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Introduction

-This spreadsheet provides indicative costs and FCERM GIA funding amounts for the draft leading options identified for the Christchurch FCERM Strategy. It comprises the following sheets:

- Strategy frontage: the full strategy frontage (ODU 1-18)
- Strategy frontage - BCP: BCP area (ODU 1-13)
- Strategy frontage - NFDC: NFDC area (ODU 14-18)
- Strategy frontage cumulative: the full strategy frontage (ODU 1-18) in cumulative terms
- ODU 1 to 18: individual ODU cost and funding breakdowns

Cost information:

- Base date (year 0) is 2024
- Whole life costs have been estimated for the options to support the option development and appraisal for the strategy. These include capital scheme costs and maintenance costs
- Capital costs have been estimated from different sources, including from generic coastal defence cost build-ups developed using engineering price books such as SPONS, the Environment Agency cost guidance, and example costs from schemes elsewhere
- Optimism bias of 60% typically applied to capital cost estimates. There are some minor exceptions to this as outlined in economics appendix
- Costs are strategic and will be subject to change when more detail is considered and site specific information is available during scheme development and appraisal
- When delivering the options, the timing of schemes and maintenance could also be subject to change depending on asset deterioration / onset of risk / non-GIA funding availability
- Costs are provided in cash costs (undiscounted) and present value costs (discounted). Present value cost discounting based on HM Treasury Green book standard discount rates
- In the funding profile tables, costs are provided for multi-year periods, either 5 years or 10 years. The costs specified are the total costs for the full 5 or 10 year period.
- All costs rounded to nearest thousand £

Funding information

- Indicative amounts of GIA funding have been calculated for the major capital scheme recommended by the options
- If more than one capital scheme included as part of an option, funding has only been calculated for the largest scheme in an option (by cost). More GIA funding could potentially be available for the whole option.
- Several limitations / assumptions were made in estimating the indicative funding amounts, such as assuming a jump forward in time to reset base year, no change to funding rules etc. - refer to the leading options report for more details

Strategy Frontage

Leading Option	Description	Indicative option cost (€k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		6,257	9,546	38,050	5,739	66,570	1,785	4,908	28,658	3,494	4,553	46,529	18,557	11,346	7,770	6,702	260,464
Local	(With National where no Local)	22,909	23,866	66,250	7,455	39,812	1,041	6,408	14,790	2,955	4,667	57,066	30,209	10,455	19,007	6,323	313,213
Backup	(With National where no Backup)	5,775	8,533	5,444	18,827	72,442	1,674	5,414	1,073	13,938	11,442	23,155	16,094	44,322	4,133	18,461	250,727

Leading Option	Description	Indicative option cost (€k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		6,157	7,750	26,926	3,383	33,395	707	1,656	8,794	914	1,029	9,051	2,640	1,146	580	408	104,536
Local	(With National where no Local)	22,811	19,049	46,926	4,416	19,978	414	2,191	4,529	770	1,054	11,005	4,359	1,021	1,423	380	140,326
Backup	(With National where no Backup)	5,677	6,702	3,805	11,104	35,986	665	1,820	313	3,680	2,529	4,353	2,047	4,451	315	1,160	84,607

Leading Option	Description	Indicative GIA funding for major capital scheme (€k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		0	1,355	3,215	0	9,396	0	0	5,389	0	0	5,096	0	0	0	0	24,451
Local	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	2,536	5,056	3,215	0	6,606	0	0	0	0	0	2,868	0	0	0	0	20,281

Leading Option	Description	Indicative non-GIA funding contribution required (€k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		6,257	8,191	34,835	5,739	57,174	1,785	4,908	23,269	3,494	4,553	41,433	18,557	11,346	7,770	6,702	236,013
Local	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	20,373	18,810	63,035	7,455	33,206	1,041	6,408	14,790	2,955	4,667	54,198	30,209	10,455	19,007	6,323	292,932

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260,464	260,464
313,213	313,213
250,727	250,727

104,536	104,536
140,326	140,326
84,607	84,607

24,451	24,451
20,281	20,281

236,013	236,013
292,932	292,932

*Indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)
 For funding amounts and shortfalls, it is likely that a combination of national and local options will be delivered across the strategy frontage, therefore funding and shortfall amounts will be between the values stated

Strategy Frontage - BCP

Leading Option	Description	Indicative option cost (£k) - cash																	Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99			
National		5,051	1,011	4,791	5,232	65,700	999	415	308	2,835	3,894	42,945	3,144	9,778	577	5,152	151,832		
Local	(With National where no Local)	21,703	930	32,952	6,909	39,153	382	368	14,131	2,296	4,008	49,080	16,470	8,887	14,542	4,770	216,581		
Backup	(With National where no Backup)	4,569	1,011	4,791	17,117	29,051	987	403	296	13,054	8,252	17,269	13,352	26,230	554	15,360	152,296		

Leading Option	Description	Indicative option cost (£k) - PV																	Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99			
National		5,031	830	3,372	3,100	32,987	397	145	92	749	886	8,459	402	994	42	317	57,803		
Local	(With National where no Local)	21,685	768	23,346	4,110	19,668	154	127	4,338	605	911	9,663	2,366	869	1,070	289	89,969		
Backup	(With National where no Backup)	4,551	830	3,372	10,110	14,569	393	141	88	3,459	1,825	3,395	1,694	2,503	41	981	47,952		

Leading Option	Description	Indicative GI A funding for major capital scheme (£k) - cash*																	Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99			
National		0	0	0	0	9,396	0	0	0	0	0	5,096	0	0	0	0	14,492		
Local	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	2,536	0	0	0	6,606	0	0	0	0	0	2,868	0	0	0	0	12,010		

Leading Option	Description	Indicative non-GI A funding contribution required (£k) - cash*																	Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99			
National		5,051	1,011	4,791	5,232	56,304	999	415	308	2,835	3,894	37,849	3,144	9,778	577	5,152	137,340		
Local	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	19,167	930	32,952	6,909	32,547	382	368	14,131	2,296	4,008	46,212	16,470	8,887	14,542	4,770	204,571		

