FRM1 Medium Term Plan Format							Local Contribution required						EXPENDIT FDGiA F	URE FOR UNDING (£k						
Project Name	National Grid Reference of Project	Risk Management Authority	LLFA	Brief Description of Problem and Proposed Solution	Total Project Cost	Adjusted OM score		REVIOUS YEARS	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18			2020/21		ALL YEARS
Mile & Gosshall Pumping Stations	Location	Environment Agency	Kent	Refurbishment of Mile and Gosshall Pumping Stations on the Stour Marshes.	£k 578			Pre Yr 0	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10 To	otal FDGiA Fundi
Allington Sluice Refurbishment	TQ 74750 58160		Kent	Refurbishment of mile and Gossinal Fundants on the stori markets. Refurbishment of the 3 vertical lifting gates and the mechanical lifting equipment.	3,243			3,243	17	5										3,265
Dour and Pent Strategy	TR307426	Environment Agency	Kent	Strategy to assess the flood risk on the River Dour and Pent Stream and to suggest options for schemes.	30			0	30									1		30
CHAFFORD/COLLIERS BRIDGE G.S	TQ 5170 4050	Environment Agency	Kent	Project to provide improvements to accuracy and operation at Colliers and Chafford Gauging Stations on the River Medway.	305															0
Middle Medway Strategy, Structured review	TQ 66372 46464	Environment Agency	Kent	Structured review of the approved Middle Medway Strategy using new and improved SFRM modelling and FCERM AG to ensure preferred options remain valid and correctly prioritis	ed. 67			43	24									+		67
MILL LEESE RESERVOIR IMPROVEMENTS	TR1648135802		Kent	- Deliver measures recommended in the interests of safety, fallowing an inspection report under the 1975 Reservoir Act, by December 2011	860			195	538	121	5							+		860
Seasalter to Graveney Sea Defences	TR0904865391	• •	Kent	 Install piezometers below the crest of the dam to enable logging of data measure water level within the body of the embankment. Sustain option to existing sea defences - 2 new groynes and groyne refurbishment with beach recharge. 	1,035			1,025	10									+		1,035
Sandwich and Deal Project Apprasial Report Preparation	TR 33205820			Produce 2 PARs seeking approval for scheme implementation. Sandwich phase - Further develop preferred option for tidal storage reservoir. Negotiate with landowners and seek	004			813	12											824
Sandwich and Deal Project Apprasial Report Preparation Sandwich Town Tidal Defences		Environment Agency	Kent	funding contribution from Pfizer. Identify possibilities of phasing works to reduce risk to Pfizer. Deal phase - will build close relationship with Dover DC who it is currently envisaged v THIS PROJECT STARTS POST PAR. To deliver preferred options receommended by Pegwell Bay to Kingsdown Strategy that have been developed further as part of the Sandwich	0	405 559/	0050	0	12	1,508	3,000	3,039	1,313	15				!		10.649
Sandwich Powin Indai Defences Sandwich Bay Sea Defences (Deal)	TR33205820 TR37805280	Environment Agency Environment Agency	Kent Kent	Deal PAR Preparation project. The scheme is to improve on-line defences along River Stour, build a wall at Sandwich Quay and construct a 220ha tidal storage reservoir (future hal THIS PROJECT STARTS POST PAR. To deliver preferred options receommended by Pegwell Bay to Kingsdown Strategy that have been developed further as part of the Sandwich	20,045	135.55% 261.28%	0	0	242	7,600	711	3,039	1,313	15						8,552
Rother Tidal Walls Improvement Scheme (West)	TQ 92360 20440		Kent	Deal PAR Preparation project. The scheme is to recharge the shingle beach, provide scour protection and construct a wave wall along Deal promenade. Dover District Council wi Upgrade to flood defences to 1 in 200 year standard along west bank of River Rother between Scots Float Sluice and Rye Harbour village (contiguous with Pett scheme).	9,876	201.2070		9,496	50	330	/									9,876
Pett Shingle Renourishment Phase 2-6	TQ 92000 16000		Kent	Coastal flood defence improvements between Rye Harbour entrance and Cliff End	15,769			13,813	449	470	484	554						+		15.769
Broomhill Sands Coastal Defence Scheme	TQ 98084 18236		Kent	Improve Coastal Sea Defences between Camber Sands and Jury's Gap in East Sussex from a 1:20 SoP to 1:200 SoP. The 2km of shingle beach and rock revetment proposed will activity of the second se	25,157	107.07%	0	867	60						250	11,990	11,990			25,157
High Knocke to Dymchurch Sea Defence - Frontage A	TR 11500 30500		Kent	contribute to the protection of 5,334 residences in Coastal Cell 2 of the Folkestone to Cliff End Strategy and will provide direct benefit to the 620 residences at immediate risk from fa Improvement of coastal defence works High Knocke to Dymchurch Town, Frontage A. 2.2km of concrete revetment, new wave wall and improved promenade.	28,001			26,362	1,483	5										27,850
			Nom	Creation of mosaic of habitats including intertidal to deliver biodiversity gain or provide compensatory habitat and fulfil Land Management Agreement with Rother DC to bring the site						5								l		
Rye Harbour Farm Habitat Creation	TQ 9430 1850	Environment Agency	Kent	beneficial Nature Conservation use on land previously purchased by the Environment Agency to facilitate the Pett Sea Defences scheme. Works involve reformation of a tidal creek system, pond and ditches etc by connection to the tidal River Rother via culverts and control sluices to provide a variety of habitats. Works also include in-situ protection of an exist	1,369			1,181	188	0	0	0	0	0						1,369
Dartford Creek Barrier 2030	TQ 54000 77800	Environment Agency	Kent	Implement (design & construction) PAR preferred option (nr 4), to include: replace lifting chains, sprocket assemblies and gearboxes; replace caterpillar roller chains; improvements emergency lighting and provision of equipment hoists; renew protective coating to gates; replace standby generator [all ref. PAR S 3.2.5 pg33].	^o 8,220			6,910	720	530	60									8,220
Dartford Creek Barrier Repairs	TQ 54000 77800	Environment Agency	Kent	Dartford Creek Barrier repairs following a break in on 28th December 2010.	197			137	60											197
Eastern Rother - Robertsbridge Flood Alleviation Schemes	TQ 73700 23500	Environment Agency	Kent	1100m of earth embankment, 750m of floodwalls + gates provide a 100-year standard of protection to northern, central and southern parts of Robertsbridge.	4,586			4,571	15											4,586
Folkstone to Cliff End Flood & Erosion Strategy 1st Rev	TR 08300 17700	Environment Agency	Kent	Stratgey for FRM between Cliff End (Hastings) and Folkestone	538			538	0											538
Flood and Coastal Erosion Protection - Hythe Ranges Scheme	TR13003210	Environment Agency	Kent	Hythe Ranges is an MoD-maintained frontage consisting of 3km shingle beach. The site is within an operational live firing range (with just two shutdown periods each year). The rang used for counter-insurgency training and, along with Lydd, provides a unique training facility for the MoD. The frontage is assessed as Condition 4, with current APF of 5%. Residual	4,813	169.83%	0	33	0		130	150		4,500						4,813
High Knocke to Dymchurch Redoubt Sea Defences	TR 11500 30500	Environment Agency	Kent	Improvement of coastal defence works High Knocke to Dymchurch Redoubt, as per strategy year 0 - 5.	30,899			30,899	0											30,899
Romney Sands Coastal Defences	TR08302360	Environment Agency	Kent	From the Folkestone to Cliff End Strategy the actual standard of defence for this part of the coast is 1 in 50, the required standard from the strategy is 1 in 200.	1,105	101.09%	0	34	0						25	50	1,000			1,109
Lydd Ranges Schemes	TQ99201800	Environment Agency	Kent	Lydd Ranges is an MoD-owned frontage consisting of 7.4km clay embankments (not continuous, contributing to a low SoP) protected by a narrow shingle ridge which requires annue profiling. The site is within an operational live firing range (with just two shutdown periods each year), and also within the Natura 2000 Network. The frontage is assessed as Conditi	20,522	127.87%	0	32	0		190				300	10,000	10,000			20,522
Rother Tidal Walls East	TQ 93302270	Environment Agency	Kent	The Folkestone to Cliff End Strategy states that the current earth and clay embankments provide a standard of protection of 1:20 on the East Bank of the River Rother. Behind the defences on these are 208 properties at risk of flooding. The strategy suggests an area of managed realignment downstream of Monkbretton Bridge to carry out some habitat	3,984	116.98%	0	34	0						140	100	3,100	610		3,984
Strategic Regional Coastal Monitoring - Canterbury Stage 2	N/A	Canterbury City Council	Kent	enhancements and reduce the erosion rate of the tidal defences. The West Bank has recently had a capital scheme completed and has a standard of protection of 1:200. The monitoring comprises topographical beach surveys, hydographic nearshore seabed surveys, aerial photography, LIDAR, hydrodynamic data recording and data management an dissemination. This provides a consistent regional approach for coastal process monit														-		0
Herne Bay Coastal Defence Strategy Plan	TR17476835	Canterbury City Council	Kent	The coastal defence strategy plan is well under way with major public consultation planned for November 2011 and completion and submission of the strategy in March 2012. The in findings confirm a hold the line strategy of beach management. rock breakwater (improved) and improvement and raising of the rear seawall is very likely to be the recommended op				125	30	25										180
Management Unit 5B-Swalecliffe Strategy Study	TR14356773	Canterbury City	Kent	There are obvious high benefits from the low lying town centre. The coastal defence strategy plan has been submitted to NRG but some significant changes are needed for resubmission although NRG agreed the strategy proposals in principle.	115			100	15									+		115
Tankerton Coast Protection Works	TR 12586732	Council Canterbury City Council	Kent	First major beach recharge 15 years after completion of the final part of the main scheme (2004) in accordance with the approved strategy plan programme. Necessary in order to protect the integrity of the seawall based on the current assessment of beach erosion. Protecting 470 houses and an SSSI. Benefits and costs based on strategy plan updated to inc actual works costs to date and future capital and revenue maintenace over 100 years.	1,160	78.91%	345			0	0	0	0	0	0	0	4,388	0	0	4,388
Studd Hill & Hampton Coastal Defence Works	TR15026772	Canterbury City	Kent	The works proposed comprise a small beach recharge and new timber groynes to ensure that the seawall is always protected. Some extending and raising of the rear seawall is also	1,510	65.49%	571			0	0				132	2,551	76		0	2,759
· · · · · · · · · · · · · · · · · · ·		Council Canterbury City		required at low points and gaps. The works (over the next twenty five years) comprise raising and extending the rear seawall, capital maintenance to the rock breakwater, with provision of additional rock, and beach			571			0					132	2,001	10			
Herne Bay Sea Defence Works	TR17476835	Council	Kent	recharge and new timber groynes. These works are necessary to upgrade the defences to a 1 in 200 year standard and also close gaps in the seawall and secure the defences agai The works comprise a major beach recharge and new timber groynes in stages to ensure protection to the seawall. Necessary to maintain the defences to a 1 in 100 year standard and	nst 1,020	151.46%	0				70	850						!		920
Hampton to Bishopstone Coast Protection Works	TR19686852	Canterbury City Council	Kent	protect the slopes from erosion and damage from overtopping in extreme events. The beach protection to the seawail against failure is low and an extreme event storm could cause the seawail to undermine and tioner a slip on the day slopes behind, which have a low factor of safety against moveme		62.48%	1458			0	0				109	73	2,927	1,149	0	4,257
Reculver Coast Protection Works	TR22746940	Canterbury City Council	Kent	Capital maintenance works 20 years after completion of the main scheme (1999) in accordance with the approved strategy plan. The works will comprise seawall refacing, rock protection at the west end to prevent outflanking and grouting/block replacement to the Towers Apron. At that time this significant refurbishment will be needed to prevent failure of th seawall and the apron under wave action during a severe storm.	e 1,225	173.03%	0												410	825
North Kent Shoreline Management Plan Future Review (SMP3)	N/a	Canterbury City Council	Kent	seawail and the apon under wave action during a severe storm Second revision of the Isle of Grain to South Foreland SMP approx 10 years after approcal of first review August 2010	210															#REF!
