South Devon and Dorset Coastal Advisory Group (SDADCAG)

Shoreline Management Plan SMP2

Durlston Head to Rame Head

Appendix H – Economic Appraisal and Sensitivity Testing





The Supporting Appendices

These appendices and the accompanying documents provide all of the information required to support the Shoreline Management Plan. This is to ensure that there is clarity in the decision-making process and that the rationale behind the policies being promoted is both transparent and auditable. The appendices are:

A: SMP Development	This reports the history of development of the SMP, describing
	more fully the plan and policy decision-making process.
B: Stakeholder Engagement	All communications from the stakeholder process are provided here, together with information arising from the consultation process.
C: Baseline Process Understanding	Includes baseline process report, defence assessment, NAI and WPM assessments and summarises data used in assessments.
D: SEA Environmental Baseline Report (Theme Review)	This report identifies and evaluates the environmental features (human, natural, historical and landscape).
E: Issues & Objectives Evaluation	Provides information on the issues and objectives identified as part of the Plan development, including appraisal of their importance.
F: Initial Policy Appraisal & Scenario Development	Presents the consideration of generic policy options for each frontage, identifying possible acceptable policies, and their combination into 'scenarios' for testing. Also presents the appraisal of impacts upon shoreline evolution and the appraisal of objective achievement.
G: Preferred Policy Scenario Testing	Presents the policy assessment and appraisal of objective achievement towards definition of the Preferred Plan (as presented in the Shoreline Management Plan document).
H: Economic Appraisal and	Presents the economic analysis undertaken in support of the
Sensitivity Testing	Preferred Plan.
I: Strategic Environmental Assessment (SEA) Report	Presents the various items undertaken in developing the Plan that specifically relate to the requirements of the EU Council Directive 2001/42/EC (the Strategic Environmental Assessment Directive), such that all of this information is readily accessible in one document.
J: Appropriate Assessment Report	Presents the Appropriate Assessment of SMP policies upon European designated sites (SPAs and SACs) as well as Ramsar sites, where policies might have a likely significant effect upon these sites. This is carried out in accordance with the Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations).
K: Water Framework Development Report	Presents assessment of potential impacts of SMP policies upon coastal and estuarine water bodies, in accordance with the requirements of EU Council Directive 2000/60/EC (the Water Framework Directive).
L: Metadatabase and Bibliographic database	All supporting information used to develop the SMP is referenced for future examination and retrieval.
M: Action Plan Summary Table	Presents the Action Plan items included in Section 6 of the main SMP document (The Plan) in tabular format for ease of monitoring and reporting action plan progress.

Within each appendix cross-referencing highlights the documents where related appraisals are presented. The broad relationships between the appendices are illustrated below.

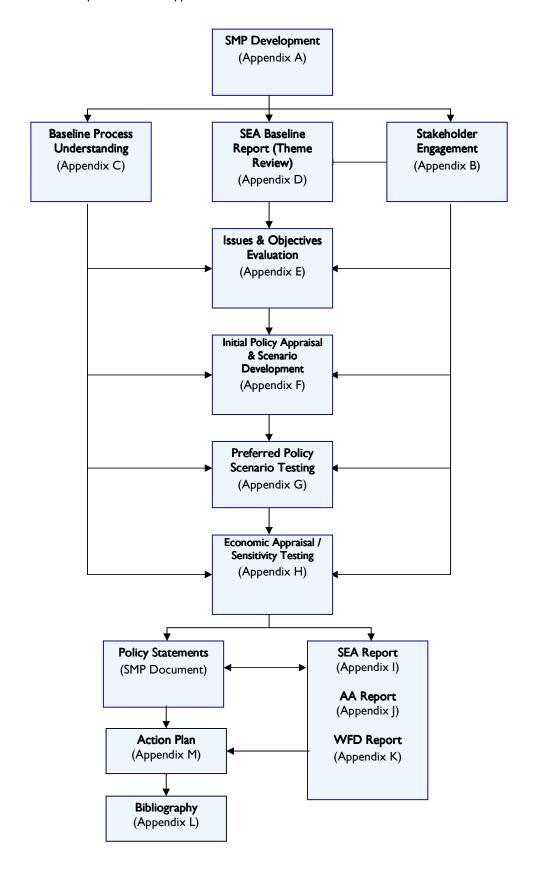


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H.I Introduction

A review of economic viability has been carried out for the Preferred Plan and its associated policies.

It should be noted that this review is not to establish the economic justification for a scheme as defined by Defra's Flood and Coastal Defence Project Appraisal Guidance Note 3: Economic Appraisal (FCDPAG3). The review makes a broad assessment of the economic robustness of the preferred policies. The economic review therefore determines whether or not each policy is:

- Clearly economically viable;
- Clearly not economically viable; or,
- Potentially economically viable (and therefore may be in need of more detailed assessment at a later date, e.g. as part of a strategic plan, although some commentary on this is provided within this report).

It should be recognised that the justification for a particular policy is not necessarily dependant on economic viability based on the benefit-cost ratio alone, as impacts on other benefits may be considered more important (e.g. holding existing defences to sustain a designated habitat). At the broad scale level of analysis undertaken at the SMP stage not all benefits are able to be evaluated in monetary terms. Although these 'intangible' benefits have not been valued in monetary terms, they are taken into account during decision-making by considering whether they are likely to be of sufficient importance to justify a scheme.

The following sections detail how the economic assessment has been undertaken. This is followed by a series of economic statements for each policy unit, and spreadsheets providing the numerical analysis performed as part of the SMP.

H.2 Use of Existing Information

The following datasets were consulted to obtain information for the economic review:

- National Property Dataset (second edition, 2005)

 for property locations and property prices;
- RICS Rural Land Market Survey (H2 2008) for agricultural land values;
- SMP Guidance and Environment Agency Unit Cost Manual for defence costs;
- Appendix C (Baseline Processes Understanding) for details of erosion rates; and,
- Environment Agency Flood Zone 2 for flood mapping extents.

A number of studies and scheme assessments have been developed for this coast over recent years. These contain detailed information on assets, benefits and management costs. Where this is directly applicable, such information has been considered and included as appropriate.

However, the justifications in these previous studies are only applicable if all other aspects are the same, i.e.

- the timeframe: many studies in the past have looked at economics over only 50 years and use different discount factors to those now required by Treasury;
- the area determined to be at risk: the SMP may have a modified assessment of the area that could be
 affected by erosion or flooding, For example the SMP uses the 1 in 1000 still water levels to
 determine flood risk, rather than a 1 in 200 year event as is commonly used for detailed studies at
 scheme level studies;
- sea level rise assumptions are the same; and,
- the preferred option matches that from the previous study: the SMP may be advocating a change from previous policy or management practice.

Where the above conditions are not realised, some of the raw data from the past studies has still been used, where it is readily available.



H.3 Generation of New Data

As there is very limited existing information that can be used directly to confirm robustness of the SMP policy, new economic data has been derived through application of a GIS (ESRI ArcView) and Defra FCDPAG economic calculation sheets. The 'Broad-scale Economic Review', described below, uses nationally available information on property locations and values, and the risk maps developed through the assessment of shoreline interactions and responses (Appendix C).

H.3.1 Determining Damages and Benefits

The benefits are the damages avoided or delayed by the Preferred Plan, i.e. the difference in losses between implementing the Preferred Plan and the No Active Intervention (NAI) scenario. These have been calculated for each epoch.

Although policy appraisal has determined a 'zone' of likely future erosion, for the purposes of estimating possible benefits, only the most landward extent of the likely erosion (for each period: 0-20, 20-50 and 50-100 years) has been used in the present analysis. These lines have been mapped and overlain with the property location/value data to calculate potential economic losses and economic benefits for the NAI scenario and the Preferred Plan scenario. It should be noted that average erosion rates for each epoch are used in this analysis and as such, erosion losses calculated within the GIS are indicative and therefore should be viewed accordingly.

In areas where there is a flooding risk, no attempt has been made to undertake detailed flood risk modelling; rather areas identified as at flooding risk by the Environment Agency's flood mapping have been used to identify assets potentially at risk (flood cells). The potential damages in these flood cells are simply taken as the summed capital value of all the 'at risk' assets. This is based on the assumption that under a NAI scenario flood defences would fail and all 'at risk' assets would be inundated and become uninhabitable. This is taken as an indicative figure for the assets potentially protected by defence structures. Flood damages have been calculated on a Policy Unit by Policy Unit basis, based on damages within Flood Cells. It should be noted that along a number of frontages, one or more flood cells extend over multiple policy units, in these cases, damages may be shown to be the same in adjacent Policy Units which extend over the same flood cell.

In calculating damages and benefits for the preferred scenario, no account has been taken of the potential for short-term accelerated or delayed losses compared to NAI, other than the total adjustment in shoreline position at the end of each epoch.

The SMP does not take account of standards of protection as it is only defence management policy that is being determined. Standards of protection relate to implementation of these policies, which is usually undertaken within more detailed 'strategy' level studies.

H.3.1.1 Benefit values

For properties, losses and benefits have been calculated only on the basis of residential and commercial property values. Other assets, such as utilities, highways, and intangibles, such as recreation, and other impacts upon the local economy or environment, have not been valued or included. Exclusion of these factors will robustly confirm economic viability, as these would provide added value. Losses and benefits have been calculated using data from the GIS. This was populated with data from a National Property Dataset. The dataset is built from the Ordnance Survey Address Point dataset and the Valuation Office Focus database. Address Point identifies the location of all existing properties. The Focus database then identifies which are non-residential (i.e. commercial/industrial) and provides a rateable value from which an approximate capital value is obtained, by applying a conversion factor. A conversion factor of 13 is used to convert rateable values to capital values, based on the types of commercial property affected and the typical yield they provide (around 7.6% to 7.7%). The remaining properties are assumed to be residential and property valuations included in the National Property Dataset were used in the analysis.

Using the 20, 50 and 100 year erosion contours, the GIS has been used to identify assets at risk in each epoch, and this data has been used with Defra FCDPAG calculation sheets to calculate the Capital Value (CV) and discounted Present Value (PV).

For the flood risk areas, GIS has been used to simply sum the CV for all property assets within the flood area, using the property dataset.

H.3.1.2 Generation of new defence cost information

Future coastal defence management approaches for each Policy Unit have been developed as part of the Preferred Plan. From this, the broad replacement and maintenance requirements for each epoch have been determined.

Where there is no existing information relating to future defence costs for an area, e.g. from a strategy plan or scheme design, costs have been generated using other nationally available information.

(a) Cost Rates

Replacement costs for general defence types have been taken from the revised Shoreline Management Plan Guidance¹. This suggests average replacement costs for linear structures (e.g. revetments, seawalls) as £2.7million/km and costs for beach management schemes at £5.1million/km. Replacement costs for Groynes, embankments and other "low cost" defence types are taken as £0.6million/km.

Maintenance costs have been taken from the Defra 'National Appraisal of Defence Needs And Costs' (NADNAC) study². This used annual maintenance costs for linear structures and for groyne fields at £10,000/km, and for beach schemes £20,000/km.

In addition to this, cost rate information for other types of defence structures, such as flood walls within estuaries, has been derived from the Environment Agency's Unit Cost Database 2007³.

(b) Cost Calculations

It has been assumed that the timing of full scheme reconstruction required (i.e. design life) is at least once every 100 years for linear defences, such as seawalls and revetments; every 50 years for beach schemes; and every 30 years for groynes and embankments. However, these periods may become more frequent for areas where erosion potential is high, e.g. on the outside of meanders and in confined channel locations. Maintenance has been assumed to occur to the same level in every year throughout the life of the scheme. In reality, this will be less in the early years and will increase in later years of the scheme's life. However, for the broad brush appraisal undertaken for the SMP this will make only a small difference to decisions as the majority of costs are associated with capital works.

Allowance has also been made for the increase in costs due to climate change impacts including sea level rise, based upon factors developed for the NADNAC study. This takes account of the need to make structures higher, deeper, and more resilient to increased exposure. The assumptions were: no cost increase for the 0-20 year epoch; costs factored up by 1.5 times present day rates for the 20-50 year epoch; and costs factored up by 2.0 times the present day rates for the 50-100 year epoch.

In accordance with the latest Defra and HM Treasury guidance, Optimism Bias (OB) was applied to all costs (at 60%) to reflect uncertainty in broad level analysis at the SMP scale.

H.3.1.3 Methodology for calculating agricultural land prices

Agricultural land values were calculated from land prices obtained from RICS $(2009)^4$ which provides data for South-West England farmland prices for the second half of 2008. For each agricultural grade a land value (£ per ha) has been assigned according to Table I below.

Average South West Arable Land Price (£/Ha)	Average South West Pasture Land Price (£/Ha)	Overall Average Land Price (£/Ha)			
£13,591	£12,356	£12,974			

Table I Average farmland prices in South-West England paid for bare land in £ per Hectare in H2 2008.

⁴ RICS (2009). Rural Land Market Survey, H2 2008. February 2009: http://www.rics.org/NR/rdonlyres/B8644DCA-9944-4602-B0E3-D6E3ACDC97BF/0/RICSRuralMarketSurveyH22008.pdf



¹ Defra (2006) Flood and Coastal Defence Appraisal Guidance, FCDPAG3 Economic Appraisal, Supplementary Note to Operating Authorities – Climate Change Impacts, October 2006.

² Defra (2004) NADNAC National Appraisal of Defence Needs and Costs Study.

³ Environment Agency (2007) Flood Risk Management Estimating Guide Unit Cost Database.

In accordance with the guidance in the Defra (2008)⁵, in following Scenario I (*land is abandoned or no longer fit for agricultural use for the foreseeable future*), the values of land were reduced by £600/ha to remove the cost of subsidies. As such, the final land value to be assigned to the agricultural land values is:

£12,974 per ha - £600 per ha = £12,374 per ha

H.3.2 Comparison of Costs and Benefits

As this review is not a full economic assessment, a formal benefit-cost assessment using benefit-cost ratios (BCR) has not been undertaken. However a benefit-cost ratio (BCR) has been included to help clarify and review the 'robustness' of the preferred plan.

In comparing likely benefits and likely costs for the policies for an individual location, over the full 100 year period, it is however still useful in some instances to be able to consider these in terms of Present Value (PV).

Present Value is the value of a stream of benefits or costs when discounted back to the present day. For this SMP, the discount factors used are the latest provided by Defra for assessment of schemes, i.e. 3.5% for years 0-30, 3.0% for years 31-75, and 2.5% thereafter.

For calculation of PV damages, the approximate timing of property losses has been determined using a GIS and corresponding discount factors applied accordingly. For calculation of PV costs for defence replacement, although the actual timing of works is uncertain, the residual life of defences was used to determine approximate timing of works, such that an appropriate discount value has been determined for the estimated costs. The year-on-year maintenance PV costs have been calculated using the total of the discount rates for that epoch.

The figures generated for this SMP are presented only in PV in Section H.4, reflecting the 'broad-scale' nature of the assessments undertaken. However, for further information, the Capital Value (CV) of these figures is presented in Annex H.1 (for benefits/damages) and Annex H.2 (for costs).

H.3.3 Economic Uncertainties

The economic appraisal has estimated the damages for the no active intervention options and the identified preferred management options. Benefits were then calculated for each preferred option (with NAI as the baseline) and compared with the costs of managing the 'at risk' assets in the particular cell. This results in a benefit-cost ratio which is reported in Economics Tables (Section H.4) and uncertainties addressed in the Uncertainties Tables (Section H.5). As discussed in Section H.3.1, the monetary damages primarily include residential and commercial property and agricultural land flood losses. The benefit-cost ratio therefore is not truly representative of the economic 'worth' of any particular option as it does not include those impacts that are more difficult to monetise (such as infrastructure, recreation, health effects, etc.). Some of these are described in the Preferred Policy Economic Tables (Section H.4) and addressed in more detail for the marginal units in the Uncertainties Tables (Section H.5). These are then brought together in the Preferred Policy Statements (Section 5, Main SMP Document).

The SMP looks over a timescale of 100 years and predictions are therefore inherently uncertain. As such, there are a number of uncertainties associated with economic 'worth' of the preferred plan policies in the future. Key economic uncertainties are recognised here. However, many of these uncertainties should be addressed through regular updates of the SMP or when significant changes to input data become available.

H.3.3.1 Agricultural land

The area of land is measured from GIS and the value per acre is adjusted according to Defra guidance. Therefore, the uncertainty associated with damages to agricultural land should be LOW. Other uncertainties will be associated with GIS, flood risk maps, etc. used to determine when and which land will be written off, as well as changes in regional agricultural importance and associated land values in the future.

⁵ Defra (2008). Flood and Coastal Defence Appraisal Guidance Economic Appraisal Supplementary Note to Operating Authorities: Valuation of Agricultural Land and Output for Appraisal Purposes, May 2008.



H.3.3.2 Residential properties

Data on properties at risk is based on GIS/property databases. Write-off values for properties from the National Property Database have been verified against average values. Therefore, uncertainty related to write-off damages for residential properties should be LOW. Other uncertainties will be associated with GIS, erosion rates, flood risk maps, etc. used to determine when and which residential properties will be written-off.

H.3.3.3 Commercial properties

Data on commercial properties has also been based on GIS/property datasets. It is known that the National Property Dataset (NPD) can introduce significant uncertainties for non-residential properties, with many properties not given a valuation and/or floor area. The economic appraisal does calculate valuations based on floor area where the NPD does not include specific valuations. This is based on a multiplier of 13 based on the yield of most properties. This helps to reduce the uncertainties although there are some commercial properties that still have no valuation (the majority of these have an X classification, which are often found to have low value). The overall level of uncertainty will vary by unit, but is likely to be LOW-MEDIUM. If there is a large number of X classified properties in any one unit, or other impacts that could not be valued in monetary terms then the uncertainty could be HIGH. Other uncertainties will be associated with GIS, erosion rates, flood risk maps, etc. used to determine when and which residential properties will be written-off.

H.3.3.4 Transport impacts

Costs of relocating/rebuilding roads and railways affected have not been included in the economic damages as there is insufficient data with which to base any monetary valuations on. Further investigation may be needed to accurately estimate the costs, where these impacts are significant to the overall damages. For example, along several lengths of the SMP frontage the only asset of value is critical highway or railway infrastructure, but with no data available to value these assets in monetary terms, it would appear on face value to be of 'no benefit' to defend those areas. Transport impacts have, however, been considered (in qualitative terms) as part of the approach to determining the preferred plan. Overall, therefore, the uncertainty should be LOW-MEDIUM (depending upon the extent of issues covered in the qualitative discussion).

H.3.3.5 Environmental impacts

The economic analysis has not valued in monetary terms any impacts on environmental sites (designated or non-designated). The economic appraisal therefore excludes environmental issues such as impacts on habitats, water quality (or quantity, through loss of abstractions), historic environment (although impacts on buildings may be partly captured under properties), landscape impacts, etc. Environmental issues have been considered (in qualitative terms) as part of the approach to determining the preferred plan. Overall, therefore, the uncertainty should be LOW-MEDIUM (depending upon the extent of issues covered in the qualitative discussion).

H.3.3.6 Recreational impacts

Within some policy units there may be impacts on recreation and tourism, but these are not quantified and have not been included in the economic damages. The impact of exclusion of recreational/tourism damages will vary by policy unit but could be HIGH in areas of regional importance for recreation and tourism. Further investigation of the likely damages under NAI needs to be investigated in those units with recreational and tourism assets that could attract visitors/users from outside the immediate area (i.e. recreation assets that are used for more than short-cuts and/or dog walking). Such investigation should also consider the relative benefits to recreation/tourism in areas where policy can be achieved incorporating retention of, for example, amenity beach.

H.3.3.7 Community/social impacts

Community impacts are likely to be greatest where there is write-off of residential and/or commercial properties. However, smaller settlements could have important social impacts reflecting the interactions between different community groups as well as between individuals. These cannot be valued in monetary terms but are taken into account during identification of the preferred plan. Some of the descriptions of the impacts refer to the integrity of settlements. The implications of lost integrity (including impacts on transport infrastructure as well as loss of properties and businesses) are included during assessment of whether the benefit-cost ratio of the preferred plan is likely to exceed one. In units where the integrity of the community

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could be affected, the uncertainty introduced in terms of the benefit-cost ratio could be MEDIUM-HIGH (depending on the actual impacts on the community and the proportion of the community affected). For erosion units, consideration needs to be given to blight affecting more than just those properties that are directly affected. Loss of other assets (e.g. the beach, access to the beach, recreational assets) could have significant effects on the whole community (even a whole parish) and could introduce MEDIUM-HIGH uncertainty

H.4 Economic Appraisal Summary Table

The table below provides a summary of the economic review of the preferred plan for each Policy Unit. It outlines any information used in this review, including benefits and costs, together with a statement on economic viability. Indicative managed realignment costs are based on the capital value and maintenance costs of a set back embankment. Preferred plan damages only relate to erosion losses avoided and not protection against flood risk to a given standard of protection as this data is not available (refer also to **Annex H.I.2**). Note: An allowance should be made for errors of approximately +/- £Im in each epoch, due to an error allowance of +/- 250m in the measurement of defence lengths for each unit.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	V av I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5g01	Duriston Head to St Alban's Head	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g02	St Alban's Head to Kimmeridge Bay	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g03	Kimmeridge Bay (defended length)	NAI	NAI	NAI	£0.18	£0.00	Provision included in the Plan to allow private defences to be maintained if other funds available. However, if not maintained then NAI would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability. Costs of continuing to defend in this area depend on ability/willingness of private landowners to fund, not public funds.	SMP policy is <i>economically viable</i> as there are few assets at risk, the future defence of which will depend on the availability of non-public funds.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	Kau I In containsia	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5g04	Kimmeridge Bay (undefended) to Worbarrow Tout	NAI	NAI	NAI	£0.27	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g05	Worbarrow Tout to Lulworth Cove (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g06	Lulworth Cove (undefended)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g07	Lulworth Cove (defended length)	NAI	NAI	NAI	£0.08	£0.00	Provision included in the Plan to allow private defences to be maintained if other funds available. However, if not maintained then NAI would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability. Costs of continuing to defend in this area depend on ability/willingness of private landowners to fund, not public funds.	SMP policy is <i>economically viable</i> as there are few assets at risk, the future defence of which will depend on the availability of non-public funds.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative	Kara I In containsice	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5g08	Lulworth Cove (West) to White Nothe	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g09	White Nothe to Ringstead Bay (defended length east)	NAI	NAI	NAI	£0.17	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g10	Ringstead Bay (defended length)	HTL	NAI	NAI	£0.24	£0.17	Maintaining the defences here in the short term and into the medium term will both ensure the scheme constructed in the mid 1990's is retained for as long as possible, as well as allow time to develop adaptation measures for when defence maintenance is withdrawn. NAI in the long-term would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability. Longevity with which the defences here could be maintained into the medium term will affect when maintenance of defences is withdrawn. This will in part be affected by rate of recession of adjacent cliffs (5g09 and 5g11).	BCR = 1.47 SMP policy is <i>economically viable</i> as the there are sufficient assets at risk to justify maintenance of the existing defences in the short to medium term to prolong the life of the scheme constructed in the mid-1990's, but there are insufficient assets at risk to justify full replacement of these defences in the medium to long term once the current defences reach the end of their effective life.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative	Vov. I In containties	Benefit-Cost Ratio &
-	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5gII	Ringstead Bay (defended length west) to Redcliff Point	NAI	NAI	NAI	£1.86	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g12	Redcliff Point to Bowleaze Cove (Gabions)	NAI	NAI	NAI	£0.09	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g13	Bowleaze Cove (Gabions) to Furzy Cliff	HTL	MR	HTL	£0.19	£0.91	There are significant tourism and recreational resources in this area, the amenity value of which is not included in the economics.	The position, timing and form of realignment works affects the PV costs. Longer term erosion risk from recession of adjacent undefended cliffs (5g12 and 5g14) will have a significant impact on this. Account of the amenity value of this area needs to be considered.	BCR = 0.21 SMP policy is <i>potentially economically viable</i> depending upon the amenity value of the area and the form and timing of realignment works. This requires further investigation.

