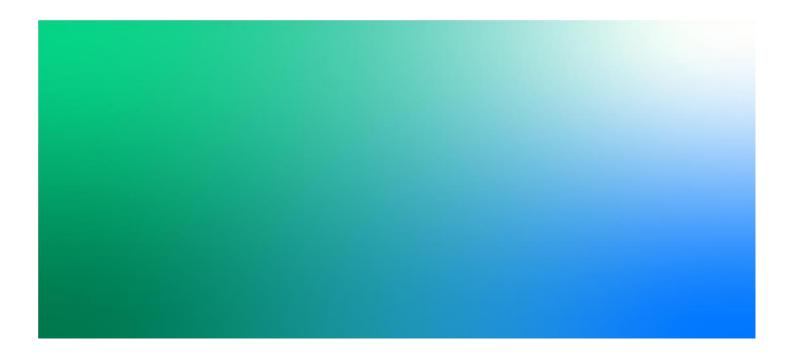
Jacobs

Gunton and Corton Options Appraisal

Appendix F - Funding

Document No. 07 | 2.0 March 2022

Coastal Partnership East



Gunton and Corton Options Appraisal

Project No:	B2413600	
Document Title:	Appendix F - Funding	
Document No.:	Document No. 07	
Revision:	1	
Document Status:	Issued	
Date:	January 2022	
Client Name:	Coastal Partnership East	
Client No:		
Project Manager:	Mark Sherlock-Smith	
Author:	Beatriz Serato	
File Name:	Appendix_F_Funding.docx	

Jacobs U.K. Limited

One Glass Wharf Bristol BS2 OFF 0117 457 2500

www.jacobs.com

© Copyright 2019 Jacobs U.K. Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Document history and status

Issue	Date	Description	Author	Checked	Reviewed	Approved
0	October 2021	Draft for client review	Beatriz Serato	Kevin Burgess	Kevin Burgess	Kevin Burgess
1	January 2022	Issued for stakeholder engagement				Kevin Burgess
2	March 2022	Issued with formatting corrections				Beatriz Serato

Jacobs

Contents

1.	Introduction	
2.	Methodology	2
3.	Summary of assumptions	3
3.1	Determination of risk	3
3.1.1	Erosion risk	3
3.1.2	Duration of benefits	3
3.1.3	Appraisal of benefits and damages avoided	
3.1.4	Deprivation index	5
3.1.5	PV Benefits estimate	6
3.2	Appraisal of schemes costs	
3.3	Partnership Funding Calculator	
4.	References 1	4
Annex	A. Partnership Funding Calculator (PFC) 1	5

1. Introduction

The purpose of this appendix is to set out the approach to, and the assumptions made for, the assessment of Flood and Erosion Risk Management (FCERM) Grant in Aid (GiA) eligibility and Partnership Funding (PF) requirements for the Gunton, Corton and North Corton frontages. This builds upon previous economic assessment undertaken during the Strategy and describes the results for the re-calculation of economic damages and re-estimate of works costs for all three frontages.

This is not the full economic assessment required as part of the business case for any scheme; that would require much more detailed information and involve more detailed calculation of both costs and benefits. The remit of this present exercise is instead to provide a high-level review of economics sufficient to inform discussions with partner stakeholders and potential funders.

2. Methodology

An Economic Assessment was produced in 2017 as part of the Strategy (CH2M, 2017), which details how risk was determined, and damages and costs were appraised, for each frontage between Gorleston to Lowestoft. The PF estimate produced for this Gunton and Corton Options Appraisal largely uses information from the Strategy.

The inputs used for this assessment were as follows:

- 1) Erosion estimates: includes timeframe of which holiday parks (including main buildings and caravans), residential and commercial properties, roads and other infrastructure assets would be lost.
- 2) Estimate of damages, including:
 - Estimate costs for relocation of caravans
 - Estimate write-off value of residential and commercial properties at risk of erosion, based on the Strategy
 - Estimate economic value for holiday parks and agricultural land, based on the Strategy
 - People related benefits estimate (e.g. mental health) for OM1
- 3) Estimated costs for potentially preferred scheme costs (see Appendix C).

The outcomes above were then used to populate a draft Partnership Funding Calculator (PFC).

3. Summary of assumptions

3.1 Determination of risk

3.1.1 Erosion risk

Coastal erosion presents the main risk for assets along Gunton Warren, Corton and North Corton. Appendix A Coastal Processes provides a detailed assessment of erosion rates, which have been compared to the rates used in the Strategy Economic Assessment (CH2M, 2017).

This study identified erosion rates between 1.5 m/year and 2.2 m/year for North Corton. These rates are comparable to those established in the Strategy, of 1.7 m/year, with sensitivity test for benefit-cost calculations using a rate of 2.3 m/year (CH2M, 2017). Therefore, assumptions made by the Strategy can still be considered valid, and those have been adopted determine the potential damages/losses.

Two cases have been considered. The 1.7 m/year erosion rate is representative of the underlying erosion trend. Although assumptions for increasing rates due to climate change have not been undertaken, the upper rate of 2.3 m/year is considered indicative of the likely rate of erosion under a scenario of accelerated sea level rise.

Given the similarity in geology at both Corton and North Corton frontages, without defences they are likely to erode at similar rates. Rates for North Corton are therefore also appropriate to use for Corton in the case of donothing.

At Gunton Warren, more rapid erosion rates have been experienced since the Strategy, ranging between 3.5 m/year and 4.5 m/year although higher rates have also occurred on an annual basis. This therefore represents a rapid increase in erosion along Gunton Warren since the Strategy, and the estimated time of asset losses have therefore been recalculated accordingly.

The year of which erosion was assumed to start along each frontage is shown in Table 3-1. For North Corton and Corton, this is the same as stated in the Strategy. For Gunton Warren however, this has been updated as erosion rates are now more rapid than previously observed at Strategy stage. For this frontage, erosion was changed to start in year 0.

Location	Baseline (Do nothing)	Do something – proposed option
Gunton Warren	Erosion starts at year 0.	No erosion
Corton	Erosion starts at year 10.	No erosion
North Corton	Erosion starts at year 0.	Erosion starts in year 0, at half rate of Do Nothing, and stabilises in long term.

Table 3-1: Assumptions for options regarding onset of erosion for Gunton Warren, Corton and North Corton. Modified from CH2M (2017)

3.1.2 Duration of benefits

A 100-year duration of benefits is assumed for the purpose of this review. This is in line with the Strategy recommendation for medium and long term policies at all three frontages.

3.1.3 Appraisal of benefits and damages avoided

The Strategy thoroughly reports on how different assets at risk along Gunton Warren, Corton and North Corton have been considered for the calculation of benefits and avoided damages. Due to the similarity of erosion rates calculated for the Strategy and for the Gunton and Corton Options assessment, the assumptions made by the Strategy on Appendix F – Economic Assessment are, in general, still valid. This is case for the following:

- Commercial and community buildings: market value was assumed the same as the Strategy as rateable value published by the Valuation Office Agency (VOA) is still the same for most of the properties;
- Agricultural land: the value of £8,800/acre estimated for the Strategy assumed;
- Car parks: in line with the Strategy, a basic build cost of £1,000 per space was assumed for loss of car park (surface level);
- Contaminated land: the Strategy stated that under a do nothing scenario, the landfill site located at Lowestoft North Beach (currently behind the seawall) would become expose and erode. Although this is outside of the study area for this assessment, benefits in protecting the landfill site were accounted for in one of the PF estimates for Gunton Warren (see Section 3.3 for PF estimates). The total cost (including landfill tax) to remove all waste material from the site was assumed the same as the Strategy: £41.49 million. It is important to note that this benefit was accounted for comparison purposes only.

For this assessment, a re-evaluation of the following was undertaken:

- Residential properties: Ordnance Survey database AddressBasePlus 2015 was reviewed against National Receptor Database 2014 provided by CPE, which showed no new residential properties since the Strategy. Valuation, however, did change and using the Housing Price Index (available at <u>http://landregistry.data.gov.uk</u>) the increase in house prices between 2016 (when the Economic Assessment for the Strategy was undertaken) and 2021 was around 20%. Therefore, the total damages calculated by the Strategy was then increased by 20% to represent present-day market value of properties. In addition to this, see Section 3.1.5.1 for consideration on timing for property loss at Gunton Warren;
- Holiday and Caravan parks: the Strategy has assumed a relocation cost of £6,000 per each static caravan. This value has been updated using the construction output price indices to around £8,000 per plot (RPA, 2020);
- Infrastructure: since the Strategy, main wastewater pipelines owned by Anglian Water have become at risk of undermining due to erosion. Plans for relocating the pipeline are currently ongoing and this have not been included in this PF estimate. However, costs for future relocation to Corton Road have been included as this could be necessary in 20 years' time, if current erosion rates are ongoing. See Section 3.1.5.1 for more details;
- Contaminated land: since the Strategy, buried oil waste at Gunton Warren has become exposed and some
 of this material has been eroded. The Strategy had estimated a cost between £40,000 and £65,000 for
 excavation and off-site disposal of approximately 74 tonnes of material being sent to landfill. For this
 assessment, this has been increased to £100,000 as an estimate due to inflation. See Section 3.1.5.1 for
 more details.

Benefits and avoided damages calculated for the Strategy are already calculated as Present Values (PV) in line with discount rates specified by HM Treasure, and have been reused unless the time to loss has been recalculated. Where relevant, the recommendations from the Middlesex University Multi-Coloured Manual (MCM, 2021) have been used and updated accordingly.

People related benefits for OM1a were also estimated for this funding assessment. According to the latest guidance¹, mental health effects of erosion were taken into account the value of £9,546 per adult to represent the mental health cost of erosion This is applied for residential properties, which have a national average of 2 adults per property.

¹ https://www.gov.uk/government/publications/partnership-funding-supporting-documents/mental-health-costs-of-flooding-and-erosion

Although benefit estimates undertaken at this stage largely rely on the Economic Assessment undertaken during the Strategy, it should be noted that the loss of tourism and mental health effects on employees of the various caravan sites have not been account for at this stage. In addition, the National Receptor Database used for this assessment is due to be updated (2021); it is believed that the value of holiday homes, chalets and other infrastructure related to the holiday parks has been reviewed but further confirmation is required upon dataset release.

3.1.4 Deprivation index

Deprivation index is provided by http://dclgapps.communities.gov.uk/imd/iod_index.html.

Gunton Warren is within Gunton & St. Margarets ward, which is ranked 17,206 out of 32,844 in England in 2019; this falls within the 50% least deprived areas for OM2a & OM3 (Figure 3-1).

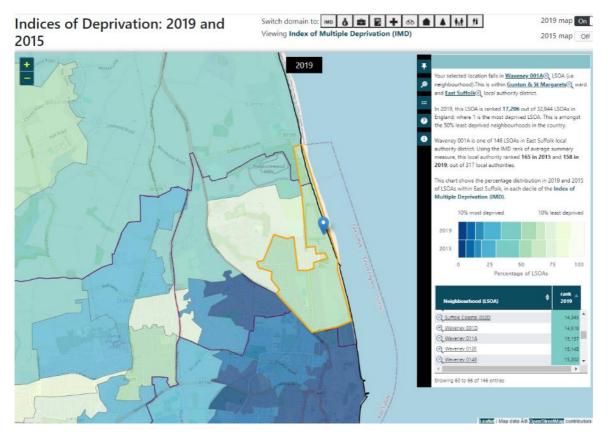


Figure 3-1: Deprivation index (2019) for Gunton Warren. Source: http://dclqapps.communities.gov.uk/imd/iod_index.html

Corton and North Corton are within Lothingland ward, which is ranked 13,663 out of 32,844 in England in 2019; this is amongst the 50% most deprived areas for OM2a & OM3 (Figure 3-2).

