1

Economic Assessment

Policy Development Zone (PDZ):14

Location: Aberdaron

Management Area (MA): 36

Policy Units (PU):14.7, 14.8, 14.9

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.05	0.6	0.26	1.7	0.94	3.8	6.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	5	851.00	45.0	45.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	51.1

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		867
Preferred Pan		PV Value (£k)
Description:	Reduction in cost to revetment to west of the village	
Notes:		683

Reconciliation

Damages do not include for the losst of community and signifcant regional amneity value. Mangement likely to be justified with potential for alternative funding.

Economic Assessment

Policy Development Zone (PDZ):14

Location: Ynys Enlli

Management Area (MA): 37

Policy Units (PU):14.10

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Ynys Enlli

Management Area (MA): 37

Policy Units (PU):14.10

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description:		0	
Notes:		0	

Reconciliation

No intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: South West Ileyn

Management Area (MA): 38

Policy Units (PU):14.11

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: South West Ileyn

Management Area (MA): 38

Policy Units (PU):14.11

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.00	0.0	0.00	0.0	0.00	0.0	0.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)	
Source:		0	
Notes:		0	
Preferred Pan		PV Value (£k)	
Description:		0	
Notes:		0	

Reconciliation

No intervention

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Bays

Management Area (MA): 39

Policy Units (PU):15.1, 15.2, 15.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.85	48.2	8.29	67.7	44.52	165.3	281.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	260.00	218.0	6	1,787.00	696.0	16	4,205.00	496.0	1410
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,691.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.73	21.7	1.77	19.5	8.65	32.6	73.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	216.00	216.0	2	641.00	308.0	3	641.00	34.0	559.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	632.8

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Bays

Management Area (MA): 39

Policy Units (PU):15.1, 15.2, 15.3

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.73	21.7	8.29	55.9	8.65	53.0	130.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	216.00	216.0	2	641.00	308.0	10	1,476.00	310.0	834.0
Other damages									PV Value (£k)
Protection would be maintained to properties at Porth Dinllaen and Mofa Nefyn through to epoch 3. Damages do not include for loss of the community at Dinaelli									
Notes: As determined by MDSF							Total preferred plan damages		964.5

Costs

Present Management Assessment		PV Value (£k)
Source: estimated cost for reinforcing and raising all defences.		
Notes:		436
Preferred Pan		PV Value (£k)
Description: Costs include fro future improvement to defnces at Porth Nefyn and at the access point at Nefyn.		
Notes:		162

Reconciliation

Despite signifcant economic loss identified at Porth Dinllaen, raising defences to the village is not considered sustainable in the long term with sea level rise.

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Shoreline

Management Area (MA): 40

Policy Units (PU):15.4, 15.5, 15.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	17	3,609.00	230.0	288
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	288.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	0	0.00	0.0	58.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	58.1

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Shoreline

Management Area (MA): 40

Policy Units (PU):15.4, 15.5, 15.6

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.02	0.1	0.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	2	340.00	58.0	17	3,609.00	230.0	288.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	288.1

Costs

Present Management Assessment		PV Value (£k)
Source: Includes costs of maintaining private works along the frontage		
Notes:		332
Preferred Pan		PV Value (£k)
Description: Management of the Pier at Trefor		
Notes:		95

Reconciliation

Policy for this area is for Managed Realignment, cots are associated with management at Trefor, managing the peir.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Outer Estuary West

Management Area (MA): 41

Policy Units (PU):16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.23	115.6	18.11	152.4	171.16	592.4	860.4
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	234.00	56.0	8	1,430.00	139.0	195
Other information									PV Value (£k)
Source: damages do not consider loss of amenity nor loss of the airfield									
Notes: As determined by MDSF									
								Total NAI damages	1,055.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.34	91.9	12.42	110.2	49.44	193.6	395.7
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	2	425.00	54.0	104.0
Other information									PV Value (£k)
Source: damages do not consider impact on amenity on the airfield									
Notes: As determined by MDSF									
								Total WPM damages	499.7

Economic Assessment

Policy Development Zone (PDZ):16

Location: Outer Estuary West

Management Area (MA): 41

Policy Units (PU):16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
		7.34	91.9	12.42	110.2	91.41	325.0	527.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	212.00	50.0	2	425.00	54.0	104.0	
Other damages										
Increased risk of flooding over epoch 3. Continued protection to properties from erosion at Dinas Dinlle.										
PV Value (£k)										
Notes: As determined by MDSF							Total preferred plan damages		631.0	

Costs

Present Management Assessment									
Source:									
Increased defence at Dinas Dinlle and within Foryd Bay									
PV Value (£k)									
Notes:									
2,423									
Preferred Pan									
Description: management of defences over epoch 1 and through epoch 2 with a reduced level of protection.									
PV Value (£k)									
Notes:									
867									

Reconciliation

Policy for HTL within epoch 1 but costs associated with managed realignment over epochs 2 and 3.

Economic Assessment

Policy Development Zone (PDZ):16

Location: *Malltraeth and Cefni*

Management Area (MA): 42

Policy Units (PU):16.8, 16.9, 16.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			30.64	383.6	172.18	1130.7	271.07	1387.4	2,901.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,961.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.90	199.1	20.35	202.1	60.33	252.5	653.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60.0
Other information									PV Value (£k)
Source:									
Potential long term loss of properties to village									
Notes: As determined by MDSF									
								Total WPM damages	713.7

Economic Assessment

Policy Development Zone (PDZ):16

Location: *Malltraeth and Cefni*

Management Area (MA): 42

Policy Units (PU):16.8, 16.9, 16.10

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			15.90	199.1	20.35	202.1	60.33	252.5	653.7	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60.0	
Other damages									PV Value (£k)	
Potential long term loss of properties to village										
Notes: As determined by MDSF									Total preferred plan damages	713.7

Costs

Present Management Assessment		PV Value (£k)
Source:	Maintain embankment	
Notes:		452
Preferred Pan		PV Value (£k)
Description:	Maintain embankment	
Notes:		452

Reconciliation

Strong economic case for maintaining defence

Economic Assessment

Policy Development Zone (PDZ):16

Location: Inner Western Section of the Menai Strait

Management Area (MA): 43

Policy Units (PU):16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.16	189.8	43.31	326.0	82.78	394.7	910.4
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	32	2,853.00	952.0	68	6,388.00	725.0	1677
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,587.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.51	94.0	10.55	100.7	36.28	146.6	341.3
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	740.00	18.0	18.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	359.3

Economic Assessment

Policy Development Zone (PDZ):16

Location: Inner Western Section of the Menai Strait

Management Area (MA): 43

Policy Units (PU):16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.32	129.2	20.93	174.2	62.58	261.4	564.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	740.00	18.0	18.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 582.8

Costs

Present Management Assessment		PV Value (£k)
Source: Genarl maintence and raising defences		
Notes:		1,895
Preferred Pan		PV Value (£k)
Description: Maintain defence generally with futre improvements to main settlements in epoch 3.		
Notes:		604

Reconciliation

Signifcant economic value in HTL to main settlements.

Economic Assessment

Policy Development Zone (PDZ):16

Location: South Eastern Shore to Ynys Mon

Management Area (MA): 44

Policy Units (PU):16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			139.29	1743.9	186.92	1818.6	2015.73	6894.3	10,456.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	296.00	290.0	4	817.00	198.0	51	5,150.00	426.0	914
Other information									PV Value (£k)
Source: damages do not include disruption due to loss of highway.									
Notes: As determined by MDSF									
								Total NAI damages	11,370.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			20.15	252.3	28.50	271.2	109.41	431.7	955.2
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	149.00	145.0	4	817.00	333.0	17	2,405.00	200.0	678.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,633.2

Economic Assessment

Policy Development Zone (PDZ):16

Location: South Eastern Shore to Ynys Mon

Management Area (MA): 44

Policy Units (PU):16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			23.22	290.7	39.59	350.2	201.70	755.2	1,396.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	149.00	145.0	2	409.00	161.0	17	2,405.00	200.0	506.0
Other damages									PV Value (£k)
Potential damages due to loss of highway and regular flooding of the road to Beaumaris.									
Notes: As determined by MDSF							Total preferred plan damages		1,902.1

Costs

Present Management Assessment		PV Value (£k)
Source: Includes fro defence of private frontages and increased defence to existing line at Beaumaris		
Notes:		1,941
Preferred Pan		PV Value (£k)
Description: costs do not include private defence. Costs take fro potential realignment of flood defence to Beaumaris.		
Notes:		1,641

Reconciliation

Strong economic case for continued defence to main settlements.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Bangor

Management Area (MA): 45

Policy Units (PU):16.26, 16.27, 16.28, 16.29, 16.30

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			76.11	952.9	170.42	1374.4	1011.13	3698.3	6,025.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	15	1,337.00	414.0	13	1,189.00	128.0	543
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	6,568.6

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			35.31	442.1	39.50	417.1	106.88	458.2	1,317.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	84.0	0	0.00	0.0	84.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,401.3

Economic Assessment

Policy Development Zone (PDZ): 1

Location: Bangor

Management Area (MA): 45

Policy Units (PU):16.26, 16.27, 16.28, 16.29, 16.30

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		35.31	442.1	39.50	417.1	1005.86	3272.0	4,131.1		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	1	212.00	84.0	0	0.00	0.0	84.0	
Other damages										
Damages include increased flood risk at Hiraal as a proxy value for potential relocation.									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		4,215.1	

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									436
Preferred Pan									
Description: Costs take as WPM but with the intent of MR at Hiraal.									PV Value (£k)
Notes:									436

Reconciliation

Despite high economic values for defence at Hiraal the policy would be for MR in epoch 3 due to the highrisk as reflected by the high residual damages.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Traeth Lafan and Llanfarifechan

Management Area (MA): 46

Policy Units (PU):16.231, 16.32, 16.33

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			6.23	78.0	31.80	212.0	37.14	215.8	505.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	12.00	3.0	3	639.00	39.0	43	
Other information									PV Value (£k)	
Source: loss of sea front not included in damages. No values have been taken for damage and disruption as a result of the loss of A55and main railway line.										
Notes: As determined by MDSF									Total NAI damages	548.8

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3.08	38.6	6.67	54.4	37.14	137.1	230.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	230.0

Economic Assessment

Policy Development Zone (PDZ):16

Location: Traeth Lafan and Llanfairfechan

Management Area (MA): 46

Policy Units (PU):16.231, 16.32, 16.33

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.08	38.6	6.67	54.4	24.00	96.0	188.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	12.00	3.0	3	639.00	39.0	42.0
Other damages									PV Value (£k)
Potential wave overtopping damages not included									
Notes: As determined by MDSF							Total preferred plan damages		230.9

Costs

Present Management Assessment		PV Value (£k)
Source: costs associated with raising existing defences		
Notes:		1,965
Preferred Pan		PV Value (£k)
Description: Mainatin defence at Llanfairfechan and realigenmnt of embankment to the west.		
Notes:		1,846

Reconciliation

Continued management at Llanfairfechan partly as a result of potential damaes to transport net wrok bur also in support of amenity values of the frontage. There is likely to be a need for collbaorative funding.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.76	47.1	22.38	145.7	51.89	232.5	425.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	186.00	13.0	13
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	438.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.14	14.3	3.44	25.5	11.33	46.2	86.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	86.0

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.14	14.3	3.44	25.5	51.89	173.2	213.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	213.0

Costs

Present Management Assessment		PV Value (£k)
Source:		50
Notes:		
Preferred Pan		PV Value (£k)
Description:	Costs associated with local defence to village and road	50
Notes:		

Reconciliation

Good justification for local defence measures

Economic Assessment

Policy Development Zone (PDZ):17

Location: Rhosneigr

Management Area (MA): 48

Policy Units (PU):17.5, 17.6, 17.7, 17.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.63	32.9	28.58	174.0	138.13	521.8	728.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	9	218.00	90.0	11	1,529.00	143.0	230
Other information									PV Value (£k)
Source: Potential risk of flooding to the road and access to the town.									
Notes: As determined by MDSF									
								Total NAI damages	958.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.89	23.7	7.78	53.9	19.67	85.9	163.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	763.00	55.0	54.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	217.5

Economic Assessment

Policy Development Zone (PDZ):17

Location: Rhosneigr

Management Area (MA): 48

Policy Units (PU):17.5, 17.6, 17.7, 17.8

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.89	23.7	7.78	53.9	19.67	85.9	163.5	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	7	763.00	55.0	55.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	218.5

Costs

Present Management Assessment		PV Value (£k)
Source: Present management is with a policy for selectively holding the line. Costs are taken fro protection of all properties along the frontage.		
Notes:		1,144
Preferred Pan		PV Value (£k)
Description: The focus for mangement would be at Roshniegr. Cost are allowed for this and for maintaining access to the town. In other areas private defence might be acceptable, subject to norml approvals. Cost for private works are not included.		
Notes:		864

Reconciliation

Local defence to small groups of properties to the south of Rhosniegr are not considered to be economically justified. Sustaining the sea front to Rhosniegr is imporantnt, together with maintaining the access to the town. There would be additional damges associated with loss of access that are not taken in to account in the above assessment. The plan is considered to be viable in terms of potential damages and with respect the the broader social amenity benefits. There may be the need to look towards collaborative funding.