Policy	Unit (Number and		eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
5g14	Furzy Cliff	NAI	NAI	NAI	£0.49	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features. The value of the road access to Bowleaze Cove (5g13) is not included in the economics.	Implications for road access to Bowleaze Cove (5g13) need to be investigated and if an alternative route is not feasible in the long term, this may affect how this frontage needs to be managed.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
5g15	Furzy Cliff to Preston Beach (Rock Groyne)	HTL	HTL	MR	£9.84	£11.62	The significant economic value of the A353 Preston Beach Road, nor the costs involved in realigning the road in the long-term, is not included in the economics. The importance of this road for the economy of the town of Weymouth was the dominant component in the economics for the scheme constructed along this frontage in 1995/6.	The position, timing and form of realignment works affects the PV costs. Longer term erosion risk from recession of adjacent undefended cliff (5g I 4) will have a significant impact on this. This requires further investigation. Account needs to be taken of the economic value of the road and the costs associated with realigning it.	BCR = 0.85 SMP policy is <i>potentially economically viable</i> . Inclusion of the economic value of the Preston Beach Road will make this economically viable, as the value of the road determined for the scheme in 1995/6 was in excess of £50m.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	Var. Un containsies	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5g16	Preston Beach (Rock Groyne) to Weymouth (Stone Pier) (includes Weymouth Harbour)	HTL	HTL	HTL	£245.66	£19.35	The economics here do not account for the significant amenity value of the open coast frontage, nor the value of highways infrastructure located along the sea front in much of this area.	None identified.	BCR = 12.70 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits make SMP policy more robust.
5g17	Weymouth (Stone Pier) to Portland Harbour (North Breakwater)	HTL	HTL	HTL	£2.54	£0.89	HTL will sustain the defences that were constructed in 2002 with a 100 year plus design life. To achieve the policy it may be necessary to undertake slope stabilisation works along part of this frontage. Allowance for such works has not been included in the economics. This area provides recreational resource and so amenity value could be included.	Form of slope stabilisation works required needs to be investigated and the costs of intervention may be greater than estimated. This could reduce the BCR, although may well be countered by benefits from potential loss of utility provision and access to properties that would not themselves be lost to erosion.	BCR = 2.86 SMP policy is <i>economically viable</i> based on monetised benefits alone. This needs further investigation to resolve uncertainties and develop a more robust economic appraisal.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy	
5g18	Bincleaves to Castle Cove	MR	MR	MR	€0.33	£0.00	Provision included in the Plan to allow private slope stabilisation measures to be introduced if non-public funds available. However, if not maintained then NAI would result in naturally functioning coastline with benefits for designated geological features.	The low rates of cliff recession along this frontage are the result of the presence of the Portland Harbour Breakwaters. It is assumed these will remain for the life of the Plan and so continue to influence this area. If the breakwaters are not maintained and eventually fail, then it is likely that the rate of recession along this frontage will increase, resulting in increased benefits to justify intervention using public funds.	SMP policy is <i>economically viable</i> as there are few assets at risk, the future defence of which will depend on the availability of non-public funds. If assumptions about the breakwaters are wrong it is only likely to increase the benefits which may well make it viable for public funds to be used to intervene along this frontage.	

Policy	Unit (Number and	Pr	referred Pol	icy	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative	V and In acceptain the	Benefit-Cost Ratio &
•	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties Form of slope stabilisation	Justification for SMP Policy
5g19	Castle Cove to Castle Cove Sailing Centre	HTL	HTL	HTL	£1.13	£0.61	HTL will require slope stabilisation measures to protect Old Castle Road. This road provides access to over 40 properties that are not at risk of erosion in the SMP period. The road also contains utilities and services to these properties. These additional benefits are not included in the SMP economics.	Form of slope stabilisation works required needs to be investigated and the costs of intervention may be greater than estimated. This could reduce the BCR, although may well be countered by benefits from potential loss of utility provision and access to properties that would not themselves be lost to erosion. The low rates of cliff recession along this frontage are the result of the presence of the Portland Harbour Breakwaters. It is assumed these will remain for the life of the Plan and so continue to influence this area. If the breakwaters are not maintained and eventually fail, then it is likely that the rate of recession along this frontage will increase, resulting in increased benefits to justify intervention using public funds.	BCR = 1.87 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust. If assumptions about the breakwaters are wrong it is only likely to increase the benefits which may well make it viable for public funds to be used to intervene along this frontage.

Polic	y Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative	Karal la contribuie	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5g20	Castle Cove Sailing Centre to Dowman Place	MR	MR	HTL	£0.24	£0.34	HTL will be required in the long term to ensure critical infrastructure (main gas pipeline) that serves many properties that would otherwise not be affected by coastal change. This frontage also contains important recreational assets, the value of which has not been determined. These additional benefits are not included in the SMP economics.	Form of slope stabilisation works required needs to be investigated and the costs of intervention may be greater than estimated. This could reduce the BCR, although may well be countered by benefits from potential loss of utility provision to properties that would not themselves be lost to erosion. The low rates of cliff recession along this frontage are the result of the presence of the Portland Harbour Breakwaters. It is assumed these will remain for the life of the Plan and so continue to influence this area. If the breakwaters are not maintained and eventually fail, then it is likely that the rate of recession along this frontage will increase, resulting in increased benefits to justify intervention using public funds.	BCR = 0.69 SMP policy is <i>potentially economically viable</i> if include additional benefits. This requires further investigation. Also, if assumptions about the breakwaters are wrong it is only likely to increase the benefits which may well make it viable for public funds to be used to intervene along this frontage.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	Key Uncertainties	Benefit-Cost Ratio &
_	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	,	Justification for SMP Policy
5g21	Small Mouth to Osprey Quay (Portland Harbour)	HTL	HTL	HTL	£0.60	£4.54	HTL is required here to protect the A354 Portland Beach Road, the only transport link between the Isle of Portland and the rest of the UK and as such needs to be defended for the economic benefit of the area. The value of the road has not been included in the economics.	This frontage is sheltered by Portland Harbour Breakwaters. It is assumed that these will remain. However, if this is not the case and the frontage is exposed to greater wave energy, it is unlikely that this would affect economic viability given the importance of the A354. The form of future transport provision along this frontage is likely to be influenced by the future evolution of Chesil Beach on the western side of the road.	BCR = 0.13 SMP policy is <i>potentially economically viable</i> if include additional benefits from the value of the A354. This requires further investigation.
5g22	Osprey Quay (Portland Harbour) to Kings Pier	HTL	HTL	HTL	£15.17	£11.85	Defence provision along part of this frontage is the responsibility of private landowners, including the Port operator. The economic value of Portland Port, business and recreational/amenity resources in this area are not included in the SMP economics.	This frontage is sheltered by Portland Harbour Breakwaters. It is assumed that these will remain. However, if this is not the case and the frontage is exposed to greater wave energy, it is unlikely that this would affect economic viability given the importance of the area to the wider economy of the area.	BCR = 1.28 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
١	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
5g23	Kings Pier to Portland Bill	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a01	Portland Bill to West Weare	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a02	Chiswell to Chesil Beach	HTL	HTL	HTL	£15.79	£4.67	Defence provision along supports defence to the low-lying land behind the defences afforded by the policies in 5g22. Defences here also protect the A354 Portland Beach Road, the only transport link between the Isle of Portland and the rest of the UK and as such needs to be defended for the economic benefit of the area. The value of the road has not been included in the economics.	No specific uncertainties that would affect economic viability.	BCR = 3.38 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	V ou I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6a03	Chesil Beach (to Wyke Narrows)	MR	MR	MR	£0.00	£0.50	This part of Chesil Beach is undefended, but provides an important defence function for the A354 Portland Beach Road that runs behind it. This is the only transport link between the Isle of Portland and the rest of the UK and is of significant economic importance to the area. The value of the road has not been included in the economics.	The form of future transport provision along the eastern side of this frontage is likely to be influenced by the future evolution of Chesil Beach. The frequency of intervention needed to restore the defence function of the beach, and so the costs estimated in the SMP, will depend on the frequency of large storm events in the future.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> when take into account that intervention here is likely to be occasional and only following large storm events to restore the defence function of the beach to protect the A354.
6a04	Chesil Beach and The Fleet	NAI	NAI	NAI	£0.40	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a05	Abbotsbury to Cogden Beach	NAI	NAI	NAI	£0.95	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Durlston Head to Rame Head SMP2 Appendix H – Economic Appraisal and Sensitivity Testing

Policy	Policy Unit (Number and Description)	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailities	Justification for SMP Policy	
6a06	Cogden Beach to Hive Beach (Burton Bradstock)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	
6a07	Hive Beach (Burton Bradstock)	NAI	NAI	NAI	£0.38	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	
6a08	Burton Cliff	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	

Policy	Policy Unit (Number and		eferred Pol	•	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6a09	Freshwater Beach	MR	MR	MR	£4.16	£1.01	This policy involves managing the retreat of the beach in line with recession of adjacent cliffs (6a08 and 6a10), as well as constructing a set-back defence to ensure flood risk to the upstream village of Burton Bradstock continues to be reduced. The economics do not account for the value to the local economy of the Freshwater Caravan Park that will be affected to some extent by the realignment of this coast.	No specific uncertainties that would affect economic viability.	BCR = 4.11 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a10	East Cliff (West Bay)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6all	West Bay (East Beach to eastern pier)	HTL	HTL	MR	£1.75	£3.86	Realignment to a set back defence in the long term will ensure flood risk to the wider West Bay area continues to be reduced, and supports the HTL policy for the rest of West Bay (6a12).	Links to erosion of adjacent East Cliff, as well as flood defence benefits to the wider West Bay area need to be identified.	BCR = 0.45 SMP policy is <i>potentially economically viable</i> . Management of this unit, and so the economic case, is linked to the defence of the rest of West Bay (6a I 2). This link requires further investigation.

Durlston Head to Rame Head SMP2 Appendix H – Economic Appraisal and Sensitivity Testing

Policy	Policy Unit (Number and		eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
!	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6a12	West Bay (West Beach from eastern pier) to West Cliff (East) (includes West Bay Harbour)	HTL	HTL	HTL	£63.01	£9.15	HTL protects urban area and commercial harbour as well as amenity resources. Economics do not include valuation of amenity or harbour.	Links to erosion of adjacent East Cliff, as well as flood defence benefits to the wider West Bay area need to be identified.	BCR = 6.89 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a13	West Cliff (East) to Thorncombe Beacon	NAI	NAI	NAI	£0.06	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a14	Thorncombe Beacon to Seatown (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Policy Unit (Number and		eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6a15	Seatown	HTL	NAI	NAI	£0.30	£0.11	Maintaining the defences here in the short term and into the medium term will both ensure the scheme constructed in the mid 1990's is retained for as long as possible, as well as allow time to develop adaptation measures for when defence maintenance is withdrawn. NAI in the long-term would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability. Longevity with which the defences here could be maintained into the medium term will affect when maintenance of defences is withdrawn. This will in part be affected by rate of recession of adjacent cliffs (5g09 and 5g11)	BCR = 2.85 SMP policy is <i>economically viable</i> as the there are sufficient assets at risk to justify maintenance of the existing defences in the short to medium term to prolong the life of the scheme constructed in the mid-1990's, but there are insufficient assets at risk to justify full replacement of these defences in the medium to long term once the current defences reach the end of their effective life.
6216	Seatown (West) to Golden Cap	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a17	Golden Cap to Charmouth (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	V ou I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6a18	Charmouth	HTL	MR	MR	£1.14	£0.92	Open coast defences would be maintained for as long as possible in thee short term and into the medium term. Realignment would seek to reduce the risk of tidal flooding upstream.	Future management here significantly influenced by future recession of cliffs to the west (6a19). Extent of future tidal flood risk upstream will influence when, where and what form the realigned position takes. The costs of realignment may therefore vary.	BCR = 1.23 SMP policy is <i>economically viable</i> based on monetised benefits alone. This could be affected by when, where and what form realignment occurs. This requires further investigation.
6a19	Charmouth (West) to East Cliff (Lyme Regis)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a20	East Cliff (Lyme Regis) to Broad Ledge (Lyme Regis)	HTL	HTL	HTL	£0.99	£2.80	HTL here to protect extensive urban area of the town of Lyme Regis. The economic value of a key access road to the town is not included in the economics.	Future management here significantly influenced by future recession of cliffs to the east (6a19). Benefits here also relate to reducing erosion risk to assets in adjacent units (6a21).	BCR = 0.35 SMP policy is <i>potentially economically viable</i> if take into account the additional benefits of protecting the highway infrastructure that is of significant importance to the town of Lyme Regis.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	,	Justification for SMP Policy
	Broad Ledge						HTL here to protect extensive urban area of the town of Lyme Regis.	Future management here significantly influenced by future recession of cliffs to the west (6a19).	BCR = 2.36 SMP policy is <i>economically</i>
6a21	(Lyme Regis) to The Cobb (Lyme Regis)	HTL	HTL	HTL	£17.09	£7.23	The economic value of the recreational and amenity resources located along this frontage is not included in the economics.	Benefits here also relate to reducing erosion risk to assets in adjacent units (6a21).	viable based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a22	Monmouth Beach	HTL	MR	HTL	£10.04	£1.02	HTL here to protect extensive urban area of the town of Lyme Regis against flood risk. A more formal defence line would be constructed in the medium term to achieve this policy. The economic value of the recreational and amenity resources located along this frontage is not included in the economics.	Future management here significantly influenced by future recession of cliffs to the west (6a22). Benefits here also relate to reducing flood risk to assets in adjacent units (6a21), although this needs to be investigated further.	BCR = 9.80 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a23	Monmouth Beach to Seven Rock Point	NAI	NAI	NAI	£0.35	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6a24	Seven Rock Point to Haven Cliff (West)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a25	Axe Estuary (Mouth Breakwater to Axmouth North)	HTL	HTL	HTL	£0.70	£3.09	HTL here to protect key local transport link between Seaton and Axmouth, as well as retain breakwater at the estuary mouth that serves to keep the mouth navigable for vessels to use facilities within the estuary. The economic value of these assets is not included in the SMP economics.	Linkages between management of this area in relation to the rest of the Axe Estuary need to be investigated in more detail.	BCR = 0.23 SMP policy is <i>potentially economically viable</i> . Further investigation is needed to assess the economic value of defending the Axmouth Road along this stretch, as well as demonstrating the benefit of retaining a structure to keep the estuary mouth open.
6a26	Axe Estuary (Axmouth North to Seaton North)	MR	MR	MR	£2.96	£1.31	The Seaton Tramway is an important resource to the economy of the area, although this value is not included in the SMP economics. The value of habitat created as part of realignment has also not been included in the economics.	Linkages between management of this area in relation to the rest of the Axe Estuary need to be investigated in more detail. Location(s) and extent(s) of realignment in this area will affect the economic case either positively or negatively.	BCR = 2.26 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust, although may be mitigated by higher costs of realignment (depending on when and where this occurs). This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6a27	Axe Estuary (Seaton East)	HTL	HTL	HTL	£10.49	£0.77	The Seaton Tramway is an important resource to the economy of the area, although this value is not included in the SMP economics. HTL to reduce flood risk to the extensive urban area of the town of Seaton.	Linkages between management of this area in relation to the rest of the Axe Estuary need to be investigated in more detail.	BCR = 13.72 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a28	Axe Estuary (Spit)	NAI	NAI	NAI	£0.16	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	Future evolution of the spit and its potential influence of the spit on the rest of the Axe Estuary needs to be investigated and accounted for in measures introduced within the Axe Estuary (6a25 to 6a27).	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a29	Axe Estuary (Spit) to Seaton (West)	HTL	HTL	HTL	£12.23	£8.90	HTL to reduce flood and erosion risk to the extensive urban area of the town of Seaton. Economics do not account for the tourism and amenity value of this area.	Requirement for future beach recharge dependent upon future sediment supply from the west, the rate of which is uncertain.	BCR = 1.37 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a30	Seaton (West) to Seaton Hole	HTL	MR	MR	£1.51	£1.77	Continued defence here will reduce but not prevent erosion altogether.	Rate of future cliff retreat will determine timing of realignment. Links to reducing erosion risk to the rest of Seaton (6a29) need to be investigated.	BCR = 0.85 SMP policy is <i>potentially economically viable</i> depending on when realignment of defences occurs.

Policy	Unit (Number and	Pro	eferred Pol	icy	Broad-so Review (Benefits and Negative	Voy I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6a31	Seaton Hole to Beer	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a32	Beer	HTL	HTL	HTL	£0.25	£0.19	HTL to reduce flood and erosion risk to the town of Beer. Economics do not account for the tourism and amenity value of this area.	No specific uncertainties that would affect economic viability.	BCR = 1.34 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a33	Beer to Beer Head	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6234	Beer Head to Salcombe Hill	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically</i> viable as there are few assets at risk.

Policy Unit (Number and		Preferred Policy ST (to MT (to LT (to			Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)		MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	•	Justification for SMP Policy
6a35	River Sid and East Sidmouth	MR	MR	MR	£0.00	£3.26	Managing the realignment of the coast aims to reduce the risk of cliff recession outflanking the rest of Sidmouth and exposing fluvial defences along the River Sid to coastal processes. The economics do not account for the benefits incurred in relation to the protection of the rest of Sidmouth (6a36) which are considerable.	Frequency of beach management works will determine the sustainability of the realignment policy in the long term. It may be necessary to include control structures which would alter the estimated costs. Retreat of adjacent undefended cliffs (6a34) also a significant control on management of this frontage.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> if economics expanded to account for protection of the rest of Sidmouth (6a36) to the east by reducing the risk of outflanking impacting upon fluvial defences along the River Sid. This requires further investigation.
6a36	Sidmouth	HTL	HTL	HTL	£49.11	£1.55	HTL to reduce flood and erosion risk to the town of Sidmouth. Economics do not account for the tourism and amenity value of this area.	No specific uncertainties that would affect economic viability.	BCR = 31.71 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a37	Chit Rocks to Big Picket Rock	NAI	NAI	NAI	£0.16	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically</i> viable as there are few assets at risk.

