



Directorate of Economy & Environment
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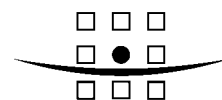
Isle of Wight Shoreline Management Plan 2

Appendix H: Economic Appraisal

December 2010

Royal Haskoning

for Coastal Management;
Directorate of Economy & Environment, Isle of Wight Council



ROYAL HASKONING

Appendix H: Economic Appraisal

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H1 Introduction

A review of economic viability of the preferred plan for each area has been carried out. The review is undertaken in the context of each management area in order to maintain a relatively high level approach.

An important feature of the approach is that policy decisions are initially taken upon the appraisal of achievement of objectives, not on an economic appraisal. Economic assessments are only undertaken to provide a check on the viability of the selected preferred policies. This is an important factor in delivering the best sustainable solution, rather than a purely economically driven one.

It should be noted that further detailed economic analysis will need to be undertaken in justifying any specific scheme in line with principles set out in the FCDPAG series of guidance.

The aim of the current review is to determine to what degree the preferred policy may be justified in economic terms relating to coast protection or sea defence. In addition, the review aims to examine the nature of the economic justification; considering whether that justification lies strongly with the defence of clear direct benefits, in terms of direct flood or erosion risk to asset, or derives from associated damages such as amenity, recreation, traffic disruption or is driven by the aims of other plans.

Various sets of information have been used to develop the review. In addition to this, a considerable amount of work has been undertaken as part of the various strategies or scheme appraisals covering the whole area. The use of these is discussed in section H2 and H3.

The results of the review are reported in summary tables provided in Annex H1 and the development of these tables is discussed in section H4.

A discussion of sensitivity is provided in section H5 together with an identification of the approach to assessing the future costs of schemes or maintenance.

References to local studies are provided in the summary tables in section H4.

H2 Use of existing information

A number of Strategies have been carried out for certain sections of the coastline in line with the recommendations and to address uncertainties identified in SMP1.

- *North East Coastal Defence Strategy*
- *Eastern Yar Flood and Erosion Risk Management Strategy Study*
- *West Wight Coastal Defence Strategy* (underway)
- *Sandown Coastal Defence Strategy* (underway)

These studies have been able to consider the economic consequence for specific areas in far greater detail than would be appropriate for the SMP2. In particular, the strategies have been able to determine specific damages relating to flooding due to overtopping and consider damages relating to aspects such as amenity and uses of the coast. In addition the strategies have developed specific approaches to defence and from this have been able to assess future costs of scheme at least in outline.

The findings of these studies have been used to feed into the SMP2 economic assessment, where appropriate. However, detailed information from these studies has not been included in the SMP2. Further details of which findings have been used are contained in the summary tables in Annex H1. The *Eastern Yar Flood and Erosion Management Strategy Study* has been referred to the most often as it is the most recent and complete study.

Some potential conflicts in the information contained within these studies includes:

- Timescales – The studies may not consider the same 100yr timescale as the SMP2
- Discount Factors – The factors used may have been different to those currently recommended by Treasury
- Geographical Area - The strategies also have not necessarily been developed over the same geographic area as policy units now defined in the SMP2.
- Policies - In some locations the SMP2 is now making recommendations which modify the options and recommendations considered by the strategies.

For these reasons it has been necessary to occasionally adapt information from these studies to allow this information to be used to effect in the SMP2.

H3 Generation of new data

Determination of Damages

The following outlines the method applied for identifying flood and erosion risks across the Isle of Wight Shoreline Management Plan Review (Task 2.5). This was to output general economic data on the value of potential assets lost. Essentially, the number of properties and area of agricultural land and nature conservation designations at risk from flooding and/or erosion were calculated using Geographical information Systems (GIS).

GIS analysis

For the “No Active Intervention” and “With Present Management*” scenario, the following were calculated, based on flood extents and erosion mapping provided to Royal Haskoning from Isle of Wight Council (Refer to Appendix C3):

- Properties at risk from erosion, per epoch (*2008 address point data used*)
- Properties at risk from tidal and tidal/fluviial flooding now and in 100 years (*2008 address point data used*)

Average residential property values were determined for each PDZ based on data contained on the following website: http://www.iwight.com/living_here/life_events/movinghome/prices.asp.

