

Appendix E – Partnership funding calculator

FCRM Partnership Funding Calculator for Flood and Coastal Erosion Risk Management Grant in Aid (FCRM GIA) Version 8 January 2014

Project Name:
 Unique Project Number:

All figures are in £'s
 Figures in blue to be entered onto Medium Term Plan

SUMMARY: prospect of FCRM GIA funding

Raw Partnership Funding Score	<input type="text" value="54% (1)"/>	Scheme Benefit to Cost Ratio	<input type="text" value="3.54"/> to 1
External Contribution or saving required to achieve an Adjusted Score of 100%	<input type="text" value="63,426,404 (2)"/>	Effective return to taxpayer	<input type="text" value="23.87"/> to 1
Adjusted Partnership Funding Score (PF)	<input type="text" value="100% (3)"/>	Effective return on contributions	<input type="text" value="22.73"/> to 1
PV FCRM GIA towards the up-front costs of this scheme (PV Cost for Approval)	<input type="text" value="47,403,540 (4)"/>		

Cell (2) shows the minimum amount of contributions and/or reductions in scheme cost that are required to raise the Adjusted PF Score to at least 100%. Further increases on this will improve this scheme's chances of an FCRM GIA allocation in the desired year. Planned savings and contributions should be entered into cells(9,10,12) and cells(14-17). See NOTE below.

1. Scheme details

Risk Management Authority type of asset maintainer	<input type="text" value="EA (5)"/>	Yes <input type="checkbox"/> (6)
Duration of Benefits (years)	<input type="text" value="100 (7)"/>	Is evidence available that a Strategic Approach has been taken, and that double counting of benefits has been avoided?
PV Whole-Life Benefits:	<input type="text" value="1,112,356,394 (8)"/>	All costs and benefits must be on a Present Value (PV) Whole Life basis over the Duration of Benefits period. Where Contributions are identified these should also be on a Present Value basis.
PV Costs:	<input type="text" value="101,053,540 (9)"/>	
PV Appraisal Costs	<input type="text" value="101,053,540 (10)"/>	The total value of any necessary contributions will depend on whether maintenance (ongoing costs) is funded through revenue FCRM GIA, or by other means.
PV design & Construction Costs	<input type="text" value="101,053,540 (11)"/>	
Sub Total - PV Cost for Approval (appraisal,design,construction)	<input type="text" value="14,379,061 (12)"/>	NOTE: This scheme is to be maintained by the EA (ref cell 5). Any contributions needed (ref cell 2) are to help fund both up-front costs (cell 11) and future ongoing costs (cell 12) and should be entered into cells(14-17).
PV Post-Construction Costs	<input type="text" value="115,433,427 (13)"/>	
PV Contributions secured to date	<input type="text" value="12,720,000 (14)"/>	
PV Local Levy secured to date	<input type="text" value="32,385,000 (15)"/>	
PV Public Contributions secured to date	<input type="text" value="6,100,000 (16)"/>	
PV Private Contributions secured to date	<input type="text" value="2,400,000 (17)"/>	
PV Funding from other Environment Agency functions/courses secured to date	<input type="text" value="83,890,000 (18)"/>	
PV Total Contributions secured to date	<input type="text" value="97,695,000 (19)"/>	

2. Qualifying benefits under Outcome Measure 2: households better protected against flood risk

Number of households in:	Before				After			Change due to scheme			
20% most deprived areas	44	0	0	0	30	30	0	0	30	0	
21-40% most deprived areas	107	147	0	0	101	147	0	0	147	147	
60% least deprived areas	354	358	0	0	304	358	0	0	358	358	
At:	Moderate risk	Significant risk	Very significant risk		Moderate risk	Significant risk	Very significant risk		Moderate risk	Significant risk	Very significant risk
Annual damages avoided (£), compared with a household at low risk					100	800	1,200				
Change in household damages, in:	Per year			Over lifetime of scheme			Qual. benefits (discounted)				
20% most deprived areas	£	20,100		£	2,010,000		OM2 (20%)	£	803,294		
21-40% most deprived areas	£	98,430		£	9,843,000		OM2 (21-40%)	£	2,928,555		
60% least deprived areas	£	98,200		£	9,820,000		OM2 (60%)	£	2,933,949		

3. Qualifying benefits under Outcome Measure 3: households better protected against coastal erosion

Number of households in:	Before		Damages per household avoided:		£		£		
20% most deprived areas			Annual damages avoided		£	0.000	£	0.000	
21-40% most deprived areas			Loss expected in		£	50	£	20	
60% least deprived areas			Present value of Year 1 loss (i.e. first year damages, discounted based on when loss is expected)		£	1,104	£	3,015	
	Long-term loss	Medium-term loss			Long-term loss	Medium-term loss			
Change in household damages, in:	Year 1 loss avoided:			Over lifetime of scheme:			Qual. benefits (discounted):		
20% most deprived areas	£	-		£	-		OM3 (20%)	£	-
21-40% most deprived areas	£	-		£	-		OM3 (21-40%)	£	-
60% least deprived areas	£	-		£	-		OM3 (60%)	£	-

4. Qualifying benefits under Outcome Measure 4: statutory environmental obligations met

Payments under:	Assumed benefits per unit:	Qual. benefits (discounted):		
OM4a: <input type="text" value="6.50"/> Hectares of net water-dependent habitat created	£	15,000	OM4a: £	99,000
OM4b: <input type="text" value="100"/> Hectares of net intertidal habitat created	£	50,000	OM4b: £	-
OM4c: <input type="text" value="100"/> Kilometres of protected river improved	£	80,000	OM4c: £	-
			OM4d: £	99,000

5. Qualifying benefits arising from the overall scheme, for entry into the Medium Term Plan

OM deprivation:	Qual. benefits:	Payment rate:	FCRM GIA contribution:	
OM1	£	1,112,356,394	£	61,910,293
OM2	£	803,294	£	270,114
	£	2,936,555	£	891,698
	£	2,933,949	£	526,758
OM3	£	-	£	-
	£	-	£	-
	£	-	£	-
OM4	£	99,000	£	99,000
Total	£	1,112,356,394	£	61,993,943

Sensitivity Testing: It is assumed that users of this calculator approximate the implications of funding their change to input data which may become necessary as the project develops and other information is available. Five typical tests are provided below. Users should consider how appropriate these are to their project, what other tests may be appropriate and how best to use the calculator with all those that may be involved in the project.

As scenario above

- Sensitivity 1 - Change in PV Whole Life Cost (25% increase)
- Sensitivity 2 - Change in OM2 - 50% of households in Very Significant (before) risk may already be in Significant Risk band
- Sensitivity 3 - Change in OM3 - 50% of households in Medium Term loss (before) may already be in Long Term loss
- Sensitivity 4 - Increase Duration of Benefits by 25%
- Sensitivity 5 - Reduce Duration of Benefits by 25%

Raw Score	Contribution for 100% Score (£K)
54%	53,436,494
100%	115,364,570
0%	54,519,139
54%	53,436,494
80%	80,000
54%	53,436,395

END OF WORKSHEET

Notes

The estimated PV cost from CH2M included the maintenance costs to maintain current system. In the PF calculator these have been included as an adjustment in cell (17) as the cost does not need to be covered by the Oxford FAS project. The funding for this work is included elsewhere in current EA budgets.

The figure for private contribution in cell (16) includes the present value of the estimated highly likely contributions.