Policy	Policy Unit (Number and Description)		Preferred Policy ST (to MT (to LT (to			ale SMP (PV, £m)	Benefits and Negative	V ou I In containties	Benefit-Cost Ratio &
			MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6a38	Big Picket Rock to Otterton Ledge	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a39	Otter Estuary (Otterton Ledge to Budleigh Salterton East)	MR	MR	MR	£1.63	£1.21	The value of habitat created as part of realignment has not been included in the economics.	Location(s) and extent(s) of realignment in this area will affect the economic case either positively or negatively.	BCR = 1.34 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust, although may be mitigated by higher costs of realignment (depending on when and where this occurs). This requires further investigation.
6a40	Otter Estuary (Spit)	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	Future evolution of the spit and its potential influence of the spit on the rest of the Otter Estuary needs to be investigated and accounted for in measures introduced within the Otter Estuary (6a39).	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy Unit (Number and Description)		Preferred Policy			Broad-scale SMP Review (PV, £m)		Benefits and Negative	Kay I la compaintie	Benefit-Cost Ratio &
		ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6a 4 1	Budleigh Salterton	HTL	HTL	HTL	£0.80	£4.92	HTL to reduce flood and erosion risk to the town of Budleigh Salterton. Economics do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and so the area most at risk consists of assets related to these areas.	Tourism and amenity benefits need to be investigated.	BCR = 0.16 SMP policy is <i>potentially economically viable</i> if include tourism and amenity benefits. This requires further investigation.
6a42	Budleigh Salterton (West) to Straight Point	NAI	NAI	NAI	£0.50	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6a43	Straight Point to Orcombe Rocks	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy Unit (Number and		Preferred Policy			Broad-scale SMP Review (PV, £m)		Benefits and Negative	Vov. I In containties	Benefit-Cost Ratio &
	Description)		ST (to MT (to 2025) 2055)		Benefits of Costs of Policy Policy		- Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6244	Orcombe Rocks to Maer Rocks	HTL	HTL	HTL	£0.00	£1.88	HTL to reduce flood and erosion risk to the eastern part of the town of Exmouth. Economics do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and to the area most at risk, consists of assets related to these areas.	Tourism and amenity benefits need to be investigated.	BCR = 0.0 SMP policy is <i>potentially economically viable</i> if include tourism and amenity benefits. This requires further investigation.
6a 4 5	The Maer	HTL	MR	HTL	£0.00	£2.44	Economics do not account for the current tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and to the area most at risk, consists of assets related to these areas. No account of potential benefits in terms of habitat creation and retention of beach in the long term through realignment has been made in the economics.	Tourism and amenity benefits need to be investigated. Links to management of flood risk for the rest of Exmouth (6a46) also need to be investigated This area is also proposed for future land development. If this were to go ahead then MR would be less feasible and HTL would be preferred policy.	BCR = 0.0 SMP policy is <i>potentially economically viable</i> if include tourism and amenity benefits, as well as benefits for flood risk management to the rest of Exmouth (6a46). This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officertainties	Justification for SMP Policy
6a46	Harbour View to Exmouth Pier	HTL	HTL	HTL	£114.45	£1.15	HTL to reduce flood risk to the town of Exmouth. Economics do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and so the area most at risk, consists of assets related to these areas.	No specific uncertainties that would affect economic viability.	BCR = 99.51 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6a47	Exmouth Spit	HTL	HTL	HTL	£24.04	£3.22	HTL to reduce flood risk to the town of Exmouth. Economics do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and so the area most at risk, consists of assets related to these areas.	No specific uncertainties that would affect economic viability.	BCR = 7.47 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b01	Exe Estuary - Exmouth (west)	HTL	HTL	HTL	£176.31	£1.00	HTL to reduce flood risk to the town of Exmouth.	No specific uncertainties that would affect economic viability.	BCR = 175.72 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b02	Exe Estuary - Exmouth (west) to Lympstone	HTL	HTL	HTL	£26.55	£1.01	HTL to reduce flood risk to the assets along this part of the eastern side of the Exe Estuary, which link also to the protection of Exmouth (6b01) and the railway line. Economic value of the railway line in this area, and key recreational assets such as cycle routes are not included in the economics.	No specific uncertainties that would affect economic viability.	BCR = 26.33 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b03	Exe Estuary - Lympstone	HTL	HTL	HTL	£16.46	£0.70	HTL to reduce flood risk to Lympstone and railway. Economic value of the railway line in this area, and key recreational assets such as cycle routes are not included in the economics.	No specific uncertainties that would affect economic viability.	BCR = 23.68 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b04	Exe Estuary - Nutwell Park	HTL	HTL	HTL	£0.18	£0.56	HTL to reduce flood risk to the railway line. Economic value of the railway line in this area, and key recreational assets such as cycle routes are not included in the economics.	Value of defending this area relates to the same policies along other parts of this eastern side of the Exe Estuary that protect the railway line between Exmouth and Exeter.	BCR = 0.31 SMP policy is <i>potentially economically viable</i> when take account of the economic value of the railway line along the entire length of the east side of the Exe Estuary.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative	V and In contain the	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6Ь05	Exe Estuary - Lympstone Commando	HTL	HTL	HTL	£0.00	£0.73	HTL to reduce flood risk to the railway line and MoD facilities. Economic value of the railway line in this area, and key recreational assets such as cycle routes are not included in the economics. Value of MoD assets also not included.	Value of defending this area relates to the same policies along other parts of this eastern side of the Exe Estuary that protect the railway line between Exmouth and Exeter.	BCR = 0.0 SMP policy is <i>potentially economically viable</i> when take account of the economic value of the railway line along the entire length of the east side of the Exe Estuary.
6b06	Exe Estuary - Exton	HTL	HTL	HTL	£0.20	£0.85	HTL to reduce flood risk to Exton and the railway line. Economic value of the railway line in this area, and key recreational assets such as cycle routes are not included in the economics.	Value of defending this area relates to the same policies along other parts of this eastern side of the Exe Estuary that protect the railway line between Exmouth and Exeter.	BCR = 0.23 SMP policy is <i>potentially economically viable</i> when take account of the economic value of the railway line along the entire length of the east side of the Exe Estuary.
6b07	Exe Estuary - Exton to Lower Clyst	HTL	HTL	HTL	£5.61	£1.57	HTL to reduce flood risk to the railway line. Economic value of the railway line in this area, and key recreational assets such as cycle routes are not included in the economics.	Value of defending this area also relates to the same policies along other parts of this eastern side of the Exe Estuary that protect the railway line between Exmouth and Exeter.	BCR = 3.59 SMP policy is <i>economically</i> <i>viable</i> based on monetised benefits alone.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Oncertainties	Justification for SMP Policy
6b08	Exe Estuary - Lower Clyst	MR	MR	MR	£3.31	£0.74	Realignment is intended to reduce flood risk to people and property whilst providing habitat creation opportunities. The value of habitat created as part of realignment has not been included in the economics. The economic value of the local road that runs across this area has also not been included in the economics.	Location(s) and extent(s) of realignment in this area will affect the economic case either positively or negatively.	BCR = 4.46 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust, although may be mitigated by higher costs of realignment (depending on when and where this occurs). This requires further investigation.
6b09	Exe Estuary - Topsham	HTL	HTL	HTL	£40.23	£6.52	HTL to continue to reduce flood risk to the developed area of Topsham.	No specific uncertainties that would affect economic viability.	BCR = 6.17 SMP policy is <i>economically viable</i> based on monetised benefits alone.
6b10	Exe Estuary - M5 (east) to St James' Weir	HTL	HTL	HTL	£0.68	£3.28	HTL by maintaining defences along this already defended frontage to reduce flood risk to property, highways and infrastructure in Exeter. The value of highways and infrastructure are not included in the SMP economics.	Value of defending this area also relates to the same policies along other parts of the Exe Estuary to continue to reduce flood risk to developed areas.	BCR = 0.23 SMP policy is <i>potentially economically viable</i> when consider additional benefits. This requires further investigation.

Policy	Unit (Number and		eferred Pol			cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailities	Justification for SMP Policy	
6b11	Exe Estuary - Topsham Sludge beds	HTL	HTL	HTL	£16.31	£1.30	HTL does not account for value of infrastructure assets or the mainline railway that runs across this area.	No specific uncertainties that would affect economic viability.	BCR = 12.50 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.	
6b12	Exe Estuary - St James' Weir to M5 (west)	HTL	HTL	HTL	£4.33	£2.11	HTL does not account for value of infrastructure assets or the mainline railway that runs across this area.	No specific uncertainties that would affect economic viability.	BCR = 2.05 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.	
6b13	Exe Estuary - M5 (west) to Turf Lock	HTL	HTL	HTL	£25.41	£1.97	HTL does not account for value of infrastructure assets or the mainline railway that runs across this area.	No specific uncertainties that would affect economic viability.	BCR = 12.92 SMP policy is <i>economically</i> viable based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.	

Policy	Unit (Number and	Pr	eferred Pol	•	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Vov. I In containsing	Benefit-Cost Ratio &
ĺ	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6b14	Exe Estuary - Turf Lock to Powderham	HTL	MR	HTL	£5.54	£1.59	Realignment is intended to reduce flood risk to people and property whilst providing habitat creation opportunities. The value of habitat created as part of realignment has not been included in the economics. The economic value of the mainline railway that runs across this area has also not been included in the economics, although the policy would intend to continue to protect this asset and so any value would form part of the economic benefits.	Location(s) and extent(s) of realignment in this area will affect the economic case either positively or negatively. Implications for mainline railway may make it unfeasible to implement MR, in which case HTL would occur.	BCR = 3.48 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6Ы5	Exe Estuary - Powderham (south)	HTL	HTL	HTL	£1.19	£0.69	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics.	No specific uncertainties that would affect economic viability.	BCR = 1.72 SMP policy is <i>economically</i> viable based on monetised benefits alone. Additional benefits from including the mainline railway value likely to make SMP policy more robust.

Policy	Unit (Number and		eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b16	Exe Estuary - Starcross	HTL	HTL	HTL	£83.30	£1.34	HTL to continue to reduce flood risk to the developed area of Starcross. The economic value of the mainline railway that runs across this area has also not been included in the economics, although the policy would intend to continue to protect this asset and so any value would form part of the economic benefits.	No specific uncertainties that would affect economic viability.	BCR = 62.22 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits from including the mainline railway value likely to make SMP policy more robust.
6b17	Exe Estuary - Cockwood	HTL	HTL	HTL	£1.15	£0.51	HTL to continue to reduce flood risk to the developed area of Cockwood. The economic value of the mainline railway that runs across this area has also not been included in the economics, although the policy would intend to continue to protect this asset and so any value would form part of the economic benefits.	No specific uncertainties that would affect economic viability.	BCR = 2.24 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits from including the mainline railway value likely to make SMP policy more robust.

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	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b18	Exe Estuary - Cockwood to The Warren	HTL	HTL	HTL	£3.23	£1.59	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics.	No specific uncertainties that would affect economic viability.	BCR = 2.03 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits from including the mainline railway value likely to make SMP policy more robust.
6b19	Dawlish Warren (inner side)	NAI	To be determined by more detailed study in the short term		£0.00	£0.00	NAI along the currently undefended frontage of the inner side of Dawlish Warren will allow natural processes to continue.	Future management of this frontage is dependent upon the future management for the rest of Dawlish Warren (6b20 to 6b22).	Natural frontage. SMP policy is <i>economically viable</i> in the short term whilst longer term management of the whole of Dawlish Warren is determined.
6b20	Dawlish Warren (East - distal end)	HTL	by more study in	etermined detailed the short rm	£0.00	£0.75	HTL aims to ensure the important defence function of Dawlish Warren is maintained for the benefit of the inner estuary.	Future management of this frontage is dependent upon more detailed investigations in the short term.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> in the short term to ensure that Dawlish Warren is maintained in about its present position to provide flood risk benefits for the wider Exe Estuary. These benefits require further investigation.

Policy	Unit (Number and	Pro	eferred Policy	Review	cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to LT (to 2055) 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b21	Dawlish Warren (Central - gabion defences)	HTL	To be determined by more detailed study in the short term	£0.00	£1.11	HTL aims to ensure the important defence function of Dawlish Warren is maintained for the benefit of the inner estuary.	Future management of this frontage is dependent upon more detailed investigations in the short term.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> in the short term to ensure that Dawlish Warren is maintained in about its present position to provide flood risk benefits for the wider Exe Estuary. These benefits require further investigation.
6b22	Dawlish Warren (West - hard defences)	HTL	To be determined by more detailed study in the short term	£32.53	£0.45	HTL aims to ensure the important defence function of Dawlish Warren is maintained for the benefit of the inner estuary. The economic value of the mainline railway that runs across this area has also not been included in the economics, although the policy would intend to continue to protect this asset and so any value would form part of the economic benefits.	Future management of this frontage is dependent upon more detailed investigations in the short term.	BCR = 72.75 SMP policy is <i>economically viable</i> in the short term to ensure that Dawlish Warren is maintained in about its present position to provide flood risk benefits for the wider Exe Estuary. These benefits require further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6b23	Langstone Rock to Coryton Cove	HTL	HTL	HTL	£0.30	£28.00	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics. This frontage also protects the town of Dawlish and has a significant amenity value that is also not included in the economics.	Amenity value of the frontage needs to be investigated.	BCR = 0.01 SMP policy is <i>potentially economically viable</i> once take account for the economic value of the mainline railway and amenity value of the frontage.
6b24	Coryton Cove to Holcombe	HTL	HTL	HTL	£0.00	£7.75	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics.	No specific uncertainties that would affect economic viability. HTL here links with like policies to protect the mainline railway in the rest of the SMP.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> once take account for the economic value of the mainline railway.
6b25	Holcombe to Sprey Point	HTL	HTL	HTL	£0.00	£10.79	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics.	No specific uncertainties that would affect economic viability. HTL here links with like policies to protect the mainline railway in the rest of the SMP.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> once take account for the economic value of the mainline railway.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	,	Justification for SMP Policy
6b26	Sprey Point	HTL	HTL	HTL	£0.00	£3.19	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics.	No specific uncertainties that would affect economic viability. HTL here links with like policies to protect the mainline railway in the rest of the SMP.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> once take account for the economic value of the mainline railway.
6b27	Sprey Point to Teignmouth Pier	HTL	HTL	HTL	£0.00	£13.12	HTL aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics. Economics also do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town of Teignmouth, and so the area most at risk, consists of assets related to these areas.	No specific uncertainties that would affect economic viability. HTL here links with like policies to protect the mainline railway in the rest of the SMP.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> once take account for the economic value of the mainline railway and amenity value of the frontage.

Policy	Unit (Number and	Pro	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
1	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy	
6b28	Teignmouth Pier to The Point	HTL	HTL	HTL	£0.00	£2.77	HTL aims to protect urban area of the town of Teignmouth. Economics do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and so the area most at risk, consists of assets related to these areas.	No specific uncertainties that would affect economic viability. HTL here links with like policies to protect the mainline railway in the rest of the SMP.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> once take account for the economic value of the mainline railway and amenity value of the frontage.	
6b29	The Point	MR	MR	MR	£0.00	£11.07	Benefits of managing this area would need to be related to the wider Teign Estuary. Such a link has not been made in the SMP economics.	MR here would only occur if detailed study in the short term shows that it is needed for the benefit of the rest of the Teign Estuary. Otherwise this area would be left to function largely naturally.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> as intervention is likely to only be occasional at best, and would be linked to the management of flood risk in the wider Teign Estuary. This requires further study.	

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b30	Teign Estuary - The Point to Teignmouth and Shaldon Bridge	HTL	HTL	HTL	£18.03	£4.83	HTL aims to protect the developed area of the town of Teignmouth and the mainline railway that runs across this area. The railway has a significant economic value although this has not been included in the SMP economics. The economic value of Teignmouth docks has also not been included in the economics.	No specific uncertainties that would affect economic viability.	BCR = 3.73 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b31	Teign Estuary - North Shore (Teignmouth and Shaldon Bridge to Passage House Hotel)	HTL	HTL	HTL	£70.48	£11.07	Benefits link to the reduction in flood risk to the town of Teignmouth. HTL also aims to protect the mainline railway that runs across this area. This has a significant economic value although this has not been included in the SMP economics.	No specific uncertainties that would affect economic viability.	BCR = 6.36 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits from including the mainline railway value likely to make SMP policy more robust.

Policy	Unit (Number and		eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b32	Teign Estuary - Passage House Hotel to Kingsteignton Road Bridge	HTL	MR	MR	£94.98	£1.50	Realignment is intended to reduce flood risk to people and property whilst providing habitat creation opportunities. The value of habitat created as part of realignment has not been included in the economics. The economic value of the mainline railway that runs across this area has also not been included in the economics, although the policy would intend to continue to protect this asset and so any value would form part of the economic benefits.	No specific uncertainties that would affect economic viability.	BCR = 63.52 SMP policy is <i>economically viable</i> based on monetised benefits alone.
6b33	Teign Estuary - Kingsteignton and Newton Abbot	HTL	HTL	HTL	£87.49	£1.81	HTL to continue to reduce flood risk to the urban area of the town of Newton Abbot	No specific uncertainties that would affect economic viability.	BCR = 48.31 SMP policy is <i>economically viable</i> based on monetised benefits alone.
6b34	Teign Estuary - South Shore (Newton Abbot to Shaldon)	NAI (locally HTL)	NAI (locally HTL)	NAI (locally HTL)	£3.26	£1.13	HTL to continue to reduce flood risk to key assets along this largely undefended frontage, including a sewage treatment to works.	No specific uncertainties that would affect economic viability.	BCR = 2.90 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
1	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b35	Teign Estuary - Shaldon	HTL	HTL	HTL	£56.45	£1.15	HTL to continue to reduce flood and erosion risk to the urban area of the town of Shaldon.	No specific uncertainties that would affect economic viability.	BCR = 48.98 SMP policy is <i>economically viable</i> based on monetised benefits alone.
6b36	Shaldon (The Ness) to Maidencombe (North)	NAI	NAI	NAI	£0.47	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b37	Maidencombe	NAI	NAI	NAI	£0.10	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6Ь38	Maidencombe (South) to Watcombe Head	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b39	Watcombe	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	V and Improved in the	Benefit-Cost Ratio &
١	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6b40	Watcombe to Petit Tor Point	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b41	Petit Tor Point to Walls Hill	HTL	HTL	HTL	£0.00	£4.34	Defences here are primarily for providing amenity resources at the current time. However they do also protect the cliff toe from erosion, with the cliff top area being extensively developed. HTL here will ensure that risk of erosion to this extensive area remains low whilst retaining amenity assets of value to the economy of the area. The value of the amenity resource has not been included in the economics.	Amenity value of the assets and likely erosion risk if they are not retained requires further investigation.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> if take into account amenity value. This requires further investigation.
6b42	Walls Hill	NAI	NAI	NAI	£1.66	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
1	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tainties	Justification for SMP Policy	
6b43	Anstey's Cove	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	
6b44	Anstey's Cove to Hope's Nose	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	
6b45	Hope's Nose to Meadfoot Beach (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
ا	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Oncertainties	Justification for SMP Policy
6b46	Meadfoot Beach	HTL	HTL	HTL	£0.00	£3.08	Defences here are primarily for providing amenity resources at the current time. However they do also protect the cliff toe from erosion, with the cliff top area being extensively developed and including a major highway link. HTL here will ensure that risk of erosion to this extensive area remains low whilst retaining amenity assets of value to the economy of the area. The value of the amenity resource and highway protected by defences along this frontage has not been included in the economics.	Amenity value of the assets and likely erosion risk if they are not retained requires further investigation.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> if take into account amenity and highway value. This requires further investigation.
6b47	Meadfoot Beach (West) to Beacon Cove	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6b48	Beacon Cove to Torre Abbey Sands (Torquay Harbour)	HTL	HTL	HTL	£8.59	£6.80	HTL will ensure defences continue to reduce flood risk to this part of Torquay. This area also includes Torquay Marina which is a significant economic resource for the area. The value of the marina has not been included in the economics.	No specific uncertainties that would affect economic viability.	BCR = 1.29 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b49	Torre Abbey Sands	HTL	HTL	HTL	£0.57	£3.43	HTL along this frontage will ensure that flood risk in this area continues to be reduced whilst beach resource of benefit to the tourism value of the frontage is likely to be maintained. Retention of beach resource is likely to be of increasing amenity value in terms of the wider region as other beaches are lost as sea levels rise. This is not accounted for in the economics.	Amenity value requires further investigation.	BCR = 0.17 SMP policy is potentially economically viable when take into account amenity benefits. This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	V av. I in containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6b50	Corbyn's Head	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b51	Livermead Sands	HTL	HTL	HTL	£0.00	£1.50	HTL along this frontage will ensure that erosion risk to a main highway link in this area continues to be reduced whilst beach resource of benefit to the tourism value of the frontage is likely to be maintained. Retention of beach resource is likely to be of increasing amenity value in terms of the wider region as other beaches are lost as sea levels rise. This is not accounted for in the economics. Value of the highway has also not been included in the economics.	Amenity and highway value requires further investigation.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> when take into account amenity and highway benefits. This requires further investigation.
6b52	Livermead Head	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio & Justification for SMP Policy
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	
6b53	Hollicombe Beach	HTL	HTL	HTL	€0.00	£1.54	HTL along this frontage will ensure that erosion risk to an important railway line in this area continues to be reduced whilst beach resource of benefit to the tourism value of the frontage is likely to be maintained. Retention of beach resource is likely to be of increasing amenity value in terms of the wider region as other beaches are lost as sea levels rise. This is not accounted for in the economics. Value of the railway line has also not been included in the economics.	Amenity and railway value requires further investigation.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> when take into account amenity and railway line benefits. This requires further investigation.
6b54	Hollicombe Head	NAI	NAI	NAI	£0.02	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and		eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b55	Hollicombe Head to Roundham Head	HTL	HTL	HTL	£51.97	£21.69	HTL aims to protect urban area of the town of Paignton against flood risk. Economics do not account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and so the area most at risk, consists of assets related to these areas.	No specific uncertainties that would affect economic viability.	BCR = 2.40 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b56	Goodrington Sands	HTL	HTL/ MR	HTL	£1.55	£0.48	Continued protection of property as well as important highway and railway routes will be provided under this policy, either along existing or realigned defence positions. Economics do not account for the value of transport infrastructure. Nor do they account for the tourism and amenity value of this area, which are likely to be significant as the most seaward part of the town, and so the area most at risk, consists of assets related to these areas.	It is uncertain if realignment of defences will be feasible along all parts of this frontage. In which case HTL will occur. Amenity and transport value requires further investigation.	BCR = 4.29 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative	Vov. I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6b57	Goodrington Sands to Broadsands	NAI	NAI	NAI	£5.88	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b58	Broadsands	HTL	MR	HTL	£0.40	£0.91	Realignment along this frontage aims to retain a natural beach for the benefit of amenity whilst ensuring flood risk continues to be reduced locally. Potential amenity and habitat creation benefits of realignment have not been accounted for in the SMP economics.	Amenity value requires further investigation. Costs of realignment depend on how much set back defence is required, or if most realignment can be simply to high ground.	BCR = 0.43 SMP policy is <i>potentially economically viable</i> depending on when and how realignment occurs. This requires further investigation.
6b59	Broadsands to Churston Cove (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tainties	Justification for SMP Policy
6b60	Churston Cove (East) to Shoalstone Point	HTL	HTL	HTL	£1.37	£6.68	HTL aims to protect urban area of the town of Brixham against flood and erosion risk. Economics do not account for the tourism value of this area. The economics also do not account for the commercial value of the harbour and marina in this area to the economy of the wider area.	Valuation of the tourism and commercial assets requires further investigation.	BCR = 0.20 SMP policy is <i>potentially economically viable</i> when take account of tourism and commercial value of this area. This requires further investigation.
6b61	Shoalstone Point to Berry Head	NAI	NAI	NAI	£1.78	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b62	Berry Head to Sharkham Point	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b63	Sharkham Point to Kingswear (South)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
ĺ	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Oncertainties	Justification for SMP Policy	
6b64	Dart Estuary - Kingswear (South) to Waterhead Creek	HTL	HTL	HTL	£2.70	£1.85	HTL aims to continue to reduce flood risk to currently defended areas around the town of Kingswear.	Exact timing and nature of works needs to be investigated in more detail.	BCR = 1.48 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP	
							account of commercial value of the area at risk of flooding.		policy more robust.	
6b65	Dart Estuary - Waterhead Creek to Greenway Viaduct	HTL	HTL	HTL	£0.00	£2.37	HTL along this frontage aims to continue to protect the Dart Valley railway line, which is an important economic asset for the area. The economic value of the	Exact timing and nature of works needs to be investigated in more detail, as does value of the railway to the economy of the area.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> when consider the likely value of the railway to the economy of the area.	
							railway is not included in the economics			
6b66	Dart Estuary - Greenway Viaduct to Totnes South	HTL/ NAI	HTL/ NAI	HTL/ NAI	£3.01	£0.32	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are	Exact timing and nature of works needs to be investigated in more detail.	BCR = 9.39 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional	
	(east bank)	100					not defences along much of this stretch, NAI would occur.	investigated in more detail.	benefits likely to make SMP policy more robust.	