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137,340
204,571

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)
 For funding amounts and shortfalls, it is likely that a combination of national and local options will be delivered across the strategy frontage, therefore funding and shortfall amounts will be between the values stated

Strategy Frontage - NFDC

Leading Option	Description	Indicative option cost (€k) - cash																Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99		
National		1,206	8,535	33,259	507	870	786	4,493	28,350	659	659	3,584	15,413	1,568	7,193	1,550	108,632	
Local	(With National where no Local)	1,206	22,936	33,298	546	659	659	6,040	659	659	7,986	13,739	1,568	4,465	1,553	96,632		
Backup	(With National where no Backup)	1,206	7,522	653	1,710	43,391	687	5,011	777	884	3,190	5,886	2,742	18,092	3,579	3,101	98,431	

Leading Option	Description	Indicative option cost (€k) - PV																Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99		
National		1,126	6,920	23,554	283	408	310	1,511	8,702	165	143	592	2,238	152	538	91	46,733	
Local	(With National where no Local)	1,126	18,281	23,580	306	310	260	2,064	191	165	143	1,342	1,993	152	353	91	50,357	
Backup	(With National where no Backup)	1,126	5,872	433	994	21,417	272	1,679	225	221	704	958	353	1,948	274	179	36,655	

Leading Option	Description	Indicative GiA funding for major capital scheme (€k) - cash*																Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99		
National		0	1,355	3,215	0	0	0	0	5,389	0	0	0	0	0	0	0	9,959	
Local**	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	0	5,056	3,215	0	0	0	0	0	0	0	0	0	0	0	0	8,271	

Leading Option	Description	Indicative non-GiA funding contribution required (€k) - cash*																Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99		
National		1,206	7,180	30,044	507	870	786	4,493	22,961	659	659	3,584	15,413	1,568	7,193	1,550	98,673	
Local**	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	1,206	17,880	30,083	546	659	659	6,040	659	659	7,986	13,739	1,568	4,465	1,553	88,361		

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98,673
88,361

*Indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)
 For funding amounts and shortfalls, it is likely that a combination of national and local options will be delivered across the strategy frontage, therefore funding and shortfall amounts will be between the values stated

Strategy Frontage - Cumulative

Leading Option	Description	Indicative option cost (€k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		6,257	15,803	53,853	59,592	126,162	127,947	132,855	161,513	165,007	169,560	216,089	234,646	245,992	253,762	260,464	260,464
Local	(With National where no Local)	22,909	46,775	113,025	120,480	160,292	161,333	167,741	182,531	185,486	190,153	247,219	277,428	287,883	306,890	313,213	313,213
Backup	(With National where no Backup)	5,775	14,308	19,752	38,579	111,021	112,695	118,109	119,182	133,120	144,562	167,717	183,811	228,133	232,266	250,727	250,727

Leading Option	Description	Indicative option cost (€k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		6,157	13,907	40,833	44,216	77,611	78,318	79,974	88,768	89,682	90,711	99,762	102,402	103,548	104,128	104,536	104,536
Local	(With National where no Local)	22,811	41,860	88,786	93,202	113,180	113,594	115,785	120,314	121,084	122,138	133,143	137,502	138,523	139,946	140,326	140,326
Backup	(With National where no Backup)	5,677	12,379	16,184	27,288	63,274	63,939	65,759	66,072	69,752	72,281	76,634	78,681	83,132	83,447	84,607	84,607

Leading Option	Description	Indicative GiA funding for major capital scheme (€k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		0	1,355	4,570	4,570	13,966	13,966	13,966	19,355	19,355	19,355	24,451	24,451	24,451	24,451	24,451	24,451
Local	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	2,536	7,592	10,807	10,807	17,413	17,413	17,413	17,413	17,413	17,413	20,281	20,281	20,281	20,281	20,281	20,281

Leading Option	Description	Indicative non-GiA funding contribution required (€k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National		6,257	14,448	49,283	55,022	112,196	113,981	118,889	142,158	145,652	150,205	191,638	210,195	221,541	229,311	236,013	236,013
Local	(Note = where there is no Local Option, the National funding and timing has been used in the profile)	20,373	39,183	102,218	109,673	142,879	143,920	150,328	165,118	168,073	172,740	226,938	257,147	267,602	286,609	292,932	292,932

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236,013
292,932

*Indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)
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ODU 1 - Hengistbury Head East

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Do Minimum: small scale repairs to existing defences	Main	Main	Main	Main	Main	Main	Main								
Local	Managed Realignment: maintain toe defences and undertake beach recycling from epoch 1. Erosion of cliff would be controlled but not stopped entirely	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach

Leading Option	Description	Indicative option cost (£k) - cash															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)							Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Minimum: small scale repairs to existing defences	23.0	46.0	91.0	91.0	183.0	183.0	37.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	654.0
Local	Managed Realignment: maintain toe defences and undertake beach recycling from epoch 1. Erosion of cliff would be controlled but not stopped entirely	40.0	54.0	2,098.0	54.0	40.0	54.0	40.0	2,112.0	40.0	54.0	94.0	2,152.0	94.0	2,152.0	94.0	9,172.0

Leading Option	Description	Indicative option cost (£k) - PV															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)							Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Minimum: small scale repairs to existing defences	21.0	36.0	61.0	51.0	86.0	72.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	340.0
Local	Managed Realignment: maintain toe defences and undertake beach recycling from epoch 1. Erosion of cliff would be controlled but not stopped entirely	37.0	43.0	1,485.0	30.0	19.0	21.0	13.0	648.0	10.0	12.0	16.0	314.0	9.0	158.0	5.0	2,820.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)							Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Minimum: small scale repairs to existing defences	Not calculated - no major capital scheme															0
Local	Managed Realignment: maintain toe defences and undertake beach recycling from epoch 1. Erosion of cliff would be controlled but not stopped entirely	Not calculated - GIA to be capped at National option															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 2 - Mudeford Sandbank