Economic Assessment

Policy Development Zone (PDZ):17

Location: West Holy Island

Management Area (MA): 49

Policy Units (PU):17.9, 17.10, 17.11, 17.12, 17.13, 17.14

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			49.53	620.1	245.13	1642.7	812.57	3310.6	5,573.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	408.00	252.0	1	204.00	103.0	6	1,658.00	105.0	460
Other information									
Source: Trearddur Bay Coastal study PAR damages assessed at Trearddur Bay amount to £4.4M. This included amenity damages that were addressed through the recent scheme. Other damages generally assessed by SMP include damages to other areas potentially impacted along the southwest shoreline of Holy Island.									PV Value (£k)
Notes: As determined by MDSF									Total NAI damages 6,033.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			25.89	324.1	50.71	427.0	100.29	472.6	1,223.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	13.0	13.0
Other information									
Source: Reduction in damages take account of recent scheme at Trearddur Bay.									PV Value (£k)
Notes: As determined by MDSF									Total WPM damages 1,236.8

Economic Assessment

Policy Development Zone (PDZ):17

Location: West Holy Island

Management Area (MA): 49

Policy Units (PU):17.9, 17.10, 17.11, 17.12, 17.13, 17.14

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			25.89	324.1	50.71	427.0	100.29	472.6	1,223.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0	0	0	0	0	1	204	13	13
Other damages									PV Value (£k)
residual damages due to flooding. No account is taken for potential disruption to road.									
Notes: As determined by MDSF							Total preferred plan damages		1,236.8

Costs

Present Management Assessment		PV Value (£k)
Source: Costs associated with general management of walls along the frontage.		
Notes:		202
Preferred Plan		PV Value (£k)
Description: Costs taken for holding existing defences but with the intent for some realignment in epoch 3		
Notes:		149

Reconciliation

The area contains important small communities. Access is via the coastal road, which is at risk in specific areas. The intent is to sustain the communities and associated with this the need to maintain the road.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Holyhead and Penrhos

Management Area (MA): 50

Policy Units (PU):17.15, 17.16, 17.17, 17.18

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			94.63	1184.8	500.76	3319.3	580.98	3385.8	7,889.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	3.00	0.0	0
Other information									PV Value (£k)
Source: Long term risk fo erosion to property									
Notes: As determined by MDSF									
								Total NAI damages	7,889.9

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			46.32	579.9	49.81	535.9	118.37	526.4	1,642.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,642.3

Economic Assessment

Policy Development Zone (PDZ):17

Location: Holyhead and Penrhos

Management Area (MA): 50

Policy Units (PU):17.15, 17.16, 17.17, 17.18

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			46.32	579.9	49.81	535.9	118.37	526.4	1,642.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									
									PV Value (£k)
Notes: As determined by MDSF							Total preferred plan damages		1,642.3

Costs

Present Management Assessment		PV Value (£k)
Source:	Maintain general defence to Holyhead and potential retired flood defence at Penrhos	
Notes:		777
Preferred Pan		PV Value (£k)
Description:	Maintain general defence to Holyhead and potential retired flood defence at Penrhos	
Notes:		777

Reconciliation

Avoids significant damage to Holyhead area, supporting important regional town.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Inland Sea

Management Area (MA): 51

Policy Units (PU):17.19, 17.20

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			111.82	1400.0	618.52	4071.6	848.85	4592.9	10,064.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	32.0	32
Other information									PV Value (£k)
Source: significant flood risk to the village of Valley.									
Notes: As determined by MDSF									
								Total NAI damages	10,096.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			56.90	712.4	66.70	689.1	178.66	768.0	2,169.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	32.0	32.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,201.4

Economic Assessment

Policy Development Zone (PDZ):17

Location: Inland Sea

Management Area (MA): 51

Policy Units (PU):17.19, 17.20

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			56.90	712.4	66.70	689.1	178.66	768.0	2,169.4	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	2,169.4

Costs

Present Management Assessment		PV Value (£k)
Source: SMP 1 did not include for defence to Valley as this flood risk was not assessed. This assessment allows for this defence.		
Notes:		137
Preferred Pan		PV Value (£k)
Description: local defence within In Land Sea and to the village of Valley.		
Notes:		137

Reconciliation

strong economic justification for maintaining defence to Valley. Local defence included to maintain flood defence to the rear of Treaddur and to maintain access.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Newlands and Afon Alaw

Management Area (MA): 52

Policy Units (PU):17.21, 17.22, 17.23

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.26	3.3	1.95	12.3	23.59	79.9	95.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	204.00	67.0	5	572.00	74.0	140
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	235.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	1.11	7.4	7.60	27.3	37.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
SMP 1 policy is for selectively holding the line. Under this scenario this assumed defence to new property									
Notes: As determined by MDSF									
								Total WPM damages	37.4

Economic Assessment

Policy Development Zone (PDZ):17

Location: Newlands and Afon Alaw

Management Area (MA): 52

Policy Units (PU):17.21, 17.22, 17.23

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	1.11	7.4	7.60	27.3	37.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	572.00	72.0	72.0
Other damages									PV Value (£k)
SMP 2 assessment indicates risk to property at Newlands. The approach would be to manage potential loss over time.									
Notes: As determined by MDSF							Total preferred plan damages		109.4

Costs

Present Management Assessment		PV Value (£k)
Source: Significant costs associated with full defence at newlands		
Notes:		1,107
Preferred Plan		PV Value (£k)
Description: The plan is for managed realignment.		
Notes:		391

Reconciliation

Longer term adjustment and adaptation in defence approach.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northwest Ynys Mon

Management Area (MA): 53

Policy Units (PU):18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.90	98.9	12.93	116.1	111.83	390.5	605.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	734.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.99	37.4	12.93	88.8	19.25	100.7	226.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	355.9

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northwest Ynys Mon

Management Area (MA): 53

Policy Units (PU):18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.99	37.4	12.93	88.8	50.25	197.8	323.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129.0
Other damages									PV Value (£k)
Potential increased damages to western bays. Management of flood risk at Cemlyn Bay									
Notes: As determined by MDSF							Total preferred plan damages		452.9

Costs

Present Management Assessment									
Source:									PV Value (£k)
No costs associated with Cemlyn Bay									
Notes:									55
Preferred Pan									
Description:									PV Value (£k)
Need for management at Cemlyn Bay to allow adaption.									
Notes:									235

Reconciliation

Managing the increasing flood risk at Cemlyn Bay while allowing natural development of the coast. Cost allowed for continued defence at Wylfa Power Station.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Cemaes Bay

Management Area (MA): 54

Policy Units (PU):18.8, 18.9, 18.10, 18.11, 18.12

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.23	15.4	3.43	26.0	23.31	83.7	125.1	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	5	320.00	137.0	6	884.00	107.0	254	
Other information									PV Value (£k)	
Source:										
Damages do not take account of disruption to road and access to the town, nor with respect to loss associated with harbour										
Notes: As determined by MDSF									Total NAI damages	379.1

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.69	8.6	1.95	14.7	4.79	21.1	44.5	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
As determined by MDSF										
Notes: As determined by MDSF									Total WPM damages	44.5

Economic Assessment

Policy Development Zone (PDZ):18

Location: Cemaes Bay

Management Area (MA): 54

Policy Units (PU):18.8, 18.9, 18.10, 18.11, 18.12

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		0.69	8.6	1.95	14.7	4.79	21.1	44.5		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	1	128.00	10.0	10.0	
Other damages										
PV Value (£k)										
Notes: As determined by MDSF							Total preferred plan damages		54.5	

Costs

Present Management Assessment									
Source: Linear approach to defence raising and reinforcing existing defence line.									PV Value (£k)
Notes:									515
Preferred Pan									
Description: Adpat defence approach particulalrly during epoch 3 to realign defence.									PV Value (£k)
Notes:									482

Reconciliation

Relatively good economic justification based solely on direct loss of property and flood risk. Damages do not take account of additional benefits in sustaining important access and operation of the harbour.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northeast Ynys Mon

Management Area (MA): 55

Policy Units (PU):18.13, 18.14, 18.15, 18.16, 18.17, 18.18

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.44	18.0	3.17	25.7	19.31	70.4	114.1
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	9	762.00	239.0	8	1,633.00	149.0	387
Other information									PV Value (£k)
Source: Dmages do not fully refelct the potential damage resulting from loss of access and harbour opertaion at Amlwch									
Notes: As determined by MDSF									
								Total NAI damages	501.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.65	8.1	1.56	12.3	4.32	18.4	38.9
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	38.9

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northeast Ynys Mon

Management Area (MA): 55

Policy Units (PU):18.13, 18.14, 18.15, 18.16, 18.17, 18.18

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.65	8.1	1.56	12.3	4.32	18.4	38.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	612.00	48.0	48.0
Other damages									PV Value (£k)
There may be loss of property at Porth Llechog in epoch 3.									
Notes: As determined by MDSF							Total preferred plan damages		86.9

Costs

Present Management Assessment		PV Value (£k)
Source: Costs include for continuing management of existing defence at Porth Llechog and Porth Elian		
Notes:		407
Preferred Pan		PV Value (£k)
Description: Costs are based on realignment at Porth Llechog and Porth Elian.		
Notes:		380

Reconciliation

The plan would continue to maintain defence at Amlech, moving towards realignment in other areas. There is a reasonable economic justification for the approach, with costs associated with adaption of defences.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Dulas Bay

Management Area (MA): 56

Policy Units (PU):19.1, 19.2, 19.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			11.66	146.0	59.42	396.3	67.27	396.5	938.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,154.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			5.63	70.5	5.87	64.1	13.92	61.9	196.5
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	412.5

Economic Assessment

Policy Development Zone (PDZ):19

Location: Dulas Bay

Management Area (MA): 56

Policy Units (PU):19.1, 19.2, 19.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			5.63	70.5	5.87	64.1	63.70	217.8	352.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages
									568.4

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description: scope for local management of erosion and flood risk through private funding									PV Value (£k)
Notes:									0

Reconciliation

No strong justification for defence. The plan allows for local private defence.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Moelfre

Management Area (MA): 57

Policy Units (PU):19.4, 19.5, 19.6, 19.7, 19.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.95	11.9	2.20	17.6	17.26	60.9	90.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	184.00	60.0	9	976.00	119.0	179
Other information									PV Value (£k)
Source: Damages do not include for disruption to road and community at Porth Moelfre and potential amenity loss at Treath Bychna									
Notes: As determined by MDSF									
								Total NAI damages	269.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.43	5.4	0.59	5.7	2.60	10.0	21.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	184.00	60.0	9	976.00	109.0	170.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	191.1

Economic Assessment

Policy Development Zone (PDZ):19

Location: Moelfre

Management Area (MA): 57

Policy Units (PU):19.4, 19.5, 19.6, 19.7, 19.8

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.43	5.4	0.59	5.7	2.60	10.0	21.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	9	976.00	119.0	119.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	140.1

Costs

Present Management Assessment		PV Value (£k)
Source:	no management.	
Notes:		0
Preferred Pan		PV Value (£k)
Description:	allow adaption to Prth Moelfre and Treath Bychan	
Notes:		33

Reconciliation

Potential significant loss to communities. The plan allows time for adaptation.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Traeth Coch

Management Area (MA): 58

Policy Units (PU):19.9, 19.10, 19.11, 19.12, 19.13, 19.14, 19.15, 19.16, 19.17

Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			14.49	181.4	77.60	513.4	112.27	594.3	1,289.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	4	551.00	214.0	12	1,601.00	148.0	362	
Other information									PV Value (£k)	
Source: Damages do not take account of disruption to road and access at Benllech and at Red Wharf Bya										
Notes: As determined by MDSF									Total NAI damages	1,651.1

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			7.69	96.3	9.16	93.9	24.65	105.8	296.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	2	332.00	129.0	7	1,165.00	202.0	331.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	627.0

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 58

Policy Units (PU):19.9, 19.10, 19.11, 19.12, 19.13, 19.14, 19.15, 19.16, 19.17

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.69	96.3	30.00	210.1	50.00	250.4	556.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	332.00	129.0	7	1,165.00	202.0	331.0
Other damages									PV Value (£k)
incarsed flood risk at Afon Nodwydd									
Notes: As determined by MDSF							Total preferred plan damages		887.8

Costs

Present Management Assessment									
Source:									PV Value (£k)
Costs take account of continued incarese and strengthening flood defences									
Notes:									703
Preferred Pan									PV Value (£k)
Description: Costs allow for continued defence during epochs 1 and 2 but with costs associated with adaptation in epoch 3.									
Notes:									463

Reconciliation

General justification fro continued management throughout the area but with the inetnt to adapt defences with incarsed flood risk during epoch 3.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Southern Shoreline

Management Area (MA): 59

Policy Units (PU):20.1, 20.2

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			16.88	211.3	88.52	587.6	140.72	717.5	1,516.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	6.00	3.0	0	0.00	0.0	3
Other information									PV Value (£k)
Source: daamges do not include for loss of A55 and railway line									
Notes: As determined by MDSF									
								Total NAI damages	1,519.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			8.85	110.8	20.57	164.0	117.69	432.8	707.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	707.6

Economic Assessment

Policy Development Zone (PDZ):20

Location: Southern Shoreline

Management Area (MA): 59

Policy Units (PU):20.1, 20.2

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.85	110.8	20.57	164.0	117.69	432.8	707.6	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	707.6

Costs

Present Management Assessment		PV Value (£k)
Source:	continued defence to frontage	
Notes:		3,364
Preferred Pan		PV Value (£k)
Description:	continued defence to frontage	
Notes:		3,364

Reconciliation

Policy justified by need to maintain the A55 and railway line

Economic Assessment

Policy Development Zone (PDZ):20

Location: Inner Estuary and Associated shoreline

Management Area (MA): 60

Policy Units (PU):20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 20.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			391.94	4907.1	1432.63	10172.0	4377.80	18186.6	33,265.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	16	2,349.00	682.0	61	7,642.00	1003.0	1684
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	34,949.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			136.25	1705.9	243.68	2118.1	679.59	2889.8	6,713.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	6,713.8