Jacobs

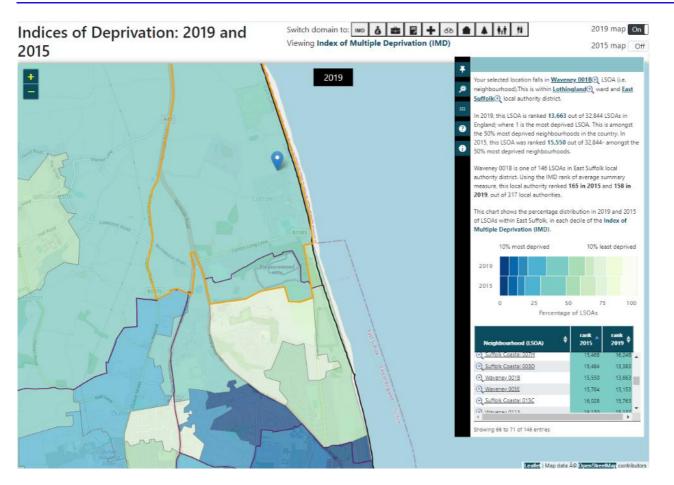


Figure 3-2: Deprivation index (2019) for Corton and North Corton. Source: <u>http://dclgapps.communities.gov.uk/imd/iod_index.html</u>

3.1.5 PV Benefits estimate

3.1.5.1 Gunton Warren

For the PV benefits estimate at Gunton Warren, the same residential properties data used in the Strategy was applied in this assessment, with the following adjustments:

- 20% increase in present-day market value;
- Timing of potential erosion loss adjusted. This was due to the more rapid erosion rates observed over the last 10 years. If the faster erosion rates continue, assets will be at risk sooner. Therefore, some residential properties are now likely to be affected by year 40 (instead of year 70 in the Strategy). Residential properties potentially affected by erosion after year 70 have not been accounted for in this update as the discounted value will not drastically alter the overall benefits calculation at this stage.

PF estimates for Gunton Warren considered residential properties, buried oil deposits remediation and relocation of three Anglian Water pipelines in year 20 (Case 1 - see Table 3-2 for PV benefits).

In addition, a second case was considered for Gunton; this includes the benefits stated for Case 1, remediation of Lowestoft North Beach landfill site in year 10 (given the rapid erosion rates currently ongoing) and relocation of Anglian Water pumping station (Case 2 – see Table 3-3 for PV benefits). The risk-free market value used for those estimates are indicative and will need to be updated at OBC stage.

It should be noted that Case 2 above reports benefits that lie outside of the study area and is included only to demonstrate that there are considerable indirect benefits of limiting erosion along the Gunton Warren frontage

and that works here might be justified on a wider basis than the Gunton benefits alone. However, it is important to recognise that those same benefits, along with others, would also need to form part of any business case for more extensive works if required along the remainder of the Lowestoft North Beach frontage. Benefits cannot be double counted (i.e. used twice for two separate schemes), therefore caution will need to be exercised if some of these were to be considered for part of the justification of works at Gunton.

Table 3-2: Appraisal for damages and benefits under Do-nothing for 2021 erosion rate at Gunton Warren - Case 1

	sumption for No maintenance works undertaken. Risk that beach at southern end increases, with erosion from year 0.				
	Residential	First properties at risk by year 40.	PV	Total	
	properties	Total number of residential properties at risk by year 100 = 11.	£1,179,668	damages PV £6,298,678	
ges	Commercial properties	None.	PV £0	, ,	
Damages	Agricultural land	None.	PV £0		
	Holiday Parks	None.	PV £0		
	Other	Costs of buried oil remediation works	PV £93,351		
		Costs for relocation of three Anglian Water pipelines by year 20	PV £5,025,659		
Benefits	No benefits are associated with the baseline case of Do Nothing PV £0				
Costs	No costs are associated with the baseline case of Do Nothing. PV £C				

Table 3-3: Appraisal for damages and benefits under Do-nothing for 2021 erosion rate at Gunton Warren, including Anglian Water pumping station and landfill site at Lowestoft North Beach – Case 2

	sumption for No maintenance works undertaken. Risk that beach at southern end increases, we promic appraisal erosion from year 0.			ncreases, with
	Residential properties	First properties at risk by year 40. Total number of residential properties at risk by year 100 = 11.	PV £1,179,668	Total damages PV £39,256,314
jes	Commercial properties	None.	PV £0	
	Agricultural land	None.	PV £0	
naj	Holiday Parks	None.	PV £0	
Damages	Other	Costs of buried oil remediation works	PV £93,351	
		Costs for relocation of three Anglian Water pipelines by year 20	PV £5,025,659	
		Cost for relocation Anglian Water pumping station by	PV	
		year 10	£3,544,594	
		Cost for landfill site remediation at Lowestoft North	PV	
		Beach by year 10	£29,413,042	

	umption for No maintenance works undertaken. Risk that beach at southern end increases, wir nomic appraisal erosion from year 0.		
Benefits	No benefits are associated with the baseline case of Do Nothing		PV £0
Costs	No costs are as	sociated with the baseline case of Do Nothing.	PV £0

Estimates for mental health benefits at Gunton Warren, which were added to the benefits above, are as follows:

- > 11 residential properties lost in year 40, with an average of 2 adults per property
- ➤ 11 x 2 x £9,546 = £210,012
- Health discount factor for year 40 = 0.5630
- ➢ Total = £118,237

3.1.5.2 Corton

For the PV benefits estimate at Corton, the same data used in the Strategy was applied in this assessment, only adjusting residential properties with a 20% increase due to present-day market value.

Two PF estimates have been undertaken for Corton:

- 1) Considering losses due to baseline erosion rates of 1.7 m/year, as per the Strategy Table 3-4;
- 2) Considering losses due to high erosion rate of 2.3 m/year, as per the Strategy Table 3-5.

Table 3-4: Appraisal for damages and benefits under Do-nothing for the baseline erosion rate at Corton

	mption for omic appraisal	No maintenance works to existing defence, risk that fa 10.	ilure could occ	ur from year
	Residential properties	First properties at risk by year 20. Total number of residential properties at risk by year 100 = 35.	PV £1,183,554	Total damages PV £2,522,878
	Commercial properties	First commercial properties at risk by year 20.	PV £599,625	
Damages	Agricultural land	None.	PV £0	
Dar	Holiday Parks	Loss of holiday park land - cost of relocating caravan pitches included and more permanent structures included, where rateable or house price data available. Loss of associated infrastructure. Includes costs of business write-off due to erosion.	£739,699	
	Other Loss of other infrastructure		PV £0	
Benefits	No benefits are	e associated with the baseline case of Do Nothing	PV £0	

	mption for omic appraisal	No maintenance works to existing defence, risk that failure could occur from year 10.		
Costs	No costs are as	sociated with the baseline case of Do Nothing.	PV £0	

	sumption for No maintenance works to existing defence, risk that failure could occur from year 5 onomic appraisal				
	Residential properties	First properties at risk by year 15. Total number of residential properties at risk by year 100 = 176.	PV £6,407,268	Total damages PV £8,031,355	
	Commercial properties	First commercial properties at risk by year 15.	PV £398,802		
Jamages	Agricultural land	None.	PV £0		
Dan	Holiday Parks	Loss of holiday park land - cost of relocating caravan pitches included and more permanent structures included, where rateable or house price data available. Loss of associated infrastructure. Includes costs of business write-off due to erosion.	£1,211,521		
	Other	Loss of other infrastructure (Shelters/ sub-station)	PV £13,764		
Benefits	No benefits are associated with the baseline case of Do Nothing PV £0				
Costs	No costs are associated with the baseline case of Do Nothing.				

Table 3-5: Appraisal for damages and benefits under Do-nothing for the high erosion rate at Corton

Estimates for mental health benefits at Corton, which were added to the nemefits above, were also undertaken for both baseline (Table 3-6) and high erosion rates (Table 3-7).

Table 3-6: Mental health PV benefits und	ler Do-nothing for ba	aseline erosion rates at Corton

Year lost	No. properties lost	Health discount factor	Mental health PV benefits
20	3	0.7425	£42,527
30	3	0.6398	£36,645
40	2	0.5630	£21,498
50	4	0.4955	£37,840
60	4	0.4361	£33,304
70	4	0.3838	£29,310
80	5	0.3414	£32,590
90	4	0.3068	£23,430

Year lost	No. properties lost	Health discount factor	Mental health PV benefits
100	6	0.2758	£31,593
Total	35	NA	£288,738

Table 3-7: Mental health PV benefits under Do-nothing for high erosion rates at Corton

Year lost	No. properties lost	Health discount factor	Mental health benefits
15	3	0.7999	£45,815
20	7	0.7425	£99,231
30	14	0.6398	£171,011
40	12	0.5630	£128,986
50	22	0.4955	£208,122
60	27	0.4361	£224,803
70	12	0.3838	£87,930
80	24	0.3414	£156,432
90	28	0.3068	£164,008
100	27	0.2758	£142,170
Total	176	NA	£1,428,507

3.1.5.3 North Corton

For the PV benefits estimate at Corton, the same data used in the Strategy was applied in this assessment, only adjusting residential properties with a 20% increase due to present-day market value.

Two PF estimates have been undertaken for Corton:

- 1) Considering losses due to baseline erosion rates of 1.7 m/year, as per the Strategy Table 3-8;
- 2) Considering losses due to high erosion rate of 2.3 m/year, as per the Strategy Table 3-9.

Table 3-8: Appraisal for damages and benefits under Do-nothing for the baseline erosion rate at North Corton

	mption for omic appraisal	Ongoing failure of defence allowed to continue, with c along frontage.	ontinued risk o	of erosion
	Residential properties	None.	PV £0	Total damages PV
ges	Commercial properties	None.	PV £0	£30,216
Damages	Agricultural land	Loss of agricultural land – up to 10 acres	PV £22,151	
	Holiday Parks	Loss of holiday park land - cost of relocating caravan pitches included and more permanent structures included, where rateable or house price data available.	£8,064	

	mption for omic appraisal	Ongoing failure of defence allowed to continue, with continued risk of erosion along frontage.							
		Loss of associated infrastructure. Includes costs of business write-off due to erosion.							
	Other	Loss of other infrastructure	PV £0						
Benefits	No benefits are	associated with the baseline case of Do Nothing	PV £0						
Costs	No costs are as	sociated with the baseline case of Do Nothing.	PV £0						

Table 3-9: Appraisal for damages and benefits under Do-nothing for the high erosion rate at North Corton

	mption for omic appraisal	Ongoing failure of defence allowed to continue, with calong frontage.	ontinued risk o	of erosion
	Residential properties	None.	PV £0	Total damages PV
	Commercial properties	None.	PV £0	£661,893
Damages	Agricultural land	Loss of agricultural land – up to 10 acres	PV £72,783	
Dam	Holiday Parks	Loss of holiday park land - cost of relocating caravan pitches included and more permanent structures included, where rateable or house price data available. Loss of associated infrastructure. Includes costs of business write-off due to erosion.	£589,110	
	Other	Loss of other infrastructure	PV £0	
Benefits	No benefits are	associated with the baseline case of Do Nothing	PV £0	
Costs	No costs are as	sociated with the baseline case of Do Nothing.	PV £0	

Estimates for mental health benefits at North Corton were not undertaken as no residential properties are at risk over the 100 year assessment.

3.2 Appraisal of schemes costs

Table 3-10 details the costings, both with and without 60% Optimism Bias added, for the proposed option at each frontage. See Appendix C for details on cost review.

Location	Option	Assumption	Capital Cost (£)	With OB 60% (£)	PV cost (£)
Gunton Warren	Introduce beach management control structures	Includes a new terminal groyne between Gunton and Lowestoft North Beach boundary, and additional control structures along the frontage. Also includes capital and maintenance.	£4,854,850	£7,767,760	£7,487,911
Corton	See assumptions	Hold the line through building more substantial defence structures. Adjustments to rock bund to transition with North Corton. Introduce beach management control structures along Corton Woods frontage.	£18,411,331	£29,458,130	£27,893,356
North Corton	Remove defences and create hard points to provide intermediate controls on erosion	Shore Parallel breakwaters, including the removal of 50% of existing structures, remainder encased in rock. Also includes construction and maintenance	£3,927,980	£6,284,768	£6,155,707

Table 3-10: Cost estimates for proposed options along each frontage

Consideration has also been given to a combined scheme between Corton and North Corton. For this, a total PV cost of £34,008,524 was considered (with 60% Optimism Bias included).

It should be noted that these costs do not include for the costs of any works to the upper cliff to address those instability issues, as these would not form part of the GiA or PF calculation in any case.

3.3 Partnership Funding Calculator

The above information has then been used to determine the potential for FCERM GiA for various options. A highlevel Benefit Cost Assessment has been completed and the Partnership Funding Calculations undertaken to highlight the additional funding that may need to be found from alternative sources to deliver the projects. The aim of this assessment is to establish an order of magnitude for funding levels; a more detailed review of benefits and costs would be required should it be decided to proceed with a formal application for FCERM GiA funding.