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing													
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89
National	Do Minimum: small scale repairs to existing defences	Main	Main	Main	Main	Main	Main	Main							
Local	Maintain with Adaptation: sustain the FCERM service of the Sandbank by holding its form over time and aiming to keep it broadly in its current position. Achieved through beach nourishment and defence maintenance. Property level protection to permanent properties on the Sandbank	Main, Beach	Main, Beach	Refurb, PLP, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, PLP, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, PLP, Main, Beach	Main, Beach	PLP, Main, Beach	Main, Beach

Leading Option	Description	Indicative option cost (£k) - cash															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						Total	
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89		90-99
National	Do Minimum: small scale repairs to existing defences	46.0	91.0	183.0	183.0	365.0	365.0	73.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,306.0
Local	Maintain with Adaptation: sustain the FCERM service of the Sandbank by holding its form over time and aiming to keep it broadly in its current position. Achieved through beach nourishment and defence maintenance. Property level protection to permanent properties on the Sandbank	23.0	37.0	3,688.0	37.0	37.0	37.0	3,688.0	37.0	37.0	3,057.0	3,725.0	1,566.0	3,725.0	74.0	19,805.0	

Leading Option	Description	Indicative option cost (£k) - PV															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						Total	
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89		90-99
National	Do Minimum: small scale repairs to existing defences	43.0	72.0	121.0	102.0	172.0	144.0	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	680.0	
Local	Maintain with Adaptation: sustain the FCERM service of the Sandbank by holding its form over time and aiming to keep it broadly in its current position. Achieved through beach nourishment and defence maintenance. Property level protection to permanent properties on the Sandbank	21.0	30.0	2,613.0	21.0	18.0	15.0	13.0	1,133.0	10.0	8.0	602.0	546.0	148.0	274.0	4.0	5,456.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*														
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	
National	Do Minimum: small scale repairs to existing defences	Not calculated - no major capital scheme														0
Local	Maintain with Adaptation: sustain the FCERM service of the Sandbank by holding its form over time and aiming to keep it broadly in its current position. Achieved through beach nourishment and defence maintenance. Property level protection to permanent properties on the Sandbank	Not calculated - GIA to be capped at National option														0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 3 - Christchurch Harbour south

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)				
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Adaptation / Resilience A: Property level protection	Main	Main	PLP, Main	Main	Main	Main	Main	PLP, Main	Main	Main	Main	PLP, Main	Main	PLP, Main	Main
Local	Adaptation / Resilience C: As per Adaptation / Resilience A, but with localised erosion defences to the access road to Hengistbury Head and around Wick historic landfill site	Main	Main	Scheme, PLP, Main	Main	Main	Main	Main	Scheme, PLP, Main	Main	Main	Main	Scheme, PLP, Main	Main	Scheme, PLP, Main	Main

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Adaptation / Resilience A: Property level protection	11.0	11.0	51.0	11.0	11.0	11.0	11.0	51.0	11.0	11.0	23.0	63.0	23.0	63.0	23.0	385.0
Local	Adaptation / Resilience C: As per Adaptation / Resilience A, but with localised erosion defences to the access road to Hengistbury Head and around Wick historic landfill site	11.0	11.0	557.0	23.0	23.0	23.0	557.0	23.0	23.0	46.0	579.0	46.0	579.0	46.0	2,570.0	

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Adaptation / Resilience A: Property level protection	11.0	9.0	36.0	6.0	5.0	5.0	4.0	16.0	3.0	2.0	4.0	9.0	2.0	5.0	1.0	118.0
Local	Adaptation / Resilience C: As per Adaptation / Resilience A, but with localised erosion defences to the access road to Hengistbury Head and around Wick historic landfill site	11.0	9.0	393.0	13.0	11.0	9.0	8.0	171.0	6.0	5.0	8.0	84.0	4.0	43.0	3.0	778.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Adaptation / Resilience A: Property level protection	Very few properties at risk and funding for PLP/PLR likely to come from different sources															0
Local	Adaptation / Resilience C: As per Adaptation / Resilience A, but with localised erosion defences to the access road to Hengistbury Head and around Wick historic landfill site	Funding for historic landfill / access unlikely to be from GIA. GIA capped at national option															0

*note - indicative funding for major capital scheme in option only (if multiple capital schemes, not all have been assessed)

ODU 4 - Wick

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Sustain C: Raise and lengthen existing setback embankment defence from epoch 1, and then progressively over time to keep pace with sea level rise	Main	Scheme, Main	Main	Main	Scheme, Main	Main	Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Main
Local	Sustain B: As Sustain C, however, repeat maintenance / refurbishments would also be undertaken on the frontline quay wall to prevent erosion of historic landfill	Main	Scheme, Main	Main	Refurb, Main	Scheme, Main	Main	Main	Main	Refurb, Main	Main	Scheme, Main	Refurb, Main	Main	Main	Refurb, Main

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Sustain C: Raise and lengthen existing setback embankment defence from epoch 1, and then progressively over time to keep pace with sea level rise	34.0	606.0	34.0	34.0	905.0	34.0	34.0	34.0	34.0	34.0	1,929.0	68.0	68.0	68.0	68.0	3,984.0
Local	Sustain B: As Sustain C, however, repeat maintenance / refurbishments would also be undertaken on the frontline quay wall to prevent erosion of historic landfill	34.0	606.0	34.0	1,962.0	870.0	34.0	34.0	34.0	1,962.0	34.0	1,905.0	1,996.0	68.0	68.0	1,996.0	11,637.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Sustain C: Raise and lengthen existing setback embankment defence from epoch 1, and then progressively over time to keep pace with sea level rise	32.0	509.0	23.0	19.0	454.0	14.0	12.0	10.0	9.0	7.0	379.0	9.0	7.0	5.0	4.0	1,493.0
Local	Sustain B: As Sustain C, however, repeat maintenance / refurbishments would also be undertaken on the frontline quay wall to prevent erosion of historic landfill	32.0	509.0	23.0	1,169.0	436.0	14.0	12.0	10.0	519.0	7.0	374.0	253.0	7.0	5.0	129.0	3,499.0