For the “No Active Intervention” scenario, the following were also calculated:

- Agricultural land at risk from erosion, per epoch (*agricultural shapefile downloaded from the Natural England website*)
- Agricultural land at risk from tidal and tidal/fluviial flooding now and in 100 years (*agricultural shapefile downloaded from the Natural England website*)
- Nature conservation designations (SSSI, SAC, SPA, RAMSAR) at risk from erosion, per epoch (*National designation provided to Royal Haskoning from Isle of Wight Council*)
- Nature conservation designations (SSSI, SAC, SPA, RAMSAR) at risk from tidal and tidal/fluviial flooding now and in 100 years (*National designation provided to Royal Haskoning from Isle of Wight Council*)

These calculations were SMP-wide.

The erosion and flooding shapefiles were used to ‘clip out’ the agriculture and nature conservation areas at risk. The resulting shapefiles were a direct output of the input agricultural and nature conservation data, which was often not entirely accurate in mapping the coastline. In addition, the address point data omitted caravans, mobile homes etc and sometimes industrial areas.

Determination of Costs

In order to determine the benefit-cost ratio of implementing the preferred options an outline assessment of the costs for each option has been made. This has been carried out by assessing the current defences and estimating the future works that may be required in order to implement the preferred policy. It should be noted that it is only possible to provide very outline

costs for such work. These costs were then compared with more detailed strategy option costs, where appropriate.

The preferred policies over the 3 epochs were used to determine the level of outline cost assessment undertaken:

- It was assumed that there would be no cost implications associated with implementing any 'No Active Intervention' policies.
- A 'Hold the Line' policy would require structure maintenance and probable future construction work – based on the existing structures.
- 'Managed Realignment' would potentially require a combination of the above options, depending on the realignment being proposed.

Prior to the SMP being carried out, a high-level assessment of the existing defences was carried out by Isle of Wight Council for the whole coastline (Refer to Appendix C2). This was useful in determining the location of Policy Unit boundaries. The following overall assessment was made for each frontage:

- Structure Type
- Structure Length
- Structure Condition

An assessment of when new structures would likely be required was carried out based on the overall condition of the existing defences. It was generally assumed that all frontages would require a range of maintenance or 're-build' (construction) work at some point over the 100 year period.

Average baseline costs have been used in estimating works. Typically these have been derived from a series of tables for different structure types. For each structure type the cost per metre of defence is estimated based on tidal and wave exposure. The key structure types are shown in the following tables.

Typical average cost tables, including for optimism bias.

Rock Revetment £/m

Tidal Exposure	Wave Exposure			
	Very Low	Low	Medium	High
Very Low				
Low		200	500	1000
Medium		1000	2000	4000
High		3000	7000	12500

Earth Embankment £/m

Tidal Exposure	Wave Exposure			
	Very Low	Low	Medium	High
Very Low				
Low		200	350	1500
Medium		1500	2000	4000
High		3000	3500	6000

Concrete Seawalls £/m

Tidal Exposure	Wave Exposure			
	Very Low	Low	Medium	High
Very Low	100	150	250	500
Low	200	300	500	1000
Medium	1000	1500	2000	5000
High	2500	4500	7000	12000

Sheet piled walls £/m

Tidal Exposure	Wave Exposure			
	Very Low	Low	Medium	High
Very Low				
Low		200	400	600
Medium		600	1000	2000
High	600	1000	2000	3500

Rock Breakwaters £/m

Tidal Exposure	Wave Exposure			
	Very Low	Low	Medium	High
Very Low				
Low		1500	1500	5000
Medium		2000	4000	8000
High		3000	6000	12500

Frontages were generally assumed to be subjected to a medium risk of tidal and wave exposure. However, more sheltered frontages, such as inside estuaries, were assumed to be subjected to low wave exposure, whereas frontages exposed on the southern and western sides of the island were assumed to be subjected to high wave exposure.

Maintenance has been allowed for by considering regular, as well as periodic, more substantial, work to defences. A nominal sum of £5k has been included every 2 years for each frontage to carry out the regular maintenance. A figure representing 5% of the initial construction cost was used for the more substantial, periodic maintenance work. The maintenance costs therefore take into account the existing extent of defence and to a degree the condition or age of the works.

It should be noted that the build-up of the costs, as for the benefits, cannot be exhaustive at SMP level and are therefore only an estimate. For example, items such as any monitoring work that may be required as part of, or alongside, the preferred policies or small-scale defence details have not been considered.

Both the Damages and the Costs have been discounted over the 100 year period and presented as Present Values in line with SMP guidance. The discounting rates used are those currently recommended by the Treasury.

H4 Economic appraisal summary table

Annex H1 provides economic summary tables. The results from these are further summarised in the main SMP2 text.