Economic Assessment

Policy Development Zone (PDZ):20

Location: Inner Estuary and Associated shoreline

Management Area (MA): 60

Policy Units (PU):20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 20.10

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		136.25	1705.9	243.68	2118.1	2996.60	10142.1	13,966.0		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages										
Damages include increased flood damage at Deganwy as proxy for potential adaption of defences									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		13,966.0	

Costs

Present Management Assessment		PV Value (£k)	
Source: Maintaing and raising defences .			
Notes:		4,487	
Preferred Pan		PV Value (£k)	
Description: mainatin and raise defences but with intent to adapt mangement at Morfa Conwy.			
Notes:		3,108	

Reconciliation

Strong economic and social argument for continued mangement of the area.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Outer Estuary East

Management Area (MA): 61

Policy Units (PU): 20.11, 20.12, 20.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2253.08	28208.6	2542.95	26737.9	29940.99	101674.7	156,621.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	156,910.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1053.91	13195.0	1179.33	12450.3	3033.84	13187.2	38,832.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289.0
Other information									PV Value (£k)
Source:									
potential long term loss of property at Gogarth in epoch 3									
Notes: As determined by MDSF									
								Total WPM damages	39,121.5

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 61

Policy Units (PU): 20.11, 20.12, 20.13

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1053.91	13195.0	1179.33	12450.3	3033.84	13187.2	38,832.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289.0
Other damages									PV Value (£k)
potential long term loss of property at Gogarth in epoch 3									
Notes: As determined by MDSF							Total preferred plan damages		39,121.5

Costs

Present Management Assessment		PV Value (£k)
Source: maintain defences		
Notes:		2,782
Preferred Pan		PV Value (£k)
Description: Potential realignment to more sustainable position		
Notes:		2,841

Reconciliation

Strong economic and social argument for continued management.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Upper Estuary

Management Area (MA): 62

Policy Units (PU):20.14, 20.15, 20.16, 20.17, 20.18, 20.19

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			164.32	2057.3	235.26	2227.7	2717.28	9241.5	13,526.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	772.00	62.0	62
Other information									PV Value (£k)
Source: Loss of railway and disruption to road. Potential extensive flooding around Llandudno Junction									
Notes: As determined by MDSF									
								Total NAI damages	13,588.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			80.28	1005.1	107.78	1048.4	428.49	1678.5	3,732.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	3,732.1

Economic Assessment

Policy Development Zone (PDZ):20

Location: Upper Estuary

Management Area (MA): 62

Policy Units (PU):20.14, 20.15, 20.16, 20.17, 20.18, 20.19

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Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch			
		80.28	1005.1	107.78	1048.4	428.49	1678.5	3,732.1		
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages										
Potential costs for relocation of the railway line not included.									PV Value (£k)	
Notes: As determined by MDSF							Total preferred plan damages		3,732.1	

Costs

Present Management Assessment									
Source: High costs associated with raising defence to Llandudno Junction and in defence of railway line from GlanConwy									PV Value (£k)
Notes:									11,646
Preferred Pan									
Description: Reduced costs associated with Llandudno junction and for only medium term investment in railway.									PV Value (£k)
Notes:									7,866

Reconciliation

Important economic and social costs associated with Llandudno Junction and Glan conwy. Costs associated with realignment within estuary.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.1

Economic Assessment

Policy Development Zone (PDZ): 1

Management Area (MA): 1

Location: South West Peninsula and Islands

Policy Units (PU): 1.1, 1.2, 1.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs Pvd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.04	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs Pvd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									0.1
Total preferred plan damages									0.1

Costs

Present Management Assessment		PV Value (£k)
Source:	NAI	0
Notes:		0
Preferred Pan		PV Value (£k)
Description:	No Active Intervntion. Minor private works at St Martins Haven not included	0
Notes:		0

Reconciliation

Maintain natural behaviour of the coast.

Economic Assessment

Policy Development Zone (PDZ): 2
Location: Little Haven and Broad Haven

Management Area (MA): 2
Policy Units (PU): 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

Damages

Scenario: No Active intervention											
MDSF Assessment											
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
			0.30	3.8	1.02	7.4	107.87	340.8	351.9		
Erosion damages											
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd		
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)		
0	0.00	0.0	2	132.00	62.0	47	4,886.00	319.0	381		
Other information									PV Value (£k)		
Source: Little Haven Prefeasibility study. May 2002 outline damages determined over 50 years (6% discount rate). Only considered flood risk. No further information with respect to Broad Haven											
Notes: As determined by MDSF. Additional damages would occur due to wave overtopping and tidal locking.									<table border="1"> <tr> <td>Total NAI damages</td> <td>732.9</td> </tr> </table>	Total NAI damages	732.9
Total NAI damages	732.9										

Scenario: With Present Management											
MDSF Assessment											
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd		
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)		
			0.18	2.3	0.67	4.7	4.35	15.7	22.7		
Erosion damages											
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd		
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)		
0	0.00	0.0	0	0.00	0.0	1	134.00	7.0	7.0		
Other information									PV Value (£k)		
Source: Little Haven Prefeasibility study. May 2002 no residual damages assessed.											
Notes: As determined by MDSF, does not include increased risk to roads or loss of amenity beaches									<table border="1"> <tr> <td>Total WPM damages</td> <td>29.7</td> </tr> </table>	Total WPM damages	29.7
Total WPM damages	29.7										

Economic Assessment

Policy Development Zone (PDZ): 2

Location: Little Haven and Broad Haven

Management Area (MA): 2

Policy Units (PU): 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.18	2.3	0.67	4.7	4.35	15.7	22.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	610.00	40.0	40.0
Other damages									PV Value (£k)
Loss of road at Little Haven and Broad Haven. Properties lost due to erosion as defences are set back at Little Haven and Broad Haven.									
Notes: As determined by MDSF, additional loss of property due to realignment.								Total preferred plan damages	62.7

Costs

Present Management Assessment									
Source: Little Haven Prefeasibility study. May 2002									PV Value (£k)
Increasing height of defence at Little Haven. Maintain and improve defence at Broad Haven									
Notes:									1,081
Preferred Pan									
Description: Maintain defence at Little Haven and Broad Haven with managed realignment during epoch 2 and 3. Maintain flood defence at Nolton Haven.									PV Value (£k)
Notes:									784

Reconciliation

Additional cost associated with realignment to allow adaptation during epoch 2 and 3. Damages do not include wave overtopping and tidal locking or potential loss of amenity beaches at Little Haven and Broad Haven. Damages do not include disruption to road due to future flooding, with potential loss of access to property.

Economic Assessment

Policy Development Zone (PDZ): 2

Location: *Nolton Haven and Newgale*

Management Area (MA): 3

Policy Units (PU): 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			33.80	423.2	38.13	401.0	390.40	1341.3	2,165.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF.									
								Total NAI damages	2,188.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			6.97	87.3	38.13	251.4	46.90	266.1	604.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23.0
Other information									PV Value (£k)
Source: No detailed study Manage shingel ridge and reinforce in epoch 2									
Notes: As determined by MDSF									
								Total WPM damages	627.8

Economic Assessment

Policy Development Zone (PDZ): 2

Location: Nolton Haven and Newgale

Management Area (MA): 3

Policy Units (PU): 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.13

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	390.40	1341.3	1,341.3	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	4	449.00	23.0	23.0	
Other damages										
Loss of road potentially in epoch 2. Manange shingle ridge until closure of the road, epoch 2										
PV Value (£k)										
Notes: As determined by MDSF								Total preferred plan damages		1,364.3

Costs

Present Management Assessment									
Source: No detailed study									
Manage shingel ridge and reinforce in epoch 2									
PV Value (£k)									
Notes:									
1,802									
Preferred Pan									
Description: Loss of road potentially in epoch 2. Manange shingle ridge until closure of the road, epoch 2. Maintain defence to road to south.									
PV Value (£k)									
Notes:									
101									

Reconciliation

Allow roll back and overtopping shingle bank. Support adaptation of use during epochs 1 and 2. Maintain raod to southern valley to support adaptive use of area.

Economic Assessment

Policy Development Zone (PDZ): 3

Location: St David's Peninsula to Strumble Head

Management Area (MA): 4

Policy Units (PU): 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
	3.75	47.0	9.09	71.6	169.91	560.3			678.8
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	178.00	36.0	36
Other information									PV Value (£k)
Source: No detailed study Damages do not take account of amenity damages or disruption to highway through Solva. Damages do not include loss of heritage at Porth Gain									
Notes: As determined by MDSF									
								Total NAI damages	714.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
	3.75	47.0	2.93	37.2	32.90	112.1			196.3
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	172.00	35.0	35.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	231.3

Economic Assessment

Policy Development Zone (PDZ): 3

Location: St David's Peninsula to Strumble Head

Management Area (MA): 4

Policy Units (PU): 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages		Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
		3.75	47.0	2.93	37.2	100.00	322.2	406.4	
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	172.00	35.0	35.0
Other damages									PV Value (£k)
Managed realignment at Solva would look to sustain community through adaptation, while maintaining road.									
Notes: As determined by MDSF						Total preferred plan damages		441.4	

Costs

Present Management Assessment		PV Value (£k)
Source: Costs include for works to sustain harbour at Solva and raising defences to village, works to sustain defence at Whitesands, Abereiddi, Porth Gain, Abercastle and Porth Claise.		
Notes:		2,311
Preferred Pan		PV Value (£k)
Description: Initial raising of defence at Solva, followed by adaptation of community. Defences at Port Claise would require collaborative funding as would works at Porth Gain. Realignment at Whitesands, at A		
Notes:		1,076

Reconciliation

Damages determined by MDSF do not take account of disruption to road and community at Solva. The preferred plan would require collaborative funding particularly at Solva, Porth Claise and Porth Gain to support community adaptation and to sustain amenity and heritage values.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Fishguard and Goodwick

Management Area (MA): 5

Policy Units (PU): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.44	230.9	117.35	757.0	1147.06	3957.6	4,945.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	8.00	2.0	3	330.00	62.0	64
Other information									PV Value (£k)
Source: No detailed study									
Damages do not take account of harbour operations nor loss of opportunity for sustaining economic hub. Losses do not take account of disruption of transport at Fishguard or Lower Town.									
Notes: As determined by MDSF								Total NAI damages	5,009.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.67	121.1	16.29	144.7	50.48	209.0	474.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: No detailed study									
Notes: As determined by MDSF								Total WPM damages	474.8

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Fishguard and Goodwick

Management Area (MA): 5

Policy Units (PU): 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.67	121.1	16.29	144.7	211.80	713.9	979.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Potential damages increase due realignment at Lower Town during epoch 3. This would need to be addressed through adaptive development of the area.									
Notes: As determined by MDSF								Total preferred plan damages	979.7

Costs

Present Management Assessment									
Source: No detailed study, costs estimated based on holding the existing defences.									PV Value (£k)
Notes:									2,218
Preferred Pan									
Description: Maintain defence to main harbour area. allow flooding to Goodwick moor by change in defence at the Parrog and taking road across by bridge (no allowed fro in the cost). Cost is allowed for a retired defence to Goodwick Realignment at Lower Town but holding the quay.									PV Value (£k)
Notes:									1,459

Reconciliation

Strong economic case for maintaining Fishguard Harbour and associated Development Hub around Goodwick. Significant additional cost associated with realignment not included in assessment to allow adaptation to a more sustainable defence system in epochs 2 and 3.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 6

Policy Units (PU): 4.9, 4.10, 4.11, 4.12, 4.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	197.00	48.0	5	858.00	122.0	170
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total NAI damages 170.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	10.0	10.0
Other information									PV Value (£k)
Source: no detaile studies									
Notes: As determined by MDSF									Total WPM damages 10.0

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 6

Policy Units (PU): 4.9, 4.10, 4.11, 4.12, 4.13

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	10.0	10.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 10.0

Costs

Present Management Assessment		PV Value (£k)
Source: no detailed studies, continue to maintain existing defences		
Notes:		321
Preferred Pan		PV Value (£k)
Description: discontinue defence Pwllgwaelog in epoch 2 and adapt approach to defence at Cwm yr Eglwys		
Notes:		117

Reconciliation

Damages do not include loss of road and potential loss of important heritadge value at Cwm Yr Eglwys. The plan approach recognises the importance of the Cwm Yr Eglwys community.