Leading Option	Description	Indicative GiA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Sustain C: Raise and lengthen existing setback embankment defence from epoch 1, and then progressively over time to keep pace with sea level rise											735.0					735.0
Local	Sustain B: As Sustain C, however, repeat maintenance / refurbishments would also be undertaken on the frontline quay wall to prevent erosion of historic landfill											775.0					775.0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)
TBC - raising and lengthening embankment in epochs 1 and 2 (smaller intervention relative to epoch 3 major scheme)

ODU 5 - Willow Drive and the Quomps

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve D-F: Raise height of defences to improve SoP from epoch 2. Maintain / replace frontline defence adjacent to historic landfill site at the Quomps (Improve D shown)	Refurb, PLP, Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Refurb, Main	Main	Main	Refurb, Main	Refurb, Main	Main	Refurb, Main
Local	Improve A-C: As per Improve D-F, except defence height would be raised in epoch 1 rather than epoch 2 (Improve B shown)	Scheme/ Refurb, Main	Main	Main	Main	Main	Main	Main	Main	Refurb, Main	Main	Main	Main	Main	Main	Main
Backup	Adaptation / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	PLP, Refurb, Main	Main	Main	PLP, Refurb, Main	Main	Main	Main	Main	Refurb, Main	PLP, Main	Main	Refurb, Main	PLP, Main	Main	Refurb, Main

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve D-F: Raise height of defences to improve SoP from epoch 2. Maintain / replace frontline defence adjacent to historic landfill site at the Quomps (Improve D shown)	3,356.0	23.0	23.0	23.0	19,439.0	23.0	23.0	23.0	2,590.0	23.0	46.0	2,613.0	2,806.0	46.0	2,613.0	33,670.0
Local	Improve A-C: As per Improve D-F, except defence height would be raised in epoch 1 rather than epoch 2 (Improve B shown)	19,936.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	4,401.0	46.0	46.0	46.0	46.0	24,728.0
Backup	Adaptation / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	2,826.0	23.0	23.0	8,321.0	23.0	23.0	23.0	23.0	6,201.0	3,583.0	46.0	6,224.0	5,666.0	46.0	6,224.0	39,275.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve D-F: Raise height of defences to improve SoP from epoch 2. Maintain / replace frontline defence adjacent to historic landfill site at the Quomps (Improve D shown)	3,355.0	18.0	15.0	13.0	9,768.0	9.0	8.0	7.0	686.0	5.0	8.0	331.0	306.0	3.0	170.0	14,702.0
Local	Improve A-C: As per Improve D-F, except defence height would be raised in epoch 1 rather than epoch 2 (Improve B shown)	19,935.0	18.0	15.0	13.0	11.0	9.0	8.0	7.0	6.0	5.0	867.0	6.0	4.0	3.0	3.0	20,910.0
Backup	Adaptation / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	2,825.0	18.0	15.0	4,882.0	11.0	9.0	8.0	7.0	1,644.0	772.0	8.0	788.0	534.0	3.0	405.0	11,929.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve D-F: Raise height of defences to improve SoP from epoch 2. Maintain / replace frontline defence adjacent to historic landfill site at the Quomps (Funding for Improve E shown**)					4,327.0											4,327.0
Local	Improve A-C: As per Improve D-F, except defence height would be raised in epoch 1 rather than epoch 2 (Funding for Improve B shown)	2,536.0															2,536.0
Backup	Adaptation / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding																0.0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

**partnership funding calculations undertaken for Improve B and E.

ODU 6 - River Avon West Bank

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Adaption / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	PLP, Main	Main	Main	Refurb, Main	PLP, Main	Main	Main	Main	Main	Refurb, Main	PLP, Main	Main	Refurb, PLP, Main	Main	Main

Leading Option	Description	Indicative option cost (£k) - cash															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						Total	
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89		90-99
National	Adaption / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	641.0	11.0	11.0	1,589.0	701.0	11.0	11.0	11.0	11.0	1,589.0	953.0	23.0	2,900.0	23.0	23.0	8,508.0

Leading Option	Description	Indicative option cost (£k) - PV															
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						Total	
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89		90-99
National	Adaption / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	641.0	9.0	8.0	948.0	352.0	5.0	4.0	3.0	3.0	363.0	187.0	3.0	273.0	2.0	1.0	2,802.0

Leading Option	Description	Indicative GiA funding for major capital scheme (£k) - cash*														
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	
National	Adaption / Resilience: Maintain frontline defences and undertake property level protection to properties at risk of flooding	Funding for PLP / PLR likely to be from alternative sources														0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 7 - Rossiters Quay

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve A: Raise existing / construct new flood defences in epoch 2	Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Main	Main	Main	Main	Main	Main	Main
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	PLP, Main	Main	Main	Refurb, Main	PLP, Main	Main	Main	Main	Refurb, Main	PLP, Main	Main	Refurb, Main	PLP, Main	Main	Refurb, Main

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Raise existing / construct new flood defences in epoch 2	11.0	11.0	11.0	11.0	8,014.0	23.0	23.0	23.0	23.0	23.0	46.0	46.0	46.0	46.0	46.0	8,403.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	41.0	11.0	11.0	1,821.0	746.0	11.0	11.0	11.0	1,821.0	821.0	23.0	1,833.0	878.0	23.0	1,833.0	9,895.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Raise existing / construct new flood defences in epoch 2	11.0	9.0	8.0	6.0	4,027.0	9.0	8.0	7.0	6.0	5.0	8.0	6.0	4.0	3.0	3.0	4,120.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	41.0	9.0	8.0	1,087.0	375.0	5.0	4.0	3.0	483.0	177.0	4.0	232.0	83.0	2.0	119.0	2,632.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Raise existing / construct new flood defences in epoch 2					630.0											630.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	Funding for PLP / PLR likely to be from alternative sources															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 9 - Stanpit

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

**year 20-24 scheme / refurb is historic landfill defence around Stanpit. Unclear if needed but cost included to be conservative

