Flood and Coastal Risk Management vision in Kent

Name: Mark Douch - Area Flood and Coastal Risk Manager

Date: March 2020



National flood and coastal risk management strategy

- ◆ 25 year Environment Plan
 - ♦ We have committed to better protect at least 300,000 homes from flooding by 31 March 2021
 - Challenges EU exit, securing partnership funding
 - Supported by our corporate strategy 'creating a better place'

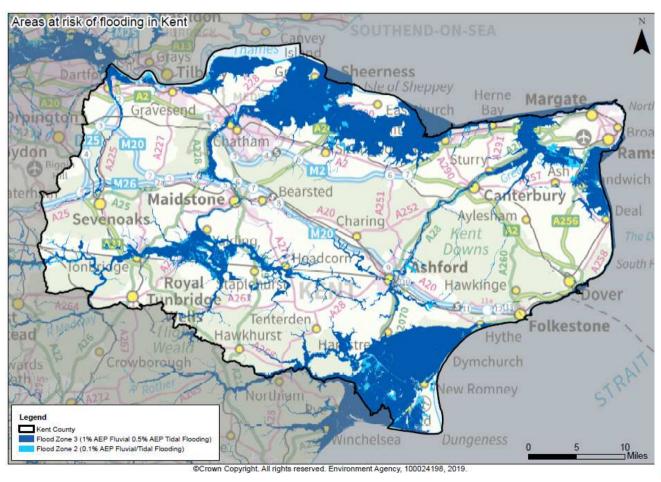






Flood risk in Kent overview

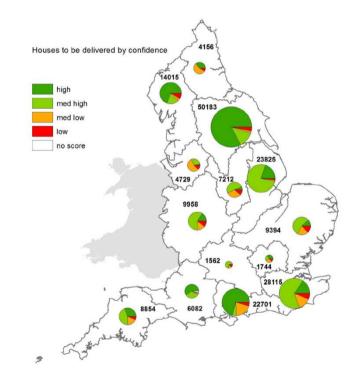
◆ In Kent currently there are 60,000 properties (residential and commercial) at risk of flooding from rivers and the sea





Flood and Coastal Risk Management Capital Programme 2019-21

- 2019-21 capital programme
 - National allocation is £845.7M
 - ♦ Kent and South London allocation is ~£113.8M
- ◆ Within Kent and South London we are forecasting to reduce flood risk to 21,022 properties over the next 2 years
- ◆ 2018/19 flood risk reduced to 7,575 properties in Kent and South London



The number of properties that will benefit from a FCRM scheme by area between 2018-2021, for all flood risk sources and all RMA projects

nvironment

EA FCRM Capital Schemes 2019-21

Project name	Project expenditure (£)			Total Project				
	GiA funding - 2019/20	GiA funding - 2020/21	Contributio ns (£) 19/20 – 20/21 total	Expenditure (£) 19/20 - 20/21 total	OM2 - 2019/20	OM2 - 2020/21	OM2b - 2019/20	OM2b - 2020/21
Leigh Expansion and Hildenborough Embankments	0	0	1,448,500	1,448,500	0	0	0	0
East Peckham Walls	60,500	0	0	60,500	0	0	0	0
Northern Sea Wall Beach Management 20/21 to 21/22	0	115,000	0	115,000	0	28	0	0
Northern Sea Wall Beach Management 18/19 to 19/20	115,000	0	0	115,000	27	0	0	0
Hythe Ranges Scheme	3,831,643	13,200,000	0	22,477,264	0	746	0	475
Leigh FSA Improvements	100,000	100,000	0	200,000	0	0	0	0
Littlestone Beach Management 2018/19-2019/20	160,000	0	0	160,000	59	0	0	0
Littlestone Beach Management 2020/21-2021/22	0	160,000	0	160,000	0	59	0	0
Denge (Lydd Ranges) Beach Management 2019/20 - 2020/21	550,000	550,000	0	1,100,000	1,724	1,724	0	1,230
Middle Medway Flood Resilience	400,000	0	1,800,000	2,200,000	0	163	0	0
Romney Sands Coastal Defences	232,000	0	0	232,000	0	20	0	0
Appledore Pumping station	50,000	2,000	0	52,000	14	0	0	0
Sheerness Defences Structural Repairs	50,000	0	0	50,000	0	0	0	0
Sandwich Town Tidal Defences	19,000	5,000	0	24,000	0	0	0	0
Sandwich Bay Sea Defences (Deal)	2,000	0	0	2,000	0	0	0	0



EA FCRM Capital Schemes 2019-21

Year	FD GiA - EA KENT Projects only (£k)	FD GiA - LA KENT Projects only (£k)	OM2 + OM3
15-16	11,142	2,349	4,428
16-17	7,595	5,250	5,105
17-18	10,319	4,572	6,528
18-19	13,462	1,989	4,058
19-20	15,895	1,068	5,158
20-21	23,723	4,443	6,117
TOTAL	82,135	19,670	31,394