The tables are produced for each management area. The tables comprise:

- The assessment of damages derived from the GIS assessment. Three scenarios are considered for comparison and to determine the benefits of defending each section of the coastline. The three scenarios are No Active Intervention, With Present Management and the Preferred Plan. Associated with each Management Area table report is an identification of other relevant information; either in terms of information from other studies or in terms of what additional damages might be considered in relation to the specific scenario. For each scenario a total damages is reported with notes to explain how this has been derived from the information;
- The assessment of costs for the Preferred Plan.

H5 Sensitivity

The critical uncertainties with respect to policy are highlighted and discussed in the main text of the SMP2. With respect to the economics, there is recognised uncertainty particularly in relation to erosion rates and possible timing of required works. Such uncertainty affects both the timing of the occurrence of damages and when works might be required. As such, these aspects tend to balance in the economics.

Certainly within the scope of the SMP2, to assess the likely affordability and overall sustainability of policies, such issues of timing are already accounted for. Clearly in terms of actual loss and hence planning of individual situations, timing may be quite important and the SMP2 has recommended monitoring to improve information.

Where the preferred policy changes from present management, the tables in Annex H1 allow comparison of the economics associated with this change. This highlights, purely from an economic perspective, the sensitivity of decisions being made.

Annex H1 Supporting Economic Appraisal Data – Damages/Benefits and Costs

Economic Assessment

Policy Development Zone (PDZ)1

Management Area (MA): MAN 1A

Location: Gurnard, Cowes & East Cowes (Policy Units PU1A.1 – PU1A.6)

DAMAGES

Scenario: **No ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			219,367			279,934			313,321			812,622		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)			7,309					
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
48	658	658	73	5,058	1,621	345	47,907	5,030						
Notes: Includes Floodzones A, B1, B2, B3, C1, C2, C3, E (Refer to Appendix C3)											Total NAI Damages (£k)		819,931	

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			6,480			7,134			5,217			18,831		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)			102					
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	1	172	44	5	434	57						
Notes: Includes Floodzones A, B1, B2, B3, C1, C2, C3, E (Refer to Appendix C3)											Total WPM Damages (£k)		18,933	

Economic Assessment

Policy development Zone (PDZ)1

Management Area (MA): MAN 1A

Location: Gurnard, Cowes & East Cowes (Policy Units PU1A.1 – PU1A.6)

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Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)	PVd 2055 (£k)	PVd 2110 (£k)	Total Present Value (£k)		
Flooding damages (Properties)			6,480	7,134	6,474	20,088		
Present Value of Erosion Damages:								
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)		
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)
0	0	0	7	919	329	67	4,678	619
Additional damages:								
Total Damages (£k)							21,036	

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
976	1,391	3,428	5,790

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)1

Management Area (MA): MAN 1B

Location: Medina Estuary & Newport (Policy Units PU1B.1 – PU1B.5)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			17,410			24,408			30,166			71,984		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	0	0	0	0	0	0	0					
Notes: Includes floodzones D1, D2, D3 (Refer to Appendix C3)									Total NAI Damages (£k)			71,984		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			16,022			9,253			1,655			26,930		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	0	0	0	0	0	0	0					
Notes: Includes floodzones D1, D2, D3 (Refer to Appendix C3)									Total WPM Damages (£k)			26,930		

Economic Assessment

Policy development Zone (PDZ)1

Management Area (MA): MAN 1B

Location: Medina Estuary & Newport (Policy Units PU1B.1 – PU1B.5)

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Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)	PVd 2055 (£k)	PVd 2110 (£k)	Total Present Value (£k)		
Flooding damages (Properties)			16,022	15,731	14,365	46,118		
Present Value of Erosion Damages:								
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)		
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)
0	0	0	0	0	0	0	0	0
Additional damages:								
Total Damages (£k)						46,118		

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
104	812	50	966

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)2

Management Area (MA): MAN 2A

Location: Old Castle Point - Woodside (Policy Units PU2A.1 – PU2A.2)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
10	784	772	5	410	193	18	1,447	152	1,117					
Notes: Includes floodzone F (Refer to Appendix C3)									Total NAI Damages (£k)			1,117		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
3	0	0	2	33	124	10	746	85	209					
Notes: Includes floodzone F (Refer to Appendix C3)									Total WPM Damages (£k)			209		

Economic Assessment

Policy development Zone (PDZ)2

Management Area (MA): MAN 2A

Location: Old Castle Point - Woodside (Policy Units PU2A.1 – PU2A.2)