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)				
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Sustain A: Raise existing / construct new flood defences from epoch 2 and then raise over time to keep pace with sea level rise. Defences would defend Stanpit historic landfill site	Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Main
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	PLP, Main	Main	Main	Refurb, Main	Scheme / refurb**, PLP, Main	Main	Main	Main	Refurb, Main	Main	PLP, Main	Refurb, Main	PLP, Main	Main	Refurb, Main

Leading Option	Description	Indicative option cost (€k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Sustain A: Raise existing / construct new flood defences from epoch 2 and then raise over time to keep pace with sea level rise. Defences would defend Stanpit historic landfill site	34.0	34.0	34.0	34.0	18,910.0	34.0	34.0	34.0	34.0	34.0	6,504.0	68.0	68.0	68.0	68.0	25,992.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	54.0	34.0	34.0	1,811.0	8,945.0	34.0	34.0	34.0	1,811.0	34.0	4,528.0	1,845.0	8,738.0	68.0	1,845.0	29,849.0

Leading Option	Description	Indicative option cost (€k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Sustain A: Raise existing / construct new flood defences from epoch 2 and then raise over time to keep pace with sea level rise. Defences would defend Stanpit historic landfill site	32.0	27.0	23.0	19.0	9,503.0	14.0	12.0	10.0	9.0	7.0	1,281.0	9.0	7.0	5.0	4.0	10,962.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	52.0	27.0	23.0	1,079.0	4,494.0	14.0	12.0	10.0	480.0	7.0	892.0	234.0	823.0	5.0	120.0	8,272.0

Leading Option	Description	Indicative GIA funding for major capital scheme (€k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Sustain A: Raise existing / construct new flood defences from epoch 2 and then raise over time to keep pace with sea level rise. Defences would defend Stanpit historic landfill site					2,985.0											2,985.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	Funding for PLP / PLR likely to be from alternative sources															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 10 - Mundeford

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)				
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve A: Property level protection to properties at risk in epochs 1 and 2. Construct new flood defences in epoch 3 to increase SoP against flooding	PLP, Main	Main	Main	Refurb, Main	PLP, Main	Main	Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Main
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	PLP, Main	Main	Main	Refurb, Main	PLP, Main	Main	Main	Main	Refurb, Main	Main	PLP, Main	Refurb, Main	PLP, Main	Main	Refurb, Main

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Property level protection to properties at risk in epochs 1 and 2. Construct new flood defences in epoch 3 to increase SoP against flooding	763.0	23.0	23.0	3,056.0	1,333.0	23.0	23.0	23.0	23.0	23.0	25,533.0	46.0	46.0	46.0	46.0	31,030.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	761.0	23.0	23.0	3,056.0	1,333.0	23.0	23.0	23.0	3,056.0	23.0	1,856.0	3,079.0	4,136.0	46.0	3,079.0	20,540.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Property level protection to properties at risk in epochs 1 and 2. Construct new flood defences in epoch 3 to increase SoP against flooding	761.0	18.0	15.0	1,823.0	669.0	9.0	8.0	7.0	6.0	5.0	5,036.0	6.0	4.0	3.0	3.0	8,373.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	761.0	18.0	15.0	1,823.0	669.0	9.0	8.0	7.0	810.0	5.0	365.0	390.0	390.0	3.0	200.0	5,473.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Property level protection to properties at risk in epochs 1 and 2. Construct new flood defences in epoch 3 to increase SoP against flooding											2,093.0					2,093.0
Backup	Adaptation / Resilience: Maintain / refurbish existing defences and undertake property level protection to properties at risk of flooding	Funding for PLP / PLR likely to be from alternative sources															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 11 - Mundeford Quay

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Do Minimum: small scale repairs to existing defences	Main	Main	Main	Main	Main	Main	Main								
Local	Adaptation / Resilience: Property level protection to properties at risk. Maintain existing quay walls	PLP, Main	Main	Refurb, Main	Main	PLP, Main	Main	Main	Refurb, Main	Main	Main	PLP, Main	Refurb, Main	Main	Refurb, Main	Main

Leading Option	Description	Indicative option cost (£k) - cash															
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Minimum: small scale repairs to existing defences	23.0	46.0	91.0	91.0	183.0	183.0	37.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	654.0
Local	Adaptation / Resilience: Property level protection to properties at risk. Maintain existing quay walls	101.0	11.0	7,517.0	11.0	121.0	11.0	11.0	7,517.0	11.0	11.0	143.0	7,529.0	143.0	7,529.0	23.0	30,689.0

Leading Option	Description	Indicative option cost (£k) - PV															
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Minimum: small scale repairs to existing defences	21.0	36.0	61.0	51.0	86.0	72.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	340.0
Local	Adaptation / Resilience: Property level protection to properties at risk. Maintain existing quay walls	101.0	9.0	5,329.0	6.0	61.0	5.0	4.0	2,310.0	3.0	2.0	28.0	1,105.0	14.0	554.0	1.0	9,532.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Minimum: small scale repairs to existing defences	Not calculated - no major capital scheme															0
Local	Adaptation / Resilience: Property level protection to properties at risk. Maintain existing quay walls	Not calculated - GIA to be capped at National option															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 12 - Avon Beach and Friars Cliff

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve A: Maintain / refurbish existing defences from epoch 1. Undertake beach nourishment from epoch 2 as well as new groynes and raising Avon beach seawall. Localised property level protection in epoch 3 to manage flood risk	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach, PLP	Main, Beach	Main, Beach	Main, Beach	Main, Beach
Local	Improve C: As per Improve A, but also undertake broader public realm enhancements and intervene sooner	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach, PLP	Main, beach	Main, Beach	Main, Beach	Main, Beach
Backup	Scaled back Improve: Reduce beach nourishment volume / scale of defence improvements to reduce cost and improve affordability	As per National / Local, subject to timing followed														