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Nyfer Estuary and Newport Sands

Management Area (MA): 7

Policy Units (PU): 4.14, 4.15, 4.16, 4.17, 4.18, 4.19

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	801.10	4941.5	1092.14	5925.8	11,934.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	9	1,301.00	154.0	154
Other information									PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 estimated damages due to flooding capped at £13M									
Notes: As determined by MDSF									
								Total NAI damages	12,088.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	104.53	1058.1	133.63	745.4	2,871.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 estimated damages based on 0.5m sea level rise. £300k									
Notes: As determined by MDSF									
								Total WPM damages	2,871.0

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Nyfer Estuary and Newport Sands

Management Area (MA): 7

Policy Units (PU): 4.14, 4.15, 4.16, 4.17, 4.18, 4.19

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			85.26	1067.5	300.00	2147.8	500.01	2504.0	5,719.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 5,719.3

Costs

Present Management Assessment		PV Value (£k)
Source: Newport Parrog Flood alleviation scheme PAR 2006 increase defence levels.		
Notes:		509
Preferred Pan		PV Value (£k)
Description: sustain existing defence over epoch 1 and 2 but with the intent to accept higher levels of flooding in epoch mitigated by reduction in wave height.		
Notes:		509

Reconciliation

Despite the high economic benefit, there would be difficulty in maintaining an approach of raising walls in the future, without leading to damage to the community. The plan aims to provide a more adaptive approach while maintaining the general character of the area.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan Cliffs West

Management Area (MA): 8

Policy Units (PU): 5.1

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan Cliffs West

Management Area (MA): 8

Policy Units (PU): 5.1

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 0.0

Costs

Present Management Assessment									
Source: no works									PV Value (£k)
Notes:									0
Preferred Pan									
Description: No significant works planned. This would not preclude minor local works to support access.									PV Value (£k)
Notes:									0

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):5

Location: Teifi Estuary

Management Area (MA): 9

Policy Units (PU): 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
	8.67	108.5	90.76	554.3	119.61	658.5			1,321.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,358.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
	8.67	108.5	90.76	554.3	90.14	566.2			1,229.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,266.1

Economic Assessment

Policy Development Zone (PDZ):5

Location: Teifi Estuary

Management Area (MA): 9

Policy Units (PU): 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			8.67	108.5	43.02	288.2	63.75	334.2	730.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	1	197.00	37.0	37.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									767.9
Total preferred plan damages									767.9

Costs

Present Management Assessment		PV Value (£k)
Source: There is no detailed plan for mangement in this area. Costs have been estimated agisnt maintaining existing defences.		1,429
Notes:		
Preferred Pan		PV Value (£k)
Description: The core feature of the Plan is to sustain existing use use and cahracter of the area while minimising reliance on the need for on-going increased provison and hardening of defences. The intent would be to reduce flood risk to Poppit but there would still be signifcant risk in the longer term. Allowances have been made for mangement of the entrance to the estuary. However these are solely intended as indicatve.		841
Notes:		

Reconciliation

The damages determined by the SMP do not fully reflect the important local and regional avalue of the estauy in terms of the fishing industry, tourism and recreation. The economic assessment can only provide indicative values that would need to be developed through a local mangement plan. There is however, identifid signifcant flood and erosion risk which needs to be addressed in such a local management plan.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Cardigan

Management Area (MA): 10

Policy Units (PU): 5.10, 5.11, 5.12, 5.13, 5.14

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			70.42	881.7	506.14	3214.3	509.17	3177.9	7,273.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	128.00	56.0	0	0.00	0.0	56
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	7,329.9

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.84	198.3	25.22	228.9	43.04	213.7	640.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	640.9

Economic Assessment

Policy Development Zone (PDZ): 4

Location: Dinas Head and Adjacent Cliffs

Management Area (MA): 10

Policy Units (PU): 5.10, 5.11, 5.12, 5.13, 5.14

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			15.84	198.3	25.22	228.9	43.04	213.7	640.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 640.9

Costs

Present Management Assessment		PV Value (£k)
Source: Improvements to cardigan north are being considered.		
Notes:		1,718
Preferred Pan		PV Value (£k)
Description: Defences would generally be maintained around Cardigan and at St Dogmaels north. Upstream of Cardigan the plan would be to allow set back of defences.		
Notes:		1,718

Reconciliation

There is significant benefit in maintaining defences as set out in the plan. Even so consideration has to be given in reducing the long term flood risk by appropriate development control.

Economic Assessment

Policy Development Zone (PDZ):5

Location: Mwnt and Aberporth Cliffs

Management Area (MA): 11

Policy Units (PU):5.15

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch	MDSF (£k)
	0.00	0.0		0.00	0.0		0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total NAI damages
									0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch	MDSF (£k)
	0.00	0.0		0.00	0.0		0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages
									0.0

Economic Assessment

Policy Development Zone (PDZ):5

Location: Mwnt and Aberporth Cliffs

Management Area (MA): 11

Policy Units (PU):5.15

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description: No works identified.		
Notes:		0

Reconciliation

There are no significant assets at risk.

Economic Assessment

Policy Development Zone (PDZ):6

Location: Aberporth and Villages

Management Area (MA): 12

Policy Units (PU):6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	20	2,758.86	288.8	289
Other information									PV Value (£k)
Source: Damages resulting from loss of road and services not evaluated for any of the communities. Potential increased cliff slippage at Aberporth and Tresaith would result in significantly greater loss.									
Notes: As determined by MDSF									
								Total NAI damages	289.0
Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	624.14	56.0	56.0
Other information									PV Value (£k)
Source: no detailed study									
Notes: As determined by MDSF									
								Total WPM damages	56.0

Economic Assessment

Policy Development Zone (PDZ):6

Location: Aberporth and Villages

Management Area (MA): 12

Policy Units (PU):6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	4	624.14	56.0	56.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	56.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		527
Preferred Pan		PV Value (£k)
Description: Mainatin defences at Aberporth. Realignment at Tresaith and at Llangrannog		
Notes:		403

Reconciliation

Damages evaluated do not fully reflect loss to communities in terms of access and potential risk due to landslippage. Defence at Aberporth is essential to maintain the core opf the community. Realignment at Tresaith would safeguard the main access but allow adaption and sustain beach. Realignment at Llangrannog would aim to retain village and allow development of important amenity beach.

Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	7	1,080.00	332.0	47	5,074.62	434.3	766.3	
Other information									PV Value (£k)	
Source: No detailed study. Damages do not take account of loss of the harbour and central core of New Quay										
Notes: As determined by MDSF									Total NAI damages	766.3

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	7	1,080.00	332.0	21	2,796.99	232.0	564.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	564.0

Economic Assessment

Policy Development Zone (PDZ):7

Location: New Quay Bay

Management Area (MA): 13

Policy Units (PU):7.1, 7.2, 7.3, 7.4

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	7	1,080.00	332.0	27	3,518.71	307.4	639.4
Other damages									PV Value (£k)
Increased damages with MR along Rock Street									
Notes: As determined by MDSF									
Total preferred plan damages									639.4

Costs

Present Management Assessment		PV Value (£k)
Source: Takes costs of protecting Rock Street		
Notes:		1,051
Preferred Pan		PV Value (£k)
Description: Minor works would be undertaken to maintain Rock Street but not to stop slow erosion of the frontage. Costs include an estimated cost of maintaining the stone pier and works to reinforce Llanina Point.		
Notes:		853

Reconciliation

Damages identified above do not take account of loss of harbour and consequential damage to the centre of New Quay. Costs associated with maintaining the Pier may require alternative funding sources and plans would need to be developed in consultation with the community in terms of the long term development of the town.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source: Damages may not fully reflect longer term risk to property on coastal slope above defences. This would require more detailed study.									
Notes: As determined by MDSF									Total NAI damages 0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages 0.0

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Damages may not fully reflect longer term risk to property on coastal slope above defences. This would require more detailed study.									
Notes: As determined by MDSF									
									Total preferred plan damages
									0.0

Costs

Present Management Assessment		PV Value (£k)
Source: Present management continues to maintain the existing defences.		
Notes:		1,163
Preferred Pan		PV Value (£k)
Description: The plan recognises that potential risk to property on the coastal slope. Some of the defence is privately owned. The intent would be to assist in management of defences subject to more detailed assessment of risk but in the long term to withdraw from management of the frontage. This would require agreed adaptation.		
Notes:		244

Reconciliation

There is a potential risk to property. This would need to be examined further. The intent would be to move away from defence of the frontage but over epoch 1 and 2 to examine risk in more detail.

Economic Assessment

Policy Development Zone (PDZ):8

Location: Aberaeron and Aberarth

Management Area (MA): 15

Policy Units (PU):8.1, 8.2, 8.3, 8.4, 8.5, 8.6

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			105.88	1325.6	60.94	930.0	5428.75	17182.7	19,438.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	149.00	36.0	74	9,025.00	852.0	888
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	20,326.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			55.72	697.6	69.37	697.4	124.25	606.0	2,001.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	1,375.00	91.0	91.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,092.0

Economic Assessment

Policy Development Zone (PDZ):8

Location: Aberaeron and Aberarth

Management Area (MA): 15

Policy Units (PU):8.1, 8.2, 8.3, 8.4, 8.5, 8.6

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			55.72	697.6	69.37	697.4	124.25	606.0	2,001.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	7	1,375.00	91.0	91.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages
									2,092.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		1,527
Preferred Pan		PV Value (£k)
Description:		
Notes:		1,222

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):8

Location: Llanrhystud bay

Management Area (MA): 16

Policy Units (PU):8.7, 8.8, 8.9, 8.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch	MDSF (£k)
	0.00	0.0		0.00	0.0		0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	10.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
	AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch	MDSF (£k)
	0.00	0.0		0.00	0.0		0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	10.0

Economic Assessment

Policy Development Zone (PDZ):8

Location: Llanrhystud bay

Management Area (MA): 16

Policy Units (PU):8.7, 8.8, 8.9, 8.10

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	2	119.00	10.0	10.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 10.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description:		
Notes:		0

Reconciliation

Economic Assessment

Policy Development Zone (PDZ):9

Location: Aberystwyth

Management Area (MA): 17

Policy Units (PU):9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVD	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			401.96	5032.5	552.11	5318.9	4245.08	15015.2	25,366.7	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVD	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	182	19,929.00	2476.0	2476	
Other information									PV Value (£k)	
Source: Aberystwyth Coastal Defence Strategy 2006 damages assessed by strategy: Tan y Bwlch - £76k, Harbour - £6936k, South Marine Terrace - £3211, Victoria and Marine Terrace - £7629. Total damages estimates (excluding properties within the rheidol valley = £17, 852. damages assessed only with 0.5m sea level rise.										
Notes: As determined by MDSF taking account of rheidol valley and additional sea level rise.									Total NAI damages	27,842.7

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVD	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			213.05	2667.4	292.78	2820.0	499.18	2478.8	7,966.2	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVD	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	2	263.00	24.0	24.0	
Other information									PV Value (£k)	
Source: Aberystwyth Coastal Defence Strategy 2006 damages assessed by strategy: Tan y Bwlch - £31k, Harbour - £843k, South Marine Terrace - £1057, Victoria and Marine Terrace - £1297. Total damages estimates (excluding properties within the rheidol valley = £3,228. damages assessed only with 0.5m sea level rise.										
Notes: As determined by MDSF taking account of rheidol valley and additional sea level rise.									Total WPM damages	7,990.2

Economic Assessment

Policy Development Zone (PDZ):9

Location: Aberystwyth

Management Area (MA): 17

Policy Units (PU):9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			213.05	2667.4	292.78	2820.0	1104.67	4374.0	9,861.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	263.00	24.0	24.0
Other damages									PV Value (£k)
no allowance has been taken for loss of highways, services along the sea front and amenity use. No cost has been allowed for loss of railway. Increased flood risk at Glanrafon Terrace in epoch 3									
Notes: As determined by MDSF									
								Total preferred plan damages	9,885.4

Costs

Present Management Assessment		PV Value (£k)
Source: Aberystwyth Coastal Defence Strategy 2006		
Defence cost from strategy: Tan y bwlch - £3,770, Harbour - £1260, South Marine Terrace - £1977, Victoria and Marine Terrace - £698. Total cost estimates (excluding Tan y bwlch and costs within the Rhiedol valley) = £3,935.		
Notes:		4,961
Preferred Pan		PV Value (£k)
Description: Maintain all defences except at Tan y Bwlch and potential for realignment at Glanrafon Terrace in epoch 3. Includes for future cost of defence within the Rhiedol Valley		
Notes:		5,092

Reconciliation

strong economic case for continued management even without taking account of amenity values and potential loss of services. Long term risks in terms of sustainable management, with potential loss of amenity and increased flood risk in the Rhiedol Valley.

Economic Assessment

Policy Development Zone (PDZ):9

Location: Clarach and Wallog

Management Area (MA): 18

Policy Units (PU):9.11, 9.12, 9.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			40.87	511.7	49.03	501.2	491.72	1692.5	2,705.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	19.0	67
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,772.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			40.87	511.7	5.76	260.0	491.72	1557.1	2,328.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	198.00	48.0	3	163.00	17.0	65.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,393.8

Economic Assessment

Policy Development Zone (PDZ):9

Location: Clarach and Wallog

Management Area (MA): 18

Policy Units (PU):9.11, 9.12, 9.13

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			40.87	511.7	5.76	260.0	491.72	1557.1	2,328.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	1	198.00	48.0	3	163.00	17.0	65.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	2,393.8

Costs

Present Management Assessment		PV Value (£k)
Source: Allowance made for costs associated with realignment during epoch 2		
Notes:		126
Preferred Pan		PV Value (£k)
Description: Allowance made for costs associated with realignment during epoch 2		
Notes:		126

Reconciliation

Significant improvement to flood defence would require works along the sea front and along the banks of the river. This would incur significant cost and set a precedent that would be unsustainable in the longer term.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			362.92	4543.8	536.23	5012.8	17519.38	56514.1	66,070.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	74	8,274.00	2687.0	247	30,055.00	2982.0	5669
Other information									PV Value (£k)
Source: Borth appriasl of options 2006 Damges determined for both sea front and potential flood risk at Ynyslas = £51,000K.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.									
								Total NAI damages	71,739.6

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			181.20	2268.6	210.80	2185.4	536.43	2338.8	6,792.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Borth appriasl of options 2006 Damages assessed for bortyh frontage with proposed scheme = £2,000k.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.									
								Total WPM damages	6,792.9

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			181.20	2268.6	210.80	2185.4	536.43	2338.8	6,792.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	294	35,574.00	2644.0	2644.0
Other damages									PV Value (£k)
no allowance for damages associated with potential loss or relocation of railway.									
Notes: As determined by MDSF Taking account of additional damages within the Dyfi Estuary.							Total preferred plan damages		9,436.9

Costs

Present Management Assessment		PV Value (£k)
Source: Borth appraisl of options 2006 costs for mangement at Borth taken from appraisal, additionla cost added for defence at Dyfi Junction.		
Notes:		19,076
Preferred Pan		PV Value (£k)
Description: costs for mangement at Borth taken from appraisal, additionla cost added for defence at Dyfi Junction.		
Notes:		19,076

Reconciliation

The Borth Appraisal is approved with the intent of providing defence to the fronatge over the next 75 years taking account of sea level rise. Beyond 75 years the approach would be to allow a redcution on defnce standard. Defence furtehr within the estaury would depend critically on future mangement of teh railway line, although there would still be seen as being justification for defence at Dyfi junction.