The PFC tables (Annex A) show the outcomes of the various PF estimates undertaken for all three frontages, which are summarised below.

Frontage	Maximum Potential Eligible GiA	Minimum PF to be sourced ¹
Gunton Warren only (Case 1)	£450,000	£7,050,000
Gunton Warren plus Links Road (Case 2)	£2,400,000	£5,100,000
Corton	£1,800,000	£26,000,000

Appendix F - Funding

North Corton Cliffs	£40,000	£6,120,000
Corton and North Corton combined	£1,800,000	£32,200,000

¹Total cost minus the maximum potential eligible GiA

In general, although the PF Calculator show that there are benefits that would be eligible for FCERM GiA on each frontage, the calculator reports that the schemes do not qualify because the benefit-cost ratio (BCR) is less than unity. However, this does not accurately represent the circumstances here which are that these schemes will only be pursued if primarily funded by non-FCERM sources with only modest GiA anticipated, as the spreadsheet Calculator is not designed for, and does not appear to have facility to deal with, such situations.

4. References

CH2M (2017). Appendix F – Economic Assessment. Gorleston to Lowestoft Coastal Strategy. Report produced for Coastal Partnership East. Project Reference G2LCS/F/1.2, 68pp.

Multi-Coloured Manual (MCM) (2021). Handbook for Economic Appraisal 2021. Flood and Coastal Erosion Risk Management. 209p.

RPA (2020). Pakefield Erosion High Level Economic Assessment. Final report prepared for Coastal Partnership East. 42pp.

Annex A. Partnership Funding Calculator (PFC)

A.1 PFC for Gunton Warren Case 1

Project t	eams are i	required t	o provide	a copy of	the PF C	alculator	within the	eir busine:	ss case fo	or approva	I of FCER	RM GIA.					
	d and (
	ship Fun								sk Manag	gement G	Fant-In-	AId (FCE	RM GIA)				1.0
	: March 202 Project detai		by projects	delivering	FCERM ou	tcomes af	ter 1 April 2	2021)							Key	input calculat	selection
	. Project detai							,							l		
Project Name National Proje		Gunton and C B2413600	orton Options	Appraisal				1	Project stage Option reference		Gunton Warrer	- Crea 1	ļ	Project benefi		Benefit:0	Cost ratio to 1
Date of PF Ca		29 October 20	21						Option reterend	ce	Gunton Warrei	n Case 1	1		in to cost ratio:		to 1 to 1
Lead RMA		Coastal Partne						1					E	fective return or			to 1
FCERM GiA a	pplicant type														ı		
	(pound Sterling				•									FCERM	GiA eligibility	is removed as	costs exceed benefits
Figures in blu	e to be included	in the nationa	FCERM capita	I programme fo	r the chosen op	otion											Denenits
SECTION 2	2: Prospect o	f eligibility	for FCERM	GiA													
Confirmed st	rategic approac	h?															
Daw DE Casa				la		Address of DE 1	C			la							
Raw PF Score				Va		Adjusted PF				i'd							
Minimum pv c	ontribution/savin	g required	n/a			pv FCERM Gi	A up-front costs		n/a								
pv maximum	eligible FCERM	GiA	low BCR			pv FCERM Gi	A future costs		n/a								
SECTION 3	3: Costs and	contributio	ns for the P	REFERRED	OPTION (ov	er the dura	tion of bene	fits period)			-						
		contributio							towards pv a	noraisal costs		v qualifying	towards pv				
Project costs pv appraisal o			rowards quai	fying outcomes		pv Local Levy	is secured to d	late	lonalos pr aj		outcome	s up-front	outcome	es future	Cont	ributor(s) or Fu	od(c)
	construction cos	sts	£	7,204,560		pv other public									Cont		10(3)
pv risk conting			£	-			voluntary secto	r									
pv costs for ap	pproval		£	7,204,560		pv other Envir	ronment Agency										
pv future costs			£	283,351		pv sub-total			£	-	£		£	-			
pv WLC (over	duration of bene	fits)	£	7,487,911		pv total contrit	butions		£		Contributions secure contril	to future cost butions toward	s are not incluo Is future costs,	led in GiA calc separately	ulation. Other	RMAs are enc	ouraged to
SECTION 4	1: Outcome M	Aeasure 1 -	economic b	enefits arisi	ng from FCE	ERM											
pv WLB (appr	aisal period)		£	6,298,678		Economic sum	mary sheet com	pleted		1							
	enefits (DoB) p	eriod		100			a included in bu										
pv WLB (DoB	= OM1A)		£	6,298,678						•							
	l impacts - due to	measures	£	118,237													
proposed (Do																	
SECTION 5	5A: Outcome	Measure 2	A (today) - h	ouseholds a	at risk today	that are be	etter protecte	ed against f	lood risk by	this project	(over the d	uration of b	enefits perio	od)			
	ls in deprived a	reas				at risk today			-		cha	ange due to pr	oject			pv qual.	benefits
20% most dep										0	0	0	0	0		£	-
21% to 40% m										0	0	0	0	0		£	-
60% least dep	rived			low risk	moderate risk	intermediate	significant risk	very			-	intermediate	-	very	l l	2	-
						risk		significant risk				risk		significant risk			
	is in deprived a	reas			at risk af	ter duration o	of benefits		1	Annual dama	ages avoided ((£) compared v	vith a househol	d at low risk			
20% most dep										0	59	294					
21% to 40% m 60% least dep										U	28	294	1000	1589			
				low risk	moderate risk	intermediate	significant risk	very	-	The deprivation	o categories are	e taken from the	Index of Multip	ole Deprivation	, available throu	igh gov.uk	
						risk		significant risk		(see guidance a							
SECTION 5	B: Outcome	Measure 2	B (2040) - he	ouseholds a	t risk in 204	0 that are b	etter protect	ted against	flood risk by	y this projec	t (over the r	remaining d	uration of be	enefits perio	od)		
Year when me - Gateway 4	easures are rea	dy for service			OM2 (2040) FC	ERM GiA elig	jibility is not ap	plicable									
	ls in deprived a	reas			at	t risk from 204	40				cha	ange due to pro	piect			pv qual.	benefits
20% most dep									1	0	0	0	0	0	[Ltd by DoB	
21% to 40% m	nost deprived									0	0	0	0	0		Ltd by DoB	
60% least dep	rived									0	0	0	0	0		Ltd by DoB	
				low risk	moderate risk	intermediate risk	significant risk	very significant risk		low risk	moderate risk	intermediate risk	significant risk	very significant risk			
N° household	ls in deprived a	reas			at risk af	ter duration o	of benefits			Annual dama	anor avoided ((f) compared v	vith a househol	d at low rick			
20% most dep										Annual Gama	ages avoided ((2) compared i	nul a nousenoi				
21% to 40% m										0	59	294	1000	1589			
60% least dep	rived			low risk	moderate rick	intermediate	significant risk	very		The deprivation	esterorier are	taken from the	Index of Multiv	ale Deprivation	, available throu	iah any uk	
				IOW TISK	moderate risk	risk	Significant risk	significant risk		(see guidance a	and version she	eet for links)	index of multip	ne Deprivation	, available tillou	igii gov.uk	
SECTION 6	6: Outcome M	Aeasure 3 -	households	better prote	ected agains	st coastal e	rosion										
N° hoursehold	ls in deprived a			at risk	today			Damages per	household avo	nided:						pv qual.	benefits
20% most dep		reas			locuty			Annual damag		indea.		£ 6,800	£ 6,800	1	l l	£	
21% to 40% m	nost deprived							Loss expected	1 in			50	20	years		£	-
60% least dep	rived			11				Present value	of Year 1 loss (i.	.e. first year dan	nages,	£ 1,341	£ 3,417			£	440,641
				long-term loss	medium-term loss			discounted bas	sed on when los	is is expected)		Long-term loss	Medium-term loss				
SECTION 7	7: Outcome M	Aeasure 4 -	environmer														
Type of habita	at (OM4A)		fore' condition				ndition at end o			pv qual.	benefits		I couth of sive	er habitat en ha	need (OM(D)		
Intertidal habita		Poor	Moderate	Good		Poor	Moderate	Good		£	-	1	Length of HV	er habitat enha kilometre(s)	lited (Om4D)	pv qual.	benefits
Woodland							1			£	-	Comprehe	nsive restoration		[£	
Wet woodland										£	-		artial restoration			£	-
Wetlands/wet g	grassland									£	-	A single	e, major physical improvement			£	-
Grassland										£	-						
Heathland Ponds/lakes									-	e e	-	-					
Ponds/lakes Arable land										£							
										-		1					
SECTION 8	3: Qualifying	benefits an	d eligible F	CERM GIA a	rising from	project				Example se	ensitivity an	alyses					%age of whole life
ом	deprivation	Qualifyin	g benefits	%age benefits	Payment rate	Eligible F	FCERM GiA	%age	-	Test				Raw score	Contributio	ns required	costs
OM1a	overall	£	5,739,800	91.1%	6	£	344,388	75.5%	-	PF Calculator (a				n/a	n/a		n/a
OM1b	people related	E	118,237	1.9%	20	E	23,647	5.2%	-	SA1: pv WLC -			mada	n/a	n/a		n/a
OM2	20% most 21% to 40%	£	-	0.0%	45 30	£	-	0.0%		SA2: OM2 - Flor SA3: OM3 - Ero				N/A	No OM2 contrib	oution	n/a #VALUE!
Om2	21% to 40% 60% least	£		0.0%	30	£		0.0%		SA3: OM3 - Ero SA4: Duration o				n/a n/a	n/a n/a		#VALUE! n/a
	20% most	£	-	0.0%	45	£	-	0.0%		SA5: Duration of				n/a	n/a		n/a
ОМЗ	21% to 40%	£	-	0.0%	30	£	-	0.0%		SA6: Strategic o				n/a	n/a		n/a
	60% least	£	440,641	7.0%	20	£	88,128	19.3%		SA7: Change in	environmental h	habitat is optimis	tic	N/A	No OM4 contrib	oution	n/a
OM4	habitat	£	-	0.0%	20	£	-	0.0%	_								
	rivers	2	-	0.0%	20	£	-	0.0%									
Total		£	6,298,678	pv ma	ax. eligible GiA	£	456,164										