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Maintain / refurbish existing defences from epoch 1. Undertake beach nourishment from epoch 2 as well as new groynes and raising Avon beach seawall. Localised property level protection in epoch 3 to manage flood risk	49.0	49.0	3,499.0	49.0	9,737.0	49.0	49.0	49.0	49.0	2,097.0	213.0	97.0	2,145.0	97.0	2,145.0	20,373.0
Local	Improve C: As per Improve A, but also undertake broader public realm enhancements and intervene sooner	49.0	49.0	18,216.0	49.0	49.0	49.0	49.0	49.0	2,097.0	256.0	140.0	2,188.0	140.0	2,188.0	25,617.0	

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Maintain / refurbish existing defences from epoch 1. Undertake beach nourishment from epoch 2 as well as new groynes and raising Avon beach seawall. Localised property level protection in epoch 3 to manage flood risk	46.0	39.0	2,479.0	28.0	4,892.0	20.0	17.0	14.0	12.0	479.0	40.0	13.0	233.0	7.0	124.0	8,443.0
Local	Improve C: As per Improve A, but also undertake broader public realm enhancements and intervene sooner	46.0	39.0	12,912.0	28.0	23.0	20.0	17.0	14.0	479.0	47.0	18.0	237.0	11.0	126.0	14,029.0	

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Maintain / refurbish existing defences from epoch 1. Undertake beach nourishment from epoch 2 as well as new groynes and raising Avon beach seawall. Localised property level protection in epoch 3 to manage flood risk					1,454.0											1,454.0
Local	Improve C: As per Improve A, but also undertake broader public realm enhancements and intervene sooner	Capped at National option amount															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 13 - Highcliffe

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve C: In epoch 1 construct rock armour defence at east end of unit to reduce outflanking risk. In epoch 1 and 2 maintain existing defences and undertake beach recycling. From epoch 3 undertake beach nourishment, construct new rock groynes and refurbish defences	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach
Local	Improve A: As per Improve C, except the beach nourishment in epoch 3 would be brought forward to be undertaken from epoch 2. New rock groynes from epoch 3	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach
Backup	Scaled back Improve: Reduce beach nourishment volume / scale of defence improvements to reduce cost and improve affordability	As per National / Local, subject to timing followed														

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve C: In epoch 1 construct rock armour defence at east end of unit to reduce outflanking risk. In epoch 1 and 2 maintain existing defences and undertake beach recycling. From epoch 3 undertake beach nourishment, construct new rock groynes and refurbish defences	60.0	60.0	740.0	60.0	5,919.0	60.0	60.0	60.0	60.0	60.0	7,698.0	120.0	1,676.0	120.0	120.0	16,873.0
Local	Improve A: As per Improve C, except the beach nourishment in epoch 3 would be brought forward to be undertaken from epoch 2. New rock groynes from epoch 3	60.0	60.0	740.0	60.0	9,032.0	60.0	60.0	60.0	60.0	60.0	6,142.0	120.0	1,676.0	120.0	120.0	18,430.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve C: In epoch 1 construct rock armour defence at east end of unit to reduce outflanking risk. In epoch 1 and 2 maintain existing defences and undertake beach recycling. From epoch 3 undertake beach nourishment, construct new rock groynes and refurbish defences	57.0	48.0	522.0	34.0	2,973.0	24.0	20.0	18.0	15.0	13.0	1,516.0	16.0	158.0	9.0	7.0	5,430.0
Local	Improve A: As per Improve C, except the beach nourishment in epoch 3 would be brought forward to be undertaken from epoch 2. New rock groynes from epoch 3	57.0	48.0	522.0	34.0	4,538.0	24.0	20.0	18.0	15.0	13.0	1,209.0	16.0	158.0	9.0	7.0	6,688.0

Leading Option	Description	Indicative GiA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve C: In epoch 1 construct rock armour defence at east end of unit to reduce outflanking risk. In epoch 1 and 2 maintain existing defences and undertake beach recycling. From epoch 3 undertake beach nourishment, construct new rock groynes and refurbish defences											2,268.0					2,268.0
Local	Improve A: As per Improve C, except the beach nourishment in epoch 3 would be brought forward to be undertaken from epoch 2. New rock groynes from epoch 3					1,537.0											1,537.0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 14 - Naish Cliff and Barton on Sea

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Managed Realignment A: Improved toe defences and cliff stabilisation / drainage in the area between Marine Drive West and the eastern end of Barton on Sea from epoch 1	Main	Main	Scheme, Main	Main	Main	Main	Main	Main	Main	Main	Main	Refurb, Main	Main	Main	Main
Backup	Managed Realignment B: As per Managed Realignment A, except defence improvements would be undertaken during epoch 2 (rather than epoch 1) and beach nourishment at Naish Cliff	Main	Main	Main	Main	Scheme, Main, Beach	Main	Main	Main	Main	Main, Beach	Main	Main	Refurb, Main, Beach	Main	Main, Beach
Backup	Managed Realignment D: As per Managed Realignment B, except defences would not be constructed at Marine Drive West	Main	Main	Main	Main	Scheme, Main, Beach	Main	Main	Main	Main	Main, Beach	Main	Main	Refurb, Main, Beach	Main	Main, Beach
Backup	Maintain: maintain existing defences and functioning drainage but no new defences constructed.	Main	Main	Main	Refurb, Main	Main	Main	Main	Main	Refurb, Main	Main	Main	Refurb, Main	Main	Main	Refurb, Main