Seasalter Coast Protection Works	TR 0918 6531	Canterbury City	Kent	First major beach recharge 15 years after completion of the main scheme (2006) in accordance with the approved strategy plan. Necessary in order to protect the integrity of the sea based on the current assessment of beach erosion. Protecting 240 houses and the main railway line. Benefits and costs based on strategy plan updated to include actual works cost	in 720	79.97%	246			0	0	0	0	0	0	0	0	2,142	0	2.142
Seasaner Coast Protection works	TK 0916 0551	Council	Keni	2006 and future capital and revenue maintenace over 100 years. First major beach recharge 15 years after completion of the main scheme (2006) in accordance with the approved strategy plan programme. Necessary in order to protect the integri		79.97%	240			0	0	0	0	0	0	0	0	2,142	0	2,142
Whitstable Flood Defence Works	TR 1038 6649	Canterbury City Council	Kent	First major beach rectarge to years are completion of the main science (2006) in accordance with the approved stategy plan programme, necessary in order to protect the integri of the seawall based on the current assessment of beach erosion. Protecting 2380 houses and the town centre. Benefits and costs based on strategy plan updated to include actual works costs in 2006 and future capital and revenue maintenace over 100 vears.	,y 1,100	291.24%	0											1,000		1,000
South Foreland to Beachy Head Shoreline Mangement Plan - 10	TR19003480	Shepway District	Kent	As lead authority, the Council will be required to ensure that the Action Plan is administered in accordance with the SMP requirements	75													+ +		0
Year Review Coronation Parade Works	TR23703630	Council Shepway District	Kent	The concrete arches and maintenance gangway at Coronation Parade form an important sea defence to the soft cliffs behind as well as significant assets. This includes the	5,988	99.00%	2293	128	20						55	516	3,011		4	3,755
South Foreland to Beachy Head Shoreline Management Plan,		Council Shepway District		internationally important National Grid Transco Interconnector structure which has the ability to provide upto 5% of the UK's peak electricity demaindand facilitates the cross border to		99.00%	2293	120	20						55	516	3,011	4	4	
Action plan	TR19003480	Council	Kent	As lead authority, the Council will be required to ensure that the Action Plan is administered in accordance with the SMP requirements Folkestone Harbour Coast Protection Scheme. The rock structures and new static beaches at Folkestone which were completed in 2004 have significantly reduced the risk of erosic	50 D													- <u> </u>		0
Hythe to Folkestone Beach Management 2008 -2013	TR19003480	Shepway District Council	Kent	however, in order to maintain the 1 in 200 year (0.5%) standard of protection against flooding in Hythe, it is necessary to manage the large resource of shingle along this frontage. If shingle is not recycled from the collection areas back to the deposition sites then beach levels will begin to lower. This not only exposes the old seawall to violent wave attack	662			221	221	220										662
Hythe to Folkestone Beach Management 2013 - 2017	TR19003480	Shepway District Council	Kent	Following the completion of the 2008 to 2013 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirement the Strategy and the policy of Hold the Line (Sustain) for this frontage.	s of 1,310	76.10%	313	0	0						222	924	924	924	924	4,840
Greatstone Dunes Management (2008 - 2011)	TR 08202270	Shepway District Council	Kent	The dures currently provides protection to approximately 155 houses located on the lower lying land behind the dunes system. The Folkestone to Cliff End Flood and Erosion Management Strategy (FCEFEMS) 2008, report identified that the dures have a 0.1% chance (1 in 100) of failure in any one year, which would most probably be brought about by a mechanism of erosion, with eventual failure as a result of a breach in the dunes. The Strategy proposal is to Hold the Line by managing the dune system with fencing to prevent ero:	45 sion.			30	15											45
Greatstone Dunes Management (2012 - 2016)	TR 08202270	Shepway District Council	Kent	The dunes currently provides protection to approximately 155 houses located on the lower lying land behind the dunes system. The Folkestone to Cliff End Flood and Erosion Management Strategy (FCEFENS) 2008, report identified that the dunes have a 0.1% chance (1 in 100) of failure in any one year, which would most proteably be brought about by a mechanism of erosion, with eventual failure as a result of a breach in the dunes. The Strategy proposal is to Hold the Line by managing the dune system with fencing to prevent ero Ecolonian to the output of the built to Ecologicate backbox is before to BOM. Defense to BOM. Defense to BOM. Defense to BOM and the system with fencing to prevent ero Ecolonian to the builts to Ecologicate backbox is Defense to BOM. Defense to BOM. Defense to BOM and the system with fencing to prevent ero set of the BOM and the Bom BOM and the BOM	sion.	2350.34%	0	0	0		15	15	15	15	15					75
Hythe to Folkestone Harbour Coast Protection Scheme, Post Project Construction	TR19003480	Shepway District Council	Kent	Following the completion of the Hythe to Folkestone Harbour Coast Protection Scheme in 2004, Defra require the Council to carry out a post completion design review to ensure that public money has been spent in an appropriate manner and that the Scheme is performing as designed.	430			30	0						50	350				430
HYTHE TO FOLKESTONE BEACH MANAGEMENT 2018 - 2022	TR19003480	Shepway District Council	Kent	Following the completion of the 2013 to 2017 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirement the Strategy and the policy of Hold the Line (Sustain) for this frontage.	s of 1,425	76.10%	341			0	0	0	0	0	340	866	883	900	917	4,840
HYTHE TO FOLKESTONE BEACH RECHARGE	TR19003480	Shepway District Council	Kent	Following the completion of the 2008 to 2013 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirement the Strategy and the policy of Hold the Line (Sustain) for this frontage.	s of 6,000	133.19%	0											+	100	6,100
HYTHE TO FOLKESTONE BEACH MANAGEMENT PLAN	TR19003480	Shepway District	Kent	Following the completion of the 2008 to 2013 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirement	s of 10											1		+		0
SOUTH FORELAND TO BEACHY HEAD SHORELINE	TR19003480	Council Shepway District	Kent	the Strategy and the policy of Hold the Line (Sustain) for this frontage. As lead authority, the Council will be required to ensure that the Action Plan is administered in accordance with the SMP requirements	100										+	+		+'	_	100
MANAGEMENT PLAN - 20 YEAR REVIEW Scheme Walmer to Kingsdown beach management works	TR 37890 49660	Council	Kent	Properties at risk from coastal erosion if seawalls at Kingsdown and Oldstairs Bay fail. Beach management protects the existing seawalls.	509			269	120	0	120							+	 	509
2009/10 - 2014/15 Scheme Walmer to Kingsdown beach management works	TR 37890 49660			Properties at risk from coastal erosion if seawalls at Kingsdown and Oldstairs Bay fail. Works will involve new construction of timber groyne field and shingle recharge, followed by		AF ACD!	2254		120	0	0				56	1,737	10	40	10	
2014/15 - 2019/20			Kent	annual beach recycling.	4,127	45.46%	2301	360		0	U				90	1,737	10	10	10	2,205
Further studies to re-alignment of MOD Rifle Range Area	TR 3789 4966	Dover District Council	Kent	Second stage of contamination study	75							<u> </u>							75	75

	1	I	1			T			1										
Surface Water Management Plan for Deal Town & Walmer	TR 3691 5272	Dover District Council	Kent	Properties of Deal Town have been at constant risk of surface flooding from many contributing factors. This study would help outline a surface water management plan and identify l areas for improvement development works	^{ey} 120			0	0					100	20				120
Pegwell Bay/ Sandwich Road Flood Defence Scheme	TR34566386	Thanet District Council	Kent	Wave overtopping of the A256 during storm conditions causing damage to road/local properties. A low concrete flood wall on the line of existing sea wall would significantly improve level of flood defence offered to the properties identified.	the 270	62.31%	102	0	20					149	0	0	0	0	169
Margate Flood and Coast Protection Scheme	TR35307107	Thanet District	Kent	Margate's Harbour Arm protects and retains the main beach at Margate which in turn protects the seawall from wave action and scour. The densely populated Margate old town an	5,779			850	2,000	2,929						4	1	-	5,779
		Council Thanet District	Kent	Dreamland' site are two low lying areas that benefit from the protection of th Upper courses of precast sea wall and 'wave return' copings exhibiting movement due to expansive forces/wave energy. Failure of copings anticipated within 5-7 years with more					2,000	2,323									
Westgate - St Mildred's Bay - Coping/Berm Slab Replacement	TR32087051	Council	Kent	general sea wall failure expected to follow within 1-2 years, allowing cliff erosion to recommence. It is likely that works would consist of the construction of a new insitu cast toe to	525	27.93%	378	0	0					7	140	0	0	0	147
East of Epple to Westgate Bay - Sea Wall Refacing Works	TR31277003	Thanet District Council	Kent	Upper courses of precast sea wall and 'wave return' copings exhibiting movement due to expansive forces/wave energy. Failure of copings anticipated within 5-7 years with more general sea wall failure expected to follow within 1-2 years, allowing cliff erosion to recommence. It is likely that works would consist of the construction of a new insitu cast toe to	330	30.50%	229	0	0					6	95	0	0	0	101
St Mildred's Bay - Westbrook, Pointing and Expansion Joint	TR32847043	Thanet District Council	Kent	A capital coast protection scheme was undertaken here in 1995/96. Maintenance work is required in the near tuture to maintain the integrity of expansion joints and repoint failing jo between the wave return copings.	nts 50	56.33%	22	0	0					28	0	0	0	0	28
Repairs	TR28896994	Thanet District	Kont	Upper courses of precast sea wall and wave return' copings exhibiting movement due to expansive forces/wave energy. Failure of copings anticipated within 5-7 years with more	315	29.57%	222			0				2	90	0		0	93
Minnis - Grenham Bay - Coping/Berm Slab Replacement	1820090994	Council Thenest District	Kent	general sea wall failure expected to follow within 1-2 years, allowing cliff erosion to recommence. It is likely that works would consist of the construction of a new insitu cast toe to This sea wall consists of precast concrete facing and coping units with chalk fill behind and a dense bitumen macadam upper surface. The surface construction is approx 40 years of		29.57%	222			0				3	90		-	0	93
Stone Bay - Sea Wall Berm Upper Surface Replacement	TR39966816	Thanet District Council	Kent	and requires replacement in the near future to avoid the unbound fill being washed out which would jeopardise the integrity of the structure. The replacement surface is likely to con		109.24%	0							10	205				215
Thanet Groyne Reconstruction/Refurbishment	TR27476936	Thanet District Council	Kent	The majority of Thanet's coastline is protected from erosion or flooding by man made defences. In many locations, (particularly on the North Thanet Coast) at total of 43 concrete groynes contribute to the level of protection enjoyed by maintaining sediment and therefore reducing water depth/wave energy and the potential for undermining defences. Many of	475	64.33%	169			0				10	296	0	0	0	306
River Rother ABD and Hazard Mapping	TQ 630 259	Environment Agency	Kent	these structures are aging and Mapping of the River Rother for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelles				74								4			74
	10 050 259	Environment Agency	Kent	outlines, ABD (for Robertsbridge) and Hazard Maps.				74											
River Bourne Channel Survey	TQ 6072 5576	Environment Agency	Kent	Channel survey of the River Bourne at Basted Mill to collect data to enable modelling and mapping of this watercourse. Modelling and Mapping of the River Bourne for various defer and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled outlines, ABD and Hazard Maps.	dea			36	7										44
Coult Stream ABD and Hazard Mapping	TQ 6640 4860	Environment Agency	Kent	Modelling and Mapping of the Coult Stream for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelle outlines. ABD and Hazard Maps.	t i i i i i i i i i i i i i i i i i i i			26											26
Hamstreet ABD and Hazard Mapping	TR 0029 3347	Environment Agency	Kent	Modelling and Mapping of the Speringbrook Sewer at Hamstreet for various defended and undefended scenarios. The project will deliver a range of detailed flood outlines, flood le				15	1								+		17
North Kent Coastal Modelling	TR11486757	Environment Agency		velocity data and an ABD for the Hamstreet defences Modeling and Mapping of the North Kent Coast for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as mod outling and Mapping of the North Kent Coast for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as mod outling and Mapping of the North Kent Coast for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as mod				0	60	20							+		80
Plenty Brook Modelling	TR17626706	Environment Agency	Kent	outlines. ABD and Hazard Maps Modelling and Mapping of the Plenty Brock for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as mode outlines. ABD and Hazard Maps					30										30
Pent Stream Modelling	TR21723684	Environment Agency	Kent	outlines. ABD and Hazard Mans. Modelling and Wapping of the Pent Stream tor vanous detended and undetended scenarios. The project will produce depths, levels, trows, trow direction outputs as well as mode putpies. ABD and Hazard Mans. JetM&BOM starf will carry out in house modelling and mapping of the stream in the Kent and South London Area for various defended and undefended scenarios. The project will pro					21										21
Consultant Support For In-House Modelling	TR18584 35175	Environment Agency	Kent	depths, levels, flows, flow direction outputs as well as modelled outlines, ABD and Hazard Maps. This money is to pay for consultant support and QA of the work being comple				0	20										20