Scenario: **PREFERRED PLAN**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			0			0			0			0
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)			1,117			
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
10	784	772	5	410	193	18	1,447	152				
Additional damages:												
Total Damages (£k)											1,117	

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
0	0	0	0

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment**Policy Development Zone (PDZ)2****Management Area (MA): MAN 2B****Location: Wootton Creek & Quarr (Policy Units PU2B.1 – PU2B.8)****DAMAGES**Scenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			11,263			14,639			15,295			41,197		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
18	249	249	15	746	239	32	3,210	316	804					
Notes: Includes floodzones G1, G2, G3 (Refer to Appendix C3)									Total NAI Damages (£k)			42,001		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			1,830			2,028			928			4,786		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
3	0	0	6	596	198	10	686	66	264					
Notes: Includes floodzones G1, G2, G3 (Refer to Appendix C3)									Total WPM Damages (£k)			5,050		

Economic Assessment

Policy development Zone (PDZ)2

Management Area (MA): MAN 2B

Location: Wootton Creek & Quarr (Policy Units PU2B.1 – PU2B.8)

Scenario: **PREFERRED PLAN**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			1,830			2,028			928			4,786		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)			264					
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
4	0	0	7	596	198	12	687	66						
Additional damages:														
Total Damages (£k)											5,050			

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
633	284	356	1,272

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)2

Management Area (MA): MAN 2C

Location: Ryde – Seagrove Bay (Policy Units PU2C.1 – PU2C.4)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			61,237			71,654			65,198			198,089		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
40	1,633	1,391	83	10,175	3,029	354	48,441	6,225	10,645					
Notes: Includes floodzones H, I, J (Refer to Appendix C3)									Total NAI Damages (£k)			208,734		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			2,297			2,512			2,123			6,932		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	0	0	0	0	0	0	0					
Notes: Includes floodzones H, I, J (Refer to Appendix C3)									Total WPM Damages (£k)			6,932		

Economic Assessment

Policy development Zone (PDZ)2

Management Area (MA): MAN 2C

Location: Ryde – Seagrove Bay (Policy Units PU2C.1 – PU2C.4)

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Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			2,297			2,512			2,123			6,932		
Present Value of Erosion Damages:												0		
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	0	0	0	0	0	0						
Additional damages:														
											Total Damages (£k)		6,932	

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
598	913	3,228	4,739

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment**Policy Development Zone (PDZ)3****Management Area (MA): MAN 3A****Location: Bembridge Harbour (Policy Units PU3A.1 – PU3A.5)****DAMAGES**Scenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			74,137			85,824			77,606			237,567		
Present Value of Erosion Damages:												Total Present Value (£k)		
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
35	1,020	908	20	600	209	23	1,202	120	1,237					
Notes: Includes floodzones K, L1, L2, L3 (Refer to Appendix C3)									Total NAI Damages (£k)			238,804		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			10,137			11,064			4,784			25,985		
Present Value of Erosion Damages:												Total Present Value (£k)		
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
34	1,020	908	14	420	161	12	360	42	1,110					
Notes: Includes floodzones K, L1, L2, L3 (Refer to Appendix C3)									Total WPM Damages (£k)			27,095		

Economic Assessment

Policy development Zone (PDZ)3

Management Area (MA): MAN 3A

Location: Bembridge Harbour (Policy Units PU3A.1 – PU3A.5)

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Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			11,000			12,000			5,000			28,000
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)						
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
34	1,020	908	14	420	161	12	360	42	1,110			
Additional damages:												
											Total Damages (£k)	29,110

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
5,437	2,497	1,342	9,276

COMMENTS

The Eastern Yar Strategy suggests that a PV figure of £9,584k would be more accurate following more detailed analysis. Therefore, this figure will be adopted for this SMP.