Local Authority FCRM Capital Programme 2019-21

Project name	Lead RMA	Proje	ct expenditur	e (£)	Total Project	Outcome Measures (OM3 - 2019/20	Outcome Measures (OM3 - 2020/21
		GiA funding - 2019/20	GiA funding - 2020/21	Local Levy funding - 2019/20	Expenditure (£) 19/20 - 20/21 total		
Chatham Waterfront	Medway	25,000	0	0	25,000	0	0
Hythe to Folkestone Beach Management 2020 - 2025	Shepway District Council	0	252,000	0	252,000	0	438
Hythe to Folkestone Beach Management 2015 - 2020	Shepway District Council	250,000	0	0	250,000	438	0
Hythe to Folkestone Beach Recharge	Shepway District Council	30,000	5,005,000	0	5,035,000	0	2,190

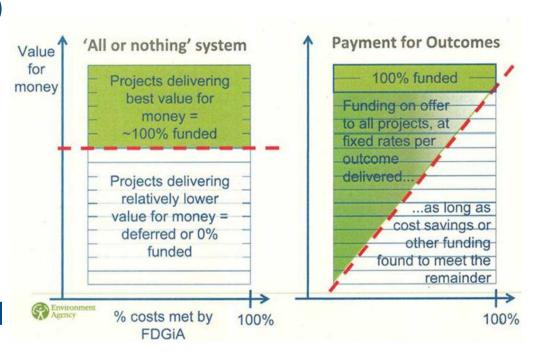


Capital programme £5.78M (2019-21)



Funding for capital schemes

- Partnership funding (pf) model
- Funding allocated based on the costs of the scheme and benefits delivered (number of properties protected)
- Under this model not all schemes attract 100% capital funding
- We seek external contributions to make up any funding shortfall



Previous funding allocation process (left) and partnership funding model (right)



Forward look – Next 6 year capital programme 2021 and beyond

- We have developed a robust pipeline of future projects
- The next generation projects are likely to be those with lower benefits and larger pf gaps to fill
- ♦ We will continue to work closely with our partners to align our programmes via groups such as the Kent County Flood Partnership (EA, KCC and SW)



Forward Look – Future schemes

- Some schemes are unfunded in the next two years
 - ◆ Great Stour Flood Alleviation Scheme ~ 300 properties at risk Canterbury and the middle Stour
 - ◆ East Peckham Flood Alleviation Scheme ~192 properties at risk, project has a pf score of 33% with £1.7M required in contributions to progress scheme





Nailbourne Schemes

Awaiting completion of Nailbourne options appraisal





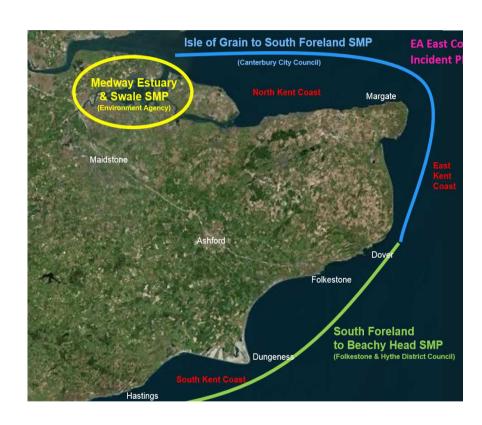
Forward look – capital programme 2021 and beyond

- Rother Tidal Walls East and West
- River Stour FAS
- Tillingham and Scots Float Sluice Refurbishment
- Romney Marshes Pumping station refurbishment
- Medway Estuary and Swale schemes
- Capital Maintenance to EA and LA defences
- Lydd Sea defence project
- Five Oak Green



Shoreline Management Plans (SMPs) refresh

- SMPs set the strategy for coastal management over the next 100 years
- Management approaches:
 - Hold the line
 - No active intervention
 - Manage Realignment
 - Advance the line
- Delivered via strategies and individual schemes



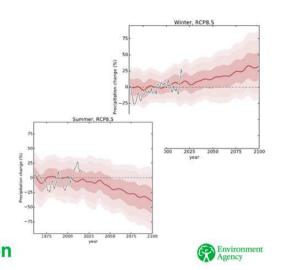
SMPs covering the Kent coastline

SMP refresh currently underway



Accounting for climate change

- UKCP climate change projections
- We are incorporating the updated predictions into our plans, strategies, schemes and flood risk models
- Winter precipitation is expected to increase significantly
- Summer rainfall is expect to decrease significantly
 - But when it rains in summer there may be more intense storms



- ◆ Funding gap could increase if Future precipitation scheme costs increase to account for climate change
- Future proofing and adaptation will be key