Priority Site Model Review Pumping Stations - Carbon Savings	Various Various	Environment Agency Environment Agency	Kent Kent	Model review and re running where necessary where faults found with our detailed modelling outside of the defects period Re running of exisiting models to test pump removal scenarios and their flood risk implications				0	0	20 30	20 40	20	15 1	5		+	+	──┼	90 70
Isle of Sheppey and Oyster Coast Brooks Survey and Modelling	TQ9443373846	Environment Agency Environment Agency	Kent	Re running of existing models to test pump removal scenarios and their nooo risk implications Survey and modelling of the Scrapsgate Drain, Warden Bay Drain, Kite Farm Ditch and Gorrell Stream			+ +	0	0	30	40 80					+	+	+	110
Snodland and East Malling Modelling	TQ7061960829, TQ7097658258	Environment Agency	Kent	Survey, Modelling and Mapping of the Snodland Mill Stream and East Malling & Ditton Stream				0	0	55									55
Partnership Projects	Various	Environment Agency	Kent	Money to put towards working in partnership with external organisations to get modelling and mapping outputs			+	0	0		30	30	30 3	0		+	+	$+-\mp$	120
Iwade Stream Modelling Prockbill Stream Modelling	TQ9012267793 TR1497935162	Environment Agency Environment Agency	Kent Kent	Survey, Modelling and Mapping of the Iwade Stream				0	0		40 50						+		40
Brockhill Stream Modelling Kent and South London Survey	TQ2823346695	Environment Agency	Kent	Modelling and Mapping of the Brockhill Stream Survey of the Salfords Stream, Hogsmill River and River Ebbsfleet		1	+ +	0	0		40					+	+	+	40
River Medway Modelling	TQ7572855840	Environment Agency	Kent	Generating a 1000yr outline for the River Medway in particular around Maidstone				0	0			55							55
River Ebbsfleet Modelling	TQ6158574167	Environment Agency	Kent	Modelling and Mapping of the River Ebbsfleet				0	0			40							40
River Darent Strategy	TQ52665812	Environment Agency	Kent	The Darent Strategy is needed to investigate options identified in the North Kent Rivers CFMP to reduce flood risk to all of the villages and towns along the length of the River Darent	1.			0		50	100								150
TE2100 DARTFORD CREEK CHANNEL REALIGNMENT	TQ5368076792	Environment Agency	Kent	Some of the defences along the Dartford Creek are starting to erode as the river is trying to realign. There are harder engineered banks on the left bank as there are more assets to protect. There is an oppurtunity to allow the river room to realign on the right bank and create some intertidal habitat in the proce				0						50	100	100	2,000		2,250
River Shutle	TQ4699873357	Environment Agency	Kent	Study to follow modelling work that investigate increased flood risk Lamorbey	bt.					30									30
Oyster Coast Brooks Culvert	TR1408866569	Environment Agency	Kent	Package schemes for Gorrel Stream, Kite Farm and Plenty Brook culvert repairs. Localised repairs to internal culvert structure and repairs and replacement of trashscreens at the in and cullet structures. This will reduce flood risk in the area. improve onerational health and safety for the incident response field team and the pu Cultation entities to addresse. 2 A sum representation and any softwirther the transmission between the sum and the put Cultation entits to addresse. A sum representation and the put and the put and the put and the put addresse. A sum representation and the put addresses and the put addresses and the put address and the put address and the put addresses and the put addresses and the put address a	BL			383	100										483
Hollowshore	TR0904865391	Environment Agency	Kent	Sustain option to existing sea defences - 2 new groynes and groyne refurbishment with beach recharge. Property at risk of flooding as a result of failure of the seawall at the outfall is approximately 20 dwellings. Numerous businesses including large transport depot, works, boat yard an				1,138	10								+		1,149
Bartons Point Beach Management	TR0205063407	Environment Agency	Kent	Project is raise on locating as a result of the service at the outer is approximately 20 oreanings. Internetical balances and and an experimental service and an experimental and a service at the outer service and an experimental and a service at the outer servi	130			0	80										80
Seasalter, Red Sluice Culvert	TQ92587494	Environment Agency	Kent	Seasalter, Red Sluice Culvert. Remediation works to repair a culvert where the joints have opened and the crest of the embankment is failing into the culvert.	50			3	210										213
Codds Sluice and Outfall Replacement	TQ 07529 64985 TQ 89337 70981		Kent Kent	Codds Sluice and Outfall Replacement	53 149			53	0								+		53
MILTON CREEK OUTFALL Gorrel Stream Flood Alleviation Scheme	TR1107465805 to	Environment Agency Environment Agency	Kent	Investigate and implement FAS for Gorrel Stream. The Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel. Though the Gorre		100.41%	445	149 0	75					200	750	750			149
IWADE WEEDSCREEN	TR1073967076 TQ 89944 67575		Kent	not a maior watercourse it has caused localized flooding in Whitstabl A 12 meter long culvert is located on the River Iwade close to Sheerstone Road, Iwade. The culvert is currently not equipped with a weedscreen thus allowing large debris to enter	1,775	100.4178	445	0	75					200	730	730			0
Warden Bay Outfalls (Warden Bay Flood Alleviation Scheme				the structure causing sudden diameter and capacity reduction hence increasing flood risk in the villac Recommended refurbishments to outfalls. The outfalls provide drainage to low lying land between the villages of Warden and Leysdown-on-Sea. There is the opportunity to improve		404.000/	00	0							000				220
with Sustainable Urban Drainage system)	TR02457133	Environment Agency	Kent	flood resilience or reduce risk of flooding with some other work that could be tied in with work to the outfalls. This project is not numeric one priority more index examples and a same same. It is a soury to new pretermine the teast carriaging line or reargament across the internation	220	101.30%	82	0						20	200	4	4		
Medway Estuary and Swale Habitat and Process Study	TQ93856656	Environment Agency	Kent	designated freshwater habitat of the Medway and Swale Estuaries. Without the study the Middle and Outer Medway Strategy and the Swale Strategy will be unable to proceed. The undertaking of this study is also with fee the continuing second of monotonic and the within these estudies.				55		50	50	50	50						205
Faversham Creek to Whitstable Harbour Strategy Review	TR06756498	Environment Agency		0 This is a review of the original strategy taking into account revised procedures and risks, new works, developments and environmental amendments. This strategy would incorporate	270 the			0				0)					270
Isle of Sheppey Strategy	TQ9576669511	Environment Agency	Kent	Northerm, Eastern and Southern defences on the Isle of Sheppey and identify the preferred options to implement the policies in the respective revised Shoreline Management Plans	200			0				100	100						200
SHEERNESS Sea Defence SOUTHERN DEF	TQ 95806950	Environment Agency	Kent	The exact nature of the works has yet to be designed, but is likely to involve an amount of managed realignment Implement flood alleviation measures resulting from prefeasibility study into COWs	6,150	185.02%	0	0								150	3,000	3,000	6,150
Kite Farm Diversion Channel	TR1434566945 to TR1413267366	Environment Agency	Kent		230	79.30%	59	0		0				29	197	0	0	0	226
Faversham Flood Alleviation Scheme	TR 0164461893 to TR0151361642	Environment Agency	Kent	Scheme to reduce the risk of flooding to cottages which run along the bank of the Faversham creek, this could be in the form of low bund or small flood wall.	230	114.07%	0	0	0					30	200				230
	TQ 9128569336 to			ruture strategy for the Sware to be constructed to implement SwF actions. The area contains SFA, KANISAN, numerous SSSTS, trational nature Reserves and the North N Marshes are covered by Environmentally Sensitive Area. The brief for this study is currently being developed, it will generally follow the current DEFRA quidance. Future strategy for	the											4	-		
The Swale Strategy	TR 0236564405	Environment Agency	Kent	Swale to be constructed to implement SMP actions. The area contains SPA, RAMSAR, numerous SSSI's, National Nature Reserves and the North Kent Marshes are covered by	^{ne} 200			0				100	100						200
Swale Schemes	TQ 9128569336 to TR 0236564405		Kent	Environmentally Constitute Area. The brief for this study is surgered to being developed, it will according to low the surgered DEEDA moder. These are schemes that are expected to come from the Swale Strategy. The scope of works will be determined in the strategy but is likely to involve managed re-alignment across first-water habitat.												50	100	5,000	10,150
The Middle and Outer Medway Estuary Strategy	TQ7589369880 to		Kent	Future strategy for the middle and outer Medway to be constructed to implement SMP actions. The area contains SPA, RAMSAR , numerous SSSI's, National Nature Reserves and	200			0				100	100			-			200
	TQ9128569336 TQ7589369880 to			North Kent Marshes are covered by Environmentally Sensitive Area. The brief for this study is currently being developed, it will generally follow the current DEFRA guidance. Future strategy for the middle and outer Medway to be constructed to implement SMP actions. The area contains SPA, RAMSAR, numerous SSSI's, National Nature Reserves and		+	+ +		1						-	+	+	++	
Middle and Outer Medway Estuary Schemes	TQ9128569336	Environment Agency	Kent	North Kent Marshes are covered by Environmentally Sensitive Area. The brief for this study is currently being developed, it will generally follow the current DEFRA guidance.												50	100	5,000	10,150
Queenborough Creek Barrier upgrade and refurb.	TQ9077972024	Environment Agency	Kent	The tidal barrier is a high consequence asset which is requiring part replacements and upgrades. The panel and numerous sluices on the gates are failing or in poor repair and requiring full refurbishment.	ire 350	176.43%	0	0				350							350
Robin's Creek Outfall	TQ61957493	Environment Agency	Kent	Having completed the Kent Tidal Outfalls Reconditioning Programme several outfalls were recommended for major improvement/refurbishments. One of the outfalls that recommen	ed 340		+ +	0	40	300						+	+	++-	340
				work was Robins Creek. This outfall drains the River Ebbsfleet which drains several housing estates, and commercial buildings and potentially Ebbsfleet International Rail Station The strategy is going to finalise and deliver the projects set out in the SMPs.	540										_	+	+	+	
Upper Tidal Medway Strategy	TQ1336637	Environment Agency	Kent	The brief for this study is currently being developed, it will generally follow the current DEFRA guidance. Construction/inprovement of Flood Defences in the Thames Estuary as recommended from the TE1200				0	0	0	100	100				<u> </u>	<u> </u>	+	200
TE2100 Thames Tidal & East Scheme	TQ73887917	Environment Agency	Kent		1,000	9.26%	2722	0	0	0	0	0		28	139	111	0	0	278
TE2100 Thames Tidal Walls West Scheme	TQ60687521	Environment Agency	Kent	Construction/Improvement of Flood Defences in the Thames Estuary as recommended from TE2100	1,000	18.54%	9775	0	0	0	0	0		222	1,112	890	0	0	2,225
Isle of Grain to South Foreland Shoreline Management Plans	TR22806934	Environment Agency	Kent	Review of the Shoreline Management Plan for Isle of Grain to South Foreland.												1	1		100
Review LITTLE MILL Flood Alleviation Scheme	TQ65724819	Environment Agency	Kent	Little Mill floods regularly from events as small as a 1 in 5 year event, this project aims to identify a preferred option to reduce risk to properties at risk of flooding in the area.	1,075	102.87%	960	0	150					250	725	20	5		1,150
	TQ60705689		Kent	Design and installation of new weedscreen on the River Bourne adjacent to Quarry Hill Road in Borough Green, Kent				-									1		0
Borough Green weedscreen		Environment Agency		Scheme to reduce the risk of flooding to East Peckham from the River Medway. This scheme has come out of the Middle Medway Strategy.												+	+	───	-
East Peckham Flood Alleviation Scheme	TQ66924895	Environment Agency	Kent		418	269.24%	0	0	0	0	50	368							418
Yalding gauging station repairs	TQ67024901	Environment Agency	Kent	Undertake repairs to Yalding gauging station	0		\vdash	0	10							<u>+</u>	+	$+-\pm$	10
	TQ42173487	Environment Agency	Kent	Individual property protection scheme to reduce flood risk to 47 properties at risk of flooding from the River Medway and/or the Kidbrooke Stream.	0			115	115										230
Forest Row Flood Alleviation Scheme		Environment Agency	Kent	Fitting new lead screws in actuators of leigh barrier main lifting for north and south gates This is phase two of the project. The earlier project called 'Leigh Barrier Mechanical Improvements' has been closed by ncpms. However, this new phase has been incorrectly name	209	803.79%	0	49	80	80						<u>+</u>	+	$+-\pm$	209
Forest Row Flood Alleviation Scheme Leigh Barrier Enhanced Maintenance	TQ56394611				^{on} 1,450	146.64%	0	0	0	0					1	1	1	1	0
Forest Row Flood Alleviation Scheme Leigh Barrier Enhanced Maintenance Leigh Barrier Mechanical Improvements Phase 2	TQ56394611	Environment Agency	Kent	the MTP with the old title and IMSO/CWD numbers. This entry aims to redress the error with a new title and relevant numbers.														L	
Forest Row Flood Alleviation Scheme Leigh Barrier Enhanced Maintenance Leigh Barrier Mechanical Improvements Phase 2 AYLESFORD Flood Alleviation Scheme	TQ56394611 TQ73175906	Environment Agency	Kent	the MTP with the old title and IMSO/CWD numbers. This entry aims to redress the error with a new title and relevant numbers. A flood Alleviation scheme for the village of Aylesford on the Aylesford stream a former COW, near Maidstone.	1,170	36.26%	835	170	75	0				98	132	0	0	0	475
Forest Row Flood Alleviation Scheme Leigh Barrier Enhanced Maintenance Leigh Barrier Mechanical Improvements Phase 2	TQ56394611		Kent	the MTP with the old title and IMSO/CWD numbers. This entry aims to redress the error with a new title and relevant numbers. A flood Alleviation scheme for the village of Aylesford on the Aylesford stream a former COW, near Maidstone. Partnership project with Tonbridge and Malling Borough Council (T&MBC). A new flood wall will be constructed as part of a larger project to gentrify this area of the town. The EA a contributing to the funding of the new wall, but T&MBC are undertaking design and construction.	e		835	170 0	75 200					98	132	0	0	0	475 200