Total

A.2 PFC for Gunton Warren Case 2

Project t	eams are i	required t	o provide	a copy of	the PF C	alculator	within the	eir busine	ss case for appro	val of FCE	RM GIA.				
Flood	d and (Coasta	al Eros	sion R	isk Ma	anage	ment	(FCEF	RM)						
									sk Ńanagemen	t Grant-in	-Aid (FCE	RM GiA)		
	March 202		by projects	delivering	FCERM ou	itcomes aft	er 1 April 2	2021)						Key inpu	
	Project detai													ca	lculated cells
Project Name National Proje		Gunton and C B2413600	orton Options	Appraisal				l	Project stage Option reference	Gunton Warre			Desired based	Be fit to cost ratio:	5.2 to 1
Date of PF Ca		29 October 20	21						Option reference	Gunton warre	en Gase 2			turn to taxpayer:	n/a to 1
Lead RMA		Coastal Partne]				E	ffective return o		n/a to 1
FCERM GIA a															
	e to be included		FCERM capita	l programme fo	r the chosen o	ption									
	: Prospect o														
	rategic approac				See guidance	. Evidence pro	vided in the b	usiness case							
					0					_					
Raw PF Score			1	5%		Adjusted PF S			15%	Insufficient c	contributions to :	secure FCERN	II GIA		
Minimum pv o	ontribution/savin	g required	£	6,150,872		pv FCERM GiA	up-front costs		£	•					
pv maximum	eligible FCERM	GiA	£	2,433,622		pv FCERM GiA	future costs		£	- Other RMAs	not eligible for F	CERM GiA to	wards future c	osts	
SECTION 3	3: Costs and	contributio	ns for the P	REFERRED	OPTION (ov	er the durat	ion of bene	fits period)		terret a			100		
Project costs			Towards quali	fying outcomes		Contributions	secured to d	ate	towards pv appraisal cos		pv qualifying es up-front	towards pr outcom	v qualitying es future	-	
pv appraisal o	osts construction cos		£	7,204,560		pv Local Levy pv other public				_				Contributor(s)	or Fund(s)
pv design and pv risk conting		515	£	7,204,300		pv private and		r							
pv costs for ap	oproval		£	7,204,560		pv other Enviro	nment Agency								
pv future costs		(fite)	£	283,351 7,487,911		pv sub-total pv total contribu	utions		£	£	-	£	-	culation. Other RMAs are	encoursed to
	duration of bene		~			<u> </u>	440115				ibutions toward			conter runas an	caged to
	: Outcome M	neasure 1 -	economic b		-										
pv WLB (appr Duration of b	aisal period) enefits (DoB) p	ariod	£	39,256,314 100		Economic sum Economic data									
pv WLB (DoB			£	100 39,256,314		conomic data		wiess Gase?							
People related	l impacts - due to	o measures	£	118,237											
proposed (Dol			-												
			A (today) - h	ouseholds a	at risk today		tter protecte	ed against f	lood risk by this proj				od)		
N° household 20% most dep	Is in deprived a	reas				at risk today		1]	0 0	ange due to pro	ject 0	0	pv E	qual. benefits
21% to 40% m										0 0		0	0	£	-
60% least dep	rived]	0 0	-	0	0	£	-
				low risk	moderate risk	intermediate risk	significant risk	very significant risk	low risk	moderate risk	k intermediate risk	significant risk	very significant risk		
	ls in deprived a	reas			at risk at	fter duration of	benefits	1	Annual o	amages avoided	l (£) compared w	ith a househo	ld at low risk		
20% most dep 21% to 40% m										- 59	294	1000	1589	1	
60% least dep														J	
				low risk	moderate risk	intermediate risk	significant risk	very significant risk		ation categories ar tice and version sh		Index of Multi	ple Deprivation	n, available through gov.ul	
SECTION 5	B: Outcome	Measure 2	B (2040) - ho	ouseholds a	t risk in 204	0 that are be	etter protect	ted against	flood risk by this pro		···-··	ration of b	enefits peri	od)	
	easures are rea					CERM GiA eligi								,	
- Gateway 4	ls in deprived a					t risk from 204				ch	ange due to pro	inat			qual. benefits
20% most dep		ieas								0 0		0	0	Ltd by D	
21% to 40% m										0 0		0	0	Ltd by D	
60% least dep	rived			low risk	moderate risk	intermediate	significant risk	very	low risk	0 0 moderate risk		0 significant risk	very 0	Ltd by D	bB
					at sink at	risk	-	significant risk			risk		significant risk		
N° household 20% most dep	Is in deprived a prived	reas			at risk at	fter duration of	Denefits		Annual	amages avoided	l (£) compared w	ith a househo	ld at low risk		
21% to 40% m									0	59	294	1000	1589]	
60% least dep	rived			low risk		intermediate		very	The density		- takan farm tha	Index of Multi-	ala Densivation	n. available through gov.ul	
				IOW TISK	moderate risk	intermediate risk	significant risk	significant risk		nce and version sh		index of Multi	pie Deprivation	n, available through gov.u	
SECTION 6	i: Outcome M	Measure 3 -	households	better prote	ected agains	st coastal er	osion								
N° household	ls in deprived a	reas		at risk	today			Damages per	household avoided:					pv	qual. benefits
20% most dep 21% to 40% m						-		Annual damag			£ 6,800	£ 6,800		3	-
21% to 40% m 60% least dep				11		-		Loss expected			50 £ 1,341	20 £ 3,417	years	£	440,641
				long-term	medium-term	1			of Year 1 loss (i.e. first year sed on when loss is expecte		Long-term	Medium-term	J		
SECTION 7	: Outcome M	Aeasure 4	environmer	loss Ital improve	loss nents						loss	loss			
SECTION	. outcome i						distant in the	(D-D ***)							
Type of habita	at (OM4A)	"be Poor	fore' condition Moderate	(Ha) Good		'after' con Poor	dition at end o Moderate	f DoB (Ha) Good	pv q	ual. benefits		Length of riv	ver habitat enh	anced (OM4B)	
Intertidal habita									£]		kilometre(s)		qual. benefits
Woodland Wet woodland									E	-		isive restoration artial restoration		£	-
Wet woodland Wetlands/wet g	grassland								£			, major physical		£	
Grassland									£	-		improvement			
Heathland									£	-					
Ponds/lakes Arable land									£						
	: Qualifying	benefite an	d eligible E		rising from	project			Evample	sensitivity a	nalvses				%age of
OM			-		-	Eligible F	FRM GiA	P/		sensitivity di	naryaea		Paul	Contributions require	whole life
OM OM1a	deprivation overall	£	g benefits 38,697,436	%age benefits 98.6%	Payment rate 6	£	2,321,846	%age 95.4%	Test PF Calculat	or (above)			Raw score 15%	£ 6,150	
OM1b	people related	£	118,237	0.3%	20	£	23,647	1.0%	SA1: pv WI	C - Affordability			12%	£ 7,952	
010	20% most	£	-	0.0%	45	£	-	0.0%	-	Flood risks lower t			N/A	No OM2 contribution	n/a
OM2	21% to 40%	£		0.0%	30 20	£	•	0.0%		Erosion risks lowe on of benefits - Opt			15%	£ 6,150 £ 6,150	
	20% most	£	-	0.0%	45	£	-	0.0%	-	on of benefits - Opt			15%	£ 6,152	
ОМЗ	21% to 40%	£	-	0.0%	30	£	-	0.0%		gic considerations			15%	£ 6,150	
	60% least	£	440,641	1.1%	20 20	£	88,128	3.6%	SA7: Chan	je in environmental	napitat is optimist	30°	N/A	No OM4 contribution	n/a
OM4	rivers	£		0.0%	20	£		0.0%							
Total		£	39,256,314	pv m	ax. eligible GiA	£	2,433,622								
Ref:															

A.3 PFC for Corton baseline erosion

Project t	eams are i	required t	o provide	a copy of	the PF C	alculator v	within the	ir busine	ss case for approv	al of FCE	RM GiA.				
Flood	d and (Coasta	al Eros	sion R	isk Ma	anage	ment	(FCEF	(M)						
									sk Management	Grant-in	-Aid (FCE	RM GiA))		
Version 1	: March 202	0 (for use				itcomes afte								Key input	selection
	Project detai							-						calcu	ated cells
Project Name National Proje		Gunton and C B2413600	orton Options	Appraisal				l	Project stage Option reference	Corton baseli			Project benef		Cost ratio
Date of PF Ca		29 October 20	21						Option reference	Conton baseli	ne erosion				a to 1
Lead RMA		Coastal Partne	rship East]				E	ffective return o		a to 1
FCERM GiA a								-							
	(pound Sterling to be included		ECERM capita	I programme fo	r the chosen o	otion							FUERI	I GiA eligibility is removed a	benefits
	2: Prospect o														
	rategic approad				I										
		arr								-					
Raw PF Score	e			/a		Adjusted PF Se	core		n/a	_					
Minimum pv c	ontribution/savin	g required	n/a			pv FCERM GiA	up-front costs		n/a						
pv maximum	eligible FCERM	GiA	low BCR			pv FCERM GiA	future costs		n/a						
SECTION 3	3: Costs and	contributio	ns for the P	REFERRED	OPTION (ov	ver the durati	ion of bene	fits period)							
Project costs	5		Towards qualit	fying outcomes		Contributions	secured to d	ate	towards pv appraisal costs	towards p outcom	pv qualifying es up-front	towards provide towards provide towards and towards and towards and towards and towards and towards provide towards	v qualifying es future		
pv appraisal o						pv Local Levy								Contributor(s) or F	und(s)
pv design and pv risk conting	construction co	sts	£	27,390,390		pv other public s pv private and v									
pv costs for ap			£	27,390,390		pv other Enviror									
pv future costs			£	502,426		pv sub-total			£ -	£	-	£	-		
	duration of bene		٤	27,892,816		pv total contribu	itions		ε -	Contribution secure contr	s to future cost ibutions toward	s are not inclui s future costs,	oed in GiA calo , separately	ulation. Other RMAs are er	couraged to
SECTION 4	4: Outcome M	Measure 1 -	economic b	enefits arisi	ng from FC	ERM									
pv WLB (appr			£	2,522,878		Economic summ									
Duration of b pv WLB (DoB	enefits (DoB) p	eriod	¢	100 2,522,878		Economic data	included in bus	siness case?							
1 - C	f = OM1A) f impacts - due ti	measures	~												
proposed (Dol		o measures	٤	288,738											
SECTION 5	5A: Outcome	Measure 2	A (today) - h	ouseholds a	at risk today	/ that are bet	ter protecte	ed against f	ood risk by this proje	t (over the c	duration of b	enefits perio	od)		
	ds in deprived a	reas				at risk today				ch	ange due to pro			pv qua	l. benefits
20% most dep 21% to 40% m												0	0	£	
60% least dep												0	0	£	
				low risk	moderate risk	intermediate risk	significant risk	very	low risk	moderate risk		significant risk	very significant risk		
N° household	ds in deprived a	reas			at risk at	risk fter duration of	benefits	significant risk					-		
20% most dep									Annual da	nages avoided	(£) compared w	ith a househo	ld at low risk	_	
21% to 40% m									0	59	294	1000	1589	J	
60% least dep	prived			low risk	moderate risk	intermediate	significant risk	very	The deprivati	on categories ar	re taken from the	Index of Multi	ple Deprivatior	n, available through gov.uk	
						risk		significant risk		e and version sh					
			B (2040) - ho	ouseholds a				-	flood risk by this proje	ct (over the	remaining d	iration of b	enefits perio	od)	
Year when m - Gateway 4	easures are rea	dy for service			OM2 (2040) FC	CERM GiA eligit	pility is not app	plicable							
	ds in deprived a	reas			a	t risk from 2040)				ange due to pro				l. benefits
20% most dep 21% to 40% m											0 0	0	0	Ltd by DoB	
60% least dep												0	0	Ltd by DoB	
				low risk	moderate risk	intermediate risk	significant risk	very significant risk	low risk	moderate ris	k intermediate risk	significant risk	very significant risk		
N° household	ds in deprived a	reas			at risk af	fter duration of	benefits	Significant fish	Annual da	name avoided	(£) compared w	ith a hourahol	°.		
20% most dep														1	
21% to 40% m 60% least dep									0	59	294	1000	1589	J	
				low risk	moderate risk		significant risk	very	The deprivati	on categories a	re taken from the	Index of Multi	ple Deprivatior	n, available through gov.uk	
SECTION (. Outcome I	lecoure 2	hauaahalda	hotter prote	oted engine	risk	aalan	significant risk	(see guidanc	e and version sh	heet for links)				
			nouseholds			st coastal er	USION								
N° household 20% most dep	ds in deprived a	reas		at risk	today	1		Damages per Annual damag	household avoided: es avoided		£ 6.800	£ 6.800	1	pv qua	l. benefits
21% to 40% m								Loss expected			50	20	years	£	-
60% least dep	orived			32	3			Present value	of Year 1 loss (i.e. first year d	images,	£ 1,341	£ 3,417]	£	1,588,035
				long-term loss	medium-term loss			discounted bas	ed on when loss is expected		Long-term loss	Medium-term loss			
SECTION 7	7: Outcome M	Measure 4 -	environmen	tal improve	ments										
		'be	fore' condition	(Ha)		'after' con	dition at end of	f DoB (Ha)							
Type of habita		Poor	Moderate	Good		Poor	Moderate	Good	pv qua	I. benefits		Length of riv	ver habitat enha		
Intertidal habita Woodland	at					┝──┤			£		Committee	sive restoration	kilometre(s)	pv qua	I. benefits
Woodland Wet woodland									£			nsive restoration artial restoration		£	
Wetlands/wet g	grassland								£	-	A single	, major physical improvement		3	-
Grassland Heathland									£	-	-	- inprovement			
Heathland Ponds/lakes						┝──┤			£		-				
Arable land									£	-					
SECTION 8	3: Qualifying	benefits an	d eligible F	CERM GiA a	rising from	project			Examples	ensitivity a	nalyses				%age of
ом	deprivation		g benefits	%age benefits		Eligible FC	ERM GIA	%age	Test				Raw score	Contributions required	whole life costs
OM1a	overall	£	646,104	25.6%	6	£	38,766	9.4%	PF Calculator	· · · · · · · · · · · · · · · · · · ·			n/a	n/a	n/a
OM1b	people related	£	288,738	11.4%	20	£	57,748	13.9%	SA1: pv WLC				n/a	n/a	n/a
OM2	20% most 21% to 40%	£	-	0.0%	45 30	£	•	0.0%			than assumptions or than assumption		N/A n/a	No OM2 contribution	n/a #VALUE!
	60% least	£		0.0%	20	£		0.0%			tion choice is cons		n/a	n/a	n/a
	20% most	£	-	0.0%	45	£	-	0.0%	SA5: Duration	of benefits - Opt	tion choice is optir	nistic	n/a	n/a	n/a
OM3	21% to 40% 60% least	£	- 1,588,035	0.0%	30 20	£	- 317,607	0.0%			not demonstrated habitat is optimis		n/a N/A	n/a No OM4 contribution	n/a
	60% least habitat	£	1,066,035	0.0%	20	£	-	76.7%	SA7: Unange	environmental	national is optimis		N/A	No Own contribution	n/a
OM4	rivers	£	-	0.0%	20	£	-	0.0%							
Total		£	2,522,878	pv m	ax. eligible GiA	£	414,121								
Ref:															