Economic Assessment

Policy Development Zone (PDZ):10

Location: Dyfi North, Tywyn and the Dysynni

Management Area (MA): 20

Policy Units (PU):10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			198.13	2480.6	368.77	3160.5	899.89	3970.9	9,612.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	10	1,085.00	319.0	84	9,952.00	1113.0	1432
Other information									PV Value (£k)
Source: Damages do not include fro loss of harbour, disruption to transport routes and loss of ammenity along the sea front at Tywyn.									
Notes: As determined by MDSF									Total NAI damages 11,044.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			35.98	450.5	56.81	517.3	216.10	854.2	1,822.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages 1,822.0

Economic Assessment

Policy Development Zone (PDZ):10

Location: Dyfi North, Tywyn and the Dysynni

Management Area (MA): 20

Policy Units (PU):10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, 10.17, 10.18, 10.19

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	MDSF (£k)
35.98		450.5	56.81		517.3	216.10		854.2	1,822.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
There is incared flood risk to Aberdyfi Golf course and to agricultural land within the Penllyn Marhs and Dysynni areas.									
Notes: As determined by MDSF								Total preferred plan damages	1,822.0

Costs

Present Management Assessment									
Source: works include for improvement to defnces at Aberdofi, continued defnce at Tywyn and to the railway line. Defences in the Pnllyn marhs area include fro a cross wall embankment to the southa nd set back defence to the road and railway.									PV Value (£k)
Notes:									9,039
Preferred Pan									
Description: works include for improvement to defnces at Aberdofi, continued defnce at Tywyn and to the railway line. Defences in the Pnllyn marhs area include fro a cross wall embankment to the southa nd set back defence to the road and railway.									PV Value (£k)
Notes:									9,039

Reconciliation

damages do not include for significant disruption to the transport network or the loss of important socio-economic factors at Tywyn and Aberdyfi. Whiel shown to be marginal these additional impacts on the area justiy continued management.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Southern Cliffs

Management Area (MA): 21

Policy Units (PU):11.1, 11.2, 11.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	764.00	43.0	43
Other information									PV Value (£k)
Source: damages do not include for disruption to transport net work									
Notes: As determined by MDSF									
								Total NAI damages	43.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: damages do not include for disruption to transport net work									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):11

Location: Southern Cliffs

Management Area (MA): 21

Policy Units (PU):11.1, 11.2, 11.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
damages do not include for disruption to transport net work									
Notes: As determined by MDSF								Total preferred plan damages	0.0

Costs

Present Management Assessment		PV Value (£k)
Source: cost do not include for local mangement of defences to rialway line		
Notes:		0
Preferred Pan		PV Value (£k)
Description: cost do not include for local mangement of defences to rialway line		
Notes:		0

Reconciliation

The principal aim of the plan would be for continued defence of the railway. This has not been assessed in the above tables.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Entrance - South

Management Area (MA): 22

Policy Units (PU):11.4, 11.5, 11.6, 11.7, 11.8, 11.9

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2296.01	28746.0	2454.00	26481.3	23606.34	81568.9	136,796.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	22	3,596.00	276.0	276
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	137,072.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			224.55	2811.4	492.91	3999.8	2774.34	10226.5	17,037.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: incased defences.									
Notes: As determined by MDSF									
								Total WPM damages	17,037.7

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Entrance - South

Management Area (MA): 22

Policy Units (PU):11.4, 11.5, 11.6, 11.7, 11.8, 11.9

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			224.55	2811.4	1502.00	9625.5	23520.34	78319.9	90,756.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	22	3,596.00	276.0	276.0
Other damages									PV Value (£k)
relocation of community at Fairbourne, damages taken as for NAI in epoch 3.									
Notes: As determined by MDSF								Total preferred plan damages	91,032.8

Costs

Present Management Assessment		PV Value (£k)
Source:	continued defence of frontages	
Notes:		6,693
Preferred Pan		PV Value (£k)
Description:	Costs associated with mangement during epoch 1 and 2.	
Notes:		4,429

Reconciliation

Despite significant potential benefits, long term defence is not considered to be sustainable.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Estuary

Management Area (MA): 23

Policy Units (PU):11.10, 11.11, 11.12, 11.13

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.44	5.5	0.62	5.9	8.88	29.7	41.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source: Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF								Total NAI damages	41.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	0.30	2.9	4.48	15.0	20.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF								Total WPM damages	20.6

Economic Assessment

Policy Development Zone (PDZ):11

Location: Mawddach Estuary

Management Area (MA): 23

Policy Units (PU):11.10, 11.11, 11.12, 11.13

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	0.30	2.9	4.48	15.0	20.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Damages do not include fro disruption to the transport network, maintaining the road through to Barmouth.									
Notes: As determined by MDSF								Total preferred plan damages	20.6

Costs

Present Management Assessment		PV Value (£k)
Source: Local mangement of defences including Penmaenpool		
Notes:		980
Preferred Pan		PV Value (£k)
Description: Local mangement of defences including Penmaenpool		
Notes:		980

Reconciliation

The plan aims to allow adaption but still maintain the important transport network to Barmouth and critical defence at Penmaenpool.

Economic Assessment

Policy Development Zone (PDZ):11

Location: Barmouth

Management Area (MA): 24

Policy Units (PU):11.14, 11.15, 11.16

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	114.76	744.7	1878.82	6239.9	7,220.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	40	4,735.00	290.0	290
Other information									PV Value (£k)
Source: Damges do not include loss of harbour and sea front.									
Notes: As determined by MDSF									
								Total NAI damages	7,510.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	55.00	411.5	127.70	571.9	1,218.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,218.8

Economic Assessment

Policy Development Zone (PDZ):11

Location: *Barmouth*

Management Area (MA): 24

Policy Units (PU):11.14, 11.15, 11.16

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			18.81	235.5	44.00	350.2	100.00	450.7	1,036.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	10	1,180.00	364.0	0	0.00	0.0	364.0
Other damages									PV Value (£k)
Realignment may require relocation of properties to provide width for management. This relocation would reduce flood risk in the future.									
Notes: As determined by MDSF								Total preferred plan damages	1,400.4

Costs

Present Management Assessment									
Source: Costs are based on estimated cost of increasing defence on existing line.									PV Value (£k)
Notes:									4,686
Preferred Pan									
Description: Estimated costs derived for realignment of defences over the northern frontage at Barmouth.									PV Value (£k)
Notes:									1,852

Reconciliation

There is a strong economic benefit indicated for this area.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			8.00	100.2	19.04	150.7	29.00	150.4	401.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17
Other information									PV Value (£k)
Source: Potential flooding to railway not included.									
Notes: As determined by MDSF									
								Total NAI damages	418.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.00	37.6	5.00	44.6	29.00	106.4	188.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17.0
Other information									PV Value (£k)
Source: Potential flooding to railway not included.									
Notes: As determined by MDSF									
								Total WPM damages	205.6

Economic Assessment

Policy Development Zone (PDZ):11

Location: Dyffryn Ardudwy

Management Area (MA): 25

Policy Units (PU):11.17, 11.18, 11.19, 11.20

Damages (continued)

Scenario: Preferred Plan												
MDSF Assessment												
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)		PVd for epoch	
			3.00	37.6		19.04	122.9		29.00	150.4		310.8
Erosion damages												
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)			
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)				
0	0.00	0.0	0	0.00	0.0	2	229.00	17.0	17.0			
Other damages										PV Value (£k)		
Potential flooding to railway not included.												
Notes: As determined by MDSF										Total preferred plan damages	327.8	

Costs

Present Management Assessment										
Source: manage naturql flood defence and improve during epoch 2. Private defences not included										PV Value (£k)
Notes:										275
Preferred Pan										PV Value (£k)
Description: manage nautrual bank for epoch 1. Private defences not included.										
Notes:										7

Reconciliation

Managed by private investment. Mainatin flood defence only over epoch 1.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Artro Estuary

Management Area (MA): 26

Policy Units (PU):12.1, 12.2, 12.3, 12.4, 12.5, 12.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	110.95	463.2	858.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	6	1,090.00	84.0	135
Other information									PV Value (£k)
Source: Damages do not include potential loss and disruption to transport.									
Notes: As determined by MDSF									
								Total NAI damages	993.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	45.68	258.9	654.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Damages do not include potential loss and disruption to transport.									
Notes: As determined by MDSF									
								Total WPM damages	654.2

Economic Assessment

Policy Development Zone (PDZ):12

Location: Artro Estuary

Management Area (MA): 26

Policy Units (PU):12.1, 12.2, 12.3, 12.4, 12.5, 12.6

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.44	130.7	37.03	264.6	45.68	258.9	654.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
management would be subject to development of estuary mangement plan. Damags taken as for WPM									
Notes: As determined by MDSF								Total preferred plan damages	654.2

Costs

Present Management Assessment									
Source: Improvement to embankments within estuary and defence at shoreline.									PV Value (£k)
Notes:									2,506
Preferred Pan									
Description: The defence along the railway would be maintianed but mangement within the estuary would be subject to a mangements plan.									PV Value (£k)
Notes:									1,574

Reconciliation

defence along the rialway line and road would maintain the transport network. Defences would be realigned within the estuary subject to a detailed plan.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Harlech and Dwyryd Estuary

Management Area (MA): 27

Policy Units (PU):12.7, 12.8, 12.9, 12.10, 12.11, 12.12

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			201.63	2524.4	311.54	2860.9	3363.27	11502.2	16,887.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	16,978.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			31.84	398.6	64.40	536.5	159.14	699.7	1,634.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,725.9

Economic Assessment

Policy Development Zone (PDZ):12

Location: Harlech and Dwyryd Estuary

Management Area (MA): 27

Policy Units (PU):12.7, 12.8, 12.9, 12.10, 12.11, 12.12

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			31.84	398.6	64.40	536.5	159.14	699.7	1,634.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	78.0	1	108.00	13.0	91.0
Other damages									PV Value (£k)
proposed realignment at Talsarnau may increase damages in this area. This would need to be examined in more detail.									
Notes: As determined by MDSF								Total preferred plan damages	1,725.9

Costs

Present Management Assessment									
Source: maintains all defences									PV Value (£k)
Notes:									3,701
Preferred Pan									
Description: potential for realignment at Talsarnau would need to be considered in detail.									PV Value (£k)
Notes:									1,135

Reconciliation

strong economic justification for continued defence. Potential for realignment could reduce costs but needs to be examined in more detail.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Porthmadog

Management Area (MA): 28

Policy Units (PU):12.13, 12.14, 12.15, 12.16

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7210.23	90272.1	8002.29	84809.8	75068.40	260011.3	435,093.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	213.0	14	1,565.00	546.0	92	10,311.00	928.0	1686
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	436,779.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			345.70	4328.2	503.67	4735.2	1129.35	5111.4	14,174.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	216.00	206.0	0	0.00	0.0	2	321.00	32.0	238.0
Other information									PV Value (£k)
Source: significant residual risk of flooding									
Notes: As determined by MDSF									
								Total WPM damages	14,412.8

Economic Assessment

Policy Development Zone (PDZ):12

Location: Porthmadog

Management Area (MA): 28

Policy Units (PU):12.13, 12.14, 12.15, 12.16

Damages (continued)

Scenario: Preferred Plan												
MDSF Assessment												
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		
			345.70	4328.2		503.67	4735.2		1129.35	5111.4		14,174.8
Erosion damages												
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)			
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)				
2	216.00	206.0	0	0.00	0.0	2	321.00	32.0	238.0			
Other damages as WPM										PV Value (£k)		
Notes: As determined by MDSF										Total preferred plan damages	14,412.8	

Costs

Present Management Assessment										
Source: Maintenance and improvement										PV Value (£k)
Notes:										1,991
Preferred Pan										PV Value (£k)
Description: As WPM										
Notes:										1,991

Reconciliation

Strong economic justification fro continued management. High residual risk needs to be examined in detail.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth East and Eastern Shingle Banks

Management Area (MA): 29

Policy Units (PU):12.17, 12.18, 12.19

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	6	577.00	173.0	35	3,599.00	454.0	627
Other information									PV Value (£k)
Source: distruption to transport network									
Notes: As determined by MDSF									
								Total NAI damages	627.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source: Increased risk of overtopping not included in damages.									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth East and Eastern Shingle Banks

Management Area (MA): 29

Policy Units (PU):12.17, 12.18, 12.19

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Overtopping damages not included. Potential need to relocate or raise railway not included. Damages may occur associated with MR in each 3. This would be assessed in detail as the need arises. Damages as WPM									
Notes: As determined by MDSF									Total preferred plan damages
									0.0

Costs

Present Management Assessment		PV Value (£k)
Source: Maintain and raise defences.		
Notes:		1,580
Preferred Pan		PV Value (£k)
Description: Potential for realignment in epoch 3 to provide a more sustainable approach to defence. This would not necessarily incur loss of properties.		
Notes:		913

Reconciliation

Damages recorded by MDSF do not fully recognise the value of the Criccieth sea front. There is likely to be a need for collaborative funding in developing management approach in the future.