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	Vov. I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6b67	Dart Estuary -	HTL	HTL	HTL	£87.58	£8.12	HTL aims to continue to reduce flood risk to currently defended areas around the town of Totnes.	Exact timing and nature of works needs to be investigated in more detail.	BCR = 10.79 SMP policy is <i>economically</i> <i>viable</i> based on monetised
	Totnes						Economics does not take account of the value of commercial and infrastructure assets at risk of flooding in this area.	Value of commercial and infrastructure assets at risk needs further investigation.	benefits alone. Additional benefits likely to make SMP policy more robust.
6b68	Dart Estuary - Totnes South (west bank) to Dartmouth (North)	HTL/ NAI	HTL/ NAI	HTL/ NAI	£4.20	£0.96	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are not defences along much of this stretch, NAI would occur.	Exact timing and nature of works needs to be investigated in more detail.	BCR = 4.37 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b69	Dart Estuary - Dartmouth (North) to Halftide Rock	HTL	HTL	HTL	£67.17	£4.43	HTL aims to continue to reduce flood risk to currently defended areas around the town of Dartmouth. Economics does not take account of the value of commercial and infrastructure assets at risk of flooding in this area.	Exact timing and nature of works needs to be investigated in more detail. Value of commercial and infrastructure assets at risk needs further investigation.	BCR = 15.17 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.

Policy	Policy Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy	
6b70	Dart Estuary - Halftide Rock to Blackstone Point	HTL/ NAI	HTL/ NAI	HTL/ NAI	£0.22	£0.13	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are not defences along much of this stretch, NAI would occur.	Exact timing and nature of works needs to be investigated in more detail.	BCR = 1.69 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.	
6b71	Blackstone Point to Stoke Fleming	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	
6b72	Stoke Fleming to Blackpool Sands	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	•	Justification for SMP Policy
6b73	Blackpool Sands	NAI	NAI	NAI	£0.00	£0.00	The short lengths of structures that provide some defence function along this frontage are privately owned and maintained for the purpose of providing amenity value. The beach here is presently healthy and requires little or no intervention to protect the highway that runs behind the beach, which at present is more at risk from fluvial flooding than tidal flooding.	No specific uncertainties that would affect economic viability. Costs of continuing to defend in this area depend on ability/willingness of private landowners to fund, not public funds. Long term protection of the A379 at the very back of this beach may require intervention to locally defend the road, depending on how the beach evolves in response to sea level rise.	SMP policy is <i>economically viable</i> as there are few assets at risk along this largely natural frontage, the future localised defence of which will depend on the availability of non-public funds.
6b74	Blackpool Sands to Strete	NAI	NAI	NAI	£0.27	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Preferred Policy			Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6b75	Strete to Torcross North (Slapton Sands)	MR	MR	MR	£0.01	£0.64	The economics of future management options here were investigated in detail as part of a recent study in 2006. MR aims to maintain the main road along the crest of Slapton Sands for as long as possible through reactive realignment of the road supported by some beach management activities. This accepts that the road will have to be closed in the long term. It is not clear what the economics of the final preferred option for the 2006 study are from the available information and so the values in the SMP do not include the value of the main road, although this is stated as being a PV value of £23m.	No specific uncertainties that would affect economic viability.	BCR = 0.02 SMP policy is <i>potentially economically viable</i> when take account of the value of the main road along the top of Slapton Sands, which was estimated to have a PV benefit of £23m by the 2006 study.

	Unit (Number and		eferred Pol	-	Review	cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officertainties	Justification for SMP Policy
6b76	Torcross North to Limpet Rocks	HTL	HTL	MR	£4.40	£2.48	HTL in the short and medium term aims to protect the seaward part of Torcross for as long as possible, with MR in the long term recognising the need to adapt this area as Slapton Sands to the north rolls back and outflanks this area. Economics do not account for the tourism value of this area.	Valuation of the tourism requires further investigation. Timing and nature of long term realignment also requires further investigation.	BCR = 1.77 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6b77	Limpet Rocks to Beesands (North)	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6b78	Beesands	HTL	HTL	HTL (locally MR)	£5.84	£2.05	HTL aims to continue to reduce flood and erosion risk to the village of Beesands by maintaining the defences that have only recently been constructed here with a 100 year design life. Economics do not account for the tourism value of this area.	Valuation of the tourism requires further investigation. Timing and nature of long term realignment at the northern end of the village also requires further investigation.	BCR = 2.84 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.

Policy	Unit (Number and		eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Vov. I In containties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6b79	Beesands (South) to Start Point	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c01	Start Point to Prawle Point	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c02	Prawle Point to Limebury Point	NAI	NAI	NAI	£0.03	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c03	Salcombe Harbour (Limebury Point to Kingsbridge Estuary - Scoble Point)	HTL/ NAI	HTL/ NAI	HTL/ NAI	£1.17	£3.04	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are not defences along much of this stretch, NAI would occur.	Exact timing and nature of works needs to be investigated in more detail. Defences are largely privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.38 SMP policy is <i>potentially economically viable</i> depending on where defences are required.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	,	Justification for SMP Policy
6c04	Kingsbridge Estuary East (Scoble Point to Kingsbridge)	HTL/ NAI	HTL/ NAI	HTL/ NAI	£4.08	£5.30	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are not defences along much of this stretch, NAI would occur.	Exact timing and nature of works needs to be investigated in more detail. Defences are largely privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.77 SMP policy is <i>potentially economically viable</i> depending on where defences are required.
6c05	Kingsbridge Estuary - Kingsbridge	HTL	HTL	HTL	£20.14	£7.16	HTL aims to continue to reduce flood risk to the town of Kingsbridge. Economics do not account for the tourism or commercial value of assets at risk of flooding in this area.	Valuation of the tourism and commercial assets requires further investigation.	BCR = 2.81 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6c06	Kingsbridge Estuary West (Kingsbridge to Snapes Point)	HTL/ NAI	HTL/ NAI	HTL/ NAI	£0.08	£1.15	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are not defences along much of this stretch, NAI would occur.	Exact timing and nature of works needs to be investigated in more detail. Defences are largely privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.07 SMP policy is <i>potentially economically viable</i> depending on where defences are required.

Policy	Unit (Number and	Pr	referred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	V and I in a supplication	Benefit-Cost Ratio &
·	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6c07	Salcombe (Snapes Point to Splat Cove Point)	HTL	HTL	HTL	£10.60	£10.74	HTL aims to continue to reduce flood risk to the town of Salcombe. Economics do not account for the tourism or commercial value of assets at risk of flooding in this area.	Valuation of the tourism and commercial assets requires further investigation.	BCR = 0.99 SMP policy is <i>potentially economically viable</i> when take account of tourism and commercial value of this area. This requires further investigation.
6c08	Splat Cove Point to Bolt Head	NAI	NAI	NAI	£1.02	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c09	Bolt Head to Bolt Tail	NAI	NAI	NAI	£0.18	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c10	Bolt Tail to Thurlestone Rock	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy	
6c11	Thurlestone Rock to Warren Point	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features. Private defences could be maintained to protect tourism and amenity assets.	No specific uncertainties that would affect economic viability. Costs of continuing to defend in this area depend on ability/willingness of private landowners to fund, not public funds.	SMP policy is <i>economically viable</i> as there are few assets at risk along this largely natural frontage, the future localised defence of which will depend on the availability of non-public funds.	
6c12	Warren Point to Avon Estuary (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	
6c13	Avon Estuary (East Bank – Mouth to Stadbury Farm)	NAI	NAI	NAI	£0.10	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.	

Policy	Unit (Number and		eferred Pol	•	Broad-so Review (cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &	
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy	
6c14	Avon Estuary (Upstream section – Stadbury Farm to Stakes Hill)	MR	MR	MR	£2.87	£1.21	Realignment is intended to reduce flood risk to people and property whilst providing habitat creation opportunities. The value of habitat created as part of realignment has not been included in the economics. The economic value of the local road that runs across this area and other infrastructure assets has also not been included in the economics.	Location(s) and extent(s) of realignment in this area will affect the economic case either positively or negatively.	BCR = 2.38 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust, although may be mitigated by higher costs of realignment (depending on when and where this occurs). This requires further investigation.	
6c15	Avon Estuary (West Bank – Stakes Hill to Warren Point (Bigbury-on-Sea))	NAI	NAI	NAI	£0.04	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability. Costs of continuing to defend in this area depend on ability/willingness of private landowners to fund, not public funds.	SMP policy is <i>economically viable</i> as there are few assets at risk along this largely natural frontage, the future localised defence of which will depend on the availability of non-public funds.	

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	,	Justification for SMP Policy
6c16	Warren Point (Bigbury-on-Sea) to Challaborough (West)	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	No specific uncertainties that would affect economic viability. Costs of continuing to defend in this area depend on ability/willingness of private landowners to fund, not public funds.	SMP policy is <i>economically viable</i> as there are few assets at risk along this largely natural frontage, the future localised defence of which will depend on the availability of non-public funds.
6c17	Challaborough (West) to Erme Estuary (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically</i> viable as there are few assets at risk.
6c18	Erme Estuary (East Bank – Mouth to Orcheton Wood)	NAI	NAI	NAI	£0.59	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c19	Erme Estuary (Upstream section – Orcheton Wood to Pamflete Wood)	NAI	NAI	NAI	£0.72	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c20	Erme Estuary (West Bank – Pamflete Wood to Mouth)	NAI	NAI	NAI	£0.06	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically</i> viable as there are few assets at risk.
6c21	Erme Estuary (West) to Yealm Estuary (East)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6c22	Yealm Estuary (East Bank – Mouth to Passage House)	NAI	NAI	NAI	£0.00	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c23	Yealm Estuary (East Bank – Passage House to Newton Ferrers North)	HTL	HTL	HTL	£2.84	£3.67	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. Economics do not take account of value of infrastructure assets at risk of flooding.	Defences are largely privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.77 SMP policy is potentially economically viable depending on value of infrastructure assets. Requires further investigation.
6c24	Yealm Estuary (East Bank – Newton Ferrers North to Fish House Plantation)	NAI	NAI	NAI	£0.02	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c25	Yealm Estuary (West Bank – Fish House Plantation to Season Point)	NAI	NAI	NAI	£1.37	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c26	Season Point to Wembury Point	NAI	NAI	NAI	£0.17	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6c27	Wembury Point to Mount Batten Breakwater	NAI	NAI	NAI	£0.29	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c28	Plym Estuary - Mount Batten Breakwater to Marsh Mills	HTL	HTL	HTL	£30.12	£15.29	HTL will continue to protect property and infrastructure along this area on the east side of the city of Plymouth, including an area of contaminated land. Economics do not take account of the value of infrastructure assets in this area that are at risk of flooding.	Value of infrastructure assets needs to be investigated further.	BCR = 1.97 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6c29	Plym Estuary - Marsh Mills to Coxside	HTL	HTL	HTL	£165.13	£10.14	HTL will continue to protect property and infrastructure along this part of the city of Plymouth. Economics do not take account of the value of infrastructure assets in this area, including part of the mainline railway.	No specific uncertainties that would affect economic viability.	BCR = 16.29 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
١	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6c30	Coxside to Devil's Point	HTL	HTL	HTL	£8.81	£16.76	HTL will continue to protect important tourism infrastructure along this frontage. Economics do not take account of the amenity value of the assets along this frontage which are those most at risk of flooding and erosion.	Amenity value of this frontage requires further investigation.	BCR = 0.53 SMP policy is <i>potentially economically viable</i> when take account of likely significant amenity value of the frontage. This requires further investigation.
6c31	Tamar Estuary - Devil's Point to Tamerton Lake	HTL	HTL	HTL	£39.14	£47.53	Defence provision along part of this frontage is largely the responsibility of the port operators as it encompasses Devonport dockyard. The economic value of the dockyard has not been included in the SMP economics.	Need to investigate the commercial value of the dockyard. Defences are largely privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.82 SMP policy is <i>potentially economically viable</i> when take account of the significant economic value of the dockyard. This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	·	Justification for SMP Policy
6c32	Tamar Estuary - Tamerton Lake to Gunnislake (upper Tamar Estuary East)	HTL/ MR/NAI	HTL/ MR/NAI	HTL/ MR/NAI	£4.97	£1.13	HTL aims to continue to reduce flood risk to currently defended areas along this frontage, although opportunities to implement MR could be explored. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for tourism, habitat or infrastructure values.	Due to insufficient data, the SMP can not define specific HTL/MR/NAI policy for distinct parts of this frontage. Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 4.38 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	·	Justification for SMP Policy
6c33	Tamar Estuary - Gunnislake to Saltash North (upper Tamar Estuary West)	HTL/ MR/NAI	HTL/ MR/NAI	HTL/ MR/NAI	£15.79	£2.57	HTL aims to continue to reduce flood risk to currently defended areas along this frontage, although opportunities to implement MR could be explored. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for tourism, habitat or infrastructure values.	Due to insufficient data, the SMP can not define specific HTL/MR/NAI policy for distinct parts of this frontage. Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 6.14 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Policy	Policy Unit (Number and		eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailfues	Justification for SMP Policy
6c34	Tamar Estuary - Saltash	HTL/ NAI	HTL/ NAI	HTL/ NAI	£2.56	£7.16	HTL will continue to protect the urban area of the town of Saltash and critical infrastructure, although NAI will occur in most areas where there are presently no defences. Economics do not take account of the commercial value of the area at risk of flooding, nor the value of the mainline railway that runs across parts of this area.	Value of the commercial assets and mainline railway along this frontage requires further investigation.	BCR = 0.36 SMP policy is <i>potentially economically viable</i> when take account of likely significant value of the commercial assets and mainline railway along this frontage. This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6c35	Tamar Estuary - River Lynher (Saltash South to Torpoint North (Jupiter Point))	HTL/ MR/NAI	HTL/ MR/NAI	HTL/ MR/NAI	£12.86	£1.83	HTL aims to continue to reduce flood risk to currently defended areas along this frontage, although opportunities to implement MR could be explored. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for habitat or infrastructure values, including the mainline railway that runs along parts of this frontage.	Due to insufficient data, the SMP can not define specific HTL/MR/NAI policy for distinct parts of this frontage. Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 7.01 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Poli	cy Unit (Number and	Pr	Preferred Policy			cale SMP (PV, £m)	Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Officer tailities	Justification for SMP Policy
6c3	Tamar Estuary - Torpoint North (Jupiter Point) to Torpoint South (Landing Stage)	HTL/ NAI	HTL/ NAI	HTL/ NAI	£1.17	£9.59	HTL will continue to protect the urban area of the town of Torpoint and critical infrastructure, although NAI will occur in most areas where there are presently no defences. Economics do not take account of the commercial value of the area at risk of flooding, nor the value of important highway infrastructure that runs across parts of this area.	Value of the commercial and highway assets along this frontage requires further investigation.	BCR = 0.12 SMP policy is <i>potentially economically viable</i> when take account of likely significant value of the commercial and highways assets along this frontage. This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	,	Justification for SMP Policy
6c37	Tamar Estuary - St John's Lake (Torpoint South (Landing Stage) to Millbrook (Mill Farm))	HTL/ MR/NAI	HTL/ MR/NAI	HTL/ MR/NAI	£1.49	£2.77	HTL aims to continue to reduce flood risk to currently defended areas along this frontage, although opportunities to implement MR could be explored. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for habitat or infrastructure values, including important local highways and a sewage works that are present along parts of this frontage.	Due to insufficient data, the SMP can not define specific HTL/MR/NAI policy for distinct parts of this frontage. Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.54 SMP policy is <i>potentially economically viable</i> when take account of likely significant value of the infrastructure assets along this frontage. This requires further investigation.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Rey Oncertainties	Justification for SMP Policy
6c38	Tamar Estuary - St John's Lake (Millbrook (Mill Farm) to Millbrook (Hancock's Lake))	HTL/ MR/NAI	HTL/ MR/NAI	HTL/ MR/NAI	£13.35	£1.70	HTL aims to continue to reduce flood risk to currently defended areas along this frontage, although opportunities to implement MR could be explored. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for infrastructure values, including important local highways that are present along parts of this frontage.	Due to insufficient data, the SMP can not define specific HTL/MR/NAI policy for distinct parts of this frontage. Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 7.86 SMP policy is <i>economically</i> <i>viable</i> based on monetised benefits alone.

Policy	Unit (Number and		eferred Pol	icy	Broad-scale SMP Review (PV, £m)		Benefits and Negative Impacts not Included in	Koy I Incortainties	Benefit-Cost Ratio &
	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6c39	Tamar Estuary - St John's Lake (Millbrook (Hancock's Lake) to Palmer Point	HTL/ NAI	HTL/ NAI	HTL/ NAI	£2.40	£1.93	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for valuation of local highway that is present along this frontage.	Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 1.25 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Policy	Unit (Number and	Pr	eferred Pol	icy	Broad-so Review (Benefits and Negative Impacts not Included in	Key Uncertainties	Benefit-Cost Ratio &
I	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Benefit-Cost Ratio	,	Justification for SMP Policy
6c40	Tamar Estuary - Palmer Point to Mount Edgcumbe (Cremyll))	HTL/ NAI	HTL/ NAI	HTL/ NAI	£0.00	£0.47	HTL aims to continue to reduce flood risk to currently defended areas along this frontage. In areas where there are no defences along much of this stretch, NAI would occur. Benefits do not include for the commercial value of this area to the local economy, nor the infrastructure value of the ferry terminal that is present along part of this frontage.	Further detailed investigation is required to determine the specific policy for each individual part of the frontage and to determine exact timing and nature of works required. Costs have been based on estimate of total defence length within this area. Some defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 0.00 SMP policy is <i>potentially economically viable</i> when take account of the commercial and infrastructure assets along this frontage. This requires further investigation.
6c4I	Mount Edgcumbe to Picklecombe Point	NAI	NAI	NAI	£0.32	£0.00	NAI along this predominantly undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c 4 2	Fort Picklecombe	HTL	HTL	HTL	£12.32	£2.86	HTL aims to continue to reduce flood risk to this currently defended area.	Defences are privately owned so likely that future defence provision will depend on availability of private landowners to funds works.	BCR = 4.30 SMP policy is <i>economically viable</i> based on monetised benefits alone.

Policy	Unit (Number and	Pr	eferred Pol	icy		cale SMP (PV, £m)	Benefits and Negative	Kay I Incortainties	Benefit-Cost Ratio &
1	Description)	ST (to 2025)	MT (to 2055)	LT (to 2105)	Benefits of Policy	Costs of Policy	Impacts not Included in Benefit-Cost Ratio	Key Uncertainties	Justification for SMP Policy
6c43	Picklecombe Point to Kingsand	NAI	NAI	NAI	£0.03	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.
6c44	Kingsand/Cawsand	HTL	HTL	HTL	£10.45	£2.77	HTL aims to continue to reduce flood and erosion risk to the developed area of Kingsand and Cawsand. Benefits do not take account of tourism or amenity value of this area.	Amenity value of this frontage requires further investigation.	BCR = 3.77 SMP policy is <i>economically viable</i> based on monetised benefits alone. Additional benefits likely to make SMP policy more robust.
6c45	Cawsand to Rame Head	NAI	NAI	NAI	£0.35	£0.00	NAI along this currently undefended coast would result in naturally functioning coastline with benefits for designated geological features.	None identified.	Natural frontage. SMP policy is <i>economically viable</i> as there are few assets at risk.

H.5 Sensitivity Testing

Sensitivity testing was undertaken to highlight uncertainty or risks that may affect policy decisions and identifies the consequences for the preferred scenario. This information helps understand how robust the policy decision is, helps identify where changes in future circumstances may affect the policy, helps understand where further knowledge is needed to reduce uncertainty and importantly provides a link to policy and option development within subsequent flood and erosion risk management strategies. The conclusion of this assessment is described as part of presenting the concluding policy decisions in the **Main Document (Section 5**).

It is important to note that development of the Recommended Policies have recognised uncertainty is present and have therefore sought where needed to be adaptive and able to be refined through further understanding and evidence as gathered as part of the Action Plans going forward.