A.4 PFC for Corton high erosion

Project t	eams are	required t	to provide	a copy of	the PF C	alculator	within the	eir busine	ss case for approv	al of FCERM Gi	Α.		
	d and (
									sk Management (Grant-in-Aid (`	
	: March 202								on management	orant in Ala		, 	Key input selec
	: Project deta												calculated cells
Project Name		Gunton and C	Corton Options	Appraisal				T	Project stage				Benefit:Cost ratio
National Proje	ect number	B2413600						-	Option reference	Corton high erosion		Project benef	it to cost ratio: 0.3 to 1
Date of PF Ca	alculator	29 October 20						-			_		urn to taxpayer: n/a to 1
Lead RMA FCERM GiA a	upplicant type	Coastal Partne	ership East]			E	ffective return o	n contributions: n/a to 1
	C (pound Sterling	9)										FCER	I GiA eligibility is removed as costs e
Figures in blu	e to be included	d in the nationa	I FCERM capita	l programme fo	r the chosen o	ption							bi
SECTION 2	2: Prospect of	of eligibility	for FCERM	GiA									
Confirmed st	rategic approa	sh?			1								
Raw PF Scor				/a		Adjusted PF S	Foor		n/a	1			
				/d						1			
Minimum pv c	ontribution/savir	ig required	n/a			pv FCERM Gi	A up-front costs		n/a	1			
pv maximum	eligible FCERN	I GiA	low BCR			pv FCERM Gi	A future costs		n/a	J			
SECTION 3	3: Costs and	contributio	ns for the P	REFERRED	OPTION (ov	er the dura	tion of bene	efits period)					
Project cost	5		Towards quali	fying outcomes		Contribution	s secured to d	late	towards pv appraisal costs	towards pv qualify outcomes up-from		v qualifying es future	
pv appraisal c						pv Local Levy							Contributor(s) or Fund(s)
	l construction co	sts	£	27,390,390		pv other public							
pv risk conting pv costs for a			£	27,390,390			voluntary secto onment Agency						
pv future cost			£	502,426		pv sub-total			£ -	£	- £	-	
pv WLC (over	duration of ben	efits)	£	27,892,816		pv total contrib	utions		£ -		re costs are not inclu towards future costs		ulation. Other RMAs are encouraged
SECTION 4	4: Outcome I	Measure 1 -	economic b	enefits arisi	ng from FC	ERM				secure contributions	towarus ruture costs	, separatély	
pv WLB (appr	aisal period)		£	8,031,355		Economic sum	mary sheet com	pleted					
Duration of b	enefits (DoB) p	eriod		100			a included in bu						
pv WLB (DoB	8 = OM1A)		£	8,031,355									
People related proposed (Do	d impacts - due t	o measures	£	1,428,507									
		Measure 2	A (today) - h	ouseholds	at risk todav	that are be	tter protect	ed against f	lood risk by this projec	t (over the duration	n of benefits perio	od)	
			(today) - n	outonioido i	it non today	at risk today	neor protoot	ou ugumot i	lood now by the project	change du		,	an and here fit
20% most dep	ds in deprived a prived	ireas				at risk today		1		Change du	0 0	0	pv qual. benefits
21% to 40% n									0	0	0 0	0	£
60% least dep	prived								0	-	0 0	0	£
				low risk	moderate risk	intermediate risk	significant risk	very significant risk	low risk	moderate risk interm ris		very significant risk	
N° household	ds in deprived a	ireas			at risk at	fter duration of	f benefits	-	n Annual dan	nages avoided (£) com	ared with a househo	ld at low risk	
20% most dep													1
21% to 40% n 60% least de									0	59 20	94 1000	1589	J
				low risk	moderate risk	intermediate	significant risk	very	The deprivatio			ple Deprivation	n, available through gov.uk
						risk		significant risk		and version sheet for lir	· · · · · · · · · · · · · · · · · · ·		
			B (2040) - ho	ouseholds a	t risk in 204	0 that are b	etter protec	ted against	flood risk by this projec	ct (over the remain	ing duration of b	enefits perio	od)
Year when m - Gateway 4	easures are rea	idy for service			OM2 (2040) FO	CERM GiA eligi	ibility is not ap	plicable					
	ds in deprived a	ireas			a	t risk from 204	10			change du			pv qual. benefits
20% most dep									0	0	0 0	0	Ltd by DoB
21% to 40% n 60% least dep									0	0	0 0	0	Ltd by DoB Ltd by DoB
oo in icust dep				low risk	moderate risk	intermediate	significant risk	very	low risk	moderate risk interm	ediate significant risk	very	2.0.07.000
N° housebole	ds in deprived a	reas			at risk at	risk fter duration o	fbenefits	significant risk		ris		significant risk	
20% most dep									Annual dam	nages avoided (£) com	pared with a househo	ld at low risk	
21% to 40% n									0	59 29	94 1000	1589]
60% least dep	orived			low rick	moderate rick	intermediate	cionificant rick	NODY	The destivation	n entennier are taken f	rom the Index of Multi	nla Doprivation	a available through gov uk
				low risk	moverate risk	risk	significant risk	significant risk		and version sheet for lir		pre preprivation	n, available through gov.uk
SECTION	6: Outcome I	Measure 3 -	households	better prote	ected agains	st coastal e	rosion						
N° household	ds in deprived a	ireas		at risk	today			Damages per	household avoided:				pv qual. benefits
20% most dep	prived]		Annual damag		£	6,800 £ 6,800]	£
21% to 40% n								Loss expected	l in		50 20	years	£
60% least dep	prived			166 long-term	10 medium-term	J		Present value	of Year 1 loss (i.e. first year da	mages, £	1,341 £ 3,417 -term Medium-term]	£ 7,67
				loss	loss			discounted ba	sed on when loss is expected)	lo			
SECTION	7: Outcome I	Measure 4 -	environmen	tal improve	ments								
		'be	fore' condition	(Ha)		'after' cor	ndition at end o	of DoB (Ha)					
Type of habit		Poor	Moderate	Good	1	Poor	Moderate	Good	pv qual	. benefits	Length of riv	ver habitat enha	
Intertidal habita Woodland	at								£	•	mprehensive restoration	kilometre(s)	pv qual. benefits
Woodland Wet woodland									£	- Co	mprehensive restoration Partial restoration		£
Wetlands/wet									£	-	A single, major physical		£
Grassland									£	-	improvement		
Heathland Ponds/lakes									£	-			
Ponds/lakes Arable land									£	-			
	Duralif in	honefit- :	d olicitus C	CEDMICIA	rieine fore	project		1	Errore I	opeitivity or the			
	8: Qualifying									ensitivity analyses			%ag whole
OM OM1a	deprivation overall		ig benefits	%age benefits		Eligible F	CERM GiA	%age 0.0%	Test PE Calculator /	above)		Raw score	Contributions required cos
OM1a OM1b	overall people related	£	1.428.507	0.0%	6 20	£	- 285,701	0.0%	PF Calculator (SA1: pv WLC -			n/a n/a	n/a n/. n/a n/.
	20% most	£	1,420,007	0.0%	45	£	-	0.0%		od risks lower than assu	mptions made	n/a N/A	No OM2 contribution n/
OM2	21% to 40%	£		0.0%	30	£		0.0%	SA3: OM3 - Er	osion risks lower than as	sumptions made	n/a	n/a #VAL
	60% least	£	-	0.0%	20	£	-	0.0%		of benefits - Option choice		n/a	n/a n/
OM3	20% most 21% to 40%	£	•	0.0%	45 30	£	-	0.0%		of benefits - Option choice considerations not demo		n/a n/a	n/a n/. n/a n/.
Jina	21% to 40% 60% least	£	7,670,245	84.3%	30 20	£	1,534,049	84.3%	-	considerations not demoi n environmental habitat is		n/a N/A	No OM4 contribution n/
OM4	habitat	£		0.0%	20	£		0.0%					
	rivers	£		0.0%	20	£	-	0.0%					
Total		£	9,098,752	pv m	ax. eligible GiA	£	1,819,750	J					
Ref:													