Further comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment**Policy Development Zone (PDZ)3****Management Area (MA): MAN 3B****Location: Bembridge Headland – Culver Cliff (Policy Units PU3B.1 – PU3B.5)****DAMAGES**Scenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
7	1,143	1,080	12	345	130	21	1,845	174	1,380					
Notes:									Total NAI Damages (£k)			1,380		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
5	1,150	895	8	188	90	12	984	121	1,100					
Notes:									Total WPM Damages (£k)			1,100		

Economic Assessment

Policy development Zone (PDZ)3

Management Area (MA): MAN 3B

Location: Bembridge Headland – Culver Cliff (Policy Units PU3B.1 – PU3B.5)

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Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			0			0			0			0
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)						
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
5	958	895	11	315	102	13	1,168	116	1,110			
Additional damages:												
											Total Damages (£k)	1,110

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
159	157	377	693

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)3

Management Area (MA): MAN 3C

Location: Sandown Bay (Policy Units PU3C.1 – PU3C.4)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			276,790			288,415			228,820			794,025		
Present Value of Erosion Damages:												7,089		
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
18	1,419	1,197	72	3,584	1,006	330	42,610	4,886						
Notes: Includes floodzones L4 & L5 (Refer to Appendix C3)									Total NAI Damages (£k)			801,114		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			7,218			7,245			5,260			19,723		
Present Value of Erosion Damages:												163		
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	2	30	7	15	2,101	155						
Notes: Includes floodzones L4 & L5 (Refer to Appendix C3)									Total WPM Damages (£k)			19,886		

Economic Assessment

Policy development Zone (PDZ)3

Management Area (MA): MAN 3C

Location: Sandown Bay (Policy Units PU3C.1 – PU3C.4)

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Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			7,218			7,245			5,260			19,723
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)						
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
0	0	0	0	0	0	15	2,101	155	155			
Additional damages:												
											Total Damages (£k)	19,878

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
772	1,613	3,351	5,735

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)4

Management Area (MA): MAN 4A

Location: Eastern Undercliff (inc. Ventnor) (Policy Units PU4A.1 – PU4A.2)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
8	157	157	44	3625	943	146	17575	2251	3351					
Notes:									Total NAI Damages (£k)			3,351		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	1	0.4	0.2	2	30.4	3.3	3.5					
Notes:									Total WPM Damages (£k)			3.5		

Economic Assessment

Policy development Zone (PDZ)4

Management Area (MA): MAN 4A

Location: Eastern Undercliff (inc. Ventnor) (Policy Units PU4A.1 – PU4A.2)

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)					
Flooding damages (Properties)			0			0			0			0					
Present Value of Erosion Damages:																	
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)			3.5								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)									
0	0	0	1	0.4	0.2	2	30.4	3.3									
Additional damages:												Total Damages (£k)			3.5		

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
265	677	2,654	3,596

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)4

Management Area (MA): MAN 4B

Location: Western Undercliff (Policy Units PU4B.1 – PU4B.3)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
12	180	158	37	3,452	1,008	98	11,799	1,658	2,824					
Notes:									Total NAI Damages (£k)			2,824		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
10	180	158	30	3,148	848	57	7,180	1,022	2,028					
Notes:									Total WPM Damages (£k)			2,028		

Economic Assessment

Policy development Zone (PDZ)4

Management Area (MA): MAN 4B

Location: Western Undercliff (Policy Units PU4B.1 – PU4B.3)

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			0			0			0			0
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)						
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
10	180	158	30	3,148	848	57	7,180	1022	2,028			
Additional damages:												
											Total Damages (£k)	2,099

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
0	69	256	324

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)5

Management Area (MA): MAN -

Location: Central Chale Bay – Afton Down (Policy Units -)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
2	3	3	18	1,095	326	55	4,021	361	691					
Notes:									Total NAI Damages (£k)			691		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			0			0			0			0		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
2	3	3	18	1,095	326	55	4,021	361	691					
Notes:									Total WPM Damages (£k)			691		

Economic Assessment

Policy development Zone (PDZ)5

Management Area (MA): MAN -

Location: Central Chale Bay – Afton Down (Policy Units -)

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			0			0			0			0
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)						
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
2	3	3	18	1,095	326	55	4,021	361				
Additional damages:												
											Total Damages (£k)	
											691	

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
0	0	0	0

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)6

Management Area (MA): MAN 6A

Location: Freshwater Bay & Tennyson Down Headland (Policy Units PU6A.1 – PU6A.2)

DAMAGES

Scenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			22,574			29,838			33,095			85,507		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	6	326	90	34	4,302	392	482					
Notes: Includes floodzone M1 (Refer to Appendix C3)									Total NAI Damages (£k)			85,989		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			869			993			872			2,734		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	6	325	89	19	1,695	164	254					
Notes: Includes floodzone M1 (Refer to Appendix C3)									Total WPM Damages (£k)			2,988		

Economic Assessment

Policy development Zone (PDZ)6

Management Area (MA): MAN 6A

Location: Freshwater Bay & Tennyson Down Headland (PU6A.1 – PU6A.2)