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth West

Management Area (MA): 30

Policy Units (PU):12.20, 12.21, 12.22, 12.23, 12.24, 12.25

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	13.66	44.3	47.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	25	1,987.00	634.0	40	4,411.00	657.0	1291
Other information									PV Value (£k)
Source: Damages do not include for disruption to transport route.									
Notes: As determined by MDSF									
								Total NAI damages	1,338.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.02	0.3	0.50	2.9	8.26	27.4	30.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	161.00	25.0	25.0
Other information									PV Value (£k)
Source: Damages do not reflect fully risk to transport route.									
Notes: As determined by MDSF									
								Total WPM damages	55.6

Economic Assessment

Policy Development Zone (PDZ):12

Location: Criccieth West

Management Area (MA): 30

Policy Units (PU):12.20, 12.21, 12.22, 12.23, 12.24, 12.25

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	
0.02		0.3	0.50		2.9	8.26		27.4	30.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	
0	0.00	0.0	0	0.00	0.0	2	161.00	25.0	25.0
Other damages									PV Value (£k)
Damages do not reflect fully risk to transport route.									
Notes: As determined by MDSF									Total preferred plan damages
									55.6

Costs

Present Management Assessment									
Source:									PV Value (£k)
These cost include for significant strengthening and raising of railway defence at Afon Wen in epoch 3 (estimated cost £12M)									
Notes:									4,157
Preferred Pan									
Description:									PV Value (£k)
costs include for realignemnet of revtment at Afon Wen in epoch 3, but do not include coasta associated with potential realignment of the railway.									
Notes:									3,012

Reconciliation

The priiopl costs asre associated with defnce of Criccieth where there is strong justification due to erosion damages. Realignment of defences at Afon Wen and Afon Dywfor, together with realignment of the railway would need to be considered in detail at a regional or national scale.

Economic Assessment

Policy Development Zone (PDZ):13

Location: Pwllheli Area

Management Area (MA): 31

Policy Units (PU):13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3005.67	37631.0	21157.51	134709.7	34197.14	173260.1	345,600.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	822.00	46.0	46
Other information									PV Value (£k)
Source: Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli									
Notes: As determined by MDSF									
								Total NAI damages	345,646.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			174.24	2181.5	405.63	3232.8	583.79	3096.9	8,511.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	822.00	42.0	42.0
Other information									PV Value (£k)
Source: Damages do not include for disruption to road and railway not to the broader economic damage to the harbor and to the centre of Pwllheli									
Notes: As determined by MDSF									
								Total WPM damages	8,553.1

Economic Assessment

Policy Development Zone (PDZ):13

Location: Pwllheli Area

Management Area (MA): 31

Policy Units (PU):13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, 13.8, 13.9

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			180.84	2264.1	405.63	3269.6	735.80	3572.7	9,106.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	822.00	42.0	42.0
Other damages									PV Value (£k)
Damages do not include for disruption to road and arilway not to the broader economic damage to the harbor and to the cente of Pwllheli									
Notes: As determined by MDSF								Total preferred plan damages	9,148.4

Costs

Present Management Assessment		PV Value (£k)
Source: based on startegy		
Notes:		4,370
Preferred Pan		PV Value (£k)
Description: determined based on realignment at Traeth Crugan and Abererch.		
Notes:		2,362

Reconciliation

Strong economic justification for comntinued defence but high residual damages due to possible exceedance of standard of defence..

Economic Assessment

Policy Development Zone (PDZ):13

Location: Abersoch Area

Management Area (MA): 32

Policy Units (PU):13.10, 13.11, 13.12, 13.13, 13.14, 13.15

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			37.48	469.2	109.06	817.0	1132.53	3886.2	5,172.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	212.00	212.0	2	425.00	135.0	6	852.00	53.0	401
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	5,573.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			14.01	175.4	57.34	397.8	99.51	490.9	1,064.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	72.0	2	425.00	27.0	98.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,162.1

Economic Assessment

Policy Development Zone (PDZ):13

Location: Abersoch Area

Management Area (MA): 32

Policy Units (PU):13.10, 13.11, 13.12, 13.13, 13.14, 13.15

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			14.01	175.4	57.34	397.8	99.51	490.9	1,064.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	212.00	72.0	2	425.00	27.0	99.0	
Other damages									PV Value (£k)	
damages similar to WPM										
Notes: As determined by MDSF									Total preferred plan damages	1,163.1

Costs

Present Management Assessment									
Source: continued defence to the soch valley									PV Value (£k)
Notes:									1,133
Preferred Pan									
Description: manged realignment to the Soch valley with mangement of flood defences.priavte defence included at the Warren									PV Value (£k)
Notes:									485

Reconciliation

Continued flood defence at Abersoch provides strong benefits in addition to erosion protection

Economic Assessment

Policy Development Zone (PDZ):13

Location: Porth Ceriad Headland and St Tudwals Island

Management Area (MA): 33

Policy Units (PU):13.16, 13.17, 13.18, 13.19

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):13

Location: Porth Ceriad Headland and St Tudwals Island

Management Area (MA): 33

Policy Units (PU):13.16, 13.17, 13.18, 13.19

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 0.0

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description: No costs associated with this area									PV Value (£k)
Notes:									0

Reconciliation

No planned works

Economic Assessment

Policy Development Zone (PDZ):14

Location: Hells Mouth

Management Area (MA): 34

Policy Units (PU):14.1, 14.2, 14.3, 14.4, 14.5

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	49.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	49.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Hells Mouth

Management Area (MA): 34

Policy Units (PU):14.1, 14.2, 14.3, 14.4, 14.5

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	2	340.00	49.0	49.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 49.0

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description: No works to this area									PV Value (£k)
Notes:									0

Reconciliation

No planned management intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: Porth Ysgo

Management Area (MA): 35

Policy Units (PU):14.6

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Porth Ysgo

Management Area (MA): 35

Policy Units (PU):14.6

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 0.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description:		
Notes:		0

Reconciliation

No planned intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: Aberdaron

Management Area (MA): 36

Policy Units (PU):14.7, 14.8, 14.9

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.05	0.6	0.66	4.0	21.57	69.6	74.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	7	459.00	148.0	21	2,258.00	192.0	340
Other information									PV Value (£k)
Source: Damages do not include disruption to road network or significant impact on the community and regional amenity value.									
Notes: As determined by MDSF									
								Total NAI damages	414.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.05	0.6	0.26	1.7	0.94	3.8	6.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	851.00	45.0	45.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	51.1

Economic Assessment

Policy Development Zone (PDZ):14

Location: Aberdaron

Management Area (MA): 36

Policy Units (PU):14.7, 14.8, 14.9

Damages (continued)

Scenario: Preferred Plan												
MDSF Assessment												
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		
			0.05	0.6		0.26	1.7		0.94	3.8		6.1
Erosion damages												
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)			
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)				
0	0.00	0.0	0	0.00	0.0	5	851.00	45.0	45.0			
Other damages										PV Value (£k)		
Notes: As determined by MDSF										Total preferred plan damages	51.1	

Costs

Present Management Assessment										
Source:										PV Value (£k)
Notes:										867
Preferred Pan										PV Value (£k)
Description: Reduction in cost to revetment to west of the village										
Notes:										683

Reconciliation

Damages do not include for the losst of community and signifcant regional amneity value. Mangement likely to be justified with potential for alternative funding.

Economic Assessment

Policy Development Zone (PDZ):14

Location: Ynys Enlli

Management Area (MA): 37

Policy Units (PU):14.10

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: Ynys Enlli

Management Area (MA): 37

Policy Units (PU):14.10

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	AAD (£k)		PVd for epoch	MDSF (£k)
0.00		0.0	0.00		0.0	0.00		0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages
									0.0

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description:									PV Value (£k)
Notes:									0

Reconciliation

No intervention

Economic Assessment

Policy Development Zone (PDZ):14

Location: South West Ileyn

Management Area (MA): 38

Policy Units (PU):14.11

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	0.0

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	0.0

Economic Assessment

Policy Development Zone (PDZ):14

Location: South West Ileyn

Management Area (MA): 38

Policy Units (PU):14.11

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.00	0.0	0.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 0.0

Costs

Present Management Assessment		PV Value (£k)
Source:		
Notes:		0
Preferred Pan		PV Value (£k)
Description:		
Notes:		0

Reconciliation

No intervention

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Bays

Management Area (MA): 39

Policy Units (PU):15.1, 15.2, 15.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.85	48.2	8.29	67.7	44.52	165.3	281.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	260.00	218.0	6	1,787.00	696.0	16	4,205.00	496.0	1410
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,691.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.73	21.7	1.77	19.5	8.65	32.6	73.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	216.00	216.0	2	641.00	308.0	3	641.00	34.0	559.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	632.8

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Bays

Management Area (MA): 39

Policy Units (PU):15.1, 15.2, 15.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.73	21.7	8.29	55.9	8.65	53.0	130.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	216.00	216.0	2	641.00	308.0	10	1,476.00	310.0	834.0
Other damages									PV Value (£k)
Protection would be maintained to properties at Porth Dinllaen and Mofa Nefyn through to epoch 3. Damages do not include for loss of the community at Dinaelli									
Notes: As determined by MDSF								Total preferred plan damages	964.5

Costs

Present Management Assessment									
Source: estimated cost for reinforcing and raising all defences.									PV Value (£k)
Notes:									436
Preferred Pan									
Description: Costs include for future improvement to defences at Porth Nefyn and at the access point at Nefyn.									PV Value (£k)
Notes:									162

Reconciliation

Despite significant economic loss identified at Porth Dinllaen, raising defences to the village is not considered sustainable in the long term with sea level rise.

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Shoreline

Management Area (MA): 40

Policy Units (PU):15.4, 15.5, 15.6

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	17	3,609.00	230.0	288
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	288.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	0	0.00	0.0	58.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	58.1

Economic Assessment

Policy Development Zone (PDZ):15

Location: North Llyn Shoreline

Management Area (MA): 40

Policy Units (PU):15.4, 15.5, 15.6

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.00	0.0	0.00	0.0	0.02	0.1	0.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	340.00	58.0	17	3,609.00	230.0	288.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 288.1

Costs

Present Management Assessment		PV Value (£k)
Source: Includes costs of maintaining private works along the frontage		
Notes:		332
Preferred Pan		PV Value (£k)
Description: Management of the Pier at Trefor		
Notes:		95

Reconciliation

Policy for this area is for Managed Realignment, cots are associated with management at Trefor, managing the peir.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Outer Estuary West

Management Area (MA): 41

Policy Units (PU):16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			9.23	115.6	18.11	152.4	171.16	592.4	860.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	234.00	56.0	8	1,430.00	139.0	195
Other information									PV Value (£k)
Source: damages do not consider loss of amenity nor loss of the airfield									
Notes: As determined by MDSF									
								Total NAI damages	1,055.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.34	91.9	12.42	110.2	49.44	193.6	395.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	2	425.00	54.0	104.0
Other information									PV Value (£k)
Source: damages do not consider impact on amenity on the airfield									
Notes: As determined by MDSF									
								Total WPM damages	499.7

Economic Assessment

Policy Development Zone (PDZ):16

Location: Outer Estuary West

Management Area (MA): 41

Policy Units (PU):16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.34	91.9	12.42	110.2	91.41	325.0	527.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	50.0	2	425.00	54.0	104.0
Other damages									PV Value (£k)
Increased risk of flooding over epoch 3. Continued protection to properties from erosion at Dinas Dinlle.									
Notes: As determined by MDSF								Total preferred plan damages	631.0

Costs

Present Management Assessment									
Source: Increased defence at Dinas Dinlle and within Foryd Bay									PV Value (£k)
Notes:									2,423
Preferred Pan									
Description: management of defences over epoch 1 and through epoch 2 with a reduced level of protection.									PV Value (£k)
Notes:									867

Reconciliation

Policy for HTL within epoch 1 but costs associated with managed realignment over epochs 2 and 3.

Economic Assessment

Policy Development Zone (PDZ):16

Location: *Malltraeth and Cefni*

Management Area (MA): 42

Policy Units (PU):16.8, 16.9, 16.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			30.64	383.6	172.18	1130.7	271.07	1387.4	2,901.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,961.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.90	199.1	20.35	202.1	60.33	252.5	653.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60.0
Other information									PV Value (£k)
Source:									
Potential long term loss of properties to village									
Notes: As determined by MDSF									
								Total WPM damages	713.7

Economic Assessment

Policy Development Zone (PDZ):16

Location: *Malltraeth and Cefni*

Management Area (MA): 42

Policy Units (PU):16.8, 16.9, 16.10

Damages (continued)

Scenario: Preferred Plan											
MDSF Assessment											
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)		PVd for epoch
			15.90	199.1		20.35	202.1		60.33	252.5	653.7
Erosion damages											
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)		
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)			
0	0.00	0.0	0	0.00	0.0	4	440.00	60.0	60.0		
Other damages											
Potential long term loss of properties to village											
PV Value (£k)											
Notes: As determined by MDSF									Total preferred plan damages		713.7

Costs

Present Management Assessment										
Source: Maintain embankment									PV Value (£k)	
Notes:									452	
Preferred Pan										
Description: Maintain embankment									PV Value (£k)	
Notes:									452	

Reconciliation

Strong economic case for maintaining defence

Economic Assessment

Policy Development Zone (PDZ):16

Location: Inner Western Section of the Menai Strait

Management Area (MA): 43

Policy Units (PU):16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			15.16	189.8	43.31	326.0	82.78	394.7	910.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	32	2,853.00	952.0	68	6,388.00	725.0	1677
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	2,587.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.51	94.0	10.55	100.7	36.28	146.6	341.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	740.00	18.0	18.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	359.3

Economic Assessment

Policy Development Zone (PDZ):16

Location: Inner Western Section of the Menai Strait

Management Area (MA): 43

Policy Units (PU):16.11, 16.12, 16.13, 16.14, 16.15, 16.16, 16.17

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			10.32	129.2	20.93	174.2	62.58	261.4	564.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	4	740.00	18.0	18.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 582.8

Costs

Present Management Assessment									
Source: Genarl maintenance and raising defences									PV Value (£k)
Notes:									1,895
Preferred Pan									
Description: Maintain defence generally with futre imporvements to main settlements in epoch 3.									PV Value (£k)
Notes:									604

Reconciliation

Signifcant economic value in HTL to main settlements.