A.5 PFC for North Corton baseline erosion

Project t	Project teams are required to provide a copy of the PF Calculator within their business case for approval of FCERM GIA.																
Flood and Coastal Erosion Risk Management (FCERM)																	
Partnership Funding (PF) calculator 2020 for Flood and Coastal Erosion Risk Management Grant-in-Aid (FCERM GiA)																	
Version 1: March 2020 (for use by projects delivering FCERM outcomes after 1 April 2021)																	
	Project detai		y projects (denvering i	CENHOUN	comes alter 17	April 202	. 1)							. Key	calculated	
Project Name		Gunton and C	orton Options	Appraisal				1	Project stage	ſ			1			Benefit:Co	st ratio
National Proje		B2413600						1	Option reference		North Corton bas	seline erosion		Project benef	it to cost ratio:	0.0 to	
	e of PF Calculator 29 October 2021												•		urn to taxpayer:	n/a to	
Lead RMA	Lead RMA Coastal Partnership East												E	Effective return o	n contributions:	n/a to	1
	pplicant type (pound Sterling	1)	_		l									FCER	M GiA eligibility is re	moved as c	osts exceed
	e to be included		FCERM capital	programme for	the chosen op	tion											benefits
SECTION 2	2: Prospect o	of eligibility	for FCERM (GiA													
Confirmed st	rategic approac	h?			1												
Raw PF Score				/a		Adjusted DE Case	_		-								
				/a		Adjusted PF Scon			n/a								
Minimum pv c	ontribution/saving	g required	n/a			pv FCERM GiA up-	-front costs		n/a								
pv maximum	eligible FCERM	GiA	low BCR			pv FCERM GiA futu	ure costs		n/a								
SECTION 3	3: Costs and	contributio	ns for the Pl	REFERRED	OPTION (ov	er the duration	of benefi	its period)									
Project costs	5		Towards quali	lying outcomes		Contributions see	cured to da	ate	towards pv app	oraisal costs	towards pv o outcomes			v qualifying es future			
pv appraisal c	osts		£	100,000		pv Local Levy						-			Contributo	r(s) or Fund	(s)
	construction cos	sts	£	5,015,168		pv other public sec											
pv risk conting pv costs for ap			£	1,000,000		pv private and volu pv other Environme											
pv future costs			£	40,539		pv sub-total			£		£	-	£	-			
pv WLC (over	duration of bene	fits)	£	6,155,707		pv total contribution	ns		£		Contributions to secure contribu	o future costs	s are not includ	ded in GiA calc	ulation. Other RMAs	are encour	raged to
SECTION 4	1: Outcome N	Aeasure 1 -	economic b	enefits arisir	ng from FCE	RM					secure contribu	nons toward	s ruture costs,	separately			
pv WLB (appr	aisal period)		£	30,215	1	Economic summary	sheet comp	leted									
Duration of b	enefits (DoB) pe	eriod		100		Economic data incl											
pv WLB (DoB	= OM1A)		£	30,215	1												
People related proposed (Dol	d impacts - due to B = OM1B)	measures	£	-													
		Measure 2	- A (today) - h	ouseholds a	t risk todav	that are better	protecter	d against flo	ood risk by thi	is project (over the dura	ition of ber	nefits period	1)			
	ds in deprived a		(couly) ii		, non to day	at risk todav	p	a agamet in		io project (i		ge due to pro		-,		pv qual, be	mofile
20% most dep		reas				at risk today				0	0	ge due to pro 0	0	0	£	pv quai. De	-
21% to 40% m										0	0	0	0	0	£		-
60% least dep	rived									0	0	0	0	-	£		
				low risk	moderate risk	intermediate sig risk	inificant risk	very significant risk		low risk	moderate risk	intermediate risk	significant risk	very significant risk			
N° household	ds in deprived a	reas			at risk a	fter duration of ber	nefits		-	Annual dam:	ages avoided (£)	compared w	rith a househo	ld at low risk			
20% most dep															1		
21% to 40% m 60% least dep										0	59	294	1000	1589	J		
				low risk	moderate risk	intermediate sig	nificant risk	very					Index of Multip	ple Deprivation	, available through go	v.uk (see	
						risk		significant risk			ersion sheet for li	· _ · _ · ·					
			3 (2040) - No	useholds at) that are better			lood risk by th	ns project ((over the rem	aining dur	ation of ber	nefits period)		
Gateway 4	easures are rea	dy for service	1		OM2 (2040) FO	CERM GiA eligibility	y is not app	olicable									
	ds in deprived a	reas			a	t risk from 2040						ge due to pro				pv qual. be by DoB	enefits
20% most dep 21% to 40% m									0 0				0 0 0				
60% least dep							_			0	0	0	0	0		y DoB y DoB	
				low risk	moderate risk	intermediate sign risk		very	-		moderate risk	intermediate risk	significant risk	very significant risk	, –	-	
N° household	ds in deprived a	reas			at risk a	fter duration of ber		significant risk						, second			
20% most dep									_	Annual dama	ages avoided (£)) compared w	rith a househo	ld at low risk			
21% to 40% m										0	59	294	1000	1589]		
60% least dep	rived			low risk	moderate risk	intermediate sign	nificant risk	very	J ,	he denrivation	categories are ta	sken from the	Index of Multir	nle Deprivation	, available through go	uk (see	
						risk		significant risk			ersion sheet for li		and the second s	privation		(e	
SECTION 6	6: Outcome N	Measure 3 -	households	better prote	cted agains	t coastal erosio	on										
N° household	ds in deprived a	reas		at risk	today			Damages per	household avoid	led:						pv qual. be	enefits
20% most dep								Annual damag			1	£ 6,800	£ 6,800		£		
21% to 40% m 60% least dep						-		Loss expected			_	50	20 £ 3.417	years	£	_	•
oo % least dep	aneu -			long-term	medium-term	J			of Year 1 loss (i.e. sed on when loss i		ages,	E 1,341 Long-term	Medium-term	J	2		
				loss	loss							loss	loss				
SECTION 7	7: Outcome N	leasure 4 -	environmen	tal improven	nents												
		'be	fore' condition			'after' conditi	ion at end of										
Type of habita Intertidal habita		Poor	Moderate	Good	1	Poor M	Moderate	Good	1 .	pv qual.	benefits		Length of riv	ver habitat enha	inced (OM4B)	DV much r	anofite
Intertidal habita Woodland	8L								5	2		Comprehe	nsive restoration	kilometre(s)		pv qual. be	enents
Wet woodland									£	2			artial restoration	1	£		-
Wetlands/wet	grassland								£	E		A single	e, major physical improvement		£		-
Grassland									£	2	-						
Heathland Ponds/lakes									6	2							
Arable land						├ ──┼─			5	2							
	3: Qualifying	benefits an	d eligible FC	FRM Gi∆ ar	ising from r	project				xample se	nsitivity anal	vses					None of
OM			g benefits			Eligible FCER	MGIA	94		est	, and			Paul come	Contributions re-	nuired	%age of whole life
OM OM1a	deprivation overall	£	g benefits 30,215	%age benefits 100.0%	Payment rate 6	£	(M GIA 1,813	%age 100.0%		'est 'F Calculator (a	bove)			Raw score	n/a	yaneu	costs n/a
OM1b	people related	£	-	0.0%	20	£	-	0.0%		A1: pv WLC - A				n/a	n/a		n/a
	20% most	£	-	0.0%	45	£	-	0.0%	s	A2: OM2 - Floo	od risks lower than			N/A	No OM2 contribution		n/a
OM2	21% to 40%	£	-	0.0%	30	£		0.0%			sion risks lower th			N/A	No OM3 contribution		n/a
60% least £ -			0.0%	20 45	£	-	0.0%	-		f benefits - Option f benefits - Option			n/a n/a	n/a n/a		n/a n/a	
OM3	20% most 21% to 40%	£		0.0%	45	£	-	0.0%	-		onsiderations not		ISUC	n/a n/a	n/a		n/a n/a
	60% least	£	-	0.0%	20	£		0.0%			environmental hal		ic	N/A	No OM4 contribution		n/a
OM4	habitat	£	-	0.0%	20	£	-	0.0%	-								
Total	rivers	£	- 30,215	0.0%	20 ax. eligible GiA	£	- 1,813	0.0%	J								
Ref:		-	30,213	pv m	cayine olA	-	1,010										
INTER-																	

A.6 PFC for North Corton high erosion

<form></form>	Project teams are required to provide a copy of the PF Calculator within their business case for approval of FCERM GIA.																	
	Partnership Funding (PF) calculator 2020 for Flood and Coastal Erosion Risk Management Grant-in-Aid (FCERM GiA)																	
													,	Key input	selection			
	SECTION 1	Project deta	ils											calcu	lated cells			
				Corton Options	Appraisal			I				l						
				21		-			Option reference									
	Lead RMA		Coastal Partne	ership East]				E			_			
													ECER	M Giā elizibility is removed	as costs exceed			
				I FCERM capita	I programme fo	r the chosen o	ption						10210	in our englouity is removed	benefits			
	SECTION 2	2: Prospect of	of eligibility	for FCERM	GiA													
	Confirmed st	rategic approad	sh?			1												
					n/a		Adjusted PF Score		n/a									
	Minimum pv c	ontribution/savin	a required	n/a		1			n/a									
				low BCR		1			n/a									
					DECEDDEN			ofite poriod)										
			contributio			OF HON (O			towards pv app	praisal costs								
				£		1		Jate			outcomes up-front	omes up-front outcomes future						
			sts	£														
				£														
	pv future costs	5		£	40,539		pv sub-total		£	- £	-	£	-					
Set 10 - 0.4 during Masser 1 - excention bundles atom for 0.5 CHM Visit 3 partial mining 10 - 0.5	· · ·		1	£					£	- Con	ntributions to future cost ure contributions toward	s are not inclu s future costs	ded in GiA calo , separately	culation. Other RMAs are e	ncouraged to			
	SECTION 4	4: Outcome M	Measure 1 -	economic b		ng from FC	ERM											
				£	1 C C C C C C C C C C C C C C C C C C C													
<form></form>			eriod	£			Economic data included in bu	siness case?										
SEC IDIA SC Unclose Massare Mark a first loop "I all a bitty project (over the duration of particle mark project (People related	d impacts - due ti	o measures	£														
			Moseuro 2	A (today) b	ouenholde	l at rick today	that are better protect	od againet f	lood rick by t	his project (or	vor the duration of h	anofite nori	od)					
201 mid quinti 101 m				A (louay) - I	lousenoius	at fisk today		eu against i	loou lisk by u	nis project (ov			ou)		-l han fits			
Only but drawned Der offen in description of methods of segring of a construction of methods of segring of a constructio			ireas				at risk today		1 [0			0	£	ai. Denents			
No. 0 Notesting in the methods is significant in any significant in										-		-		£	-			
	60% least dep	orived			low risk	moderate risk	intermediate significant risk	very	JL					£	-			
201 bit dignami						at sick a	risk											
mining mining <thmining< th=""> <thmining< th=""> <thmining< t<="" td=""><td></td><td></td><td>ireas</td><td></td><td></td><td>at risk a</td><td>ter duration of benefits</td><td>1</td><td>1</td><td>Annual damages</td><td>s avoided (£) compared w</td><td>ith a househo</td><td>ld at low risk</td><td></td><td></td></thmining<></thmining<></thmining<>			ireas			at risk a	ter duration of benefits	1	1	Annual damages	s avoided (£) compared w	ith a househo	ld at low risk					
in the minimum splant minimum spla										0	59 294	1000	1000 1589					
NA upplication (seq publication direction is) SECTORS 55: Culcions: Measure 24b (2043) - Fouriexholds at risk in 24b in an example as ready for service provide formation of benefits period Year when example as ready for service at als from 24b (seq publication of benefits) by the project (over the reanning duration of benefits) by the project (over the reanning duration of benefits) by the project (sever the sever the sev	60% least dep	prived			low risk	moderate risk	intermediate significant risk	very	J T	The deprivation cat	tegories are taken from the	Index of Multi	iple Deprivation	n, available through gov.uk				
Year water									······		· · · · · · · · · · · · · · · · · · ·							
- catery 4				B (2040) - h	ouseholds a				flood risk by 1	this project (o	over the remaining di	iration of b	enefits perio	od)				
Sciences Spectration	- Gateway 4				_			plicable										
21 h No <			ireas			a	t risk from 2040	_		0	change due to pro	ject 0	0		al. benefits			
Inversion of spired areas Intermediate spinear risk after dration of benefits Spinear risk Spinear risk Annual damages avoided (Discourse risk after dration of benefits) 11% Households in depired areas at risk after dration of benefits at risk after dration of benefits at risk after dration of benefits Annual damages avoided (Discourse risk after spinear risk after dration of benefits) 21% Households in depired areas at risk after dration of benefits										0	0 0							
Index application r.r.d application 01 baseded and	60% least dep	orived			low rick	moderate rick	intermediate cignificant rick	NODE				-	-	Ltd by DoB				
Color Data desired					ion non		risk					Significant risk						
21 % b 40% mont depinded 0 9 24 % 100 1989 00% is ast depinded 0 9 24 % 100 1989 The depinded catagories are taken from the index of Multiple Depindence, analysis SECTION S: Outcome Measure 3 - households better protected against coastal erosion The depinded catagories are taken from the index of Multiple Depindence, and writes the fire inset. The depinded catagories are taken from the index of Multiple Depindence, and writes the fire inset. The depinded catagories are taken from the index of Multiple Depindence, and writes the fire inset. The depinded catagories are taken from the index of Multiple Depindence, and writes the fire inset. Colspan="4">The depinded catagories are taken from the index of Multiple Depindence, and writes the fire inset. Colspan="4">The depinded catagories in depind			ireas			at risk a	ter duration of benefits		1	Annual damages	s avoided (£) compared w	ith a househo	d at low risk					
Image: moderate minimized as indereted as intermedial significant minimized as indexed minimized minimi	21% to 40% m	nost deprived								0	59 294	1000	1589]				
Sectors Sectors <t< td=""><td>60% least dep</td><td>orived</td><td></td><td></td><td>low risk</td><td>moderate risk</td><td>intermediate significant risk</td><td>verv</td><td>I ,</td><td>The deprivation cat</td><td>tegories are taken from the</td><td>Index of Multi</td><td>iple Deprivation</td><td>n, available through gov.uk</td><td></td></t<>	60% least dep	orived			low risk	moderate risk	intermediate significant risk	verv	I ,	The deprivation cat	tegories are taken from the	Index of Multi	iple Deprivation	n, available through gov.uk				
1 ^h households in depired 20% inside							risk		(1	see guidance and	version sheet for links)							
20% most deprived 21% to 40% deprived 21				households		-	st coastal erosion											
21% to 40% most deprived initial content of the served of th			ireas		at ris	today	1			ded:	S 8 000	£ 8.000		pv qu	al. benefits			
d0% least depixed imaginary module-term loss Present value of Year 1 loss (i.e. first year damages, discounted based on when loss is expected) imaginary module-term loss imaginary module-term los																		
Section 7: Outcome Measure 4 - environmental improvemental impr]	Present value	of Year 1 loss (i.e.		£ 1,341	£ 3,417		£	-			
Type of koderate Good Poor Moderate Good Moderate Good Image: Comprehensive restoration Image: Comprehance: Comprehens								discounted ba	sed on when loss	is expected)								
Type nobilati (OMA) Poor Moderate Good Poor Moderate Good prequil.bendifis Length of river habitat elanace (OME) Interdial habitat (MAA) Image: Source (Source (S	SECTION 7	7: Outcome M	Measure 4 -	environmer	ntal improve	ments												
Interdial habitat Image: marked analysis Imarked analysis Image: marked analysis																		
Woodland Wet woodland Wet woodland Comprehensive restoration Partial restoration Description Partial restoration Description			Poor	Moderate	Good	1	Poor Moderate	Good]	pv qual. ben	efits	Length of riv			al benefits			
Wetands/wet grassland Grassland + Heathland Arable land Image major physical mprovement A single: major physical improvement A single: major physical improvement E Improvement Imp									£	ε	- Compreher	sive restoration	n nonneure(S)	۵۷ du ٤	-			
Grassland Heathand Arable land Improvement Engrovement Engrovement Construction of Arable land Improvement E Improvement Improvement E Improvement <									£	ε				3	-			
HeatNand Pondslikes Arable land Image of the sensitivity analyses Employee filte of the sensitivity analyses Employee filte of the sensitivity analyses Name of the sensitivity analyses SECTION 8: Qualifying benefits Qualifying benefits Nage of whole life Name of whole life Name of the sensitivity analyses Name of the sensitivity analy		grassiand		-	-		<u>├</u> ──		£	£	- A single	improvement	įL	ε				
Arabic land ε support ε support suppo	Heathland								£	£	-							
SECTION 8: Qualifying benefits and eligible FCERM GiA arising from project Example sensitivity analyses Stage of whole life Stage of whole life <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td> </td><td></td><td></td><td>е е</td><td>-</td><td></td><td></td><td></td><td></td></t<>										е е	-							
Off Qualifying benefits %age benefits Payment rate Eligible FCERM GIA %age Test Test Raw score Contribution required Contribution required Na <) Ouslif in	honofit-	d oligitte 5		riging from	project	1		vamela con -	itivity analyses							
OM1a overall E 661,893 100.% 6 E 39,714 100.0% OM1b people related E - 0.0% 20 E - 0.0% SA1: pVIUC - Affordability SA2: DVIUC - Affordability SA2: DVIUC - Affordability Na Na Na ma na na <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>analyses</td><td></td><td>Dave</td><td>Contributions</td><td>whole life</td></t<>											analyses		Dave	Contributions	whole life			
OM1b psople related E 0.0% 2.0 E 0.0% 20% 20% 6 0.0% 4.5 6 0.0% SA1: pv WLC - Affordability SA2: OM2 - Pood risks lower than assumptions made N/A No OM2 contribution n/a n/a <td< td=""><td></td><td></td><td>£</td><td>-</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>e)</td><td></td><td></td><td></td><td></td></td<>			£	-			-				e)							
OM2 21% to 40% E 0.0% 30 E 0.0% 0.0% SA: OM3 - Erosion risks lower than assumptions made N/A No OM3 contribution n/a 0/M 20% teast E 0.0% 20 E 0.0% SA: Our ation of benefits - Option choice is conservative n/a		people related	£	-	0.0%	20	£ -	0.0%	s	SA1: pv WLC - Affor	rdability		n/a	n/a	n/a			
b0% least E 0.0% 20 E 0.0% 20 E 0.0% 20% most E - 0.0% 45 E - 0.0% SA1: Duration of benefits - Option choice is conservative n/a n/a n/a n/a 20% most E - 0.0% 30 E - 0.0% SA5: Duration of benefits - Option choice is conservative n/a	01/2		£	-			-											
20% most £ - 0.0% 45 £ - 0.0% 21% to 40% £ - 0.0% 30 £ - 0.0% 21% to 40% £ - 0.0% 20 £ - 0.0% 60% least £ - 0.0% 20 £ - 0.0% 60% least £ - 0.0% 20 £ - 0.0% Abitat £ - 0.0% 20 £ - 0.0% Total £ - 0.0% 20 £ - 0.0%							-											
b0% least E - 0.0% 2.0 E - 0.0% SA7: Change in environmental habitat is optimistic N/A No OM4 contribution n/a OM4 habitat E - 0.0% 2.0 E - 0.0% rivers E - 0.0% 2.0 E - 0.0% Total E 661,893 pv max. eligible GiA E 39,714		20% most	£		0.0%	45	-	0.0%	s	SA5: Duration of ber	nefits - Option choice is optim		n/a	n/a	n/a			
Multiple E - 0.0% 20 E - 0.0% Miners E - 0.0% 20 E - 0.0% Total E 661.893 pv max.eligible GiA E 39,714	OM3		£	-			£ -					tic						
mers E - 0.0% 20 E - 0.0% Total E 661,893 pv max.eligible GiA E 39,714	014		£	-			£ -	-		and the second se	and the second second second		- HPA					
		rivers		-				0.0%										
	Total Ref:		L	661,893	pv m	ax: eligible GiA	2 39,714											