A staged approach has been applied involving the following:

- Understanding the ability for generic uncertainties to influence the policy decision (Table H.5.1);
- Recording of those uncertainties potentially affecting the economic assessment (Section H.3.3);
- Concluding on the influence of uncertainties as part of the presentation of the policy decision and determining the robustness of the policy decision (Table H.5.1); and,
- Detailing in the Action Plans for each Policy Statement (Main Document Section 5) where further information is needed to help manage the policy going forwards to implementation stages.

SMP Procedural Guidance states that it is not appropriate to speculate regarding uncertainties in changes in social attitudes or socio-economic policy. As such, the following uncertainties are acknowledged here, but are not included in the main analysis:

- A change in social preferences in relation to an increased acceptance to flood and erosion and / or adaptive methods and changes in environmental legislation;
- · A change in funding priorities leading to increased / decreased funding;
- · Availability of compensation for those affected by flooding and / or erosion; and,
- An increasing prioritisation of agricultural land within flood and erosion risk management policy.

Supporting information regarding contemporary climate change predictions (**Appendix C**) and corresponding implications for the SMP area are found in **Annex H.3**.

H.5.1 Uncertainty Identification Table

The table indicates those management policies that may be vulnerable to typical uncertainties.

Uncertainty		Exposur	re to Uncertainty	
Officertainty	HTL	ATL	MR	NAI
Increased development	Increased development will increase or Advancing the defence line more		An increase in development will rec hinterland assets thereby reducing t MR and NAI policy exposed to this	he potential for MR and NAI.
Decreased development	Holding or Advancing the line may n future development decreases or if based on an assumption of increased HTL and ATL policy exposed to this	policy choices have been made I future development.	Reduced development will increase to retreat defences) and making a d robust. Ultimately decreased develolonger-term MR and NAI policies.	ecision not to intervene more
Knowledge on climate change forecasts (sea level rise and storminess)	technically difficult to maintain. This term Maintaining or Advancing the li of other alternatives. HTL and ATL policy exposed to this	making defences more expensive and may reduce the potential for longine and increase the attractiveness suncertainty	by MR and NAI. However, in the loundefended hinterland may be underinvestment or need to relocate and in areas of low lying hinterland. MR and NAI policy exposed to this	er threat resulting in additional /or lose assets. Particularly relevant uncertainty
Reductions in sediment supply	A reduced sediment supply may incr wave energy, defences will become a difficult to maintain. This may reduce Holding or Advancing the line and in alternatives. HTL and ATL policy exposed to this	more expensive and technically te the potential for long-term acrease the attractiveness of other	Reduced sediment supplies will pote to be self-maintaining but would not MR or NAI.	entially limit the ability for MR sites t be a primary driver for selection of
Degree of land contaminated	The presence of contamination wou Holding or Advancing the line.		The presence of contaminated land remediation to facilitate MR or NAI policy. MR and NAI policy exposed to this	l, making them less attractive as a
Accuracy of economic information	economic viability and is marginal. 1		d potentially affect policy choice in car of detail within the economic analysis a o this uncertainty	
Presence of protected habitats and species	The presence of protected habitats offsetting habitats, increasing cost ar unlikely to result in a change in HTL attractive. ATL policy exposed to this uncertain	d difficulty in deliverability. This is policy but makes ATL less	The presence of protected habitats the need to develop integrated solu existing habitats This is unlikely to makes a NAI policy less attractive. NAI policy exposed to this uncertain	itions that maintain and improve result in a change to a MR policy but

Annex H. I – Supporting Economic Appraisal Data – Damages/Benefits

H.I.I Summary of No Active Intervention Erosion Losses

Table I – No Active Intervention Residential Erosion Losses (note, for brevity, only those policy units in which erosion losses occur are presented in this table)

Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential Erosion Losses	CV (£m)	PV (£m)
	0-20	0	0	0.00	0.00			
5g03	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g04	20-50	2	-	0.36	0.09	9	1.74	0.26
_	50-100	7	-	1.38	0.17			
	0-20	0	0	0.00	0.00			
5g07	20-50	0	-	0.00	0.00	0	0.00	0.00
•	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g09	20-50	3	-	0.49	0.15	5	0.67	0.17
•	50-100	2	-	0.18	0.02			
	0-20	0	0	0.00	0.00			
5g10	20-50	2	-	0.51	0.13	7	1.79	0.24
•	50-100	5	-	1.28	0.11			
	0-20	3	3	1.70	1.36			
5gll	20-50	2	-	0.51	0.15	20	4.70	1.74
•	50-100	12	-	2.49	0.24			
	0-20	0	0	0.00	0.00			
5g12	20-50	0	-	0.00	0.00	I	0.18	0.02
J	50-100	I	-	0.18	0.02			
	0-20	0	0	0.00	0.00			
5g13	20-50	0	-	0.00	0.00	5	1.49	0.11
Jgij	50-100	5	-	1.49	0.11			
5g14	0-20	0	0	0.00	0.00	24	4.24	0.44

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential Erosion Losses	CV (£m)	PV (£m)
	20-50	0	-	0.00	0.00			
	50-100	24	-	4.24	0.44			
	0-20	10	0	1.75	1.06			
5g17	20-50	0	-	0.00	0.00	10	1.75	1.06
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g18	20-50	3	-	0.46	0.10	14	2.88	0.33
	50-100	11	-	2.42	0.24			
	0-20		0	0.30	0.18			
5g19	20-50	7	-	1.62	0.41	25	5.30	0.91
	50-100	17	-	3.39	0.32			
	0-20	0	0	0.00	0.00			
5g20	20-50	0	-	0.00	0.00	10	1.83	0.17
	50-100	10	-	1.83	0.17			
	0-20	0	0	0.00	0.00			
5g21	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	7	3	1.84	1.84			
5g22	20-50	0	-	0.00	0.00	10	1.84	1.84
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a07	20-50	I	-	0.30	0.06	I	0.30	0.06
	50-100	0	-	0.00	0.00			
	0-20	14	17	6.38	5.17			
6a12	20-50	26	-	7.01	2.32	107	26.92	8.91
	50-100	50	-	13.54	1.42			
	0-20	0	0	0.00	0.00			
6a13	20-50	0	-	0.00	0.00	2	0.42	0.02
	50-100	2	-	0.42	0.02			
6a15	0-20	0	0	0.00	0.00	4	0.87	0.26
	20-50	3	-	0.66	0.23			

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential Erosion Losses	CV (£m)	PV (£m)
	50-100	I	-	0.21	0.02			
	0-20	3	0	0.70	0.42			
6a 8	20-50	0	-	0.00	0.00	3	0.70	0.42
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.51	0.32			
6a20	20-50	8	-	2.18	0.57	14	3.58	0.99
	50-100	4	-	0.90	0.10			
	0-20	90	0	16.97	11.94			
6a21	20-50	27	-	5.22	1.42	136	25.55	13.72
	50-100	19	-	3.36	0.35			
	0-20	52	0	9.93	9.12			
6a22	20-50	0	-	0.00	0.00	52	9.93	9.12
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.35	0.35			
6a23	20-50	0	-	0.00	0.00	2	0.35	0.35
	50-100	0	-	0.00	0.00			
	0-20	4	0	0.70	0.70			
6a25	20-50	0	-	0.00	0.00	4	0.70	0.70
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a28	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a29	20-50	0	-	0.00	0.00	56	7.86	0.67
'	50-100	56	-	7.86	0.67			
	0-20	0	0	0.00	0.00			
6a30	20-50	10	-	1.37	0.32	81	13.14	1.41
	50-100	71	-	11.77	1.09	-		-
	0-20		0	0.29	0.18			
6a32	20-50	0	-	0.00	0.00	ı	0.29	0.18
	50-100	0	_	0.00	0.00	•		

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential Erosion Losses	CV (£m)	PV (£m)
	0-20	0	55	8.11	8.11			
6a36	20-50	0	-	0.00	0.00	57	8.57	8.14
	50-100	2	-	0.45	0.03			
	0-20	0	0	0.00	0.00			
6a37	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a41	20-50	1	-	0.19	0.04	66	9.78	0.76
	50-100	65	-	9.59	0.72			
	0-20	0	0	0.00	0.00			
6a42	20-50	0	-	0.00	0.00	25	3.58	0.50
	50-100	25	-	3.58	0.50			
	0-20	0	0	0.00	0.00			
6b36	20-50	0	-	0.00	0.00	37	5.16	0.41
	50-100	37	-	5.16	0.41			
	0-20	0	0	0.00	0.00			
6b37	20-50	0	-	0.00	0.00	3	0.78	0.10
	50-100	3	-	0.78	0.10			
	0-20	8	0	1.30	1.30			
6b42	20-50	0	-	0.00	0.00	8	1.30	1.30
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b48	20-50	0	-	0.00	0.00	5	1.36	0.17
	50-100	5	-	1.36	0.17			
	0-20	0	0	0.00	0.00			
6b54	20-50	0	-	0.00	0.00	3	0.43	0.02
	50-100	3	<u>-</u>	0.43	0.02			
	0-20	6	0	0.85	0.85			
6b56	20-50	0	-	0.00	0.00	6	0.85	0.85
	50-100	0	<u>-</u>	0.00	0.00			
6b61	0-20	0	0	0.00	0.00	0	0.00	0.00

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential Erosion Losses	CV (£m)	PV (£m)
	20-50	0	-	0.00	0.00			
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b64	20-50	0	-	0.00	0.00	1	0.29	0.04
	50-100	I	-	0.29	0.04			
	0-20	0	0	0.00	0.00			
6b71	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.48	0.28			
6b73	20-50	0	-	0.00	0.00	2	0.48	0.28
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.45	0.27			
6b74	20-50	0	-	0.00	0.00	2	0.45	0.27
	50-100	0	-	0.00	0.00			
	0-20	5	0	0.94	0.81			
6b78	20-50	0	-	0.00	0.00	6	1.23	0.83
	50-100	I	-	0.29	0.02			
	0-20	0	0	0.00	0.00			
6c02	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	5	I	0.94	0.61			
6c08	20-50	0	-	0.00	0.00	6	0.94	0.61
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6c09	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.29	0.28			
6cll	20-50	0	-	0.00	0.00	I	0.29	0.28
OCTT	50-100	0	-	0.00	0.00			
6c16	0-20	0	0	0.00	0.00	2	0.45	0.12
	20-50	2	-	0.45	0.12			

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential Erosion Losses	CV (£m)	PV (£m)
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.27	0.17			
6c26	20-50	0	-	0.00	0.00	2	0.27	0.17
	50-100	0	-	0.00	0.00			
	0-20	12	0	2.00	2.00			
6c39	20-50	0	-	0.00	0.00	12	2.00	2.00
	50-100	0	-	0.00	0.00			
	0-20	83	0	12.12	12.12			
6c42	20-50	0	-	0.00	0.00	83	12.12	12.12
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6c43	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6c45	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			

Table 2 – No Active Intervention Commercial Erosion Losses (note, for brevity, only those policy units in which erosion losses occur are presented in this table)

Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Commercial Erosion Losses	CV (£m)	PV (£m)
	0-20	I	0	0.18	0.18			
5g03	20-50	0	-	0.00	0.00	I	0.18	0.18
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.00	0.00			
5g04	20-50	1	-	0.01	0.00	3	0.05	0.01
	50-100	1	-	0.04	0.01			
	0-20		0	0.08	0.08			
5g07	20-50	0	-	0.00	0.00	I	0.08	0.08
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g09	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g10	20-50	0	-	0.00	0.00	I	0.01	0.00
	50-100	1	-	0.01	0.00			
	0-20	0	3	0.12	0.12			
5g	20-50	0	-	0.00	0.00	4	0.15	0.12
	50-100	1	-	0.04	0.00			
	0-20	0	0	0.00	0.00			
5g12	20-50	0	-	0.00	0.00	2	0.50	0.06
	50-100	2	-	0.50	0.06			
	0-20	0	0	0.00	0.00			
5g13	20-50	0	-	0.00	0.00	2	0.74	0.08
	50-100	2	-	0.74	0.08			
	0-20	0	0	0.00	0.00			
5g14	20-50	0	-	0.00	0.00	3	0.52	0.05
- 9	50-100	3		0.52	0.05			
5g17	0-20	4	0	2.53	1.48	4	2.53	1.48
	20-50	0	-	0.00	0.00			

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Commercial Erosion Losses	CV (£m)	PV (£m)
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g18	20-50	0	-	0.00	0.00	0	0.00	0.00
_	50-100	0	-	0.00	0.00			
	0-20	0	2	0.20	0.20			
5g19	20-50	I	-	0.01	0.00	7	0.46	0.22
_	50-100	4	-	0.25	0.02			
	0-20		0	0.07	0.07			
5g20	20-50	0	-	0.00	0.00	I	0.07	0.07
	50-100	0	-	0.00	0.00			
	0-20	0	3	0.26	0.26			
5g21	20-50	0	-	0.00	0.00	3	0.26	0.26
•	50-100	0	-	0.00	0.00			
	0-20	92	37	8.58	8.58			
5g22	20-50	0	-	0.00	0.00	129	8.58	8.58
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a07	20-50	0	-	0.00	0.00	1	0.30	0.02
	50-100	1	-	0.30	0.02			
	0-20	0	0	0.00	0.00			
6a12	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a13	20-50	0	-	0.00	0.00	2	0.32	0.04
	50-100	2	-	0.32	0.04			
	0-20	0	0	0.00	0.00			
6a15	20-50	3	-	0.10	0.05	3	0.10	0.05
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a 8	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Commercial Erosion Losses	CV (£m)	PV (£m)
	0-20	0	0	0.00	0.00			
6a20	20-50	1	-	0.00	0.00	I	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	83	0	3.27	2.93			
6a21	20-50	8	-	0.96	0.22	95	4.49	3.17
	50-100	4	-	0.26	0.02			
	0-20	37	0	0.98	0.92			
6a22	20-50	0	-	0.00	0.00	37	0.98	0.92
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a23	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a25	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.16	0.16			
6a28	20-50	0	-	0.00	0.00	I	0.16	0.16
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a29	20-50	0	-	0.00	0.00	10	0.68	0.06
	50-100	10	-	0.68	0.06			
	0-20	0	0	0.00	0.00			
6a30	20-50	0	-	0.00	0.00	7	1.21	0.09
	50-100	7	-	1.21	0.09			
	0-20	5	0	0.12	0.07			
6a32	20-50	0	-	0.00	0.00	5	0.12	0.07
	50-100	0	<u>-</u>	0.00	0.00			
	0-20	0	10	1.27	1.27			
6a36	20-50	I	-	0.16	0.07	13	2.04	1.38
	50-100	2	<u>-</u>	0.61	0.04			
6a37	0-20	I	0	0.16	0.16	<u> </u>	0.16	0.16

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Commercial Erosion Losses	CV (£m)	PV (£m)
	20-50	0	-	0.00	0.00			
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a41	20-50	0	-	0.00	0.00	9	0.51	0.05
	50-100	9	-	0.51	0.05			
	0-20	0	0	0.00	0.00			
6a42	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b36	20-50	0	-	0.00	0.00	2	0.04	0.00
	50-100	2	-	0.04	0.00			
	0-20	0	0	0.00	0.00			
6b37	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	3	0	0.36	0.36			
6b42	20-50	0	-	0.00	0.00	3	0.36	0.36
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b48	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b54	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	3	19	0.63	0.63			
6b56	20-50	0	-	0.00	0.00	22	0.63	0.63
	50-100	0	-	0.00	0.00			
	0-20	0	13	1.77	1.77			
6b6 I	20-50	0	-	0.00	0.00	18	1.97	1.78
	50-100	5	-	0.20	0.01			
6b6 4	0-20		0	0.00	0.00	I	0.00	0.00
	20-50	0	-	0.00	0.00			

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Commercial Erosion Losses	CV (£m)	PV (£m)
	50-100	0	-	0.00	0.00			
	0-20	3	0	0.22	0.22			
6b71	20-50	0	-	0.00	0.00	3	0.22	0.22
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b73	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b74	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	l	0	0.04	0.04			
6b78	20-50	0	-	0.00	0.00	l	0.04	0.04
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.03	0.03			
6c02	20-50	0	-	0.00	0.00	l	0.03	0.03
	50-100	0	-	0.00	0.00			
	0-20	8	0	0.41	0.26			
6c08	20-50	0	-	0.00	0.00	8	0.41	0.26
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.28	0.18			
6c09	20-50	0	-	0.00	0.00	I	0.28	0.18
	50-100	0	-	0.00	0.00			
	0-20	ļ	0	0.03	0.02			
6cll	20-50	0	-	0.00	0.00	l	0.03	0.02
	50-100	0	-	0.00	0.00			
	0-20	l	0	0.14	0.07			
6c16	20-50	0	-	0.00	0.00	1	0.14	0.07
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6c26	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Commercial Erosion Losses	CV (£m)	PV (£m)
	0-20	7	0	0.40	0.40			
6c39	20-50	0	-	0.00	0.00	7	0.40	0.40
	50-100	0	-	0.00	0.00			
	0-20	6	0	0.20	0.20			
6c42	20-50	0	-	0.00	0.00	6	0.20	0.20
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.05	0.03			
6c43	20-50	0	-	0.00	0.00	1	0.05	0.03
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.59	0.35			
6c45	20-50	0	-	0.00	0.00	2	0.59	0.35
	50-100	0	-	0.00	0.00			

Table 3 – No Active Intervention Combined Residential & Commercial Erosion Losses (note, for brevity, only those policy units in which erosion losses occur are presented in this table)

Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential & Commercial Erosion Losses	CV (£m)	PV (£m)
	0-20	l	0	0.18	0.18			
5g03	20-50	0	-	0.00	0.00	1	0.18	0.18
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.00	0.00			
5g04	20-50	3	-	0.37	0.09	12	1.79	0.27
	50-100	8	-	1.42	0.18			
	0-20	I	0	0.08	0.08			
5g07	20-50	0	-	0.00	0.00	1	0.08	0.08
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g09	20-50	3	-	0.49	0.15	5	0.67	0.17
	50-100	2	-	0.18	0.02			
	0-20	0	0	0.00	0.00			
5g10	20-50	2	-	0.51	0.13	8	1.80	0.24
	50-100	6	-	1.29	0.11			
	0-20	3	6	1.82	1.47			
5gll	20-50	2	-	0.51	0.15	24	4.85	1.86
_	50-100	13	-	2.53	0.24			
-	0-20	0	0	0.00	0.00			
5g12	20-50	0	-	0.00	0.00	3	0.68	0.09
_	50-100	3	-	0.68	0.09			
	0-20	0	0	0.00	0.00			
5g13	20-50	0	-	0.00	0.00	7	2.23	0.19
_	50-100	7	-	2.23	0.19			
	0-20	0	0	0.00	0.00			
5g14	20-50	0	-	0.00	0.00	27	4.75	0.49
_	50-100	27	-	4.75	0.49			
5g17	0-20	14	0	4.28	2.54	14	4.28	2.54

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential & Commercial Erosion Losses	CV (£m)	PV (£m)
	20-50	0	-	0.00	0.00			
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g18	20-50	3	-	0.46	0.10	14	2.88	0.33
	50-100	11	-	2.42	0.24			
	0-20	0	3	0.26	0.26			
5g19	20-50	0	-	0.00	0.00	3	0.26	0.26
	50-100	0	-	0.00	0.00			
	0-20	99	40	10.43	10.43			
5g20	20-50	0	-	0.00	0.00	139	10.43	10.43
	50-100	0	-	0.00	0.00			
	0-20	0	3	0.26	0.26			
5g21	20-50	0	-	0.00	0.00	3	0.26	0.26
	50-100	0	-	0.00	0.00			
	0-20	99	40	10.43	10.43			
5g22	20-50	0	-	0.00	0.00	139	10.43	10.43
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a07	20-50	I	-	0.30	0.06	2	0.60	0.08
	50-100	I	-	0.30	0.02			
	0-20	14	17	6.38	5.17			
6a12	20-50	26	-	7.01	2.32	107	26.92	8.91
	50-100	50	-	13.54	1.42			
	0-20	0	0	0.00	0.00			
6a 3	20-50	0	-	0.00	0.00	4	0.73	0.06
	50-100	4	-	0.73	0.06			
	0-20	0	0	0.00	0.00			
6a15	20-50	6	-	0.76	0.28	7	0.97	0.30
	50-100	1	-	0.21	0.02			
6a18	0-20	3	0	0.70	0.42	3	0.70	0.42

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential & Commercial Erosion Losses	CV (£m)	PV (£m)
	20-50	0	-	0.00	0.00			
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.51	0.32			
6a20	20-50	9	-	2.18	0.57	15	3.58	0.99
	50-100	4	-	0.90	0.10			
	0-20	173	0	20.24	14.87			
6a21	20-50	35	-	6.18	1.64	231	30.04	16.89
	50-100	23	-	3.62	0.38			
	0-20	89	0	10.91	10.04			
6a22	20-50	0	-	0.00	0.00	89	10.91	10.04
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.35	0.35			
6a23	20-50	0	-	0.00	0.00	2	0.35	0.35
	50-100	0	-	0.00	0.00			
	0-20	4	0	0.70	0.70			
6a25	20-50	0	-	0.00	0.00	4	0.70	0.70
	50-100	0	-	0.00	0.00			
	0-20		0	0.16	0.16			
6a28	20-50	0	-	0.00	0.00	1	0.16	0.16
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a29	20-50	0	-	0.00	0.00	66	8.54	0.73
	50-100	66	-	8.54	0.73			
	0-20	0	0	0.00	0.00			
6a30	20-50	10	-	1.37	0.32	88	14.35	1.51
	50-100	78	-	12.98	1.18			
	0-20	6	0	0.42	0.25			
6a32	20-50	0	-	0.00	0.00	6	0.42	0.25
	50-100	0	-	0.00	0.00			
6a36	0-20	0	65	9.38	9.38	70	10.61	9.52