Economic Assessment

Policy Development Zone (PDZ):16

Location: South Eastern Shore to Ynys Mon

Management Area (MA): 44

Policy Units (PU):16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			139.29	1743.9	186.92	1818.6	2015.73	6894.3	10,456.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
2	296.00	290.0	4	817.00	198.0	51	5,150.00	426.0	914
Other information									PV Value (£k)
Source: damages do not include disruption due to loss of highway.									
Notes: As determined by MDSF									
								Total NAI damages	11,370.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			20.15	252.3	28.50	271.2	109.41	431.7	955.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	149.00	145.0	4	817.00	333.0	17	2,405.00	200.0	678.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,633.2

Economic Assessment

Policy Development Zone (PDZ):16

Location: South Eastern Shore to Ynys Mon

Management Area (MA): 44

Policy Units (PU):16.18, 16.19, 16.20, 16.21, 16.22, 16.23, 16.24, 16.25

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			23.22	290.7	39.59	350.2	201.70	755.2	1,396.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	149.00	145.0	2	409.00	161.0	17	2,405.00	200.0	506.0
Other damages									PV Value (£k)
Potential damages due to loss of highway and regular flooding of the road to Beaumaris.									
Notes: As determined by MDSF								Total preferred plan damages	1,902.1

Costs

Present Management Assessment									
Source: Includes fro defence of private frontages and increased defence to existing line at Beaumaris									PV Value (£k)
Notes:									1,941
Preferred Pan									
Description: costs do not include private defence. Costs take fro potential realignment of flood defence to Beaumaris.									PV Value (£k)
Notes:									1,641

Reconciliation

Strong economic case for continued defence to main settlements.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Bangor

Management Area (MA): 45

Policy Units (PU):16.26, 16.27, 16.28, 16.29, 16.30

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			76.11	952.9	170.42	1374.4	1011.13	3698.3	6,025.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	15	1,337.00	414.0	13	1,189.00	128.0	543
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	6,568.6

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			35.31	442.1	39.50	417.1	106.88	458.2	1,317.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	212.00	84.0	0	0.00	0.0	84.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,401.3

Economic Assessment

Policy Development Zone (PDZ): 1

Location: Bangor

Management Area (MA): 45

Policy Units (PU):16.26, 16.27, 16.28, 16.29, 16.30

Damages (continued)

Scenario: Preferred Plan												
MDSF Assessment												
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)		PVd for epoch	
			35.31	442.1		39.50	417.1		1005.86	3272.0		4,131.1
Erosion damages												
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)			
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)				
0	0.00	0.0	1	212.00	84.0	0	0.00	0.0	84.0			
Other damages										PV Value (£k)		
Damages include increased flood risk at Hirael as a proxy value for potential relocation.												
Notes: As determined by MDSF										Total preferred plan damages	4,215.1	

Costs

Present Management Assessment										
Source:										PV Value (£k)
Notes:										436
Preferred Pan										PV Value (£k)
Description: Costs take as WPM but with the intent of MR at Hirael.										
Notes:										436

Reconciliation

Despite high economic values for defence at Hirael the policy would be for MR in epoch 3 due to the highrisk as reflected by the high residual damages.

Economic Assessment

Policy Development Zone (PDZ):16

Location: Traeth Lafan and Llanfarifechan

Management Area (MA): 46

Policy Units (PU):16.231, 16.32, 16.33

Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			6.23	78.0	31.80	212.0	37.14	215.8	505.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	1	12.00	3.0	3	639.00	39.0	43	
Other information									PV Value (£k)	
Source: loss of sea front not included in damages. No values have been taken for damage and disruption as a result of the loss of A55 and main railway line.										
Notes: As determined by MDSF									Total NAI damages	548.8

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			3.08	38.6	6.67	54.4	37.14	137.1	230.0	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
Notes: As determined by MDSF									Total WPM damages	230.0

Economic Assessment

Policy Development Zone (PDZ):16

Location: Traeth Lafan and Llanfairfechan

Management Area (MA): 46

Policy Units (PU):16.231, 16.32, 16.33

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.08	38.6	6.67	54.4	24.00	96.0	188.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	12.00	3.0	3	639.00	39.0	42.0
Other damages									PV Value (£k)
Potential wave overtopping damages not included									
Notes: As determined by MDSF								Total preferred plan damages	230.9

Costs

Present Management Assessment									
Source: costs associated with raising existing defences									PV Value (£k)
Notes:									1,965
Preferred Pan									
Description: Mainatin defence at Llanfairfechan and realigenmnt of embankment to the west.									PV Value (£k)
Notes:									1,846

Reconciliation

Continued management at Llanfairfechan partly as a result of potential damaaes to transport net wrok bur also in support of amenity values of the frontage. There is likely to be a need for collbaorative funding.

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			3.76	47.1	22.38	145.7	51.89	232.5	425.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	186.00	13.0	13
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	438.3

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.14	14.3	3.44	25.5	11.33	46.2	86.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	86.0

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.14	14.3	3.44	25.5	51.89	173.2	213.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 213.0

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									50
Preferred Pan									
Description: Costs associated with local defence to village and road									PV Value (£k)
Notes:									50

Reconciliation

Good justification for local defence measures

Economic Assessment

Policy Development Zone (PDZ):17

Location: Rhosneigr

Management Area (MA): 48

Policy Units (PU):17.5, 17.6, 17.7, 17.8

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.63	32.9	28.58	174.0	138.13	521.8	728.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	9	218.00	90.0	11	1,529.00	143.0	230
Other information									PV Value (£k)
Source: Potential risk of flooding to the road and access to the town.									
Notes: As determined by MDSF									
								Total NAI damages	958.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.89	23.7	7.78	53.9	19.67	85.9	163.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	763.00	55.0	54.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	217.5

Economic Assessment

Policy Development Zone (PDZ):17

Location: Rhosneigr

Management Area (MA): 48

Policy Units (PU):17.5, 17.6, 17.7, 17.8

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.89	23.7	7.78	53.9	19.67	85.9	163.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	763.00	55.0	55.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages
									218.5

Costs

Present Management Assessment									
Source: Present management is with a policy for selctively holding the line. Costs are taken fro protection of all properties along the frontage.									PV Value (£k)
Notes:									1,144
Preferred Pan									
Description: The focus for mangement would be at Roshniegr. Cost are allowed for this and for maintaining access to the town. In other areas private defence might be acceptable, subject to norml approvals. Cost for private works are not included.									PV Value (£k)
Notes:									864

Reconciliation

Local defence to small groups of properties to the south of Rhosniegr are not considered to be economically justified. Sustaining the sea front to Rhosniegr is imporantnt, together with maintaining the access to the town. There would be additional damages associated with loss of access that are not taken in to account in the above assessment. The plan is considered to be viable in terms of potential damages and with respect the the broader social amenity benefits. There may be the need to look towards collaborative funding.

Economic Assessment

Policy Development Zone (PDZ):17

Location: West Holy Island

Management Area (MA): 49

Policy Units (PU):17.9, 17.10, 17.11, 17.12, 17.13, 17.14

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			49.53	620.1	245.13	1642.7	812.57	3310.6	5,573.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
1	408.00	252.0	1	204.00	103.0	6	1,658.00	105.0	460
Other information									
Source: Trearddur Bay Coastal study PAR damages assessed at Trearddur Bay amount to £4.4M. This included amenity damages that were addressed through the recent scheme. Other damages generally assessed by SMP include damages to other areas potentially impacted along the southwest shoreline of Holy Island.									PV Value (£k)
Notes: As determined by MDSF									Total NAI damages 6,033.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			25.89	324.1	50.71	427.0	100.29	472.6	1,223.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	13.0	13.0
Other information									
Source: Reduction in damages take account of recent scheme at Trearddur Bay.									PV Value (£k)
Notes: As determined by MDSF									Total WPM damages 1,236.8

Economic Assessment

Policy Development Zone (PDZ):17

Location: West Holy Island

Management Area (MA): 49

Policy Units (PU):17.9, 17.10, 17.11, 17.12, 17.13, 17.14

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			25.89	324.1	50.71	427.0	100.29	472.6	1,223.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0	0	0	0	0	1	204	13	13
Other damages									PV Value (£k)
residual damages due to flooding. No account is taken for potential disruption to road.									
Notes: As determined by MDSF								Total preferred plan damages	1,236.8

Costs

Present Management Assessment		PV Value (£k)
Source: Costs associated with general management of walls along the frontage.		
Notes:		202
Preferred Plan		PV Value (£k)
Description: Costs taken for holding existing defences but with the intent for some realignment in epoch 3		
Notes:		149

Reconciliation

The area contains important small communities. Access is via the coastal road, which is at risk in specific areas. The intent is to sustain the communities and associated with this the need to maintain the road.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Holyhead and Penrhos

Management Area (MA): 50

Policy Units (PU):17.15, 17.16, 17.17, 17.18

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			94.63	1184.8	500.76	3319.3	580.98	3385.8	7,889.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	3.00	0.0	0
Other information									PV Value (£k)
Source: Long term risk fo erosion to property									
Notes: As determined by MDSF									
								Total NAI damages	7,889.9

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			46.32	579.9	49.81	535.9	118.37	526.4	1,642.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	1,642.3

Economic Assessment

Policy Development Zone (PDZ):17

Location: Holyhead and Penrhos

Management Area (MA): 50

Policy Units (PU):17.15, 17.16, 17.17, 17.18

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			46.32	579.9	49.81	535.9	118.37	526.4	1,642.3
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 1,642.3

Costs

Present Management Assessment									
Source: Maintain general defence to Holyhead and potential retired flood defence at Penrhos									PV Value (£k)
Notes:									777
Preferred Pan									
Description: Maintain general defence to Holyhead and potential retired flood defence at Penrhos									PV Value (£k)
Notes:									777

Reconciliation

Avoids significant damage to Holyhead area, supporting important regional town.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Inland Sea

Management Area (MA): 51

Policy Units (PU):17.19, 17.20

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			111.82	1400.0	618.52	4071.6	848.85	4592.9	10,064.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	32.0	32
Other information									PV Value (£k)
Source: significant flood risk to the village of Valley.									
Notes: As determined by MDSF									
								Total NAI damages	10,096.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			56.90	712.4	66.70	689.1	178.66	768.0	2,169.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	1	204.00	32.0	32.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	2,201.4

Economic Assessment

Policy Development Zone (PDZ):17

Location: Inland Sea

Management Area (MA): 51

Policy Units (PU):17.19, 17.20

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			56.90	712.4	66.70	689.1	178.66	768.0	2,169.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 2,169.4

Costs

Present Management Assessment									
Source: SMP 1 did not include for defence to Valley as this flood risk was not assessed. This assessment allows for this defence.									PV Value (£k)
Notes:									137
Preferred Pan									
Description: local defence within In Land Sea and to the village of Valley.									PV Value (£k)
Notes:									137

Reconciliation

strong economic justification for maintaining defence to Valley. Local defence included to maintain flood defence to the rear of Treaddur and to maintain access.

Economic Assessment

Policy Development Zone (PDZ):17

Location: Newlands and Afon Alaw

Management Area (MA): 52

Policy Units (PU):17.21, 17.22, 17.23

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Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.26	3.3	1.95	12.3	23.59	79.9	95.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	204.00	67.0	5	572.00	74.0	140
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	235.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	1.11	7.4	7.60	27.3	37.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
SMP 1 policy is for selectively holding the line. Under this scenario this assumed defence to new property									
Notes: As determined by MDSF									
								Total WPM damages	37.4

Economic Assessment

Policy Development Zone (PDZ):17

Location: Newlands and Afon Alaw

Management Area (MA): 52

Policy Units (PU):17.21, 17.22, 17.23

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.22	2.8	1.11	7.4	7.60	27.3	37.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	5	572.00	72.0	72.0
Other damages									PV Value (£k)
SMP 2 assessment indicates risk to property at Newlands. The approach would be to manage potential loss over time.									
Notes: As determined by MDSF								Total preferred plan damages	109.4

Costs

Present Management Assessment									
Source: Significant costs associated with full defence at newlands									PV Value (£k)
Notes:									1,107
Preferred Pan									
Description: The plan is for managed realignment.									PV Value (£k)
Notes:									391

Reconciliation

Longer term adjustment and adaptation in defence approach.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northwest Ynys Mon

Management Area (MA): 53

Policy Units (PU):18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.90	98.9	12.93	116.1	111.83	390.5	605.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	734.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2.99	37.4	12.93	88.8	19.25	100.7	226.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	355.9

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northwest Ynys Mon

Management Area (MA): 53

Policy Units (PU):18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	
			2.99	37.4		12.93	88.8	50.25	197.8	323.9
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	0	0.00	0.0	3	741.00	129.0	129.0	
Other damages									PV Value (£k)	
Potential increased damages to western bays. Management of flood risk at Cemlyn Bay										
Notes: As determined by MDSF									Total preferred plan damages	452.9

Costs

Present Management Assessment									
Source: No costs associated with Cemlyn Bay									PV Value (£k)
Notes:									55
Preferred Pan									
Description: Need for management at Cemlyn Bay to allow adaptation.									PV Value (£k)
Notes:									235

Reconciliation

Managing the increasing flood risk at Cemlyn Bay while allowing natural development of the coast. Cost allowed for continued defence at Wylfa Power Station.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Cemaes Bay

Management Area (MA): 54

Policy Units (PU):18.8, 18.9, 18.10, 18.11, 18.12

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Damages

Scenario: No Active intervention										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			1.23	15.4	3.43	26.0	23.31	83.7	125.1	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	5	320.00	137.0	6	884.00	107.0	254	
Other information									PV Value (£k)	
Source:										
Damages do not take account of disruption to road and access to the town, nor with respect to loss associated with harbour										
Notes: As determined by MDSF									Total NAI damages	379.1

Scenario: With Present Management										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			0.69	8.6	1.95	14.7	4.79	21.1	44.5	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other information									PV Value (£k)	
Source:										
As determined by MDSF										
Notes: As determined by MDSF									Total WPM damages	44.5

Economic Assessment

Policy Development Zone (PDZ):18

Location: Cemaes Bay

Management Area (MA): 54

Policy Units (PU):18.8, 18.9, 18.10, 18.11, 18.12

Damages (continued)

Scenario: Preferred Plan												
MDSF Assessment												
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		
			0.69	8.6		1.95	14.7		4.79	21.1		44.5
Erosion damages												
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)			
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)				
0	0.00	0.0	0	0.00	0.0	1	128.00	10.0	10.0			
Other damages										PV Value (£k)		
Notes: As determined by MDSF										Total preferred plan damages	54.5	

Costs

Present Management Assessment										
Source:										PV Value (£k)
Linear approach to defence raising and reinforcing existing defence line.										
Notes:										515
Preferred Pan										PV Value (£k)
Description: Adpat defence approach particulalrly during epoch 3 to realign defence.										
Notes:										482

Reconciliation

Relatively good economic justification based solely on direct loss of property and flood risk. Damages do not take account of additional benefits in sustaining important access and operation of the harbour.