Forest Row Flood Alleviation Scheme Leigh Barrier Enhanced Maintenance Leigh Barrier Mechanical Improvements Phase 2 AYLESFORD Flood Alleviation Scheme Tonbridge Town Lock Floodwall Five Oak Green Flood Alleviation Scheme	TQ56394611 TQ73175906	Environment Agency	Kent Kent	the MTP with the old title and IMSO/CWD numbers. This entry aims to redress the error with a new title and relevant numbers. A flood Alleviation scheme for the village of Aylestord on the Aylestord stream a former COW, near Maidstone. Partnership project with Tonbridge and Maling Borough Council (T&MBC). A new flood wall will be constructed as part of a larger project to gentrify this area of the town. The EA a	e		835 757			0				98 98 78	132 757	0	0	0	
Forest Row Flood Alleviation Scheme Leigh Barrier Enhanced Maintenance Leigh Barrier Mechanical Improvements Phase 2 AYLESFORD Flood Alleviation Scheme Tonbridge Town Lock Floodwall	TQ56394611 TQ73175906 TQ59334641	Environment Agency Environment Agency Environment Agency Environment Agency	Kent Kent Kent	the MTP with the old title and IMSO/CWD numbers. This entry aims to redress the error with a new title and relevant numbers. A flood Alleviation scheme for the village of Aylesford on the Aylesford stream a former COW, near Maidstone. Partnership project with Tonbridge and Malling Borough Council (T&MBC). A new flood wall will be constructed as part of a larger project to gentrify this area of the town. The EA a contributing to the funding of the new wall, but T&MBC are undertaking design and construction.	e	36.26%	835 757	0	200	0	10	100	500 5	78					200

Edenbridge Flood Alleviation Scheme	TQ44264579	Environment Agency	Kent	Flood Alleviation Scheme to reduce the risk of flooding to the town of Edenbridge from the Rive Eden. The existing defences need to be upgraded as they were built in the 1970s and	600	220.11%	0	0	0	0	50	550						600
			-	only provide a low standard of protection of between 1 in 20 to 1 in 30 years. The Brockhill Stream is a former Critical Ordinary Watercourse, enmained in Aori 2006. The River Stour CFMP gives the Pent system a "policy 4" which means that we aim to take	000	220.1170	0	v	Ū	Ŭ	50	550						
Brockhill Outfall Health and Safety Improvements	TR15143465	Environment Agency	Kent	further action to sustain the current scale of flood risk protection into the future responding to the potential increases in flood risk from urban development, land use change and clim														0
Seabrook Outfall Refurbishment	TR18833487	Environment Agency	Kent	The Seabrook outfall is complex structure located at the end of the Royal Military Canal in Hythe, where it culverts and discharges into the English Channel. The structure consists of an open box culvert, outfall chamber, two penstocks and the tidal flap valve. This structure is fundamental to water level control on the RMC without which flood water will not be	120			0	40	80								120
Roaring Gutter Island bank stabilisation	TR349550	Environment Agency	Kent	Repairs to the eroding bank. Bank failure would cause flooding in Sandwich	300	427.26%	0	0			300							300
River Stour Fluvial Strategy	TR 1487 5824	Environment Agency	Kent	Strategy to assess the flood risk on the Middle and Lower Stour, appraise options for future FRM and identify a preferred FRM option for the next 100 years.	150			0	50	100								150
Rother Restoration Study	TQ8574627287	Environment Agency	Kent	CFMP Action: East Sussex Rother Restoration Study (including the integrated management of rural floodplains project)	95			0							95			95
Romney Main Conveyance Improvements	TR0679324976	Environment Agency	Kent	This length of main river (approximately 400metres) is in an Urban area which has been identified as being in need of Improve to reduce the risk of fluvial flooding in the New Romney area. Measures will include, desilting and creation of a 2 stage channel.	210			0	60	150								210
Vinal Sluice Operational Health & Safety Improvements	TQ98682892	Environment Agency	Kent	Health and safety improvements to Vinal Sluice including replacement of old stoplog structure with penstock.														0
North Poulders Outfall Health and Safety Improvements	TR3298358483			Health and safety improvements to enable us to operate a tidal flap to stop tidal flooding														0
JURY'S GAP REFURBISHMENT	TQ 975 181	Environment Agency		Works to improve channel bank stability. Creation of a new concrete tidal basin within an older clay bunded structure.	700	195.41%	0	0			200	500						700
Marsh Farm Road Bridge Refurbishment	TR30866340	Environment Agency	Kent	Statutory structural survey of a bridge near Minster, design and construction work to bring it up to a condition where ownership could be passed to KCC to absolve EA of responsibility	330			0	150	180								330
Kent &South London Reservoirs Matters in the Interest of Safety	TQ64066143	Environment Agency	Kent	This is to keep all EA reservoirs within Kent and South London Compliant with the Reservoirs Act. This is a legal requirement under the Reservoirs Act 1975.	1,400			0	350	350	350	350						1,400
Pett Shingle Renourishment Phase 6-11	TQ 92000 16000	Environment Agency	Kent	Shingle recycling to maintain frontage post completion of large NCPMS scheme. Development of beach management plan in year 1.	1,440	135.20%	0	0						240	200	200 2	00 200 20	0 1,440
Denge Beach Management 2011-15	TQ98401794	Environment Agency		This project consists of annual recharge works to reinstate the shingle beach to protect an ageing seawall, this needs to continue to take place until the Broomhill Sands Scheme car	3,000			0	600	600	600	600	600					3,000
Pent Stream Channel Improvements	TR210369	Environment Agency	Kent	construct a replacement seawall. These works ensure the old seawall is not subjected to wave attack, and to sustain the supply of beach material along the southern coast of Rom. Pern Stream Channel improvements to include re-profiling and restoration of the open sections. Otwo with FRMABMD to survey open sections of the channel, already included	n 260			423	260									683
				the mapping programme. For financial savings	99				200		22		22		22			
Bridge Repairs BLACK SLUICE Health and Safety Improvements	Various TR342 586	Environment Agency Environment Agency	Kent Kent	Statutory minor repair works to Kent bridges to maintain their condition. Repairs to unstable sluice house and old weedscreen to allow staff to operate structure. Failure to operate would lead to flooding and increase pumping.	99	+		12	U		33		33		33			111
				Note that and safety improvements recommended from Health and Safety Inspection. Site can no longer be operated safety														0
BROOKSEND SLUICE Health and Safety Improvements COLDHARBOUR OUTFALL Health and Safety Improvements	TR269692 TR247693	Environment Agency		Undertake health and stately improvements recommended from Health and safety inspection, site can no longer be operated safety Undertake Health and stately improvements recommended from Health and Safety inspection, site can no longer be operated safety							_							0
	TQ951284	Environment Agency			180			20	0	180	-							200
Appledore Rye Road Bridge Health and Safety Improvements Iden Lock Improvements Flood and Coastal Risk Management		Environment Agency		Statutory works to improve condition of bridge to enable handover to third party.	75			20	0	100	_							200
contribution	TQ9366724469	• •		FCRM Contribution (30% of total project costs) detailed design and replacement of critical structure for flood management, irrigation and drainage of Romney & Walland Marshes. Replacement of a weedscreen on the causeway. Stops debris building up in a critical culvert		100 700/					75							Ţ
Canterbury Weedscreen	TR1478258332			representation or a meedaaction of mine calabeling : coops dealers administry of an a unical current Terminal groups will need to be constructed in order to maintain the shingle defence	75	420.79%	0	0		76	75							75
Greatstone Terminal Groyne	TR0818523113			Following comments at LPRG Reappraisal of Folkestone to Cliff End Strategy Schemes to deliver schemes on the South Coast in the most cost effect manner. Projects will total	75			0		75								75
Folkestone Cliff End Strategy Scheme Appraisal	TR 08300 17700	Environment Agency	Kent	Approximately £25m and deliver improved standard of protection to 13500 homes and busin	300										300			300
Royal Borough Kingston-u-Thames - Ordinary watercourse refurb	TQ 19298 66821		South Wes	t t				0	50									50
Ashlone Wharf Beverley Brook Outfall	TQ2348476215	Environment Agency	South Wes	Repair or replacement of the Ashlone Wharf flap valves to eliminate current breach of Barnes Embayment and improve condition grade to acceptable level. Flap valves are a tidal defence asset at the outfall of the Beverley Brook to the River Tharnes in Barnes, London.				392	1,107	60								1,559
Beverley Brook at Worcester Park	TQ 224 665	Environment Agency	South Wes	t 23-06-2011 - Implementation of a Flood storage area and increased bank/wall heights to increase the SoP from 1:5 to 1:50 along the length of Green Lane, Worcester Park	1,623	142.98%	1,170	200	250 .8	1,264	9							1,473
Wandsworth Town Flood Alleviation Scheme	TQ 2645 6980	Environment Agency	South West	t A standalone scheme for Wandsworth Town on the River Wandle.	4,500	228.87%	0	0	150		250	2,000	2,000	100				4,500
Burstow Stream Modelling	TQ30014335	Environment Agency	South West	t Modelling and Mapping of the Burstow Stream for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as mode outlines, ABD and Hazard Maps					30									30
Dead River Survey and Modelling	TQ1199566257	Environment Agency	South West					0	0	50								50
Surbiton Stream Survey and Modelling	TQ1889066606	Environment Agency	South West	t Survey and modelling of the Surbiton Stream				0	0	50	10							60
Hogsmill River Modelling	TQ2082663803					1		0	0			30						30
River Rythe Modelling		Environment Agency				1		0	0			40						40
Salfords Stream Modelling	TQ2823346696					1		0	0				30					30
Kinnersley Manor, Reigate Gauging Stn Improve	TQ 26240 46210			Amerisity manor Gauging Station has been in operation since 1972 and its sited in a depundcation on the Kiver while meaning that it is unised by a number of uncloses. Ker analysis of the data has shown that the site could perform well but needs improvement. It would then be able to replace Horley Gauging Station upstream which also performs poorly to							-							0
		g,		has less opportunity to improve. The side channel at Kinnersley Manor has deteriorated to such a degree that it requires complete replacement, it would be a good opportunity to insta feb base	la													
Lower Mole FAS Operational Access Road	TQ 14239 66676	Environment Agency	South West	Improved safe operational access to Lower Mole FAS structures. Moderation Evidence has been provided.				237	150									387
Gatwick Airport Gauging Stn Relocation	TQ 26108 39986	Environment Agency	Crawley	The H+T team are experiencing increasingly significant access issues to Gatwick Airport Gauging Station as security restrictions at the airport get tighter. This can be rectified moving the gauge hut outside of the airfield to a location where we can have easier and safer access to the site, whenever we require it. The existing arrangements are such that we														0
Upper Mole Flood Alleviation Scheme	TQ2780041002	Environment Agency	Crawley	have to contact security to arrange access to our site. If they are busy or dealing with other issues we either have to come back another time or wait around for up to an hour to c. Outline Design, Detailed Design and Construction of a Flood Alleviation Scheme to reduce risk to properties in Crawley and Horley and infrastructure at Gatwick Airport. (Gatwick Airport & Gatwick Stream)			1	6,240	3,830	5,498	383	20	10					15,981
Upper River Mole Modelling	TQ2688041812	Environment Agency	Crawley	Modelling review, re running and mapping following on from the work done by the Upper Mole Strategy				0	0		40	80						120
Marsh Dykes Modelling Update	TQ4750279788	Environment Agency	South East	Modelling update, re running and mapping				0	0				40					40
Crayford Sluice Repairs	TQ53302 77988	Environment Agency	South East					527	0									527
Lewisham & Catford Flood Alleviation Scheme	TQ 3885 7080	Environment Agency	South East	A FAS study on the Lewisham and Catford areas of the Ravensbourne catchment, An initial assesmnet suggests that there are over 1000 properties (residential and non-residential risk of flooding in the 0.5% Annual Exceedance Probability (AEP) event. It is estimated that approximately 307 of these properties would move from very significant/significant risk	^{at} 7,016	231.26%	0	99	312		280	2,600	3,600	100	25			7,016
Lake 4 Pump Stn PV Cells CS	TQ 46416 81024	Environment Agency	South East			1	1	0	20									20
Great Breach PS PV Cells CS		Environment Agency				1	1	0	15			1			1			15
				Beckenham Hill Trash Screen is located on the River Ravensbourne at Downham. Its purpose is to prevent the collection of rubbish within a twin, reinforced concrete box culvert which	150	1	1	0	150									150
Beckenham Hill Trash Screen	TQ3835471639	Environment Agency	South East	runs for most of its 400m length. This culvert is 4m wide and 1.8m high. Without a screen at this point there is a high potential for a blockage to occur within the culvert which could	150	1		U	150									150

FRM1 Medium Term Plan Format 2012/13				Kent County Council LLFA - Environment Agency Schemes		Local Contribution required						TURE FOR FUNDING £k						Outcome Measure OM2 (households better protected against flood risk)
	National Grid Reference	Risk Management		Brief Description of Problem and Proposed Solution Project	I ct Adjusted ON	1	PREVIOUS YEARS 2011/1	2 2012/13	2013/14	2014/15	2015/16	2016/17	2017/18 20	18/19 20	19/20 20	020/21 20	021/22 ALL YEARS	Household numbers