A.7 PFC for Corton and North Corton combined baseline erosion

Project t	Project teams are required to provide a copy of the PF Calculator within their business case for approval of FCERM GIA. Flood and Coastal Erosion Risk Management (FCERM)														
Floo	d and (Coast	al Eros	sion R	lisk M	anade	ment	(FCEF	RM)						
									sk Management	Grant-in-A	Aid (FCE	RM GiA)			
	: March 202								-					Key inpu	t selection
SECTION 1	: Project deta	ils												c	alculated cells
Project Name			Corton Options	Appraisal				Ι	Project stage						nefit:Cost ratio
National Proje		B2413600 29 October 20	21		ł				Option reference	Corton and Nor	th Corton base		Project benef	it to cost ratio: urn to taxpayer:	0.1 to 1 n/a to 1
Lead RMA	liculator	Coastal Partne						1				E		in contributions:	n/a to 1
FCERM GIA a								,							
	C (pound Sterling												FCER	II GiA eligibility is remov	ed as costs exceed benefits
	e to be included				or the chosen o	ption									
SECTION	2: Prospect of	of eligibility	for FCERM	GiA	_										
Confirmed st	rategic approa	sh?			1										
Raw PF Scor	e		n	/a		Adjusted PF 8	Score		n/a						
Minimum pv o	ontribution/savir	g required	n/a]	pv FCERM Gi	A up-front costs		n/a						
pv maximum	eligible FCERN	I GiA	low BCR		1	pv FCERM Gi	A future costs		n/a	1					
-	3: Costs and		·	PEEEDDED				fite period)							
		contributio							towards pv appraisal costs	towards pv		towards p			
Project cost			Towards quai	fying outcomes		pv Local Levy	s secured to d	ate		outcomes	i up-front	outcom	es future	Contributor(s)	or Fund(s)
pv design and	l construction co	sts	£	33,506,099		pv other public	sector								
pv risk conting							voluntary secto								
pv costs for a pv future cost			£	33,506,099 542,964		pv other Enviro	onment Agency		£	£		£			
	> duration of ben	efits)	£	34,049,063		pv total contrib	utions		£ -					ulation. Other RMAs ar	e encouraged to
SECTION	4: Outcome I	Measure 1 -	economic b	enefits arisi	- ing from FC	ERM				secure contrib	utions towards	s future costs,	separately		
pv WLB (appr			E	2,553,093			mary sheet com	pleted							
	enefits (DoB) p	eriod	Ĺ	100			included in bu								
pv WLB (DoB			£	2,553,093]										
People related	d impacts - due t	o measures	£	288,738											
		Measure 2	A (today) - h	ouseholde	at risk today	that are be	tter protect	ed against f	lood risk by this proje	ct (over the du	ration of be	enefits perio	od)		
	ds in deprived a		(at risk today	protect	gunot	a na proje		nge due to proj				qual. benefits
20% most dep		ireas				at risk today				0 0	nge dde to proj 0	0	0	۵ ۲	quai, benents
21% to 40% n	nost deprived									0 0	0	0	0	£	-
60% least dep	prived			low risk	moderate risk	intermediate	significant risk	very	low risk	0 0 moderate risk	0 intermediate	0 significant risk	0 very	£	-
				IOW HSK		risk		significant risk	IOW ITSK	moderate risk	risk	Significant risk	significant risk		
	ds in deprived a	ireas			at risk a	fter duration o	f benefits		Annual da	mages avoided (£	E) compared wi	ith a househo	ld at low risk		
20% most dep 21% to 40% n									0	59	294	1000	1589	1	
60% least de														1	
				low risk	moderate risk	intermediate risk	significant risk	very significant risk		on categories are e and version she		Index of Multi	ple Deprivation	n, available through gov.u	k
SECTION	5B: Outcome	Measure 2	B (2040) - ho	useholds a	t risk in 204		etter protec	-	flood risk by this proje			ration of b	enefits perio	(bc	
	easures are rea						ibility is not ap		need net by the proje		, inaning aa		inonico porte	,	
- Gateway 4					•	t risk from 204		pricable							
20% most dep	ds in deprived a prived	ireas			a	Trisk from 204				0 0	nge due to proj 0	lect 0	0	Ltd by D	qual. benefits oB
21% to 40% n										0 0	0	0	0	Ltd by D	
60% least dep	prived									0 0	0	0	0	Ltd by D	юВ
				low risk	moderate risk	risk	significant risk	very significant risk	low risk	moderate risk	risk	significant risk	very significant risk		
	ds in deprived a	ireas			at risk a	fter duration o	f benefits		Annual da	mages avoided (£	E) compared wi	ith a househo	ld at low risk		
20% most dep 21% to 40% m									0	59	294	1000	1589	1	
60% least dep										56	201	1000	1000	1	
				low risk	moderate risk	intermediate risk	significant risk	very significant risk		on categories are e and version she		Index of Multi	ple Deprivation	n, available through gov.u	k
SECTION	6: Outcome I	Measure 3 -	households	better prot	ected again		rosion		(200 800000						
	ds in deprived a		liouoonoitao		today	or oouotar o		Damager per	household avoided:						gual, benefits
20% most dep	os in deprived a prived	ireas		at tisk	louay	1		Annual damage	es avoided	[£ 6,800	£ 6,800	1	£	qual benefits
21% to 40% n	nost deprived					1		Loss expected	in		50	20	years	£	-
60% least dep	prived			32	3 medium-term	J			of Year 1 loss (i.e. first year d		-	£ 3,417 Medium-term	J	£	1,588,035
				long-term loss	loss			discounted bas	sed on when loss is expected)	Long-term loss	Medium-term loss			
SECTION	7: Outcome I	Measure 4 -	environmen	tal improve	ments										
		"be	fore' condition	(Ha)		'after' co	ndition at end o	f DoB (Ha)							
Type of habit		Poor	Moderate	Good	1	Poor	Moderate	Good	pv qu	al. benefits		Length of riv	er habitat enha		
Intertidal habit Woodland	at				-				£	-	Commenter	sive restoration	kilometre(s)	pv	qual. benefits
Woodland Wet woodland					-				£	-		sive restoration irtial restoration		£	
Wetlands/wet					1				£	-		major physical improvement		£	-
Grassland					-				E	•		inprovement			
Heathland Ponds/lakes					-				E						
Arable land									£						
SECTION	8: Qualifying	benefits an	Id eligible Fi	CERM GiA a	rising from	project			Frample	sensitivity ana	lyses				%age of
OM			ig benefits				CERM GiA		Test	and			Paul come	Contributions requir	whole life
OM OM1a	deprivation overall	£	676,320	%age benefits 26.5%	Payment rate 6	£	40,579	%age 9.8%	PF Calculator	(above)			Raw score n/a	n/a	ed costs n/a
OM1b	people related	£	288,738	11.3%	20	£	57,748	13.9%		- Affordability			n/a	n/a	n/a
	20% most	£		0.0%	45	£		0.0%		lood risks lower that			N/A	No OM2 contribution	n/a
OM2	21% to 40% 60% least	£	•	0.0%	30 20	£		0.0%		rosion risks lower t of benefits - Option			n/a n/a	n/a n/a	#VALUE!
	20% most	£	-	0.0%	20 45	£		0.0%		of benefits - Option			n/a n/a	n/a	n/a n/a
ОМЗ	21% to 40%	£	-	0.0%	30	£	-	0.0%	SA6: Strategi	c considerations no	t demonstrated		n/a	n/a	n/a
	60% least	£	1,588,035	62.2%	20	£	317,607	76.4%	SA7: Change	in environmental ha	abitat is optimisti	ic	N/A	No OM4 contribution	n/a
OM4	habitat rivers	£		0.0%	20	£		0.0%	-						
Total		£	2,553,093		ax. eligible GiA	£	415,934								
Ref:								-							