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential & Commercial Erosion Losses	CV (£m)	PV (£m)
	20-50	I	-	0.16	0.07			
	50-100	4	-	1.07	0.06			
	0-20		0	0.16	0.16			
6a37	20-50	0	-	0.00	0.00	1	0.16	0.16
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a41	20-50	I	-	0.19	0.04	75	10.29	0.80
	50-100	74	-	10.10	0.76			
	0-20	0	0	0.00	0.00			
6a42	20-50	0	-	0.00	0.00	25	3.58	0.50
	50-100	25	-	3.58	0.50			
	0-20	0	0	0.00	0.00			
6b36	20-50	0	-	0.00	0.00	39	5.20	0.42
	50-100	39	-	5.20	0.42			
	0-20	0	0	0.00	0.00			
6b37	20-50	0	-	0.00	0.00	3	0.78	0.10
	50-100	3	-	0.78	0.10			
	0-20	11	0	1.66	1.66			
6b42	20-50	0	-	0.00	0.00	11	1.66	1.66
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b48	20-50	0	-	0.00	0.00	5	1.36	0.17
	50-100	5	-	1.36	0.17			
	0-20	0	0	0.00	0.00			
6b54	20-50	0	-	0.00	0.00	3	0.43	0.02
	50-100	3	-	0.43	0.02			
	0-20	9	19	1.48	1.48			
6b56	20-50	0	-	0.00	0.00	28	1.48	1.48
	50-100	0	-	0.00	0.00			
6b61	0-20	0	13	1.77	1.77	18	1.97	1.78

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential & Commercial Erosion Losses	CV (£m)	PV (£m)
	20-50	0	-	0.00	0.00			
	50-100	5	-	0.20	0.01			
	0-20		0	0.00	0.00			
6b64	20-50	0	-	0.00	0.00	2	0.30	0.04
	50-100	1	-	0.29	0.04			
	0-20	3	0	0.22	0.22			
6b71	20-50	0	-	0.00	0.00	3	0.22	0.22
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.48	0.28			
6b73	20-50	0	-	0.00	0.00	2	0.48	0.28
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.45	0.27			
6b74	20-50	0	-	0.00	0.00	2	0.45	0.27
	50-100	0	-	0.00	0.00			
	0-20	6	0	0.97	0.84			
6b78	20-50	0	-	0.00	0.00	7	1.27	0.87
	50-100	1	-	0.29	0.02			
	0-20	I	0	0.03	0.03			
6c02	20-50	0	-	0.00	0.00	1	0.03	0.03
	50-100	0	-	0.00	0.00			
	0-20	13	I	1.35	0.87			
6c08	20-50	0	-	0.00	0.00	14	1.35	0.87
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.28	0.18			
6c09	20-50	0	-	0.00	0.00	1	0.28	0.18
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.32	0.30			
6cll	20-50	0	-	0.00	0.00	2	0.32	0.30
	50-100	0	-	0.00	0.00			
6c16	0-20	I	0	0.14	0.07	3	0.59	0.19

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Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also Floodable	CV (£m)	PV (£m)	Total No. Residential & Commercial Erosion Losses	CV (£m)	PV (£m)
	20-50	2	-	0.45	0.12			
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.27	0.17			
6c26	20-50	0	-	0.00	0.00	2	0.27	0.17
	50-100	0	-	0.00	0.00			
	0-20	19	0	2.40	2.40			
6c39	20-50	0	-	0.00	0.00	19	2.40	2.40
	50-100	0	-	0.00	0.00			
	0-20	89	0	12.32	12.32			
6c42	20-50	0	-	0.00	0.00	89	12.32	12.32
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.05	0.03			
6c43	20-50	0	-	0.00	0.00	1	0.05	0.03
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.59	0.35			
6c45	20-50	0	-	0.00	0.00	2	0.59	0.35
	50-100	0	-	0.00	0.00			

H.1.2 Summary of Preferred Plan Erosion Losses (Damages Avoided)

The following data takes into account the impacts of preferred policies on all units where erosion losses under the NAI scenario to determine the damages that would be avoided (if any) by adopting and implementing the preferred policies. This also demonstrates residual damages where properties at risk of flooding would remain at flood risk, though not necessarily remain at risk of erosion.

Table 4 – Combined Residential & Commercial Erosion Losses under the Preferred Plan (note, for brevity, only those policy units in which erosion losses occur are presented in this table)

Policy Unit #	Epoch	No. Lost to Epoch Erosion	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties	Damages Avoided	
#		LIUSIOII	Floodable			Protected under Preferred Plan	CV (£m)	PV (£m)
	0-20	I	0	0.18	0.18			
5g03	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.00	0.00			
5g04	20-50	3	-	0.37	0.09	0	0.18	0.18
	50-100	8	-	1.42	0.18			
	0-20		0	80.0	0.08			
5g07	20-50	0	-	0.00	0.00	0	0.08	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g09	20-50	3	-	0.49	0.15	0	0.00	0.00
	50-100	2	-	0.18	0.02			
	0-20	0	0	0.00	0.00			
5g10	20-50	2	-	0.51	0.13	0	0.00	0.00
	50-100	6	-	1.29	0.11			
	0-20	3	6	1.82	1.47			
5gl l	20-50	2	-	0.51	0.15	0	0.00	0.00
	50-100	13	-	2.53	0.24			
5g12	0-20	0	0	0.00	0.00	0	0.00	0.00
	20-50	0	-	0.00	0.00			

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Policy Unit	Epoch	No. Lost to Epoch Erosion	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties Protested under	Damages Avoided	
#			Floodable			Protected under Preferred Plan	CV (£m)	PV (£m)
	50-100	3	-	0.68	0.09	<u> </u>		
	0-20	0	0	0.00	0.00			
5g13	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	7	-	2.23	0.19			
	0-20	0	0	0.00	0.00			
5g14	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	27	-	4.75	0.49			
	0-20	0	0	0.00	0.00			
5g17	20-50	0	-	0.00	0.00	5	2.79	1.56
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g18	20-50	3	-	0.46	0.10	50	8.88	2.09
	50-100	П	-	2.42	0.24			
	0-20	0	2	0.00	0.00			
5g19	20-50	0	-	0.00	0.00	62	11.76	2.42
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
5g20	20-50	0	-	0.00	0.00	64	11.76	2.42
	50-100	0	-	0.00	0.00			
	0-20	0	3	0.26	0.26	_		
5g21	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	40	3.80	3.80			
5g22	20-50	0	-	0.00	0.00	99	6.62	6.62
	50-100	0	-	0.00	0.00			
6a07	0-20	0	0	0.00	0.00	0	0.00	0.00
	20-50	I	-	0.30	0.06			

Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties _	Damages	Avoided
"		Liosion	Floodable			Protected under Preferred Plan	CV (£m)	PV (£m)
_	50-100	I	-	0.30	0.02	_		
	0-20	0	17	2.67	2.67			
6a12	20-50	0	-	0.00	0.00	90	24.25	6.23
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a13	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	4	-	0.73	0.06			
	0-20	0	0	0.00	0.00			
6a15	20-50	6	-	0.76	0.28	0	0.00	0.00
	50-100	1	-	0.21	0.02			
	0-20	0	0	0.00	0.00			
6a 18	20-50	3	-	0.70	0.33	0	0.00	0.09
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.51	0.32			
6a20	20-50	9	-	2.18	0.57	0	0.00	0.00
	50-100	4	-	0.90	0.10			
	0-20	0	0	0.00	0.00			
6a21	20-50	0	-	0.00	0.00	231	30.04	16.89
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a22	20-50	0	-	0.00	0.00	89	10.91	10.04
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.35	0.35			
6a23	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
6a25	0-20	0	0	0.00	0.00	4	0.70	0.70
	20-50	0	-	0.00	0.00			

Policy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties	Damages	Avoided
#		Erosion	Floodable			Protected under Preferred Plan	CV (£m)	PV (£m)
	50-100	0	-	0.00	0.00	<u> </u>		
	0-20	I	0	0.16	0.16			
6a28	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a29	20-50	0	-	0.00	0.00	66	8.54	0.73
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a30	20-50	10	-	1.37	0.32	0	0.00	0.00
	50-100	78	-	12.98	1.18			
	0-20	0	0	0.00	0.00			
6a32	20-50	0	-	0.00	0.00	6	0.42	0.25
	50-100	0	-	0.00	0.00			
	0-20	0	65	9.38	9.38			
6a36	20-50	0	-	0.00	0.00	5	1.23	0.13
	50-100	0	-	0.00	0.00			
	0-20	ı	0	0.16	0.16			
6a37	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a41	20-50	0	-	0.00	0.00	75	10.29	0.80
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6a42	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	25	-	3.58	0.50			
6b36	0-20	0	0	0.00	0.00	0	0.00	0.00
	20-50	0	-	0.00	0.00			

olicy Unit #	Epoch	No. Lost to Erosion	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties	Damages	Avoided
#	·	Erosion	Floodable	` '	` ,	Protected under Preferred Plan	CV (£m)	PV (£m)
	50-100	39	-	5.20	0.42	<u> </u>		
	0-20	0	0	0.00	0.00			
6b37	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	3	-	0.78	0.10			
	0-20	П	0	1.66	1.66			
6b42	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b48	20-50	0	-	0.00	0.00	5	1.36	0.17
	50-100	0	-	0.00	0.00			
	0-20	0	0	0.00	0.00			
6b54	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	3	-	0.43	0.02			
	0-20	0	19	0.42	0.42			
6b56	20-50	9	-	1.05	0.53	0	0.00	0.52
	50-100	0	-	0.00	0.00			
	0-20	0	13	1.77	1.77			
6b61	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	5	-	0.20	0.01			
	0-20	0	0	0.00	0.00			
6b6 4	20-50	0	-	0.00	0.00	2	0.30	0.04
	50-100	0	-	0.00	0.00			
	0-20	3	0	0.22	0.22			
6b71	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
6b73	0-20	2	0	0.48	0.28	0	0.00	0.00
	20-50	0	-	0.00	0.00			

Policy Unit	Epoch	No. Lost to	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties	Damages	Avoided
#	·	Erosion	Floodable	,	` ,	Protected under Preferred Plan	CV (£m)	PV (£m)
_	50-100	0	-	0.00	0.00	<u> </u>		
	0-20	2	0	0.45	0.27			
6b74	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	6	0	0.97	0.84			
6b78	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	1	-	0.29	0.02			
	0-20	1	0	0.03	0.03			
6c02	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	13	1	1.35	0.87			
6c08	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.28	0.18			
6c09	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.32	0.30			
6cll	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	I	0	0.14	0.07			
6c16	20-50	2	-	0.45	0.12	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.27	0.17			
6c26	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
6c39	0-20	19	0	2.40	2.40	0	0.00	0.00
	20-50	0	-	0.00	0.00			

Durlston Head to Rame Head SMP2 Appendix H – Economic Appraisal and Sensitivity Testing

Policy Unit	Epoch	No. Lost to Erosion	No. Lost to Erosion but also	CV (£m)	PV (£m)	Total No. Residential Properties _	Damages	Avoided
#		El OSIOII	Floodable			Protected under Preferred Plan	CV (£m)	PV (£m)
	50-100	0	-	0.00	0.00	_		
	0-20	0	0	0.00	0.00			
6c42	20-50	0	-	0.00	0.00	89	12.32	12.32
	50-100	0	-	0.00	0.00			
-	0-20	I	0	0.05	0.03			
6c43	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			
	0-20	2	0	0.59	0.35			·
6c45	20-50	0	-	0.00	0.00	0	0.00	0.00
	50-100	0	-	0.00	0.00			

H.1.3 Summary of No Active Intervention Flooding Losses

The following data presents the value of property and agricultural land at risk of flooding.

Table 5 – Residential and Commercial Property, and Agricultural Land Flood Losses (note, for brevity, only those policy units in which flood losses occur are presented in this table).

	Policy Unit	Resid	dential	Comr	nercial		esidential mercial)	Agı	ricultural Lar	nd Area Floo	oded (Hecta	res)	Total cost of agricultural land lost CV (£m)
	•	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	iost CV (Liii)
5g15	Furzy Cliff to Preston Beach (Rock Groyne)	45	7.90	2	1.00	47	8.90	0.00	0.00	76.19	0.00	0.00	0.94
5g16	Preston Beach (Rock Groyne) to Weymouth (Stone Pier) (includes Weymouth Harbour)	858	159.77	375	85.89	1233	245.66	0.00	0.00	0.08	0.00	0.00	0.00
5g21	Small Mouth to Osprey Quay (Portland Harbour)	0	0.00	2	0.34	2	0.34	0.00	0.00	0.00	0.00	0.00	0.00
5g22	Osprey Quay (Portland Harbour) to Grove Point	2	0.30	8	4.44	10	4.74	0.00	0.00	0.00	0.00	0.00	0.00
6a02	Chiswell to Chesil Beach (Northern end of Osprey Quay)	70	12.57	87	3.23	157	15.79	0.00	0.00	0.00	0.00	0.00	0.00
6a03	Chesil Beach (to Wyke Narrows)	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6a04	Chesil Beach and The Fleet	0	0.00	I	0.00	I	0.00	0.00	0.00	32.26	0.24	0.00	0.40
6a05	Abbotsbury to Cogden Beach	3	0.69	2	0.25	5	0.93	0.00	0.00	0.98	0.00	0.00	0.01
6a07	Hive Beach (Burton Bradstock)	I	0.30	0	0.00	I	0.30	0.00	0.00	0.00	0.00	0.00	0.00
6a09	Freshwater Beach	15	3.15	9	0.79	24	3.94	0.00	0.00	18.11	0.00	0.00	0.22
6all	West Bay (East Beach to eastern	3	0.63	2	0.50	5	1.12	0.00	0.54	9.30	41.17	0.00	0.63



	Policy Unit		dential	Comr	mercial		esidential mercial)	Agı	ricultural Lar	nd Area Floo	oded (Hectai	res)	Total cost of agricultural land
	1 0.1. 3 / 0.1.10	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
	pier)												
6a12	West Bay (West Beach from eastern pier) to West Cliff (East) (includes West Bay Harbour)	260	47.54	92	5.91	352	53.46	0.00	0.61	9.63	42.36	0.00	0.65
6a18	Charmouth	3	0.54	I	0.03	4	0.57	0.00	0.00	6.01	5.52	0.00	0.14
6a21	Broad Ledge (Lyme Regis) to The Cobb (Lyme Regis)	0	0.00	8	0.21	8	0.21	0.00	0.00	0.00	0.00	0.00	0.00
6a25	Axe Estuary (Mouth Breakwater to Axmouth North)	0	0.00	0	0.00	0	0.00	0.00	0.00	0.02	0.00	0.00	0.00
6a26	Axe Estuary (Axmouth North to Seaton North)	4	1.17	0	0.00	4	1.17	0.00	0.67	35.70	108.16	0.00	1.79
6a27	Axe Estuary (Seaton East)	43	7.05	42	3.44	85	10.49	0.00	0.00	0.00	0.09	0.00	0.00
6a29	Axe Estuary (Spit) to Seaton (West)	79	11.16	7	0.34	86	11.49	0.00	0.00	0.00	0.37	0.00	0.00
6a36	Sidmouth	177	26.22	95	13.51	272	39.73	0.00	0.00	0.00	0.00	0.00	0.00
6a39	Otter Estuary (Otterton Ledge to Budleigh Salterton East)	3	0.67	ı	0.01	4	0.68	0.00	6.71	1.16	68.55	0.00	0.95
6a46	Octagon to Exmouth slipway	568	81.69	210	32.76	778	114.45	0.00	0.00	0.00	0.00	0.00	0.00
6a47	Exmouth Spit	166	23.80	4	0.24	170	24.04	0.00	0.00	0.00	0.00	0.00	0.00
6b01	Exe Estuary - Exmouth (west)	999	156.63	239	19.68	1238	176.31	0.00	0.00	0.00	0.00	0.00	0.00
6b02	Exe Estuary - Exmouth (west) to	165	26.44	2	0.09	167	26.54	0.15	0.00	0.63	0.00	0.00	0.01

	Policy Unit		dential	Comr	mercial		esidential mercial)	Agı	ricultural Lar	nd Area Floo	oded (Hectai	·es)	Total cost of agricultural land
	. 55	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
	Lympstone												
6ь03	Exe Estuary - Lympstone	96	15.79	13	0.42	109	16.21	1.65	0.00	18.94	0.00	0.00	0.25
6b04	Exe Estuary - Nutwell Park	I	0.16	0	0.00	I	0.16	0.12	0.00	1.01	0.00	0.00	0.01
6b06	Exe Estuary - Exton	0	0.00	0	0.00	0	0.00	0.91	0.00	15.02	0.00	0.00	0.20
6ь07	Exe Estuary - Exton to Lower Clyst	7	1.35	34	4.26	41	5.61	0.00	0.00	0.00	0.00	0.00	0.00
6ь08	Exe Estuary - Lower Clyst	3	0.43	0	0.00	3	0.43	69.88	0.00	1.11	161.36	0.00	2.87
6ь09	Exe Estuary - Topsham	240	38.49	37	1.74	277	40.23	0.00	0.00	0.00	0.00	0.00	0.00
6b10	Exe Estuary - M5 (east) to St James' Weir	2	0.32	I	0.08	3	0.40	0.00	0.00	0.00	22.06	0.00	0.27
6b11	Exe Estuary - Topsham Sludge beds	I	0.14	20	14.81	21	14.95	0.00	0.00	16.65	93.18	0.00	1.36
6b12	Exe Estuary - St James' Weir to M5 (west)	12	2.23	2	0.92	14	3.15	0.67	0.00	0.00	94.74	0.00	1.18
6b13	Exe Estuary - M5 (west) to Turf Lock	68	19.33	10	1.71	78	21.04	16.44	0.00	0.00	336.68	0.00	4.37
6b14	Exe Estuary - Turf Lock to Powderham	I	0.19	0	0.00	I	0.19	19.15	1.03	0.00	412.20	0.00	5.35
6b15	Exe Estuary - Powderham (south)	0	0.00	ļ	0.05	I	0.05	32.46	2.18	22.98	34.45	0.00	1.14
6b16	Exe Estuary - Starcross	447	81.08	35	1.50	482	82.57	21.99	4.44	32.34	0.00	0.00	0.73
6Ы8	Exe Estuary - Cockwood to The Warren	9	2.41	2	0.24	11	2.65	15.76	0.00	0.13	30.75	0.00	0.58
6b22	Dawlish Warren	95	27.47	34	5.06	129	32.53	0.00	0.00	0.00	0.00	0.00	0.00

	Policy Unit		dential	Comr	nercial		esidential mercial)	Agı	ricultural Lar	nd Area Floo	oded (Hectai	res)	Total cost of agricultural land
	. 69	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
	(West - hard defences)												
6b23	Langstone Rock to Coryton Cove	0	0.00	2	0.30	2	0.30	0.00	0.00	0.00	0.00	0.00	0.00
6b30	Teign Estuary - The Point to Teignmouth and Shaldon Bridge	63	8.77	80	9.27	143	18.03	0.00	0.00	0.00	0.00	0.00	0.00
6b31	Teign Estuary - North Shore (Teignmouth and Shaldon Bridge to Passage House Hotel)	395	57.31	211	12.81	606	70.12	0.00	6.35	21.25	1.20	0.00	0.36
6b32	Teign Estuary - Passage House Hotel to Kingsteignton Road Bridge	223	43.45	81	51.17	304	94.61	0.00	0.17	0.00	29.22	0.00	0.36
6b33	Teign Estuary - Kingsteignton and Newton Abbot	484	74.36	86	12.98	570	87.34	0.00	0.00	0.00	12.41	0.00	0.15
6b34	Teign Estuary - South Shore (Newton Abbot to Shaldon)	8	1.56	4	1.49	12	3.05	0.00	0.00	7.60	9.62	0.00	0.21
6b35	Teign Estuary - Shaldon	323	53.66	48	2.79	371	56.45	0.00	0.00	0.00	0.00	0.00	0.00
6b36	Shaldon (The Ness) to Maidencombe (North)	0	0.00	4	0.06	4	0.06	0.00	0.00	0.00	0.00	0.00	0.00
6b48	Beacon Cove to Torre Abbey Sands (Torquay Harbour)	0	0.00	57	8.59	57	8.59	0.00	0.00	0.00	0.00	0.00	0.00
6b49	Torre Abbey Sands	3	0.57	3	0.00	6	0.57	0.00	0.00	0.00	0.00	0.00	0.00
6b50	Corbyn's Head	0	0.00		0.00	I	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Policy Unit	Resid	dential	Comr	nercial		esidential mercial)	Agr	ricultural Lar	nd Area Floo	oded (Hectai	res)	Total cost of agricultural land
	.	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
6b55	Hollicombe Head to Roundham Head	160	22.67	191	29.29	351	51.97	0.00	0.00	0.00	0.00	0.00	0.00
6b56	Goodrington Sands	I	0.14	22	0.46	23	0.60	0.00	0.00	0.00	0.00	0.00	0.00
6b57	Goodrington Sands to Broadsands	43	5.88	0	0.00	43	5.88	0.00	0.00	0.00	0.00	0.00	0.00
6b58	Broadsands	0	0.00	5	0.39	5	0.39	0.00	0.00	0.76	0.00	0.00	0.01
6b60	Churston Cove (East) to Shoalstone Point	8	1.29	3	0.08	11	1.37	0.00	0.00	0.00	0.00	0.00	0.00
6b64	Dart Estuary - Kingswear (South) to Waterhead Creek	12	1.64	3	1.06	15	2.70	0.00	0.00	0.00	0.00	0.00	0.00
6b66	Dart Estuary - Greenway Viaduct to Totnes South (east bank)	7	1.85	13	0.90	20	2.75	0.00	0.91	10.53	8.98	0.00	0.25
6b67	Dart Estuary - Totnes	385	56.70	197	30.48	582	87.18	0.00	2.79	0.26	29.24	0.00	0.40
6b68	Dart Estuary - Totnes South (west bank) to Dartmouth (North)	18	3.59	2	0.25	20	3.84	0.00	1.69	8.09	19.32	0.00	0.36
6b69	Dart Estuary - Dartmouth (North) to Halftide Rock	310	44.04	278	23.13	588	67.17	0.00	0.00	0.00	0.00	0.00	0.00
6b73	Blackpool Sands	0	0.00	0	0.00	0	0.00	0.00	0.29	0.00	4.65	0.00	0.06
6b75	Strete to Torcross North (Slapton Sands)	0	0.00	0	0.00	0	0.00	0.00	0.00	0.84	0.00	0.00	0.01
6b76	Torcross North to Limpet Rocks	22	3.53	6	0.87	28	4.40	0.00	0.00	0.00	0.00	0.00	0.00
6b78	Beesands	31	4.49	3	0.48	34	4.97	0.00	0.00	0.00	0.00	0.00	0.00