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Managed Realignment A: Improved toe defences and cliff stabilisation / drainage in the area between Marine Drive West and the eastern end of Barton on Sea from epoch 1	255.0	270.0	26,370.0	270.0	383.0	383.0	383.0	383.0	383.0	383.0	653.0	12,936.0	765.0	765.0	765.0	45,347.0
Backup	Managed Realignment B: As per Managed Realignment A, except defence improvements would be undertaken during epoch 2 (rather than epoch 1) and beach nourishment at Naish Cliff	255.0	255.0	255.0	255.0	32,011.0	284.0	284.0	374.0	397.0	1,564.0	794.0	794.0	15,778.0	681.0	1,960.0	55,941.0
Backup	Managed Realignment D: As per Managed Realignment B, except defences would not be constructed at Marine Drive West	255.0	255.0	255.0	255.0	21,639.0	284.0	284.0	374.0	397.0	1,564.0	794.0	794.0	13,142.0	681.0	1,960.0	42,933.0
Backup	Maintain: maintain existing defences and functioning drainage but no new defences constructed.	255.0	255.0	255.0	5,361.0	180.0	180.0	240.0	255.0	2,770.0	180.0	420.0	5,616.0	360.0	495.0	2,950.0	19,772.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Managed Realignment A: Improved toe defences and cliff stabilisation / drainage in the area between Marine Drive West and the eastern end of Barton on Sea from epoch 1	238.0	212.0	18,682.0	151.0	180.0	151.0	129.0	111.0	96.0	83.0	115.0	1,889.0	74.0	57.0	45.0	22,213.0
Backup	Managed Realignment B: As per Managed Realignment A, except defence improvements would be undertaken during epoch 2 (rather than epoch 1) and beach nourishment at Naish Cliff	238.0	201.0	169.0	142.0	16,079.0	113.0	96.0	108.0	99.0	353.0	138.0	103.0	1,716.0	50.0	113.0	19,718.0
Backup	Managed Realignment D: As per Managed Realignment B, except defences would not be constructed at Marine Drive West	238.0	201.0	169.0	142.0	10,866.0	113.0	96.0	108.0	99.0	353.0	138.0	103.0	1,428.0	50.0	113.0	14,217.0
Backup	Maintain: maintain existing defences and functioning drainage but no new defences constructed.	238.0	201.0	169.0	3,193.0	85.0	71.0	80.0	74.0	732.0	39.0	72.0	713.0	35.0	37.0	190.0	5,929.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Managed Realignment A: Improved toe defences and cliff stabilisation / drainage in the area between Marine Drive West and the eastern end of Barton on Sea from epoch 1			3,215.0													3,215.0

*Indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 15 - Barton on Sea to Hordle Cliff

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Do Nothing	Do	Do	Do	Do	Do	Do	Do	Do	Do	Do	Do	Do	Do	Do	Do
		Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Nothing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
																	0.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Nothing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
																	0.0

Leading Option	Description	Indicative GiA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Do Nothing	No GiA available															0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 16 - Cliff Road

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Managed Realignment C: From second half of epoch 2 undertake beach nourishment and construct local strong point to control rate of cliff eroision. Intent to stop cliff erosion reaching Cliff Road	Main	Main	Main	Main	Main, Beach	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach
Local	Managed Realignment A or B (A shown here): As per Managed Realignment C, except beach nourishment and strong point would be constructed much sooner; in epoch 1	Main	Scheme, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach
Backup	Maintain: Maintain existing defences and undertake beach recycling to control beach levels. Likely leading to more long term erosion	Main	Refurb, Main	Main	Main	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)							
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Managed Realignment C: From second half of epoch 2 undertake beach nourishment and construct local strong point to control rate of cliff eroision. Intent to stop cliff erosion reaching Cliff Road	98.0	98.0	98.0	98.0	348.0	264.0	264.0	10,357.0	137.0	137.0	274.0	1,948.0	274.0	1,948.0	271.0	16,614.0
Local	Managed Realignment A or B (A shown here): As per Managed Realignment C, except beach nourishment and strong point would be constructed much sooner; in epoch 1	98.0	4,660.0	137.0	137.0	137.0	137.0	1,811.0	137.0	137.0	137.0	1,948.0	274.0	274.0	1,948.0	274.0	12,246.0
Backup	Maintain: Maintain existing defences and undertake beach recycling to control beach levels. Likely leading to more long term erosion	98.0	491.0	98.0	98.0	348.0	264.0	741.0	264.0	348.0	264.0	1,005.0	612.0	612.0	1,005.0	612.0	6,860.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)							
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Managed Realignment C: From second half of epoch 2 undertake beach nourishment and construct local strong point to control rate of cliff eroision. Intent to stop cliff erosion reaching Cliff Road	91.0	77.0	65.0	54.0	163.0	104.0	90.0	3,181.0	34.0	30.0	48.0	281.0	27.0	144.0	16.0	4,405.0
Local	Managed Realignment A or B (A shown here): As per Managed Realignment C, except beach nourishment and strong point would be constructed much sooner; in epoch 1	91.0	3,916.0	91.0	77.0	65.0	54.0	643.0	40.0	34.0	30.0	333.0	36.0	27.0	160.0	16.0	5,613.0
Backup	Maintain: Maintain existing defences and undertake beach recycling to control beach levels. Likely leading to more long term erosion	91.0	408.0	65.0	54.0	163.0	104.0	257.0	77.0	87.0	57.0	174.0	80.0	60.0	79.0	36.0	1,792.0

Leading Option	Description	Indicative GI/A funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)				Epoch 3 (years)							
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Managed Realignment C: From second half of epoch 2 undertake beach nourishment and construct local strong point to control rate of cliff eroision. Intent to stop cliff erosion reaching Cliff Road								1,932.0								1,932.0
Local	Managed Realignment A or B (A shown here): As per Managed Realignment C, except beach nourishment and strong point would be constructed much sooner; in epoch 1		1,301.0														1,301.0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 17 - Rook Cliff

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)				
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve C: Refurbish existing cliff toe defences in epoch 1. From second half of epoch 2 upgrade the defences at the cliff toe	Main	Refurb, Main	Main	Main	Main	Main	Main	Scheme, Main	Main	Main	Main	Main	Main	Refurb, Main	Main
Local	Improve A or B (A shown here): As per Improve C, except toe defence improvements undertaken in epoch 1	Main	Scheme, Main	Main	Main	Main	Main	Main	Main	Main	Main	Refurb, Main	Main	Main	Main	Main
Backup	Maintain: Maintain existing defences at the toe of the cliff. Long term sustainability of this approach is uncertain	Main	Refurb, Main	Main	Refurb, Main	Main	Main	Refurb, Main	Main	Main	Main	Refurb, Main	Refurb, Main	Main	Refurb, Main	Main