A.8 PFC for Corton and North Corton combined high erosion

<form></form>	Project teams are required to provide a copy of the PF Calculator within their business case for approval of FCERM GiA.																
	Flood	d and (Coasta	al Eros	sion R	lisk Ma	anager	ment	(FCEF	RM)							
										sk Management	Grant-in	-Aid (FCE	RM GiA))			
				by projects	delivering	FCERM ou	tcomes afte	er 1 April 2	2021)								
				arten Ontions	Approximat				т	Project stage							
									1		Corton and N	·	Project benefi				
		loulator							,				-				
		pplicant type	Coastal Partne	ership East					l				E	ffective return o	n contributions: n/a	to 1	
	All values in £	C (pound Sterling				•								FCERM	I GiA eligibility is removed as		
						or the chosen of	ption									Denents	
				for FCERM	GiA												
	Confirmed st	rategic approa	sh?			1					-						
	Raw PF Score	e		r	ı/a		Adjusted PF So	ore		n/a							
	Minimum pv c	ontribution/savin	g required	n/a			pv FCERM GiA	up-front costs		n/a							
	pv maximum	eligible FCERN	I GiA	low BCR			pv FCERM GiA	future costs		n/a							
	SECTION 3	3: Costs and	contributio	ns for the P	REFERRED	OPTION (ov	er the durati	on of bene	fits period)		towards a	w aux Efrica	towards p	, auglifying			
				Towards quali	fying outcomes			secured to d	ate	towards pv appraisal costs							
			sts	£	33,506,099			ector							Contributor(s) or Fun	.0(S)	
	pv risk conting	gency					pv private and v	oluntary secto	r								
	· · · · · · · · · · · · · · · · · · ·			£			1	ment Agency		£ .	£		£				
			efits)	£				tions		£ -					ulation. Other RMAs are enco	ouraged to	
	SECTION 4	4: Outcome I	Measure 1 -	economic b	enefits arisi	ing from FCI	ERM				secure contr	induons toward	s ruture costs,	separately			
	pv WLB (appr	aisal period)		£	8,679,493]	Economic summ	ary sheet comp	pleted								
			eriod	6			Economic data i	ncluded in bus	siness case?								
Purpose Biological Section 34 and Section 34 and Section 34 and Section 34 by This project (over the duration of benefits period). Prove All Section 34 and Section 34 and Section 34 by This project (over the duration of benefits period). Prove All Section 34 and Section 34 by This project (over the duration of benefits period). Prove All Section 34 by This project (over the duration of benefits period). Prove All Section 34 by This project (over the duration 34 by This			o measures	-		1											
1 1	proposed (Do	B = OM1B)		-													
301 model or provide or				A (today) - h	ouseholds	at risk today		ter protecte	ed against f	lood risk by this projec				od)			
All be indepined Image Image <td></td> <td></td> <td>ireas</td> <td></td> <td></td> <td></td> <td>at risk today</td> <td></td> <td> </td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>pv qual. £</td> <td>benefits -</td>			ireas				at risk today							0	pv qual. £	benefits -	
Normal model is defined as a model is a final as a model is gendent in a model is gende											-			0	£		
	60% least dep	orived			low risk	moderate risk	intermediate	significant risk	verv				-	0 verv	£		
Sin standard Image: series (and series series (b) is a final ser						at sint of	risk						č				
			ireas			at risk at	ter duration of t	penents		Annual dan	nages avoided	(£) compared v	rith a househol	ld at low risk			
Low m Instruction Spectra m Spectra m <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>59</td><td>294</td><td>1000</td><td>1589</td><td>]</td><td></td></th<>										0	59	294	1000	1589]		
	60% least dep	prived			low risk	moderate risk	intermediate	significant risk	very	The deprivation	n categories ar	e taken from the	Index of Multip	ple Deprivation	n, available through gov.uk		
Your extension Description State strands State strands </td <td></td>																	
- attray d				B (2040) - ho	ouseholds a	-			-	flood risk by this proje	ct (over the	remaining d	uration of be	enefits perio)		
Color data special color data specind data special color data special color data spec	- Gateway 4					•		ility is not ap	plicable								
21 hs 400 mod deprined 00 h loss at deprived 20 hs loss deprived 20 hs 400 mod deprived areas 20 hs 400 mod deprived 20 hs 400 mo			ireas			a	t risk from 2040		_		ch	ange due to pro	oject 0	0		benefits	
Image: Non-set depined areas at manufactor risk inter duration risk inter duratinter duratinterinter duratinter duration risk inter duratinterity										C	C	0	0	0 0 Ltd by DoB			
Index aprile rate appile rate <th< td=""><td>60% least dep</td><td>prived</td><td></td><td></td><td>low risk</td><td>moderate risk</td><td>intermediate s</td><td>significant risk</td><td>verv</td><td></td><td>-</td><td></td><td>· · · · ·</td><td>0 Verv</td><td>Ltd by DoB</td><td></td></th<>	60% least dep	prived			low risk	moderate risk	intermediate s	significant risk	verv		-		· · · · ·	0 Verv	Ltd by DoB		
Solt Result							risk										
etc i			ireas			at risk a	ler duration of t	penents		Annual dan	nages avoided	(£) compared v	rith a househol	ld at low risk			
Index of Number 2 Output Index of Number 2 Subject 2 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>59</td> <td>294</td> <td>1000</td> <td>1589</td> <td>]</td> <td></td>										0	59	294	1000	1589]		
SECTION 6: Outcome Measure 3 - households better protected against coastal errorion	60% least dep	prived			low risk	moderate risk	intermediate s	significant risk					Index of Multip	ple Deprivation	n, available through gov.uk		
N° househols in depined at nik today annal danages per household avoids: annal dan	SECTION 6	Si Outeeme	Accource 2	households	bottor prot	ented agains		oion	significant risk	(see guidance	and version sh	neet for links)					
20% most deprived 21% to 40% most depriv				nousenoids	-	-	si coastal ero	sion	Damager	hourahold avaided.						honofite	
21% to 40% most depixed model mode			ireas		at risk	louay	1					£ 6,800	£ 6,800]	pv qual. £	-	
Image: state is a sta									Loss expected	in				years	£	-	
Base of the control of the c	ou% least dep	anvea			long-term	medium-term]				mages.	Long-term	Medium-term	1	£	7,670,245	
Tope of condition (CMAA) Poor Moderate Good Moderate Moderate Good Moderate Moderate Good Moderate Good Good Moderate Good Good Moderate Good Good Moderate	SECTION	7: Outcome	Moscure 4	opvircom		loss							loss				
Type of ballet (OMA) Good Moderal Good Moderal Good Good Moderal Moderal Good Moderal Moderal Good Moderal Moderal Good Moderal Moderal Moderal Good Moderal Mo	SECTION /	. Outcome I				ments			(D-D (1)-)								
Wordshild Wet wordshi	Type of habita	at (OM4A)								pv qua	l. benefits		Length of riv				
Wet wordshald Wet and shive grassind Grassind Haaking Anale land Image lange lan		at				-				£	-			kilometre(s)	pv qual.	benefits	
Wetands/wet grassind Grassing/L Image: major physical inprovement A single: major physical inprove						-	├			£	-				£		
Grassing Heathland Pondslakes Image Image <t< td=""><td>Wetlands/wet g</td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td>£</td><td>-</td><td></td><td>, major physical</td><td></td><td>£</td><td>-</td></t<>	Wetlands/wet g					1				£	-		, major physical		£	-	
Pondstake Arabie land Image						-	┝──┤			£	-						
SECTION 8: Qualifying benefits and eligible FCERM GIA arising rom poject Stage benefits and eligible FCERM GIA %age Stage of whole fit on the stage benefits Stage benefits Payment rate Eligible FCERM GIA %age Test Raw score Contributions required ests Stage of whole fit ontice 0M1a overall Lid by high OM1b2.3.4 values 0.0% 6 £ 0.0% 5 0.0% 6 £ 0.0% 6 6 6	Ponds/lakes									£							
Off Qualifying benefits %age benefits Payment rate Eligible FCERM GIA %age OM1a overall 1d by high OM1b 2.3.4 values 0.0% 6 £ 0.0% 0.0% FC adoutator (above) n/a]				£	-						
OM deprivation Qualifying benefits Name train Figuily FCEM GIA Name Fest Res Contributions required costs 0M1 over Lidby high OME2.3.2.4 Males 0.0% 6 £ 0.0% Fest Name		B: Qualifying		-	CERM GIA a	rising from				Example s	ensitivity ar	nalyses				%age of whole life	
OM10 people relate E 1.428,607 15.7% 2.0 E 285,701 15.7% SA1: pv VILC - Affordability n/a n/a n/a n/a n/a OM2 20% most E 0.0% 45 E 0.0% SA2: OM2 - Flood risks lower than assumptions made N/A No OM2 contribution n/a 0/M2 20% most E 0.0% 2.0 E 0.0% SA2: OM2 - Flood risks lower than assumptions made N/A No OM2 contribution n/a 0/M2 20% most E 0.0% 2.0 E 0.0% SA3: OM3 - Flood risks lower than assumptions made N/A No OM2 contribution n/a 0/M3 21% solv E 0.0% 3.0 E 0.0% SA4: Duration of benefits - Option choice is conservative N/A N/A No OM2 contribution n/a 0/M4 Pike adV E 0.0% 2.0 E 0.0% SA4: Duration of benefits - Option choice is conservative N/A N/A N/A N/A 0/M4 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>Payment rate</td><td>Eligible FC</td><td>ERM GIA</td><td></td><td>,</td><td>(about)</td><td></td><td></td><td>Raw score</td><td></td><td>costs</td></t<>						Payment rate	Eligible FC	ERM GIA		,	(about)			Raw score		costs	
20% most £ 0.0% 45 £ 0.0% 21% most £ 0.0% 45 £ 0.0% 30 £ 0.0% SA2: OM2 - Flood risks lower than assumptions made N/A N/A OM2 contribution n/a 60% least £ 0.0% 20 £ 0.0% SA2: OM2 - Flood risks lower than assumptions made n/a			£			6 20	£	285,701						n/a n/a			
BOX least E 0.0% 2.00 E 0.0% 6.00% SA1: Duration of benefits - Option choice is conservative SA5: Duration of benefits - Option choice is conservative Na n/a n/a n/a n/a 0/M 20% inset E 7.070.245 84.3% 2.00 E 1.054.040 84.3% SA7: Change in environmental habitat is optimistic n/a n/a n/a n/a 0/M habitat E 0.0% 2.00 E 0.0% SA7: Change in environmental habitat is optimistic N/A N/A N/A N/A 0/M habitat E 0.0% 2.00 E 0.0% SA7: Change in environmental habitat is optimistic N/A N/A N/A 0/M file 9.098,752 pv max. eligible GiA E 1.819,750		20% most	£	-	0.0%	45	-	-	0.0%	SA2: OM2 - FI	ood risks lower t			N/A		n/a	
20% most E 0.0% 45 E 0.0% 21% modt E 0.0% 45 E 0.0% 21% modt E 0.0% SA 0.0% SA5: Duration of benefits - Option choice is optimistic n/a n/a n/a 60% least E 7.870.245 84.3% 20 E 1.534.049 84.3% SA6: Strategic considerations not demonstrated N/A N/A N/A n/a n/a 0M4 filters E 0.0% 20 E 0.0% SA7: Change in environmental habitat is optimistic N/A N/A N/A N/A 0M4 filters E 0.0% 20 E 0.0% SA7: Change in environmental habitat is optimistic N/A N/A N/A filters E 0.0% 20 E 0.0% SA7: Change in environmental habitat is optimistic N/A N/A SA7: Change in environmental habitat is optimistic N/A SA7: Change in environmental habitat is optimistic N/A SA7: Change in environmental habitat is optimistic	OM2		£				-			4							
b0% least E 7.870.245 9.4 3% 2.0 E 1.534.040 9.4 3% SA7: Change in environmental habitat is optimistic N/A No OM4 contribution n/a OM6 habitat E - 0.0% 20 E - 0.0% Total E 9.098,752 pv max. eligible GiA E 1.819,750 E - 0.0% E			£			45	£			SA5: Duration	of benefits - Opt	tion choice is opti	mistic				
OM4 habitat E - 0.0% 20 E - 0.0% rivers E - 0.0% 20 E - 0.0% Total E 9.098,752 pv max.eligible GiA E 1.819,750	OM3		£				-										
rivers E - 0.0% 20 E - 0.0% Total E 9.098,752 pv max.eligible GiA E 1.819,750			£	7,670,245				1,534,049		SA7: Change i	n environmental	napital is optimis	ud	N/A	No Own contribution	n/a	
		rivers	-				2		0.0%								
			£	9,098,752	pv m	ax. eligible GiA	£	1,819,750									