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northeast Ynys Mon

Management Area (MA): 55

Policy Units (PU):18.13, 18.14, 18.15, 18.16, 18.17, 18.18

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1.44	18.0	3.17	25.7	19.31	70.4	114.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	9	762.00	239.0	8	1,633.00	149.0	387
Other information									PV Value (£k)
Source: Dmages do not fully refelct the potential damage resulting from loss of access and harbour opertaion at Amlwch									
Notes: As determined by MDSF									Total NAI damages 501.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.65	8.1	1.56	12.3	4.32	18.4	38.9
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages 38.9

Economic Assessment

Policy Development Zone (PDZ):18

Location: Northeast Ynys Mon

Management Area (MA): 55

Policy Units (PU):18.13, 18.14, 18.15, 18.16, 18.17, 18.18

Damages (continued)

Scenario: Preferred Plan												
MDSF Assessment												
Flooding damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)		
			AAD (£k)	PVd for epoch		AAD (£k)	PVd for epoch		AAD (£k)		PVd for epoch	
			0.65	8.1		1.56	12.3		4.32	18.4		38.9
Erosion damages												
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)			
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)				
0	0.00	0.0	0	0.00	0.0	3	612.00	48.0	48.0			
Other damages										PV Value (£k)		
There may be loss of property at Porth Llechog in epoch 3.												
Notes: As determined by MDSF										Total preferred plan damages	86.9	

Costs

Present Management Assessment										
Source:										PV Value (£k)
Costs include for continuing management of existing defence at Porth Llechog and Porth Elian										
Notes:										407
Preferred Pan										PV Value (£k)
Description: Costs are based on realignment at Porth Llechog and Porth Elian.										
Notes:										380

Reconciliation

The plan would continue to maintain defence at Amlech, moving towards realignment in other areas. There is a reasonable economic justification for the approach, with costs associated with adaption of defences.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Dulas Bay

Management Area (MA): 56

Policy Units (PU):19.1, 19.2, 19.3

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			11.66	146.0	59.42	396.3	67.27	396.5	938.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	1,154.8

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			5.63	70.5	5.87	64.1	13.92	61.9	196.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	412.5

Economic Assessment

Policy Development Zone (PDZ):19

Location: Dulas Bay

Management Area (MA): 56

Policy Units (PU):19.1, 19.2, 19.3

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			5.63	70.5	5.87	64.1	63.70	217.8	352.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	408.00	106.0	4	817.00	110.0	216.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 568.4

Costs

Present Management Assessment									
Source:									PV Value (£k)
Notes:									0
Preferred Pan									
Description: scope for local management of erosion and flood risk through private funding									PV Value (£k)
Notes:									0

Reconciliation

No strong justification for defence. The plan allows for local private defence.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Moelfre

Management Area (MA): 57

Policy Units (PU):19.4, 19.5, 19.6, 19.7, 19.8

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.95	11.9	2.20	17.6	17.26	60.9	90.4
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	184.00	60.0	9	976.00	119.0	179
Other information									PV Value (£k)
Source: Damages do not include for disruption to road and community at Porth Moelfre and potential amenity loss at Treath Bychna									
Notes: As determined by MDSF									
								Total NAI damages	269.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.43	5.4	0.59	5.7	2.60	10.0	21.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	184.00	60.0	9	976.00	109.0	170.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	191.1

Economic Assessment

Policy Development Zone (PDZ):19

Location: Moelfre

Management Area (MA): 57

Policy Units (PU):19.4, 19.5, 19.6, 19.7, 19.8

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			0.43	5.4	0.59	5.7	2.60	10.0	21.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	9	976.00	119.0	119.0
Other damages									PV Value (£k)
Notes: As determined by MDSF									Total preferred plan damages 140.1

Costs

Present Management Assessment									
Source: no management.									PV Value (£k)
Notes:									0
Preferred Pan									
Description: allow adaption to Prth Moelfre and Treath Bychan									PV Value (£k)
Notes:									33

Reconciliation

Potential significant loss to communities. The plan allows time for adaptation.

Economic Assessment

Policy Development Zone (PDZ):19

Location: Traeth Coch

Management Area (MA): 58

Policy Units (PU):19.9, 19.10, 19.11, 19.12, 19.13, 19.14, 19.15, 19.16, 19.17

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			14.49	181.4	77.60	513.4	112.27	594.3	1,289.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	4	551.00	214.0	12	1,601.00	148.0	362
Other information									PV Value (£k)
Source: Damages do not take account of disruption to road and access at Benllech and at Red Wharf Bya									
Notes: As determined by MDSF									Total NAI damages 1,651.1

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			7.69	96.3	9.16	93.9	24.65	105.8	296.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	2	332.00	129.0	7	1,165.00	202.0	331.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									Total WPM damages 627.0

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 58

Policy Units (PU): 19.9, 19.10, 19.11, 19.12, 19.13, 19.14, 19.15, 19.16, 19.17

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd MDSF (£k)	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch		
			7.69	96.3	30.00	210.1	50.00	250.4	556.8	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd MDSF (£k)	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)		
0	0.00	0.0	2	332.00	129.0	7	1,165.00	202.0	331.0	
Other damages									PV Value (£k)	
incurred flood risk at Afon Nodwydd										
Notes: As determined by MDSF									Total preferred plan damages	887.8

Costs

Present Management Assessment									
Source: Costs take account of continued increase and strengthening flood defences									PV Value (£k)
Notes:									703
Preferred Pan									
Description: Costs allow for continued defence during epochs 1 and 2 but with costs associated with adaptation in epoch 3.									PV Value (£k)
Notes:									463

Reconciliation

General justification for continued management throughout the area but with the intent to adapt defences with increased flood risk during epoch 3.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Southern Shoreline

Management Area (MA): 59

Policy Units (PU):20.1, 20.2

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			16.88	211.3	88.52	587.6	140.72	717.5	1,516.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	1	6.00	3.0	0	0.00	0.0	3
Other information									PV Value (£k)
Source: daamges do not include for loss of A55 and railway line									
Notes: As determined by MDSF									
								Total NAI damages	1,519.5

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			8.85	110.8	20.57	164.0	117.69	432.8	707.6
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	707.6

Economic Assessment

Policy Development Zone (PDZ):20

Location: Southern Shoreline

Management Area (MA): 59

Policy Units (PU):20.1, 20.2

Damages (continued)

Scenario: Preferred Plan										
MDSF Assessment										
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd	
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)	
			8.85	110.8	20.57	164.0	117.69	432.8	707.6	
Erosion damages										
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd	
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)	
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0	
Other damages									PV Value (£k)	
Notes: As determined by MDSF									Total preferred plan damages	707.6

Costs

Present Management Assessment		PV Value (£k)
Source: continued defence to frontage		
Notes:		3,364
Preferred Pan		PV Value (£k)
Description: continued defence to frontage		
Notes:		3,364

Reconciliation

Policy justified by need to maintain the A55 and railway line

Economic Assessment

Policy Development Zone (PDZ):20

Location: Inner Estuary and Associated shoreline

Management Area (MA): 60

Policy Units (PU):20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 20.10

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			391.94	4907.1	1432.63	10172.0	4377.80	18186.6	33,265.7
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	16	2,349.00	682.0	61	7,642.00	1003.0	1684
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	34,949.7

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			136.25	1705.9	243.68	2118.1	679.59	2889.8	6,713.8
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	6,713.8

Economic Assessment

Policy Development Zone (PDZ):20

Location: Inner Estuary and Associated shoreline

Management Area (MA): 60

Policy Units (PU):20.4, 20.5, 20.6, 20.7, 20.8, 20.9, 20.10

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			136.25	1705.9	243.68	2118.1	2996.60	10142.1	13,966.0
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Damages include increased flood damage at Deganwy as proxi for potential adaption of defences									
Notes: As determined by MDSF								Total preferred plan damages	13,966.0

Costs

Present Management Assessment									
Source: Maintaing and raising defences .									PV Value (£k)
Notes:									4,487
Preferred Pan									
Description: mainatin and raise defences but with intent to adapt mangement at Morfa Conwy.									PV Value (£k)
Notes:									3,108

Reconciliation

Strong economic and social argument for continued mangement of the area.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Outer Estuary East

Management Area (MA): 61

Policy Units (PU): 20.11, 20.12, 20.13

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVD
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			2253.08	28208.6	2542.95	26737.9	29940.99	101674.7	156,621.2
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVD
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total NAI damages	156,910.2

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVD
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1053.91	13195.0	1179.33	12450.3	3033.84	13187.2	38,832.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVD
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289.0
Other information									PV Value (£k)
Source:									
potential long term loss of property at Gogarth in epoch 3									
Notes: As determined by MDSF									
								Total WPM damages	39,121.5

Economic Assessment

Policy Development Zone (PDZ): 1

Location: South West Peninsula and Islands

Management Area (MA): 61

Policy Units (PU): 20.11, 20.12, 20.13

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Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			1053.91	13195.0	1179.33	12450.3	3033.84	13187.2	38,832.5
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	19	3,466.00	289.0	289.0
Other damages									PV Value (£k)
potential long term loss of property at Gogarth in epoch 3									
Notes: As determined by MDSF								Total preferred plan damages	39,121.5

Costs

Present Management Assessment									
Source: maintain defences									PV Value (£k)
Notes:									2,782
Preferred Pan									
Description: Potential realignment to more sustainable position									PV Value (£k)
Notes:									2,841

Reconciliation

Strong economic and social argument for continued management.

Economic Assessment

Policy Development Zone (PDZ):20

Location: Upper Estuary

Management Area (MA): 62

Policy Units (PU):20.14, 20.15, 20.16, 20.17, 20.18, 20.19

Damages

Scenario: No Active intervention									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			164.32	2057.3	235.26	2227.7	2717.28	9241.5	13,526.4
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	7	772.00	62.0	62
Other information									PV Value (£k)
Source: Loss of railway and disruption to road. Potentila extensive flooding around Llandudno Junction									
Notes: As determined by MDSF									
								Total NAI damages	13,588.4

Scenario: With Present Management									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			80.28	1005.1	107.78	1048.4	428.49	1678.5	3,732.1
Erosion damages			Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other information									PV Value (£k)
Source:									
Notes: As determined by MDSF									
								Total WPM damages	3,732.1

Economic Assessment

Policy Development Zone (PDZ):20

Location: Upper Estuary

Management Area (MA): 62

Policy Units (PU):20.14, 20.15, 20.16, 20.17, 20.18, 20.19

Damages (continued)

Scenario: Preferred Plan									
MDSF Assessment									
Flooding damages			Epoch 1 (year 0 to year 20)		Epoch 2 (year 21 to year 50)		Epoch 3 (year 50 to year 100)		All epochs PVd
			AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	AAD (£k)	PVd for epoch	MDSF (£k)
			80.28	1005.1	107.78	1048.4	428.49	1678.5	3,732.1
Erosion damages									
Epoch 1 (year 0 to year 20)			Epoch 2 (year 21 to year 50)			Epoch 3 (year 50 to year 100)			All epochs PVd
No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	No. of properties	Total Valuation (£k)	PV for epoch (£k)	MDSF (£k)
0	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0.0
Other damages									PV Value (£k)
Potential costs for relocation of the railway line not included.									
Notes: As determined by MDSF								Total preferred plan damages	3,732.1

Costs

Present Management Assessment									
Source:									PV Value (£k)
High costs associated with raising defence to Llandudno Junction and in defence of railway line from GlanConwy									
Notes:									11,646
Preferred Pan									
Description: Reduced costs associated with Llandudno junction and for only medium term investment in railway.									PV Value (£k)
Notes:									7,866

Reconciliation

Important economic and social costs associated with Llandudno Junction and Glan conwy. Costs associated with realignment within estuary.