Project Name	of Project Location	Authority	LLFA	Cost			Pre Yr 0 Year) Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 Y	ear7 Y	ear 8 Y	(ear 9 Ye	ear 10 Total FDGiA Funding	SR10 period
Mile & Gosshall Pumping Stations	TQ 62690 16340	Environment Agency	Kent	Refurbishment of Mile and Gosshall Pumping Stations on the Stour Marshes. 578													0	0
Allington Sluice Refurbishment	TQ 74750 58160	Environment Agency	Kent	Refurbishment of the 3 vertical lifting gates and the mechanical lifting equipment. 3,243	3		3,243 17	5									3,265	0
Dour and Pent Strategy	TR307426	Environment Agency	Kent	Strategy to assess the flood risk on the River Dour and Pent Stream and to suggest options for schemes. 30			0 30										30	N/A
CHAFFORD/COLLIERS BRIDGE G.S	TQ 5170 4050	Environment Agency	Kent	Project to provide improvements to accuracy and operation at Colliers and Chafford Gauging Stations on the River Medway. 305													0	0
Middle Medway Strategy, Structured review	TQ 66372 46464	Environment Agency	Kent	Structured review of the approved Middle Medway Strategy using new and improved SFRM modelling and FCERM AG to ensure preferred options remain valid and correctly prioritised. 67			43 24										67	N/A
MILL LEESE RESERVOIR IMPROVEMENTS	TR1648135802	Environment Agency	Kent	Deliver measures recommended in the interests of safety, fallowing an inspection report under the 1975 Reservoir Act, by December 2011			195 538	121	5								860	52
Seasalter to Graveney Sea Defences	TR0904865391	Environment Agency	Kent	- Install piezometers below the crest of the dam to enable logging of data measure water level within the body of the embankment. Sustain option to existing sea defences - 2 new groynes and groyne refurbishment with beach recharge.			1,025 10		-								1.035	473
	11(0304003331	Environment Agency	Non	Produce 2 PARs seeking approval for scheme implementation. Sandwich phase - Further develop preferred option for tidal storage reservoir. Negotiate with landowners and seek	,		1,023 10										1,000	413
Sandwich and Deal Project Apprasial Report Preparation	TR 33205820	Environment Agency	Kent	Iunding contribution from Pitzer. Identify possibilities of phasing works to reduce risk to Pfizer. Deal phase - will build close relationship with Dover DC who it is currently envisaged will take on responsibility for half of the sea defence scheme after delivery. This PROJECT STARTS POST PAR. To deliver preferred options recommended by Pegwell Bay to Kingsdown Strategy that have been developed further as part of the Sandwich &			813 12										824	0
Sandwich Town Tidal Defences	TR33205820	Environment Agency	Kent	Deal PAR Preparation project. The scheme is to migrove on-line defences along River Storu, build a wall at Sandwich dual granultave-ocen us reloped hutters a part or indication with a scheme is to improve on-line defences along River Storu, build a wall at Sandwich dual granultave-ocen us reloped hutters a part or indication with a scheme is to improve on-line defences along River Storu, build a wall at Sandwich dual granultave-ocen us reloped hutters a part or indication with a scheme is the scheme is to improve on-line defences along River Storu, build a wall at Sandwich Quay and construit at 220h along respectively. This PROJECT STARTS POST PAR. To deliver preferred options recommended by Pegwell Bay to Kingsdown Strategy that have been developed further as part of the Sandwich &	9 120.00%	6250	0 1,774	1,508	3,000	3,039	1,313	15					10,649	486
Sandwich Bay Sea Defences (Deal)	TR37805280	Environment Agency	Kent	Deal PAR Preparation project. The scheme is to recharge the shingle beach, provide scour protection and construct a wave wall along Deal promenade. Dover District Council will be 8,552 involved in delivery.		0	0 242		711								8,552	1,418
Rother Tidal Walls Improvement Scheme (West)	TQ 92360 20440	Environment Agency	Kent	5,070	6		9,496 50	330									9,876	
Pett Shingle Renourishment Phase 2-6	TQ 92000 16000	Environment Agency	Kent	Coastal flood defence improvements between Rye Harbour entrance and Cliff End 15,76	9		13,813 449	470	484	554							15,769	
Broomhill Sands Coastal Defence Scheme	TQ 98084 18236	Environment Agency	Kent	Improve Coastal Sea Defences between Camber Sands and Jury's Gap in East Sussex from a 1:20 SoP to 1:200 SoP. The 2km of shingle beach and rock revetment proposed will contribute to the protection of 5,334 residences in Coastal Cell 2 of the Folkestone to Cliff End Strategy and will provide direct benefit to the 620 residences at immediate risk from 25,15	7 107.07%	0	867 60						<mark>250</mark> 1	1,990 1	1,990		25,157	814
High Knocke to Dymchurch Sea Defence - Frontage A	TR 11500 30500	Environment Agency	Kent	Improvement of coastal defence works High Knocke to Dymchurch Town, Frontage A. 2.2km of concrete revetment, new wave wall and improved promenade. 28,00 Creation of mosaic of habitats including intertidal to deliver biodiversity gain or provide compensatory habitat and fulfit Land Management Agreement with Rother DC to bring the site it	1		26,362 1,483	5									27,850	637
Rye Harbour Farm Habitat Creation	TQ 9430 1850	Environment Agency	Kent	beneficial Nature Conservation use on land previously purchased by the Environment Agency to facilitate the Pett Sea Defences scheme. Works involve reformation of a tidal creek inlet system, pond and ditches etc by connection to the tidal River Rother via culverts and control sluices to provide a variety of habitats. Works also include in-situ protection of an existing refuse waste site	9		1,181 188	0	0	0	0	0					1368.8	0
Dartford Creek Barrier 2030	TQ 54000 77800	Environment Agency	Kent	Implement (design & construction) PAR preferred option (nr 4), to include: replace lifting chains, sprocket assemblies and gearboxes; replace caterpillar roller chains; improvements to emergency lighting and provision of equipment hoists; renew protective coating to gates; replace standby generator (all ref. PAR S 3.2.5 pg33).)		6,910 720	530	60				T	Γ	Γ		8,220	137
Dartford Creek Barrier Repairs	TQ 54000 77800	Environment Agency	Kent	Dartford Creek Barrier repairs following a break in on 28th December 2010. 197			137 60										197	N/A
Eastern Rother - Robertsbridge Flood Alleviation Schemes	TQ 73700 23500		Kent	1100m of earth embankment, 750m of floodwalls + gates provide a 100-year standard of protection to northern, central and southern parts of Robertsbridge. 4,586	3		4,571 15										4,586	0
Folkstone to Cliff End Flood & Erosion Strategy 1st Rev	TR 08300 17700	Environment Agency	Kent	Stratgey for FRM between Cliff End (Hastings) and Folkestone 538			538 0										538	0
Flood and Coastal Erosion Protection - Hythe Ranges Scheme	TR13003210		Kent	Hythe Ranges is an MoD-maintained frontage consisting of 3km shingle beach. The site is within an operational live firing range (with just two shutdown periods each year). The range is used for counter-insurgency training and, along with Lydd, provides a unique training facility for the MoD. The frontage is assessed as Condition 4, with current APF of 5%. Residual if 4,813	169.83%	0	33 0		130	150		4,500					4.813	1,065
Flood and Coastal Erosion Protection - Hytre Ranges Scheme	1813003210	Environment Agency	Kent	is <50 years. Urgent improvement is needed to protect the MoD training site immediately behind the defence, and the approximately 3000 houses at risk of flooding should a breach	5 109.03%	0	33 0		130	150		4,500					4,813	1,065
Romney Sands Coastal Defences	TR08302360	Environment Agency	Kent	From the Folkestone to Cliff End Strategy the actual standard of defence for this part of the coast is 1 in 50, the required standard from the strategy is 1 in 200.	5 59.00%	0	34 0						25	50 1	,000		1,109	53
Lydd Ranges Schemes	TQ99201800	Environment Agency	Kent	Lydd Ranges is an MoD-owned frontage consisting of 7.4km clay embankments (not continuous, contributing to a low SoP) protected by a narrow shingle ridge which requires annual profiling. The site is within an operational live fining range (with lius two shudown periods each year), and also within the Natura 2000 Network. The frontage is assessed as Condition 5, with current APF of between 20% and 5%. Residual life is 20 years. Urgent improvement to the defences is needed to protect 4500 houses and the MoD's live firing range. Compensatory habitat is likely to be required due to the likely significant effect of the proposed scheme on the Natura 2000 Network site.	2 127.87%	0	32 0		190				300 1	0,000 10	D,000		20,522	2,822
Rother Tidal Walls East	TQ 93302270	Environment Agency	Kent	The Folkestone to Cliff End Strategy states that the current earth and clay embankments provide a standard of protection of 1:20 on the East Bank of the River Rother. Behind the defences on these are 208 properties at risk of flooding. The strategy suggests an area of managed realignment downstream of Monkbretton Bridge to carry out some habitat 3,984	116.98%	0	34 0						140	100 3	5,100	610	3,984	320
River Rother ABD and Hazard Mapping	TQ 630 259	Environment Agency	Kent	enhancements and reduce the erosion rate of the tidal defences. The West Bank has recently had a capital scheme completed and has a standard of protection of 1:200. Modelling and Mapping of the River Rother for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled judines, ABD (for Robertsbridge) and Hazard Maps.			74										74	N/A
River Bourne Channel Survey	TQ 6072 5576	Environment Agency	Kent	Channel survey of the River Bourne at Basted Mill to collect data to enable modelling and mapping of this watercourse. Modelling and Mapping of the River Bourne for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled outlines, ABD and Hazard Maps.			36 7										44	N/A
Coult Stream ABD and Hazard Mapping	TQ 6640 4860	Environment Agency	Kent	Modelling and Mapping of the Coult Stream for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled outlines, ABD and Hazard Maps.			26										26	N/A
Hamstreet ABD and Hazard Mapping	TR 0029 3347	Environment Agency	Kent	Modelling and Mapping of the Speringbrook Sewer at Hamstreet for various defended and undefended scenarios. The project will deliver a range of detailed flood outlines, flood levels, velocity data and an ABD for the Hamstreet defences.			15 1										17	N/A
North Kent Coastal Modelling	TR11486757	Environment Agency	Kent	Modelling and Mapping of the North Kent Coast for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled outlines, ABD and Hazard Maps.			0 60	20									80	N/A
Plenty Brook Modelling	TR17626706	Environment Agency	Kent	Modelling and Mapping of the Plenty Brook for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled outlines. ABD and Hazard Maos.			30										30	N/A
Pent Stream Modelling	TR21723684	Environment Agency	Kent	Modelling and Mapping of the Pent Stream for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled untlines. ARD and Hazard Mans.			21										21	N/A
Consultant Support For In-House Modelling	TR18584 35175	Environment Agency	Kent	FRM&DM staff will carry out in house modelling and mapping of the stream in the Kent and South London Area for various defended and undefended scenarios. The project will produ depths, levels, flow, flow direction outputs as well as modelled outlines, ABD and Hazard Maps. This money is to pay for consultant support and QA of the work being completed.			0 20										20	N/A
Priority Site Model Review	Various	Environment Agency	Kent	Model review and re running where necessary where faults found with our detailed modelling outside of the defects period			0 0	20	20	20	15	15					90	N/A
Pumping Stations - Carbon Savings	Various	Environment Agency	Kent	Re running of existing models to test pump removal scenarios and their flood risk implications			0 0	30	40								70	N/A
Isle of Sheppey and Oyster Coast Brooks Survey and Modelling	TQ9443373846	Environment Agency	Kent	Survey and modelling of the Scrapsgate Drain, Warden Bay Drain, Kite Farm Ditch and Gorrell Stream			0 0	30	80								110	N/A
	TQ7061960829.								00									
Snodland and East Malling Modelling	TQ7097658258	Environment Agency	Kent	Survey, Modelling and Mapping of the Snodland Mill Stream and East Malling & Ditton Stream			0 0	55									55	N/A
Iwade Stream Modelling	TQ9012267793	Environment Agency	Kent	Survey, Modelling and Mapping of the Iwade Stream			0 0		40								40	N/A
Brockhill Stream Modelling	TR1497935162	Environment Agency	Kent	Modelling and Mapping of the Brockhill Stream			0 0		50								50	N/A
Kent and South London Survey	TQ2823346695	Environment Agency	Kent	Survey of the Salfords Stream, Hogsmill River and River Ebbsfleet			0 0		40		+						40	N/A
River Medway Modelling	TQ7572855840	Environment Agency	Kent	Generating a 1000yr outline for the River Medway in particular around Maidstone			0 0			55							55	N/A
River Ebbsfleet Modelling	TQ6158574167	Environment Agency	Kent	Modelling and Mapping of the River Ebbsfleet			0 0		-	40							40	N/A
River Darent Strategy TE2100 DARTFORD CREEK CHANNEL REALIGNMENT	TQ52665812 TQ5368076792	Environment Agency	Kent Kent	The Darent Strategy is needed to investigate options identified in the North Kent Rivers CFMP to reduce flood risk to all of the villages and towns along the length of the River Darent. Some of the defences along the Darford Creek are starting to erode as the river is trying to realign. There are harder engineered banks on the left bank as there are more assets to			0	50	100				50	100	100 2	2,000	2,250	N/A 0
				protect. There is an oppurtunity to allow the river room to realign on the right bank and create some intertidal habitat in the process.		+	-								2	,		
River Shutle Strategy	TQ4699873357	Environment Agency	Kent	Study to follow modelling work that investigate increased flood risk Lamorbey Package schemes for Gorrel Stream, Kite Farm and Plenty Brook culvert repairs. Localised repairs to internal culvert structure and repairs and replacement of trashscreens at the inle				30									30	0
Oyster Coast Brooks Culvert	TR1408866569	Environment Agency	Kent	and outlet structures. This will reduce flood risk in the area, improve operational health and safety for the incident response field team and the public.			383 100										483	0