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)					
Flooding damages (Properties)			869			993			872			2,734					
Present Value of Erosion Damages:																	
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)			254								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)									
0	0	0	6	325	89	19	1,695	164									
Additional damages:												Total Damages (£k)			2,988		

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
119	310	13	443

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)6

Location: Totland - Norton (PU6B.1 – PU6B.5)

Management Area (MA): MAN 6B

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			5,605			5,626			4,333			15,564		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
5	60	49	47	6,213	1,912	218	27,948	3,213	5,774					
Notes: Includes half of Floodzone M3 (Refer to Appendix C3)									Total NAI Damages (£k)			21,338		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			639			640			257			1,536		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	13	2,319	761	56	7,167	904	1,665					
Notes: Includes half of Floodzone M3 (Refer to Appendix C3)									Total WPM Damages (£k)			3,201		

Economic Assessment

Policy development Zone (PDZ)6

Location: Totland - Norton (PU6B.1 – PU6B.5)

Management Area (MA): MAN 6B

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			Present Value of Erosion Damages:			Total Present Value (£k)								
			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			639			5,626			4,333			10,598		
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
1	0	0	13	2,319	761	93	8,585	1,032	1,793					
Additional damages:														
											Total Damages (£k)		12,391	

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
956	1,386	500	2,842

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)6

Management Area (MA): MAN 6C

Location: Yarmouth & Western Yar Estuary (PU6C.1 – PU6C.6)

DAMAGESScenario: **No ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			21,023			24,429			23,419			68,871		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
31	133	86	18	488	187	55	7875	721	994					
Notes: Includes Floodzones M2, M4, M5 & half of Floodzone M3 (Refer to Appendix C3)									Total NAI Damages (£k)		69,865			

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			3,082			3,500			2,080			8,662		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
0	0	0	0	0	0	0	0	0	0					
Notes: Includes Floodzones M2, M4, M5 & half of Floodzone M3 (Refer to Appendix C3)									Total WPM Damages (£k)		8,662			

Economic Assessment

Policy development Zone (PDZ)6

Management Area (MA): MAN 6C

Location: Yarmouth & Western Yar Estuary (PU6C.1 – PU6C.6)

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)	PVd 2055 (£k)	PVd 2110 (£k)	Total Present Value (£k)		
Flooding damages (Properties)			3,200	4,000	2,400	9,600		
Present Value of Erosion Damages:								
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)		
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)
0	0	0	0	0	0	0	0	0
Additional damages:								
Total Damages (£k)						9,600		

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
293	304	1,610	2,207

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.

Economic Assessment

Policy Development Zone (PDZ)7

Management Area (MA): MAN 7

Location: Bouldnor Copse – Southern Gurnard Bay (PU7.1 – PU7.3)

DAMAGESScenario: **NO ACTIVE INTERVENTION**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			3,678			4,404			4,170			12,252		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
4	30	23	9	380	102	36	1,280	144	269					
Notes: Includes Floodzones N1, N2 & O (Refer to Appendix C3)									Total NAI Damages (£k)			12,521		

Scenario: **WITH PRESENT MANAGEMENT**

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)		
Flooding damages (Properties)			558			609			262			1,429		
Present Value of Erosion Damages:														
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)								
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)						
2	30	23	9	380	102	36	1,280	144	269					
Notes: Includes Floodzones N1, N2 & O (Refer to Appendix C3)									Total WPM Damages (£k)			1,698		

Economic Assessment

Policy development Zone (PDZ)7

Management Area (MA): MAN 7

Location: Bouldnor Copse – Southern Gurnard Bay (PU7.1 – PU7.3)

Page 2 of 2

Scenario: PREFERRED PLAN

Present Value of Flooding Damages:			PVd 2025 (£k)			PVd 2055 (£k)			PVd 2110 (£k)			Total Present Value (£k)
Flooding damages (Properties)			3,678			4,404			4,170			12,252
Present Value of Erosion Damages:												
Epoch 1 (2025)			Epoch 2 (2055)			Epoch 3 (2110)						
No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)	No. properties	Total Valuation (£k)	PV for epoch (£k)				
4	30	23	9	380	102	36	1,280	144				269
Additional damages:												
											Total Damages (£k)	12,521

COSTS

Preferred Policy

Epoch 1 (2025)	Epoch 2 (2055)	Epoch 3 (2110)	PV value (£k)
0	0	0	0

COMMENTS

Comments are provided in the Management Area Statements, in Chapter 4 of the Main SMP document.