	Policy Unit	Resid	dential	Comr	nercial		esidential mercial)	Ag	ricultural Lar	nd Area Floo	oded (Hectai	res)	Total cost of agricultural land
	Toney office	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
6c03	Salcombe Harbour (Limebury Point to Kingsbridge Estuary - Scoble Point)	5	1.10	I	0.03	6	1.13	0.00	0.00	0.49	2.64	0.00	0.04
6c04	Kingsbridge Estuary East (Scoble Point to Kingsbridge)	20	3.80	0	0.00	20	3.80	0.00	4.47	3.85	14.61	0.00	0.28
6c05	Kingsbridge Estuary - Kingsbridge	78	12.17	96	7.96	174	20.13	0.00	0.00	0.58	0.00	0.00	0.01
6c06	Kingsbridge Estuary West (Kingsbridge to Snapes Point)	0	0.00	I	0.00	I	0.00	0.00	5.05	1.49	0.00	0.00	0.08
6c07	Salcombe (Snapes Point to Splat Cove Point)	44	6.58	67	4.00	111	10.58	0.00	0.00	2.09	0.14	0.00	0.03
6c08	Splat Cove Point to Bolt Head	I	0.14	I	0.01	2	0.15	0.00	0.00	0.00	0.00	0.00	0.00
6c11	Thurlestone Rock to Warren Point	0	0.00	0	0.00	0	0.00	0.00	1.93	23.88	9.02	0.00	0.43
6c13	Avon Estuary (East Bank - Mouth to Stadbury Farm)	0	0.00	0	0.00	0	0.00	0.00	0.00	5.35	2.85	0.00	0.10
6c14	Avon Estuary (Upstream section - Stadbury Farm to Stakes Hill)	9	1.90	4	0.27	13	2.17	0.00	0.00	0.38	53.48	2.88	0.70
6c15	Avon Estuary (West Bank - Stakes Hill to Warren Point (Bigbury-on-Sea))	0	0.00	0	0.00	0	0.00	0.00	0.00	3.12	0.00	0.00	0.04
6c16	Warren Point (Bigbury-on-Sea) to Challaborough	0	0.00	0	0.00	0	0.00	0.00	0.00	0.14	2.37	0.00	0.03

	Policy Unit	Resid	dential	Comi	mercial		esidential mercial)	Agı	ricultural Lar	nd Area Floo	oded (Hectai	res)	Total cost of agricultural land
	. 69	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
	(West)												
6c18	Erme Estuary (East Bank - Mouth to Orcheton Wood)	2	0.43	I	0.03	3	0.46	0.00	0.00	3.79	7.44	0.00	0.14
6c19	Erme Estuary (Upstream section - Orcheton Wood to Pamflete Wood)	0	0.00	0	0.00	0	0.00	0.00	0.00	4.40	53.77	0.00	0.72
6c20	Erme Estuary (West Bank - Pamflete Wood to Mouth)	0	0.00	0	0.00	0	0.00	0.00	0.74	0.86	3.24	0.00	0.06
6c23	Yealm Estuary (East Bank - Passage House to Newton Ferrers North)	15	2.71	2	0.03	17	2.74	0.00	0.00	2.58	5.29	0.00	0.10
6c24	Yealm Estuary (East Bank - Newton Ferrers North to Fish House Plantation)	0	0.00	0	0.00	0	0.00	0.00	0.00	0.37	0.96	0.00	0.02
6c25	Yealm Estuary (West Bank - Fish House Plantation to Season Point)	5	1.13	I	0.03	6	1.16	0.00	0.06	12.52	4.65	0.00	0.21
6c27	Wembury Point to Mount Batten Breakwater	I	0.29	0	0.00	I	0.29	0.00	0.00	0.00	0.00	0.00	0.00
6c28	Plym Estuary - Mount Batten Breakwater to Marsh Mills	32	6.09	58	24.01	90	30.11	0.00	0.79	0.00	0.00	0.00	0.01
6c29	Plym Estuary - Marsh Mills to Coxside	666	99.13	162	66.00	828	165.13	0.00	0.00	0.00	0.00	0.00	0.00
6c30	Coxside to Devil's Point	40	5.70	37	3.11	77	8.81	0.00	0.00	0.00	0.00	0.00	0.00

	Policy Unit		dential	Comr	nercial		esidential mercial)	Agı	ricultural Lar	nd Area Floo	oded (Hectai	res)	Total cost of agricultural land
	.	No.	CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
6c31	Tamar Estuary - Devil's Point to Tamerton Lake	224	31.83	22	7.15	246	38.98	0.00	0.00	13.10	0.00	0.00	0.16
6c32	Tamar Estuary - Tamerton Lake to Gunnislake (upper Tamar Estuary East)	П	2.30	4	0.07	15	2.37	0.00	35.92	114.98	59.07	0.00	2.60
6c33	Tamar Estuary - Gunnislake to Saltash North (upper Tamar Estuary West)	64	12.83	8	0.13	72	12.96	0.00	24.47	85.67	118.69	0.00	2.83
6c34	Tamar Estuary - Saltash	14	2.11	5	0.45	19	2.56	0.00	0.00	0.00	0.00	0.00	0.00
6c35	Tamar Estuary - River Lynher (Saltash South to Torpoint North (Jupiter Point))	61	10.73	17	0.76	78	11.49	0.00	31.72	64.30	14.11	0.00	1.36
6c36	Tamar Estuary - Torpoint North (Jupiter Point) to Torpoint South (Landing Stage)	8	1.17	0	0.00	8	1.17	0.00	0.00	0.00	0.00	0.00	0.00
6c37	Tamar Estuary - St John's Lake (Torpoint South (Landing Stage) to Millbrook (Mill Farm))	6	1.20	3	0.17	9	1.37	0.00	6.47	3.52	0.00	0.00	0.12
6c38	Tamar Estuary - St John's Lake (Millbrook (Mill Farm) to Millbrook (Hancock's Lake))	73	12.24	35	0.98	108	13.21	0.00	1.97	9.37	0.00	0.00	0.14

Durlston Head to Rame Head SMP2 Appendix H – Economic Appraisal and Sensitivity Testing

	Policy Unit	Residential		Commercial		Total (Residential + Commercial)		Agricultural Land Area Flooded (Hectares)					Total cost of agricultural land
	1 oney offic		CV (£m)	No.	CV (£m)	No.	CV (£m)	Grade I	Grade 2	Grade 3	Grade 4	Grade 5	lost CV (£m)
6c41	Mount Edgcumbe to Picklecombe Point	2	0.32	0	0.00	2	0.32	0.00	0.00	0.00	0.00	0.00	0.00
6c44	Kingsand/Cawsand	64	10.15	6	0.31	70	10.45	0.00	0.00	0.00	0.00	0.00	0.00

Annex H.2 – Supporting Economic Appraisal Data for SMP Costs

This annex presents the full preferred scenario costs developed for the SMP. As outlined in the assumptions below, these are generated from national generic costs and do not reflect local conditions. These figures should not be considered out of context. The costs presented in section H4 have been taken from available strategy and/or scheme documents where available, as these represent a more accurate and site specific consideration of implementation costs. The figures presented in this Annex have only been used where other, more detailed, cost information is not available. As such the costs presented here differ from those in section H4 for frontages where more detailed costs are available.

Basis for cost assumptions:

- Replacement costs taken from SMP Procedural Guidance (Defra, 2006). This sets replacement costs
 for linear structures (e.g. revetments, seawalls) at £2.7million/km and cost for beach management
 schemes at £5.1million/km. Groyne field costs and embankments are taken as £0.6million/km;
- Maintenance costs taken from NADNAC study prepared for Defra (2004). This sets annual
 maintenance cost for linear structures and for groyne fields at £10k/km and for beach schemes
 £20k/km;
- Assumed design life (and thus full scheme reconstruction will be required) as 100 years for linear defences, 50 years for beach schemes and 30 years for groynes.
- Allow for maintenance as a linear cost, although realistically less in early years and increasing in latter years of scheme life;
- Allowance for increase in costs due to climate change: Period 20-50 years costs factored up by 1.5 x present day rates; Period 50-100 years costs factored up by 2.0x present day rates;
- Capital costs have had 20% added to them for preliminaries, and 9% for contractors fees;
- Optimism bias (at 60%) to be applied to <u>all</u> costs when examining BCR, to reflect uncertainty in broad level analysis at SMP scale;
- For "low cost" defence structures use same rate as groynes; and,
- Rates for typical defences types used:

Defense Type	Cost	per km
Defence Type	Replacement	Maintenance
Beach recharge	£5,100,000	£20,000
Seawall	£2,700,000	£10,000
Rock revetment	£2,700,000	£10,000
Groyne	£600,000	£10,000
Embankment	£600,000	£10,000
Steel sheet piling	£2,081,000	£10,000
Flood wall	£1,186,000	£10,000
Cliff Stabilisation*	£200,000	£20,000

*Note: Cliff stabilisation costs are highly site dependent.

H.2.1 Defence Costs for Preferred policies

For brevity, the following table presents the cost estimates only for those policy units where the preferred policies involve intervention during the 100 year time-frame of the SMP (i.e. managed realignment or hold the line are proposed), as those areas where no active intervention is proposed would not incur any cost of intervention.

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	0-20	HTL	0.00	0.14	0.14	0.10				
5g10	20-50	NAI	0.00	0.00	0.00	0.00	0.00	0.14	0.10	0.17
	50-100	NAI	0.00	0.00	0.00	0.00				
	0-20	HTL	0.88	0.06	0.94	0.50				
5g13	20-50	MR	0.00	0.11	0.11	0.04	0.88	0.42	0.57	0.91
	50-100	HTL	0.00	0.25	0.25	0.03				
	0-20	HTL	5.03	1.06	6.10	3.89				_
5g15	20-50	HTL	0.05	2.41	2.45	0.80	18.68	8.77	7.26	11.62
	50-100	MR	13.60	5.31	18.91	2.57				
	0-20	HTL	2.12	1.16	3.28	2.41				
5g16	20-50	HTL	12.71	4.41	17.12	6.95	38.85	16.17	12.09	19.35
	50-100	HTL	24.01	10.60	34.61	2.73				
	0-20	HTL	0.14	0.15	0.29	0.23				
5g17	20-50	HTL	0.00	0.23	0.23	0.07	3.67	0.75	0.56	0.89
	50-100	HTL	3.53	0.38	3.91	0.25				
	0-20	MR	0.00	0.00	0.00	0.00				
5g18	20-50	MR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	50-100	MR	0.00	0.00	0.00	0.00				
	0-20	HTL	0.09	0.13	0.22	0.18				
5g19	20-50	HTL	0.00	0.29	0.29	0.10	0.26	1.07	0.38	0.61
	50-100	HTL	0.17	0.65	0.82	0.10				
	0-20	MR	0.00	0.00	0.00	0.00				
5g20	20-50	MR	0.00	0.00	0.00	0.00	0.35	1.35	0.21	0.34
	50-100	MR	0.35	1.35	1.70	0.21				

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	0-20	HTL	0.00	0.08	0.08	0.06				
5g21	20-50	HTL	2.12	0.18	2.30	0.99	10.59	1.44	2.84	4.54
	50-100	HTL	8.48	1.18	9.65	1.79				
	0-20	HTL	0.00	0.68	0.68	0.50				
5g22	20-50	HTL	9.54	1.53	11.07	5.29	15.89	5.61	7.41	11.85
	50-100	HTL	6.36	3.40	9.76	1.62				
	0-20	HTL	0.49	0.60	1.09	0.93				
6a02	20-50	HTL	2.44	1.35	3.79	1.67	2.94	4.93	2.92	4.67
	50-100	HTL	0.00	2.99	2.99	0.32				
	0-20	MR	0.00	0.15	0.15	0.12				_
6a03	20-50	MR	0.00	0.36	0.36	0.12	0.00	1.23	0.31	0.50
	50-100	MR	0.00	0.72	0.72	0.08				
	0-20	MR	0.00	0.04	0.04	0.03				
6a09	20-50	MR	0.49	0.63	1.12	0.45	0.49	2.11	0.63	1.01
	50-100	MR	0.00	1.44	1.44	0.15				
	0-20	HTL	1.53	0.12	1.65	1.57				
6a I I	20-50	HTL	0.00	0.27	0.27	0.09	5.00	1.24	2.41	3.86
	50-100	MR	3.46	0.85	4.31	0.75				
	0-20	HTL	2.67	0.59	3.25	2.76				
6a12	20-50	HTL	0.00	1.32	1.32	0.43	27.68	4.83	5.72	9.15
	50-100	HTL	25.02	2.93	27.94	2.53				
4 1=	0-20	HTL	0.00	0.09	0.09	0.07			0.07	0.11
6a15	20-50	NAI	0.00	0.00	0.00	0.00	0.00	0.09	0.07	0.11
	50-100	NAI	0.00	0.00	0.00	0.00				
	0-20	HTL	0.00	0.08	0.08	0.06	0.44		0.50	0.00
6a18	20-50	MR	0.44	0.64	1.08	0.39	0.44	1.88	0.58	0.92
	50-100	MR	0.00	1.16	1.16	0.13		1.70	. 75	2.00
6a20	0-20	HTL	1.33	0.21	1.54	1.48	1.33	1.73	1.75	2.80

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	20-50	HTL	0.00	0.47	0.47	0.15				
	50-100	HTL	0.00	1.05	1.05	0.11				
	0-20	HTL	3.67	0.39	4.06	2.55				
6a21	20-50	HTL	0.35	0.88	1.23	0.41	17.36	3.22	4.52	7.23
	50-100	HTL	13.34	1.95	15.29	1.55				
	0-20	HTL	0.00	0.14	0.14	0.10				
6a22	20-50	MR	1.06	0.35	1.41	0.45	1.06	1.37	0.64	1.02
	50-100	HTL	0.00	0.88	0.88	0.09				
	0-20	HTL	0.00	0.31	0.31	0.23				
6a25	20-50	HTL	3.55	0.70	4.25	1.54	3.55	2.56	1.93	3.09
	50-100	HTL	0.00	1.55	1.55	0.16				
	0-20	MR	0.75	0.09	0.83	0.58				
6a26	20-50	MR	0.00	0.43	0.43	0.14	0.75	1.46	0.82	1.31
	50-100	MR	0.00	0.95	0.95	0.10				
	0-20	HTL	0.00	0.08	0.08	0.06				
6a27	20-50	HTL	0.88	0.17	1.06	0.38	0.88	0.63	0.48	0.77
	50-100	HTL	0.00	0.38	0.38	0.04				
	0-20	HTL	6.56	0.63	7.19	3.87				
6a29	20-50	HTL	0.00	1.41	1.41	0.46	14.57	5.16	5.56	8.90
	50-100	HTL	8.00	3.13	11.13	1.23				
/-30	0-20	HTL	0.00	0.11	0.11	0.08	2.07	0.00		. 77
6a30	20-50	MR	2.97	0.25	3.22	0.97	2.97	0.92	1.11	1.77
	50-100	MR	0.00	0.56	0.56	0.06				
(-22	0-20	HTL	0.04	0.01	0.04	0.04	0.30	0.07	0.12	0.10
6a32	20-50	HTL	0.00	0.02	0.02	0.01	0.39	0.07	0.12	0.19
6a35	50-100 0-20	HTL MR	0.35 1.33	0.05	0.40	0.07 1.39	6.00	0.66	2.04	3.26
	20-50	MR MR	2.00	0.08	1.41 2.18	0.47	0.00	0.00	2.U 1	3.26

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	50-100	MR	2.67	0.40	3.07	0.18				
	0-20	HTL	0.10	0.54	0.64	0.48				
6a36	20-50	HTL	0.21	0.81	1.02	0.33	0.52	2.70	0.97	1.55
	50-100	HTL	0.21	1.35	1.56	0.16				
	0-20	MR	0.67	0.09	0.75	0.54				
6a39	20-50	MR	0.00	0.38	0.38	0.12	0.67	1.32	0.76	1.21
	50-100	MR	0.00	0.85	0.85	0.09				
	0-20	HTL	3.14	0.00	3.14	1.63				
6a41	20-50	HTL	0.00	0.40	0.40	0.13	15.02	2.18	3.08	4.92
	50-100	HTL	11.87	1.78	13.65	1.31				
	0-20	HTL	1.60	0.17	1.77	0.96				
6a44	20-50	HTL	0.00	0.38	0.38	0.12	1.60	1.40	1.17	1.88
	50-100	HTL	0.00	0.85	0.85	0.09				
	0-20	HTL	1.88	0.40	2.28	1.27				
6a45	20-50	MR	0.00	0.45	0.45	0.15	1.88	1.85	1.53	2.44
	50-100	HTL	0.00	1.00	1.00	0.11				
	0-20	HTL	0.00	0.32	0.32	0.24				
6a46	20-50	HTL	0.00	0.72	0.72	0.23	1.51	2.64	0.72	1.15
	50-100	HTL	1.51	1.60	3.11	0.25				
	0-20	HTL	0.45	0.76	1.21	1.00				
6a47	20-50	HTL	0.00	1.80	1.80	0.59	0.45	6.56	2.01	3.22
	50-100	HTL	0.00	4.00	4.00	0.43				
	0-20	HTL	0.00	0.29	0.29	0.21				
6b01	20-50	HTL	0.17	0.64	0.82	0.26	0.17	2.36	0.63	1.00
	50-100	HTL	0.00	1.43	1.43	0.15				
	0-20	HTL	0.00	0.29	0.29	0.21				
6b02	20-50	HTL	0.00	0.65	0.65	0.21	0.51	2.39	0.63	1.01
	50-100	HTL	0.51	1.45	1.96	0.20				

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	0-20	HTL	0.00	0.20	0.20	0.15				
6b03	20-50	HTL	0.00	0.45	0.45	0.15	0.35	1.65	0.43	0.70
	50-100	HTL	0.35	1.00	1.35	0.14				
	0-20	HTL	0.00	0.16	0.16	0.12				
6b04	20-50	HTL	0.00	0.36	0.36	0.12	0.28	1.32	0.35	0.56
	50-100	HTL	0.28	0.80	1.08	0.11				
	0-20	HTL	0.00	0.21	0.21	0.15				
6b05	20-50	HTL	0.00	0.47	0.47	0.15	0.37	1.73	0.46	0.73
	50-100	HTL	0.37	1.05	1.42	0.15				
	0-20	HTL	0.14	0.19	0.33	0.28				
6b06	20-50	HTL	0.00	0.45	0.45	0.15	0.14	1.64	0.53	0.85
	50-100	HTL	0.00	1.00	1.00	0.11				
	0-20	HTL	0.71	0.13	0.84	0.80				
6b07	20-50	HTL	0.00	0.32	0.32	0.10	0.71	1.15	0.98	1.57
	50-100	HTL	0.00	0.70	0.70	0.07				
	0-20	MR	0.15	0.15	0.30	0.26				
6b08	20-50	MR	0.00	0.36	0.36	0.12	0.15	1.31	0.46	0.74
	50-100	MR	0.00	0.80	0.80	0.09				
	0-20	HTL	3.26	0.40	3.66	3.55				
6b09	20-50	HTL	0.00	0.94	0.94	0.31	3.26	3.44	4.08	6.52
	50-100	HTL	0.00	2.10	2.10	0.22				
41.10	0-20	HTL	1.31	0.10	1.41	0.78		7.25	2.05	2.20
6b10	20-50	HTL	0.00	2.25	2.25	0.73	1.31	7.35	2.05	3.28
-	50-100	HTL	0.00	5.00	5.00	0.53				
/ L11	0-20	HTL	0.00	0.34	0.34	0.25	0.00	2.01	0.00	1.20
6b I I	20-50	HTL	0.00	0.77	0.77	0.25	0.89	2.81	0.82	1.30
/L 12	50-100	HTL	0.89	1.70	2.59	0.32	0.15	4.05	1 22	2.11
6b12	0-20	HTL	0.15	0.60	0.75	0.56	0.15	4.95	1.32	2.11