Hollowshore	TR0904865391	Environment Agency	Kent	Sustain option to existing sea defences - 2 new groynes and groyne refurbishment with beach recharge.			1,138 10								_	_	1,149	0
Bartons Point Shingle Recycling	TR0205063407	Environment Agency	Kent	Property at risk of flooding as a result of failure of the seawall at the outfall is approximately 20 dwellings. Numerous businesses including large transport depot, works, boat yard and seavage pumping station, numerous warehouses, farms and quarties. The marshland is SSSI, RAMSAR AND SPA designated. A project needs to be undertaken to stabilise the embankment and seal the culvert.			0 80										80	0
Seasalter, Red Sluice Culvert	TQ92587494	Environment Agency	Kent	Project to produce a Beach Management Plan for Bartons Point, Sheerness, future years will be maintenance shingle recharge.			3 210										213	0
Codds Sluice and Outfall Replacement	TQ 07529 64985	Environment Agency	Kent	Seasalter, Red Sluice Culvert. Remediation works to repair a culvert where the joints have opened and the crest of the embankment is failing into the culvert. 53			53 0						T				53	0
MILTON CREEK OUTFALL	TQ 89337 70981	Environment Agency	Kent	Codds Sluice and Outfall Replacement 149			149 0										149	0
Gorrel Stream Flood Alleviation Scheme	TR1107465805 to TR1073967076	Environment Agency	Kent	Investigate and implement FAS for Gorrel Stream. The Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel. Though the Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel. Though the Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel. Though the Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel. Though the Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel. Though the Gorrell stream runs through the town of Whitstable via a combination of culverted and maintained channel.	5 75.00%	445	0 75						200	750	750		1,775	184
IWADE WEEDSCREEN	TQ 89944 67575	Environment Agency	Kent	A 12 meter long culvert is located on the River lwade close to Sheerstone Road, lwade. The culvert is currently not equipped with a weedscreen thus allowing large debris to enter int	97.00%												0	23
		5. 9		the structure causing sudden diameter and capacity reduction hence increasing flood risk in the village. Recommended refurbishments to outfalls. The outfalls provide drainage to low lying land between the villages of Warden and Leysdown-on-Sea. There is the opportunity to improve the			<u> </u>											
Warden Bay Outfalls (Warden Bay Flood Alleviation Scheme with	TR02457133	Environment Agency	Kent			82	0						20	200			220	30
Sustainable Urban Drainage system)	TR02457133	Environment Agency	Kent	flood resilience or reduce risk of flooding with some other work that could be tied in with work to the outfalls. This project is the number one priority from the Medway Estuary and Swale SMP. It is a study to help determine the least damaging line of realignment across the internationa		82	0						20	200			220	30
	TR02457133 TQ93856656	Environment Agency Environment Agency	Kent Kent	flood resilience or reduce risk of flooding with some other work that could be tied in with work to the outfalls.		82	0 55	50	50	50	50		20	200			220	0

FRM1 Medium Term Plan Format							1					EXP	ENDITURE F	ORECAST						
2012/13				Kent County Council LLFA - Environment Agency Schemes			Contribution required						GiA FUNDIN £k							Outcome Measure OM2 (households better protected against flood risk)
Isle of Sheppey Strategy	TQ9576669511	Environment Agency	/ Kent	This is a review of the original strategy taking into account revised procedures and risks, new works, developments and environmental amendments. This strategy would incorporate the	e 200			0				100 100							200	0
SHEERNESS Sea Defence SOUTHERN DEF	TQ 95806950	Environment Agency	/ Kent	Northern, Eastern and Southern defences on the Isle of Sheppey and identify the preferred options to implement the policies in the respective revised Shoreline Management Plans. The exact nature of the works has yet to be designed, but is likely to involve an amount of managed realignment	6,150	185.02%	0	0								150	3,000	3,000	6,150	107
Kite Farm Diversion Channel	TR1434566945 to TR1413267366			Implement flood alleviation measures resulting from prefeasibility study into COWs	230	79.30%	59	0		0				29	197	0	0	0	226	59
Faversham Flood Alleviation Scheme	TR 0164461893 to TR0151361642	Environment Agency	/ Kent	Scheme to reduce the risk of flooding to cottages which run along the bank of the Faversham creek, this could be in the form of low bund or small flood wall.	230	114.07%	0	0	0					30	200				230	22
The Swale Strategy	TQ 9128569336 to	Environment Agency	/ Kent	Future strategy for the Swale to be constructed to implement SMP actions. The area contains SPA, RAMSAR, numerous SSSI's, National Nature Reserves and the North Ker Marshes are covered by Environmentally Sensitive Area. The brief for this study is currently being developed, it will generally follow the current DEFRA guidance. Future strategy for th	e 200			0				100 100							200	0
Swale Schemes	TR 0236564405 TQ 9128569336 to	Environment Agency	/ Kent	Swale to be constructed to implement SMP actions. The area contains SPA. RAMSAR. numerous SSSI's. National Nature Reserves and the North Kent Marshes are covered b. These are schemes that are expected to come from the Swale Strategy. The scope of works will be determined in the strategy but is likley to involve managed re-alignment across												50	100	5,000	10,150	0
The Middle and Outer Medway Estuary Strategy	TR 0236564405 TQ7589369880 to	Environment Agency		freshwater habitat. Future strategy for the middle and outer Medway to be constructed to implement SMP actions. The area contains SPA, RAMSAR, numerous SSSI's, National Nature Reserves an	200			0				100 100				00	100	0,000	200	0
Middle and Outer Medway Estuary Schemes	TQ9128569336 TQ7589369880 to TQ9128569336	Environment Agency	/ Kent	the North Kent Marshes are covered by Environmentally Sensitive Area. The brief for this study is currently being developed, it will generally follow the current DEFRA ouidan Future strategy for the middle and outer Medway to be constructed to implement SMP actions. The area contains SPA, RAMSAR, numerous SSSI's, National Nature Reserves and the North Kent Marshes are covered by Environmentally Sensitive Area. The brief for this study is currently being developed, it will generally follow the current DEFRA guidan												50	100	5,000	10,150	0
Queenborough Creek Barrier upgrade and refurb.	TQ9077972024	Environment Agency	/ Kent	The tidal barrier is a high consequence asset which is requiring part replacements and upgrades. The panel and numerous sluices on the gates are failing or in poor repair and requiring literative replacements and upgrades. The panel and numerous sluices on the gates are failing or in poor repair and requiring literative replacements and upgrades. The panel and numerous sluices on the gates are failing or in poor repair and requiring literative replacements and upgrades. The panel and numerous sluices on the gates are failing or in poor repair and requiring literative replacements.	350	176.43%	0	0				350							350	227
Robin's Creek Outfall	TQ61957493	Environment Agency	/ Kent	Having completed the Kent Tidal Outfalls Reconditioning Programme several outfalls were recommended for major improvement/refurbishments. One of the outfalls that recommende	i 340			0	40	300									340	0
Upper Tidal Medway Strategy	TQ1336637	Environment Agency		work was Robins Creek. This outfall drains the River Ebbsfleet which drains several housing estates, and commercial buildings and potentially Ebbsfleet International Rail Stat The strategy is going to finalise and deliver the projects set out in the SMPs.				0	0	0	100	100							200	0
TE2100 Thames Tidal & East Scheme	TQ73887917	Environment Agency		The brief for this study is currently being developed, it will generally follow the current DEFRA guidance. Construction/Improvement of Flood Defences in the Thames Estuary as recommended from the TE1200	1,000	9.26%	2722	0	0	0		0		28	139	111	0	0	278	0
TE2100 Thames Tidal Walls West Scheme	TQ60687521	Environment Agency		Construction/Improvement of Flood Defences in the Thames Estuary as recommended from TE2100	1,000	18.54%	9775	0	0	0		0		222	1,112	890	0	0	2,225	0
Isle of Grain to South Foreland Shoreline Management Plans	TR22806934	Environment Agency		Review of the Shoreline Management Plan for Isle of Grain to South Foreland.															100	0.0
Review LITTLE MILL Flood Alleviation Scheme	TQ65724819	Environment Agency		Little Mill floods regularly from events as small as a 1 in 5 year event, this project aims to identify a preferred option to reduce risk to properties at risk of flooding in the area.	1,075	15.30%	960	0	150					250	725	20	5		1,150	30
Borough Green weedscreen	TQ60705689	Environment Agency		Design and installation of new weedscreen on the River Bourne adjacent to Quarry Hill Road in Borough Green, Kent															0	0
East Peckham Flood Alleviation Scheme	TQ66924895	Environment Agency		Scheme to reduce the risk of flooding to East Peckham from the River Medway. This scheme has come out of the Middle Medway Strategy.	418	269.24%	0	0	0	0	50 :	368			-	1			418	238
Yalding gauging station repairs	TQ67024901	Environment Agency	/ Kent	Undertake repairs to Yalding gauging station	0			0	10										10	0
Forest Row Flood Alleviation Scheme	TQ42173487	Environment Agency		Individual property protection scheme to reduce flood risk to 47 properties at risk of flooding from the River Medway and/or the Kidbrocke Stream.	0			115	115										230	47
Leigh Barrier Enhanced Maintenance	TQ56394611	Environment Agency	/ Kent	Fitting new lead screws in actuators of leigh barrier main lifting for north and south gates	209	803.79%	0	49	80	80									209	N/A
Leigh Barrier Mechanical Improvements Phase 2	TQ56394611	Environment Agency	/ Kent	This is phase two of the project. The earlier project called "Leigh Barrier Mechanical Improvements' has been closed by ncpms. However, this new phase has been incorrectly named of the MTP with the old title and IMSO/CWD numbers. This entry aims to redress the error with a new title and relevant numbers.	1,450	146.64%	0	0	0	0									0	934
AYLESFORD Flood Alleviation Scheme	TQ73175906	Environment Agency	/ Kent	A flood Alleviation scheme for the village of Aylesford on the Aylesford stream a former COW, near Maidstone.	1,170	36.26%	835	170	75	0				98	132	0	0	0	475	57
Tonbridge Town Lock Floodwall	TQ59334641	Environment Agency	/ Kent	Partnership project with Tonbridge and Malling Borough Council (T&MBC). A new flood wall will be constructed as part of a larger project to gentrify this area of the town. The EA are contributing to the funding of the new wall, but T&MBC are undertaking design and construction.				0	200	0									200	
Five Oak Green Flood Alleviation Scheme	TQ64184390	Environment Agency	/ Kent	Project to design and construct a flood alleviation scheme for the village of Five Oak Green, Kent where there are currently 162 residential properties at risk of flooding from the Alder	1,208	54.10%	757	58	0					78	757	0	0	0	893	162
River Beult Restoration	TQ83834347	Environment Agency	/ Kent	Stream. Restoration of the River Beult SSSI to a more naturalised channel which will exhibit the characteristics associated with this river type.	3,038			38	0	10	10	100 500	500	500	500	500	380		3037.6	
Brewer Street Property Protection Scheme	TQ67893674	Environment Agency		Property Level Protection scheme for 26 houses at risk of flooding from the River Teise and Brewer Stream in Lamberhurst.		101.21%	72	0	0					130					130	26
Edenbridge Flood Alleviation Scheme	TQ44264579	Environment Agency		Flood Alleviation Scheme to reduce the risk of flooding to the town of Edenbridge from the Rive Eden. The existing defences need to be upgraded as they were built in the 1970s and	600	220.11%	0	0	0	0	50	550							600	286
-				only provide a low standard of protection of between 1 in 20 to 1 in 30 years. The Brockhill Stream is a former Critical Ordinary Watercourse, enmained in April 2006. The River Stour CFMP gives the Pent system a "policy 4" which means that we aim to take			-	-	-	-									0	54
Brockhill Outfall Health and Safety Improvements	TR15143465	Environment Agency	/ Kent	further action to sustain the current scale of flood risk protection into the future responding to the potential increases in flood risk from urban development, land use change and climate The Seabrook outfall is complex structure located at the end of the Royal Military Canal in Hythe, where it culverts and discharges into the English Channel. The structure consists of	1														U	54
Seabrook Outfall Refurbishment	TR18833487	Environment Agency	/ Kent	open box culvert, outfall chamber, two penstocks and the tidal flap valve. This structure is fundamental to water level control on the RMC without which flood water will not be released from the RMC causing flooding to Hythe and Seabrook. There is also the potential of salt water intrusion during extreme tidal conditions, and loss of water on the recreational section	120 of			0	40	80									120	341
Roaring Gutter Island bank stabilisation	TR349550	Environment Agency	/ Kent	Repairs to the eroding bank. Bank failure would cause flooding in Sandwich	300	427.26%	0	0			300								300	633
River Stour Fluvial Strategy	TR 1487 5824	Environment Agency	/ Kent	Strategy to assess the flood risk on the Middle and Lower Stour, appraise options for future FRM and identify a preferred FRM option for the next 100 years.	150			0	50	100									150	
Rother Restoration Study	TQ8574627287	Environment Agency	/ Kent	CFMP Action: East Sussex Rother Restoration Study (including the integrated management of rural floodplains project) This length of main river (approximately 400metres) is in an Urban area which has been identified as being in need of Improve to reduce the risk of fluvial flooding in the New Romney	95			0						95					95	
Romney Main Conveyance Improvements	TR0679324976	Environment Agency	/ Kent	area. Measures will include, desilting and creation of a 2 stage channel.	210			0	60	150									210	383