Leading Option	Description	Indicative option cost (£k) - cash															
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve C: Refurbish existing cliff toe defences in epoch 1. From second half of epoch 2 upgrade the defences at the cliff toe	50.0	3,836.0	50.0	50.0	50.0	50.0	50.0	17,521.0	50.0	50.0	100.0	100.0	100.0	2,828.0	100.0	24,985.0
Local	Improve A or B (A shown here): As per Improve C, except toe defence improvements undertaken in epoch 1	50.0	13,675.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	2,828.0	100.0	100.0	100.0	100.0	100.0	17,353.0
Backup	Maintain: Maintain existing defences at the toe of the cliff. Long term sustainability of this approach is uncertain	50.0	2,778.0	50.0	1,107.0	50.0	50.0	1,414.0	50.0	50.0	50.0	2,828.0	1,157.0	100.0	1,464.0	100.0	11,298.0

Leading Option	Description	Indicative option cost (£k) - PV															
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve C: Refurbish existing cliff toe defences in epoch 1. From second half of epoch 2 upgrade the defences at the cliff toe	47.0	3,227.0	33.0	28.0	23.0	20.0	17.0	5,384.0	13.0	11.0	17.0	13.0	10.0	208.0	6.0	9,057.0
Local	Improve A or B (A shown here): As per Improve C, except toe defence improvements undertaken in epoch 1	47.0	10,749.0	33.0	28.0	23.0	20.0	17.0	14.0	13.0	11.0	482.0	13.0	10.0	7.0	6.0	11,473.0
Backup	Maintain: Maintain existing defences at the toe of the cliff. Long term sustainability of this approach is uncertain	47.0	2,111.0	33.0	659.0	23.0	20.0	462.0	14.0	13.0	11.0	442.0	147.0	10.0	113.0	6.0	4,111.0

Leading Option	Description	Indicative GiA funding for major capital scheme (£k) - cash*															
		Epoch 1 (years)				Epoch 2 (years)						Epoch 3 (years)					Total
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve C: Refurbish existing cliff toe defences in epoch 1. From second half of epoch 2 upgrade the defences at the cliff toe								3,457.0								3,457.0
Local	Improve A or B (A shown here): As per Improve C, except toe defence improvements undertaken in epoch 1		2,400.0														2,400.0

*indicative funding for major capital scheme in option (if multiple capital schemes, not all have been assessed)

ODU 18 - Milford on Sea

Key	
Main	Patch and repair / small scale maintenance
Refurb	Refurbishment
Beach	Beach management (recycling / nourishment)
PLP	Property level protection / resilience
Scheme	Capital scheme to upgrade defences

Leading Option	Description	Assumed interventions and timing for costing														
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)					
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99
National	Improve A: Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 1. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2.	Main, Beach	Scheme, Main, Beach	Main, Scheme, Beach	Main, Beach	Main, Beach	Main, Beach	Scheme, PLP, Main, Beach	Main, Beach	Main, Beach	Main, Beach	PLP, Main, Beach	Main, Beach	Main, Beach	Main, Beach	
Backup	Improve B: Refurbish existing defences in epoch 1 and undertake small scale repeat beach nourishment. Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 2. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2.	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Scheme, Main, Beach	Main, Beach	Main, Beach, PLP	Main, Beach	Main, Beach	Main, Beach	PLP, Main, Beach	Main, Beach	Main, Beach	Main, Beach	
Backup	Maintain existing defences and undertake repeated small scale beach nourishment. Long term sustainability of this approach is uncertain given lowering beach levels.	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, Main, Beach	Main, Beach	Main, Beach	Main, Beach	Refurb, Main, Beach	Refurb, Main, Beach	Main, Beach	Refurb, Main, Beach	

Leading Option	Description	Indicative option cost (£k) - cash															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 1. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2.	803.0	4,331.0	6,741.0	89.0	89.0	89.0	3,796.0	89.0	89.0	89.0	2,557.0	429.0	429.0	1,652.0	414.0	21,686.0
Backup	Improve B: Refurbish existing defences in epoch 1 and undertake small scale repeat beach nourishment. Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 2. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2.	803.0	3,998.0	250.0	250.0	10,982.0	89.0	2,572.0	89.0	89.0	1,312.0	1,259.0	179.0	1,602.0	429.0	429.0	24,332.0
Backup	Maintain existing defences and undertake repeated small scale beach nourishment. Long term sustainability of this approach is uncertain given lowering beach levels.	1,328.0	4,672.0	376.0	376.0	376.0	376.0	4,497.0	376.0	376.0	376.0	4,873.0	752.0	752.0	4,873.0	451.0	24,830.0

Leading Option	Description	Indicative option cost (£k) - PV															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 1. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2.	750.0	3,404.0	4,774.0	50.0	42.0	35.0	1,275.0	26.0	22.0	19.0	412.0	55.0	41.0	129.0	24.0	11,058.0
Backup	Improve B: Refurbish existing defences in epoch 1 and undertake small scale repeat beach nourishment. Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 2. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2.	750.0	3,152.0	166.0	139.0	5,152.0	35.0	864.0	26.0	22.0	283.0	204.0	23.0	162.0	32.0	24.0	11,034.0
Backup	Maintain existing defences and undertake repeated small scale beach nourishment. Long term sustainability of this approach is uncertain given lowering beach levels.	1,241.0	3,682.0	249.0	210.0	176.0	149.0	1,510.0	109.0	94.0	81.0	791.0	97.0	72.0	383.0	27.0	8,871.0

Leading Option	Description	Indicative GIA funding for major capital scheme (£k) - cash*															Total
		Epoch 1 (years)				Epoch 2 (years)					Epoch 3 (years)						
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-59	60-69	70-79	80-89	90-99	
National	Improve A: Upgrade seawall, construct new groynes and undertake major beach nourishment from epoch 1. Construct setback tidal defences at eastern end of Milford on Sea to reduce risk of flooding from Sturt Pond direction in epoch 2. GIA funding shown for coastal erosion works only (seawall, groynes and beach nourishment)		1,355.0														1,355.0

*Indicative funding for major capital scheme in option (If multiple capital schemes, not all have been assessed)