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	20-50	HTL	0.00	1.35	1.35	0.44				
	50-100	HTL	0.00	3.00	3.00	0.32				
	0-20	HTL	0.00	0.60	0.60	0.44				_
6b13	20-50	HTL	0.12	1.35	1.47	0.47	0.12	4.95	1.23	1.97
	50-100	HTL	0.00	3.00	3.00	0.32				
	0-20	HTL	0.00	0.46	0.46	0.34				
6b14	20-50	MR	0.00	1.04	1.04	0.34	0.79	3.80	0.99	1.59
	50-100	HTL	0.79	2.30	3.09	0.32				
	0-20	HTL	0.00	0.20	0.20	0.15				
6b15	20-50	HTL	0.00	0.45	0.45	0.15	0.34	1.65	0.43	0.69
	50-100	HTL	0.34	1.00	1.34	0.14				
	0-20	HTL	0.00	0.40	0.40	0.29				
6b16	20-50	HTL	0.14	0.90	1.04	0.33	0.14	3.30	0.84	1.34
	50-100	HTL	0.00	2.00	2.00	0.21				
	0-20	HTL	0.13	0.10	0.22	0.19				
6b17	20-50	HTL	0.00	0.23	0.23	0.07	0.13	0.82	0.32	0.51
	50-100	HTL	0.00	0.50	0.50	0.05				
41.10	0-20	HTL	0.00	0.46	0.46	0.34	0.70	2.00		
6b18	20-50	HTL	0.00	1.04	1.04	0.34	0.79	3.80	0.99	1.59
	50-100	HTL	0.79	2.30	3.09	0.32				
6b20	0-20 20-50	HTL	0.00	0.64	0.64	0.47 0.00	0.00	0.64	0.47	0.75
6 D2U		tbd tbd	0.00 0.00	0.00 0.00	0.00 0.00	0.00	0.00	0.64	0.47	0.75
	50-100 0-20	HTL	0.00	0.00	0.00	0.69				
6b21	20-50	tbd	0.00	0.00	0.00	0.00	0.00	0.94	0.69	1.11
OUZI	20-30 50-100	tba tbd	0.00	0.00	0.00	0.00	0.00	0.77	0.67	1.11
6b22	0-20	HTL	0.00	0.38	0.00	0.00	0.00	0.38	0.28	0.45
UULL	20-50	tbd	0.00	0.38	0.36	0.28	0.00	0.30	0.20	0т3
	- 20-30	100	0.00	0.00	0.00	0.00				

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	50-100	tbd	0.00	0.00	0.00	0.00				
	0-20	HTL	18.01	0.77	18.78	16.21				
6b23	20-50	HTL	0.00	2.30	2.30	0.75	18.01	8.16	17.50	28.00
	50-100	HTL	0.00	5.10	5.10	0.54				
-	0-20	HTL	5.16	0.20	5.36	4.48				
6b24	20-50	HTL	0.00	0.66	0.66	0.21	5.16	2.32	4.85	7.75
	50-100	HTL	0.00	1.46	1.46	0.16				
	0-20	HTL	7.42	0.27	7.69	6.21				
6b25	20-50	HTL	0.00	0.94	0.94	0.31	7.42	3.32	6.74	10.79
	50-100	HTL	0.00	2.10	2.10	0.22				
	0-20	MR	1.98	0.16	2.14	1.66				
6b26	20-50	HTL	0.00	0.60	0.60	0.20	1.98	2.09	1.99	3.19
	50-100	HTL	0.00	1.33	1.33	0.14				
	0-20	HTL	3.88	0.14	4.03	3.25				
6b27	20-50	HTL	9.44	1.13	10.57	3.82	22.30	4.49	8.20	13.12
	50-100	HTL	8.97	3.22	12.19	1.13				
	0-20	HTL	0.00	0.00	0.00	0.00				
6b28	20-50	HTL	3.47	0.61	4.08	1.44	4.09	2.64	1.73	2.77
	50-100	HTL	0.63	2.03	2.66	0.28				
	0-20	MR	0.00	1.10	1.10	0.81				
6b29	20-50	MR	12.80	2.48	15.27	5.53	12.80	9.08	6.92	11.07
	50-100	MR	0.00	5.50	5.50	0.58				
	0-20	HTL	4.77	0.27	5.04	2.68				
6b30	20-50	HTL	0.00	0.61	0.61	0.20	4.77	2.23	3.02	4.83
	50-100	HTL	0.00	1.35	1.35	0.14				
	0-20	HTL	0.00	1.10	1.10	0.81				
6b31	20-50	HTL	12.80	2.48	15.27	5.53	12.80	9.08	6.92	11.07
	50-100	HTL	0.00	5.50	5.50	0.58		-		

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	0-20	HTL	0.00	0.36	0.36	0.26				
6b32	20-50	MR	0.94	0.35	1.29	0.58	0.94	1.51	0.93	1.50
	50-100	MR	0.00	0.80	0.80	0.09				
	0-20	HTL	1.10	0.28	1.38	0.78				
6b33	20-50	HTL	0.00	0.63	0.63	0.21	1.10	2.31	1.13	1.81
	50-100	HTL	0.00	1.40	1.40	0.15				
	0-20	HTL	0.68	0.17	0.86	0.48				
6b34	20-50	HTL	0.00	0.39	0.39	0.13	0.68	1.44	0.70	1.13
	50-100	HTL	0.00	0.87	0.87	0.09				
	0-20	HTL	0.00	0.36	0.36	0.26				
6b35	20-50	HTL	0.00	0.81	0.81	0.26	0.00	2.97	0.72	1.15
	50-100	HTL	0.00	1.80	1.80	0.19				
	0-20	HTL	2.79	0.12	2.91	2.51				
6b41	20-50	HTL	0.00	0.36	0.36	0.12	2.79	1.26	2.71	4.34
	50-100	HTL	0.00	0.79	0.79	0.08				
	0-20	HTL	3.25	0.00	3.25	1.69				
6b46	20-50	HTL	0.00	0.41	0.41	0.14	3.25	1.33	1.92	3.08
	50-100	HTL	0.00	0.92	0.92	0.10				
	0-20	HTL	6.09	0.09	6.18	3.81				
6b48	20-50	HTL	0.00	0.78	0.78	0.25	6.09	2.59	4.25	6.80
	50-100	HTL	0.00	1.73	1.73	0.18				
	0-20	HTL	0.00	0.00	0.00	0.00				
6b49	20-50	HTL	5.30	0.30	5.60	2.04	5.30	1.30	2.14	3.43
	50-100	HTL	0.00	1.00	1.00	0.11				
	0-20	HTL	1.59	0.00	1.59	0.83				
6b51	20-50	HTL	0.00	0.20	0.20	0.07	1.59	0.65	0.94	1.50
	50-100	HTL	0.00	0.45	0.45	0.05				
6b53	0-20	HTL	0.00	0.00	0.00	0.00	2.38	0.59	0.96	1.54

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	20-50	HTL	2.38	0.14	2.52	0.92				
	50-100	HTL	0.00	0.45	0.45	0.05				
	0-20	HTL	0.00	0.00	0.00	0.00				_
6b55	20-50	HTL	30.61	1.80	32.41	11.78	43.95	7.80	13.55	21.69
	50-100	HTL	13.34	6.00	19.34	1.78				
	0-20	HTL	0.00	0.16	0.16	0.12				
6b56	20-50	MR	0.26	0.10	0.35	0.16	0.26	0.48	0.30	0.48
	50-100	HTL	0.00	0.22	0.22	0.02				
	0-20	HTL	0.00	0.09	0.09	0.07				
6Ь58	20-50	MR	0.71	0.26	0.97	0.44	0.71	0.96	0.57	0.91
	50-100	HTL	0.00	0.60	0.60	0.06				
	0-20	HTL	0.00	0.70	0.70	0.51				
6b60	20-50	HTL	7.54	1.57	9.10	3.29	7.54	5.75	4.17	6.68
	50-100	HTL	0.00	3.49	3.49	0.37				
	0-20	HTL	0.00	0.18	0.18	0.14	•			
6b64	20-50	HTL	2.14	0.41	2.55	0.92	2.14	1.52	1.16	1.85
	50-100	HTL	0.00	0.92	0.92	0.10				
41.4=	0-20	HTL	0.00	0.74	0.74	0.54		4.11		2.27
6b65	20-50	HTL	0.00	1.67	1.67	0.54	0.00	6.11	1.48	2.37
	50-100	HTL	0.00	3.70	3.70	0.39				
6b66	0-20 20-50	HTL HTL	0.00 0.00	0.10 0.23	0.10 0.23	0.07 0.07	0.00	0.83	0.20	0.32
0000	20-30 50-100	HTL	0.00	0.23	0.23	0.07	0.00	0.03	0.20	0.32
-	0-20	HTL	6.52	0.84	7.36	4.01				
6b67	20-50	HTL	0.00	1.90	1.90	0.62	6.52	6.96	5.08	8.12
0007	20-30 50-100	HTL	0.00	4.22	4.22	0.62	0.52	0.70	3.00	0.12
6b68	0-20	HTL	0.00	0.30	0.30	0.43	0.00	2.48	0.60	0.96
0000	20-50	HTL	0.00	0.68	0.68	0.22	0.00	2.10	0.00	0.70
		1111	0.00	0.00	0.00	V				

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	50-100	HTL	0.00	1.50	1.50	0.16				
	0-20	HTL	0.00	0.44	0.44	0.32				
6b69	20-50	HTL	5.12	0.99	6.11	2.21	5.12	3.63	2.77	4.43
	50-100	HTL	0.00	2.20	2.20	0.23				
	0-20	HTL	0.00	0.04	0.04	0.03				
6b70	20-50	HTL	0.00	0.09	0.09	0.03	0.00	0.33	0.08	0.13
	50-100	HTL	0.00	0.20	0.20	0.02				
	0-20	MR	0.00	0.20	0.20	0.15				
6b75	20-50	MR	0.00	0.45	0.45	0.15	0.00	1.65	0.40	0.64
	50-100	MR	0.00	1.00	1.00	0.11				
	0-20	HTL	1.34	0.20	1.54	0.84				
6b76	20-50	HTL	0.00	0.44	0.44	0.14	5.58	1.39	1.55	2.48
	50-100	MR	4.24	0.75	4.99	0.56				
	0-20	HTL	1.06	0.48	1.54	0.90				
6b78	20-50	HTL/ MR	0.00	0.68	0.68	0.22	1.06	2.66	1.28	2.05
	50-100	MTL/ MR	0.00	1.50	1.50	0.16				
	0-20	HTL	3.00	0.17	3.17	1.69				
6c03	20-50	HTL	0.00	0.38	0.38	0.12	3.00	1.40	1.90	3.04
	50-100	HTL	0.00	0.85	0.85	0.09				
	0-20	HTL	5.16	0.31	5.47	2.91				
6c04	20-50	HTL	0.00	0.71	0.71	0.23	5.16	2.59	3.31	5.30
	50-100	HTL	0.00	1.57	1.57	0.17				
	0-20	HTL	7.06	0.40	7.46	3.97				
6c05	20-50	HTL	0.00	0.90	0.90	0.29	7.06	3.30	4.47	7.16
	50-100	HTL	0.00	2.00	2.00	0.21				
6c06	0-20	HTL	1.13	0.06	1.19	0.63	1.13	0.53	0.72	1.15

Policy Unit #	Epoch	Policy	Capital CV (£m) includes 20% for preliminaries and 9% for contractor fees	Maintenance CV (£m)	Total CV (£m)	Total PV (£m)	Whole Life Capital CV (£m)	Whole Life Maintenance CV (£m)	Total Whole Life PV (£m)	Total Whole Life Cost PV+60% Optimism Bias (£m)
	20-50	HTL	0.00	0.14	0.14	0.05				
	50-100	HTL	0.00	0.32	0.32	0.03				
	0-20	HTL	10.59	0.60	11.19	5.95				
6c07	20-50	HTL	0.00	1.35	1.35	0.44	10.59	4.95	6.71	10.74
	50-100	HTL	0.00	3.00	3.00	0.32				
	0-20	MR	0.59	0.11	0.69	0.56				
6c14	20-50	MR	0.00	0.34	0.34	0.11	0.59	1.19	0.75	1.21
	50-100	MR	0.00	0.75	0.75	0.08				
	0-20	HTL	2.95	0.38	3.33	1.81				
6c23	20-50	HTL	0.00	0.85	0.85	0.28	2.95	3.14	2.29	3.67
	50-100	HTL	0.00	1.90	1.90	0.20				
	0-20	HTL	12.03	1.65	13.68	7.47				
6c28	20-50	HTL	0.00	3.71	3.71	1.21	12.03	13.61	9.56	15.29
	50-100	HTL	0.00	8.25	8.25	0.88				
	0-20	HTL	8.14	1.05	9.19	5.01				
6c29	20-50	HTL	0.00	2.36	2.36	0.77	8.14	8.66	6.34	10.14
	50-100	HTL	0.00	5.25	5.25	0.56				
	0-20	HTL	0.00	0.78	0.78	0.57				
6c30	20-50	HTL	20.36	1.76	22.11	9.49	20.36	6.43	10.48	16.76
	50-100	HTL	0.00	3.90	3.90	0.41				
	0-20	HTL	0.00	2.50	2.50	1.84				
6c31	20-50	HTL	56.95	5.63	62.57	26.78	56.95	18.38	29.70	47.53
	50-100	HTL	0.00	10.25	10.25	1.09				
	0-20	MR	0.93	0.12	1.05	0.57				
6c32	20-50	MR	0.00	0.27	0.27	0.09	0.93	0.84	0.71	1.13
	50-100	MR	0.00	0.45	0.45	0.05				
6c33	0-20	MR	1.24	0.39	1.63	1.21	1.24	2.68	1.61	2.57
	20-50	MR	0.00	0.71	0.71	0.23				

50-100 HTL 0.00 2.00 2.00 0.21 0-20 HTL 1.47 0.19 1.66 0.91 6c35 20-50 HTL 0.00 0.43 0.43 0.14 1.47 1.57 50-100 HTL 0.00 0.95 0.95 0.10 0-20 HTL 8.83 0.70 9.53 5.11 6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 50-100 HTL 0.00 3.50 3.50 0.37 0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 0.00 0.32 0.32 0.17 0.00 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.32 0.10 1.49 1.17	4.47 7.16 1.15 1.83 5.99 9.59		7.06 3.30	7.06			1.58	0.00	MD		
6c34 20-50 HTL 0.00 0.90 0.90 0.29 7.06 3.30 50-100 HTL 0.00 2.00 2.00 0.21 0-20 HTL 1.47 0.19 1.66 0.91 6c35 20-50 HTL 0.00 0.43 0.43 0.14 1.47 1.57 50-100 HTL 0.00 0.95 0.95 0.10	1.15 1.83		7.06 3.30	7.06	3.97						
50-100 HTL 0.00 2.00 2.00 0.21 0-20 HTL 1.47 0.19 1.66 0.91 6c35 20-50 HTL 0.00 0.43 0.43 0.14 1.47 1.57 50-100 HTL 0.00 0.95 0.95 0.10 0-20 HTL 8.83 0.70 9.53 5.11 6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 50-100 HTL 0.00 3.50 3.50 0.37 0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 <th>1.15 1.83</th> <th></th> <th>7.06 3.30</th> <th>7.06</th> <th></th> <th>7.46</th> <th>0.40</th> <th>7.06</th> <th>HTL</th> <th>0-20</th> <th></th>	1.15 1.83		7.06 3.30	7.06		7.46	0.40	7.06	HTL	0-20	
0-20 HTL 1.47 0.19 1.66 0.91 6c35 20-50 HTL 0.00 0.43 0.43 0.14 1.47 1.57 50-100 HTL 0.00 0.95 0.95 0.10 0-20 HTL 8.83 0.70 9.53 5.11 6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 9.53 50-100 HTL 0.00 3.50 3.50 0.37 0.37 0.32 0.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 0.00 1.60 1.60 0.17 0-20 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.71 0.71 0.08 0-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL		1.15			0.29	0.90	0.90	0.00	HTL	20-50	6c34
6c35 20-50 HTL 0.00 0.43 0.43 0.14 1.47 1.57 50-100 HTL 0.00 0.95 0.95 0.10 0-20 HTL 8.83 0.70 9.53 5.11 6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 50-100 HTL 0.00 3.50 3.50 0.37 0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83		1.15			0.21	2.00	2.00	0.00	HTL	50-100	
50-100 HTL 0.00 0.95 0.95 0.10 0-20 HTL 8.83 0.70 9.53 5.11 6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 50-100 HTL 0.00 3.50 3.50 0.37 0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.72 0.23 2.10 2.64 50-100 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83		1.15			0.91	1.66	0.19	1.47	HTL	0-20	
0-20 HTL 8.83 0.70 9.53 5.11 6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 50-100 HTL 0.00 3.50 3.50 0.37 0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83	5.99 9.59		.47 1.57	1.47	0.14	0.43	0.43	0.00	HTL	20-50	6c35
6c36 20-50 HTL 0.00 1.58 1.58 0.51 8.83 5.78 <th< th=""><th>5.99 9.59</th><th></th><th></th><th></th><th>0.10</th><th>0.95</th><th>0.95</th><th>0.00</th><th>HTL</th><th>50-100</th><th></th></th<>	5.99 9.59				0.10	0.95	0.95	0.00	HTL	50-100	
50-100 HTL 0.00 3.50 3.50 0.37 0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 0.00 1.60 1.60 0.17 0-20 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83	5.99 9.59				5.11	9.53	0.70	8.83	HTL	0-20	
0-20 HTL 2.10 0.32 2.42 1.33 6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 0.00 1.60 1.60 0.17 0-20 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83		5.99	.83 5.78	8.83	0.51	1.58	1.58	0.00	HTL	20-50	6c36
6c37 20-50 HTL 0.00 0.72 0.72 0.23 2.10 2.64 50-100 HTL 0.00 1.60 1.60 0.17 0-20 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83					0.37	3.50	3.50	0.00	HTL	50-100	
50-100 HTL 0.00 1.60 1.60 0.17 0-20 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83					1.33	2.42	0.32	2.10	HTL	0-20	
0-20 HTL 1.49 0.14 1.64 0.88 6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83	1.73 2.77	1.73	10 2.64	2.10	0.23	0.72	0.72	0.00	HTL	20-50	6c37
6c38 20-50 HTL 0.00 0.32 0.32 0.10 1.49 1.17 50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83					0.17	1.60	1.60	0.00	HTL	50-100	
50-100 HTL 0.00 0.71 0.71 0.08 0-20 HTL 1.17 0.30 1.47 0.83					0.88	1.64	0.14	1.49	HTL	0-20	
0-20 HTL 1.17 0.30 1.47 0.83	1.06 1.70	1.06	.49 1.17	1.49	0.10	0.32	0.32	0.00	HTL	20-50	6c38
					0.08	0.71	0.71	0.00	HTL	50-100	
6c39 20-50 HTL 0.00 0.67 0.67 0.22 1.17 2.46					0.83	1.47	0.30	1.17	HTL	0-20	
****	1.20 1.93	1.20	.17 2.46	1.17	0.22	0.67	0.67	0.00	HTL	20-50	6c39
50-100 HTL 0.00 1.49 1.49 0.16					0.16	1.49	1.49	0.00	HTL	50-100	
0-20 HTL 0.28 0.07 0.35 0.20					0.20	0.35	0.07	0.28	HTL	0-20	
6c40 20-50 HTL 0.00 0.16 0.16 0.05 0.28 0.59	0.29 0.47	0.29	0.28 0.59	0.28	0.05	0.16	0.16	0.00	HTL	20-50	6c 4 0
50-100 HTL 0.00 0.36 0.36 0.04					0.04	0.36	0.36	0.00	HTL	50-100	
0-20 HTL 2.83 0.16 2.99 1.59					1.59	2.99	0.16	2.83	HTL	0-20	
6c42 20-50 HTL 0.00 0.36 0.36 0.12 2.83 1.32	1.79 2.86	1.79	83 1.32	2.83	0.12	0.36	0.36	0.00	HTL	20-50	6c42
50-100 HTL 0.00 0.80 0.80 0.09					0.09	0.80	0.80	0.00	HTL	50-100	
0-20 HTL 2.74 0.16 2.89 1.54					1.54	2.89	0.16	2.74	HTL	0-20	
6c44 20-50 HTL 0.00 0.35 0.35 0.11 2.74 1.28	1.73 2.77	1.73	74 1.28	2.74	0.11	0.35	0.35	0.00	HTL	20-50	6c44
50-100 HTL 0.00 0.78 0.78 0.08					0.08	0.78	0.78	0.00	HTL	50-100	

Annex H.3 – Supporting information for Sensitivity Testing

Proposed climate change scenarios (Defra, 2006)6:

Area	Assumed Vertical Land	Net Sea level Rise (mm/yr)					
	Movement (mm/yr)	1990- 2025	2025-2055	2055-2085	2085-2115		
South West and Wales	South West and Wales -0.5			8.0 11.5 14.5			
Indicative Sensitivity Ran volume (within estuaries		+10%	+20%				
Indicative Sensitivity Ran Height / Offshore wave	+5%		+10%				

Consequences for the South Devon and Dorset coast (in mOD) with regards to Defra (2006) climate change predictions, based upon Admiralty Tide Tables 2009 as the present day levels:

	MHWS				MSL				
Location	Present	to 2025 (+60mm)	to 2055 (+230m m)	to 2105 (+620m m)	Present	to 2025 (+60mm)	to 2055 (+230m m)	to 2105 (+620m m)	
Plymouth (Devonport)	2.28	2.34	2.51	2.90	0.10	0.16	0.33	0.72	
Salcombe	2.25	2.31	2.48	2.87	0.09	0.15	0.32	0.71	
Dartmouth	2.28	2.34	2.51	2.90	0.31	0.37	0.54	0.93	
Torquay	2.20	2.26	2.43	2.82	0.20	0.26	0.43	0.82	
Teignmouth (Approaches)	1.95	2.01	2.18	2.57	0.17	0.23	0.40	0.79	
Exmouth (Approaches)	2.16	2.22	2.39	2.78	0.07	0.13	0.30	0.69	
Lyme Regis	1.95	2.01	2.18	2.57	0.09	0.15	0.32	0.71	
Bridport (West Bay)	1.85	1.91	2.08	2.47	0.07	0.13	0.30	0.69	
Chesil Cove	1.90	1.96	2.13	2.52	0.17	0.23	0.40	0.79	
Portland	1.17	1.23	1.40	1.79	0.11	0.17	0.34	0.73	
Lulworth Cove	1.18	1.24	1.41	1.80	0.18	0.24	0.41	0.80	

⁶ Defra (2006) Flood and Coastal Defence Appraisal Guidance, FCDPAG3 Economic Appraisal, Supplementary Note to Operating Authorities – Climate Change Impacts, October 2006.