Vinal Sluice Operational Health & Safety Improvements	TQ98682892	Environment Agency	/ Kent	Health and safety improvements to Vinal Sluice including replacement of old stoplog structure with penstock.															0	38
North Poulders Outfall Health and Safety Improvements	TR3298358483	Environment Agency	/ Kent	Health and safety improvements to enable us to operate a tidal flap to stop tidal flooding															0	65
JURY'S GAP REFURBISHMENT	TQ 975 181	Environment Agency	/ Kent	Works to improve channel bank stability. Creation of a new concrete tidal basin within an older clay bunded structure.	700	195.41%	0	0			200 !	500							700	406
Marsh Farm Road Bridge Refurbishment	TR30866340	Environment Agency	/ Kent	Statutory structural survey of a bridge near Minster, design and construction work to bring it up to a condition where ownership could be passed to KCC to absolve EA of responsibility	330			0	150	180									330	NA
Kent &South London Reservoirs Matters in the Interest of Safety	TQ64066143	Environment Agency	/ Kent	This is to keep all EA reservoirs within Kent and South London Compliant with the Reservoirs Act. This is a legal requirement under the Reservoirs Act 1975.	1,400		1	0	350	350	350 :	350							1,400	0
Pett Shingle Renourishment Phase 6-11	TQ 92000 16000	Environment Agency	/ Kent	Shingle recycling to maintain frontage post completion of large NCPMS scheme. Development of beach management plan in year 1.	1,440	135.20%	0	0					240	200	200	200	200	200	1,440	2,276
Denge Beach Management 2011-15	TQ98401794	Environment Agency		This project consists of annual recharge works to reinstate the shingle beach to protect an ageing seawail, this needs to continue to take place until the Broomhill Sands Scheme can construct a replacement seawail. These works ensure the old seawail is not subjected to wave attack, and to sustain the supply of beach material along the southern coast of Romney Marsh where direct placement of material is not allowed. The works are being incorrected into a beach material along the southern coast of Romney where where a beach and the state of the callowed. The works are being incorrected into a beach material along the southern coast of Romney the state of the state of the state of the callowed. The works are being incorrected into a beach material along the southern coast of Romney the state of the	3,000			0	600	600	600	600 600							3,000	580
Pent Stream Channel Improvements	TR210369	Environment Agency	/ Kent	Marsh where direct placement of material is not allowed. The works are being incorporated into a beach management plan to ensure they are managed more effectively and that Pent Stream Channell improvements to include re-profiling and restoration of the open sections. We will work with FRM&DM to survey open sections of the channel, already included the mapping programme, for financial savings.	n 260			423	260										683	1,097
Bridge Repairs	Various	Environment Agency	/ Kent	Statutory minor repair works to Kent bridges to maintain their condition.	99			12	0		33	33		33	1				111	
BLACK SLUICE Health and Safety Improvements	TR342 586	Environment Agency	/ Kent	Repairs to unstable sluice house and old weedscreen to allow staff to operate structure. Failure to operate would lead to flooding and increase pumping.		137.00%													0	100
BROOKSEND SLUICE Health and Safety Improvements	TR269692	Environment Agency		Undertake Health and Safety Improvements recommended from Health and Safety Inspection. Site can no longer be opertad safely											1				0	3
COLDHARBOUR OUTFALL Health and Safety Improvements	TR247693	Environment Agency		Undertake Health and Safety Improvements recommended from Health and Safety Inspection, site can no longer be operated safely											-	1			0	TBC
Appledore Rye Road Bridge Health and Safety Improvements	TQ951284	Environment Agency		Statutory works to improve condition of bridge to enable handover to third party.	180			20	0	180									200	0
Iden Lock Improvements Flood and Coastal Risk Management	TQ9366724469	Environment Agency		FCRM Contribution (30% of total project costs) detailed design and replacement of critical structure for flood management, irrigation and drainage of Romney & Walland Marshes.	75								-		+				0	136
contribution				Replacement of a weedscreen on the causeway. Stops debris building up in a critical culvert		400 700/					75								-	
Canterbury Weedscreen	TR1478258332			Terminal growne will need to be constructed in order to maintain the shingle defence	75	420.79%	0	0			75								75	174
Greatstone Terminal Groyne	TR0818523113			Following comments at LPRG Reappraisal of Folkestone to Cliff End Strategy Schemes to deliver schemes on the South Coast in the most cost effect manner. Projects will total	75			0		75									75	153
Folkestone Cliff End Strategy Scheme Appraisal	TR 08300 17700	Environment Agency	/ Kent	Approximately £25m and deliver improved standard of protection to 13500 homes and busines	300									300					300	0

FRM1 Medium Term Plan Format 2012/13				Kent County Council LLFA - Local Authority Schemes			Local Contribution required					I		URE FOREC JNDING ON £k					
	National Grid	Risk		Brief Description of Problem and Proposed Solution	Total			PREVIOUS	2011/12	2012/13	2013/14	2014/15	2015/16		2017/18	2018/19	2019/20	2020/21 202	1/22 ALL
Project Name	Reference of Project	Management Authority	LLFA		Project Cost	Adjusted OM score		YEARS Pre Yr 0	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5					YEARS
Strategic Regional Coastal Monitoring - Canterbury Stage 2	Location N/A	Canterbury City Council	Kent	The monitoring comprises topographical beach surveys, hydographic nearshore seabed surveys, aerial photography, LIDAR, hydrodynamic data recording and data management and dissemination. This provides a consistent regional approach for coastal process monitoring.	£K 2,508														0
Herne Bay Coastal Defence Strategy Plan	TR17476835	Canterbury City Council	Kent	The coastal defence strategy plan is well under way with major public consultation planned for November 2011 and completion and submission of the strategy in March 2012. The initi findings confirm a hold the line strategy of beach management. rock breakwater (improved) and improvement and raising of the rear seawall is very likely to be the recommended optic There are obvious high benefits from the low high own centre.	al on. 180			125	30	25									180
Management Unit 5B-Swalecliffe Strategy Study	TR14356773	Canterbury City Council	Kent	The coastal defence strategy plan has been submitted to NRG but some significant changes are needed for resubmission although NRG agreed the strategy proposals in principle.	115			100	15										115
Tankerton Coast Protection Works	TR 12586732	Canterbury City Council	Kent	First major beach recharge 15 years after completion of the final part of the main scheme (2004) in accordance with the approved strategy plan programme. Necessary in order to prot the integrity of the seawall based on the current assessment of beach erosion. Protecting 470 houses and an SSSI. Benefits and costs based on strategy plan updated to include actu works costs to date and future capital and revenue maintenace over 100 years.		78.91%	345			0	0	0	0	0	0	0	4,388	0 0	0 4,388
Studd Hill & Hampton Coastal Defence Works	TR15026772	Canterbury City Council	Kent	The works proposed comprise a small beach recharge and new timber groynes to ensure that the seawall is always protected. Some extending and raising of the rear seawall is also required at low points and gaps.	1,510	65.49%	571			0	0				132	2,551	76	0 0	0 2,759
Herne Bay Sea Defence Works	TR17476835	Canterbury City Council	Kent	The works (over the next twenty five years) comprise raising and extending the rear seawall, capital maintenance to the rock breakwater, with provision of additional rock, and beach recharge and new timber groynes. These works are necessary to upgrade the defences to a 1 in 200 year standard and also close gaps in the seawall and secure the defences agains overflow in extreme events.	at 1,020	151.46%	0				70	850							920
Hampton to Bishopstone Coast Protection Works	TR19686852	Canterbury City Council	Kent	The works comprise a major beach recharge and new limber groynes in stages to ensure protection to the seawalt. Necessary to maintain the defences to a 1 in 100 year standard an protect the slopes from erosion and damage from overtopping in extreme events. The beach protecting the seawall against failure is low and an extreme event storm could cause the s to undermine and trigger a slip on the clay slopes behind, which have a low factor of safety against movement.	e ^{awall} 3,620	62.48%	1458			0	0				109	73	2,927	1,149 (0 4,257
Reculver Coast Protection Works	TR22746940	Canterbury City Council	Kent	Capital maintenance works 20 years after completion of the main scheme (1999) in accordance with the approved strategy plan. The works will comprise seawail relacing, rock protec the west and to prevent outflanking and grouting/block replacement to the Towers Apron. At that time this significant refurbishment will be needed to prevent failure of the seawail and apron under wave action during a servere storm.	tion at the 1,225	173.03%	0											41	10 825
North Kent Shoreline Management Plan Future Review (SMP3)	N/a	Canterbury City Council	Kent	Second revision of the Isle of Grain to South Foreland SMP approx 10 years after approcal of first review August 2010	210														#REF!
Seasalter Coast Protection Works	TR 0918 6531	Canterbury City Council	Kent	First major beach recharge 15 years after completion of the main scheme (2006) in accordance with the approved strategy plan. Necessary in order to protect the integrity of the seaw based on the current assessment of beach erosion. Protecting 240 houses and the main railway line. Benefits and costs based on strategy plan updated to include actual works costs 2006 and future capital and revenue maintenace over 100 years.		79.97%	246			0	0	0	0	0	0	0	0	2,142 0	0 2,142
Whitstable Flood Defence Works	TR 1038 6649	Canterbury City Council	Kent	First major beach recharge 15 years after completion of the main scheme (2006) in accordance with the approved strategy plan programme. Necessary in order to protect the integrity seawall based on the current assessment of beach erosion. Protecting 2380 houses and the town centre. Benefits and costs based on strategy plan updated to include actual works or 2006 and future capital and revenue maintenace over 100 years.		291.24%	0											1,000	1,000
South Foreland to Beachy Head Shoreline Mangement Plan - 10 Year	TR19003480	Shepway	Kent	As lead authority, the Council will be required to ensure that the Action Plan is administered in accordance with the SMP requirements	75														0
Review		District Council		The concrete arches and maintenance gangway at Coronation Parade form an important sea defence to the soft cliffs behind as well as significant assets. This includes the internatio	nally														
Coronation Parade Works	TR23703630	Shepway District Council	Kent	Important National Grid Transco Interconnector structure which has the ability to provide upto 5% of the UK's peak electricity demaindand facilitates the cross border trade between the and Continental Europe. Comparison of topographic surveys suggest a steady recession of the top of the cliff and the potential for wave action to erode the toe of the exposed cliff. Tarches are in a poor state of repair and failure to carry out remedial work would eventually lead to deterioration and eventual collapse. The solution involves refurbishment of the arche works to arrest erosion of the cliff face behind and coastal protection of the eastern extent of the arches.	he cooo	99.00%	2293	128	20						55	516	3,011	4 4	4 3,755
South Foreland to Beachy Head Shoreline Management Plan, Action plan	TR19003480	Shepway District Council	Kent	As lead authority, the Council will be required to ensure that the Action Plan is administered in accordance with the SMP requirements	50														0
				Folkestone Harbour Coast Protection Scheme. The rock structures and new static beaches at Folkestone which were completed in 2004 have significantly reduced the risk of erosion however, in order to maintain the 1 in 200 year (0.5%) standard of protection against flooding in Hythe, it is necessary to manage the large resource of shingle along this frontage. If st															
Hythe to Folkestone Beach Management 2008 -2013	TR19003480	Shepway District Council	Kent	is not recycled from the collection areas back to the deposition sites then beach levels will begin to lower. This not roifly exposes the old seawall to violent wave attack and potential undermining, but significantly increases the risk of flooding from wave overtopping. Under the do-nothing scenario, i.e. If the beaches at Hythe are left unmanaged, it is estimated that seawall will all within 5 years and the natural ridge of high ground between the seawall and the flood compartment will breach within 10 years. The failure of the seawall and conseque erosion at Sandgate and Folkestone also has the potential to re-activate coastal landslips. This would result in the loss of over 700 residential dwellings and some key infrastructure. In addition, without the presence of a healthy beach in front of the seawall, wave overtopping will increase significantly.	he nt 662			221	221	220									662
Hythe to Folkestone Beach Management 2013 - 2017	TR19003480	Shepway District Council	Kent	Following the completion of the 2008 to 2013 works, It will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirements Strategy and the policy of Hold the Line (Sustain) for this frontage.	1,310	76.10%	313	0	0						222	924	924	924 92	24 4,840
Greatstone Dunes Management (2008 - 2011)	TR 08202270	Shepway District Council	Kent	The dunes currently provides protection to approximately 155 houses located on the lower tying land behind the dunes system. The Folkestone to Cliff End Flood and Erosion Manage Strategy (FCEFENS) 2008, report identified that the dunes have a 0.1% chance (it in 100) of failure in any one year, which would most probably be brought babut by a mechanism of erosion, with eventual failure as a result of a breach in the dunes. The Strategy proposal is to Hold the Line by managing the dune system with fencing to prevent erosion.	ment 45			30	15										45
Greatstone Dunes Management (2012 - 2016)	TR 08202270	Shepway District Council	Kent	The dunes currently provides protection to approximately 155 houses located on the lower lying land behind the dunes system. The Folkestone to Cliff End Flood and Erosion Manage Strategy (FCEFEMS) 2008, report identified that the dunes have a 0.1% chance (1 in 100) of tailure in any one year, which would most probably be brought about by a mechanism of erosion, with eventual failure as a result of a breach in the dunes. The Strategy proposal is to Hold the Line by managing the dune system with floring to prevent erc	ment 75	2350.34%	0	0	0		15	15	15	15	15				75
Hythe to Folkestone Harbour Coast Protection Scheme, Post Project Construction	TR19003480	Shepway District Council	Kent	Protection, with eventual rational as a result of a treat in the durines. The during proposal is to hold the cline by managing the durine system with rending to prevent end. Following the completion of the Hythe to Folkestone Harbour Coast Protection Scheme in 2004, Defra require the Council to carry out a post completion design review to ensure that p money has been spent in an appropriate manner and that the Scheme is performing as designed.	ublic 430			30	0						50	350			430
HYTHE TO FOLKESTONE BEACH MANAGEMENT 2018 - 2022	TR19003480	Shepway	Kent	Following the completion of the 2013 to 2017 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirements Strategy and the policy of Hold the Line (Sustain) for this frontage.	of the 1,425	76.10%	341			0	0	0	0	0	340	866	883	900 91	17 4,840
HYTHE TO FOLKESTONE BEACH RECHARGE	TR19003480	District Council Shepway	Kent	Following the completion of the 2008 to 2013 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirements Strategy and the policy of Hold the Line (Sustain) for this frontage.	of the 6,000	133.19%	0											10	00 6,100
HYTHE TO FOLKESTONE BEACH MANAGEMENT PLAN	TR19003480	District Council Shepway	Kont	Following the completion of the 2008 to 2013 works, it will be necessary to continue with beach management between Hythe and Folkestone in order to comply with the requirements	of the 10														0
SOUTH FORELAND TO BEACHY HEAD SHORELINE MANAGEMENT	TR19003480	District Council Shepway	Kent	Strategy and the policy of Hold the Line (Sustain) for this frontage. As lead authority, the Council will be required to ensure that the Action Plan is administered in accordance with the SMP requirements	100														100
PLAN - 20 YEAR REVIEW Scheme Walmer to Kingsdown beach management works 2009/10 -	TR 37890	District Council Dover District	Kent	Properties at risk from coastal erosion if seawalls at Kingsdown and Oldstairs Bay fail. Beach management protects the existing seawalls.	509			269	120	0	120								509
2014/15 Scheme Walmer to Kingsdown beach management works 2014/15 -	49660 TR 37890	Council Dover District	Kent	Properties at risk from coastal erosion if seawalls at Kingsdown and Oldstairs Bay fail. Works will involve new construction of timber groyne field and shingle recharge, followed by ann	ual 4,127	45.46%	2351	360		0	0				56	1,737	10	10 1	0 2,205
2019/20 Further studies to re-alignment of MOD Rifle Range Area	49660 TR 3789 4966	Council Dover District	Kent	beach recycling. Second stage of contamination study	75														5 75
Surface Water Management Plan for Deal Town & Walmer	TR 3691 5272	Council Dover District	Kent	Properties of Deal Town have been at constant risk of surface flooding from many contributing factors. This study would help outline a surface water management plan and identify key				0	0						100	20			120
Peqwell Bay/ Sandwich Road Flood Defence Scheme		Council Thanet District	Kent	areas for improvement development works Wave overtopping of the A256 during storm conditions causing damage to road/local properties. A low concrete flood wall on the line of existing sea wall would significantly improve th		62.31%	102	0								0	0	0 0	0 169
Margate Flood and Coast Protection Scheme	TR34566386 TR35307107	Council Thanet District	Kent Kent	of flood defence offered to the properties identified. Margate's Harbour Arm protects and retains the main beach at Margate which in turn protects the seawall from wave action and scour. The densely populated Margate old town and Dreamland's list are two low lying areas that benefit from the protection.	270 5,779	62.31%	102	850	20	2,929					149	0	U	0 (5,779
Westgate - St Mildred's Bay - Coping/Berm Slab Replacement	TR32087051	Council Thanet District Council	Kent	Upper courses of precast sea wall and wave return' copings exhibiting movement due to expansive forces/wave energy. Failure of copings anticipated within 5-7 years with more gen sea wall failure expected to follow within 1-2 years, allowing off erosion to recommence. It is likely that works would consist of the construction of a new institu cast toe to protect the so from undermining and renewal of the coping (and first course below) with new precast units. The seaward berm slab (approx Am wide) would also be renewed as part of the scheme.	eral 6 525	27.93%	378	0	0						7	140	0	0 0	0 147
East of Epple to Westgate Bay - Sea Wall Refacing Works	TR31277003	Thanet District Council	Kent	Upper courses of precast sea wall and 'wave return' copings exhibiting movement due to expansive forces/wave energy. Failure of copings anticipated within 5-7 years with more gen sea wall failure expected to follow within 1-2 years, allowing cliff erosion to recommence. It is likely that works would consist of the construction of a new insitu cast toe to protect the s from undermining and renewal of the coping (and first course below) with new precast units. The seaward berm stab (approx 4m wide) would also be renewed as part of the scheme.		30.50%	229	0	0						6	95	0	0 0	0 101
St Mildred's Bay - Westbrook, Pointing and Expansion Joint Repairs	TR32847043	Thanet District Council		A capital coast protection scheme was undertaken here in 1995/96. Maintenance work is required in the near future to maintain the integrity of expansion joints and repoint failing joint between the wave return copings.	50	56.33%	22	0	0						28	0	0	0 0	0 28
Minnis - Grenham Bay - Coping/Berm Slab Replacement	TR28896994	Thanet District Council	Kent	Upper courses of precast sea wall and 'wave return' copings exhibiting movement due to expansive forces/wave energy. Failure of copings anticipated within 5-7 years with more gen sea wall failure expected to follow within 1-2 years, allowing cliff erosion to recommence. It is likely that works would consist of the construction of a new insitu cast toe to protect the s from undermining and renewal of the coping (and first course below) with new precast units. The seaward berm slab (approx 4m wide) would also be renewed as part of the scheme.		29.57%	222			0					3	90	0	0 0	0 93
Stone Bay - Sea Wall Berm Upper Surface Replacement	TR39966816	Thanet District Council	Kent	This sea wall consists of precast concrete facing and coping units with chalk fill behind and a dense bitumen macadam upper surface. The surface construction is approx 40 years old requires replacement in the near future to avoid the unbound fill being washed out which would jeopardise the integrity of the structure. The replacement surface is likely to consist of combination of concrete berm slabs (on the seaward side) and DBM surfacing.		109.24%	0								10	205			215
Thanet Groyne Reconstruction/Refurbishment	TR27476936	Thanet District Council		comparison or concrete verify allow of the service story and comparison of the service verify and comparison of the service verify and comparison of the service of protection enjoyed by maintaining sediment and therefore reducing valer depth/vave energy and the potential for undermining defences. Many of these structure a ging and require major refluction the model as a direct result of the service of protection enjoyed by maintaining sediment and therefore reducing valer depth/vave energy and the potential for undermining defences. Many of these structure a ging and require major refluction the service of the ser	tures 475	64.33%	169			0					10	296	0	0 0	0 306

FRM1 Medium							Local Contribution required							TURE FO					
Term Plan Format	National Grid		LLFA	Brief Description of Problem and Proposed Solution	Total			PREVIOUS	2011/12	2012/13	2013/14	2014/15	2015/16	£k 2016/17	2017/18	2018/19 2019/20	2020/21	2021/22	ALL YEARS
Project Name	Reference of Project Location	Risk Management Authority			Project Cost £k	Adjusted OM score		YEARS Pre Yr 0	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7 Year 8	Year 9		Total FDGiA Funding
Royal Borough Kingston-u-Thames - Ordinary watercourse refurb	TQ 19298 66821	Royal Borough Kingstor Upon Thames	¹ South West	Ea reference: DEFRAFDGiA002				0	50										50
Ashlone Wharf Beverley Brook Outfall	TQ2348476215	Environment Agency	South West	Repair or replacement of the Ashlone Wharf flap valves to eliminate current breach of Barnes Embayment and improve condition grade to acceptable level. Flap valves are a tidal defence asset at the outfall of the Beverley Brook to the River Thames in Barnes, London.				392	1,107	60									1,559
Beverley Brook at Worcester Park	TQ 224 665	Environment Agency	South West	23-06-2011 - Implementation of a Flood storage area and increased bank/wall heights to increase the SoP from 1:5 to 1:50 along the length of Green Lane, Worcester Park	1,623	142.98%	1,170	200	250 .8	1,264	9								1,473
Wandsworth Town Flood Alleviation Scheme	TQ 2645 6980	Environment Agency	South West	A standalone scheme for Wandsworth Town on the River Wandle.	4500	228%	0	0	150		250	2000	2000	100					4500
Burstow Stream Modelling	TQ30014335	Environment Agency	South West	Modelling and Mapping of the Burstow Stream for various defended and undefended scenarios. The project will produce depths, levels, flows, flow direction outputs as well as modelled outlines, ABD and Hazard Maps.					30										30
Dead River Survey and Modelling	TQ1199566257	Environment Agency	South West	Survey and modelling of the Dead River				0	0	50									50
Surbiton Stream Survey and Modelling	TQ1889066606	Environment Agency	South West	Survey and modelling of the Surbiton Stream				0	0	50	10								60
Hogsmill River Modelling	TQ2082663803	Environment Agency	South West	Modelling review, re running and mapping				0	0			30							30
River Rythe Modelling	TQ1477264192	Environment Agency	South West	Modelling review, re running and mapping				0	0			40							40
Salfords Stream Modelling	TQ2823346696	Environment Agency	South West	Modelling review, re running and mapping				0	0				30						30
Kinnersley Manor, Reigate Gauging Stn Improve	TQ 26240 46210	Environment Agency	South West	It is utilised by a number of functions. Recent analysis of the data has shown that the site could perform well but needs improvement. It would then be able to replace Horley Gauging Station upstream which also performs poorly but has less opportunity to improve. The side channel at Kinnersley Manor has deteriorated to such a degree that it requires complete replacement, it would be a good															0
Lower Mole FAS Operational Access Road	TQ 14239 66676	Environment Agency	South West					237	150										387
Gatwick Airport Gauging Stn Relocation	TQ 26108 39986	Environment Agency	Crawley	The new real are expensioning increasingly significant access issues to darkink Autor of adapting station as security restrictions at the airport get tighter. This can be rectified by moving the gauge hut outside of the airfield to a location where we can have easier and safer access to the site, whenever we require it. The existing arrangements are such that we have to contact security to arrange access to or site. If they are busy or dealing with other issues we either have to come back another time or wait around for up to an event of the intervent of the site of the security is another security in a security of the security of															0
Upper Mole Flood Alleviation Scheme	TQ2780041002	Environment Agency	Crawley	Outline Design, Detailed Design and Construction of a Flood Alleviation Scheme to reduce risk to properties in Crawley and Horley and infrastructure at Gatwick Airport. (Gatwick Airport & Gatwick Stream)				6,240	3,830	5,498	383	20	10						15,981
Upper River Mole Modelling	TQ2688041812	Environment Agency	Crawley	Modelling review, re running and mapping following on from the work done by the Upper Mole Strategy				0	0		40	80							120
Marsh Dykes Modelling Update	TQ4750279788	Environment Agency	South East	Modelling update, re running and mapping				0	0				40						40
Crayford Sluice Repairs	TQ53302 77988	Environment Agency	South East	H&S works to reduce height of existing valve chamber and install new gearbox, install platform, telemetry and screen on new screen chamber.				527	0										527
Lewisham & Catford Flood Alleviation Scheme	TQ 3885 7080	Environment Agency	South East	A FAS study on the Lewisham and Catford areas of the Ravensbourne catchment, An initial assesmnet suggests that there are over 1000 properties (residential and non-residential) at risk of flooding in the 0.5% Annual Exceedance Probability (AEP) event. It is estimated that approximately 307 of these properties would move from very significant/significant risk category to moderate/low risk	7,016	231.26%	0	99	312		280	2,600	3,600	100	25				7,016
Lake 4 Pump Stn PV Cells CS	TQ 46416 81024	Environment Agency	South East	Pumping station				0	20										20
Great Breach PS PV Cells CS	TQ 49331 80599	Environment Agency	South East	Pumping station				0	15										15
Beckenham Hill Trash Screen	TQ3835471639	Environment Agency	South East	Beckenham Hill Trash Screen is located on the River Ravensbourne at Downham. Its purpose is to prevent the collection of rubbish within a twin, reinforced concrete box culvert which runs for most of its 400m length. This culvert is 4m wide and 1.8m high. Without a screen at this point there is a high potential for a blockage to occur within the culvert which could result in flooding to properties (up to 400m extension).	150			0	150										150