Flood and Coastal Risk Management vision in Kent

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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
 - Supported by our corporate strategy 'creating a better place'
 - National governance
 - Challenges EU exit, securing partnership funding, ensuring we manage to time and cost

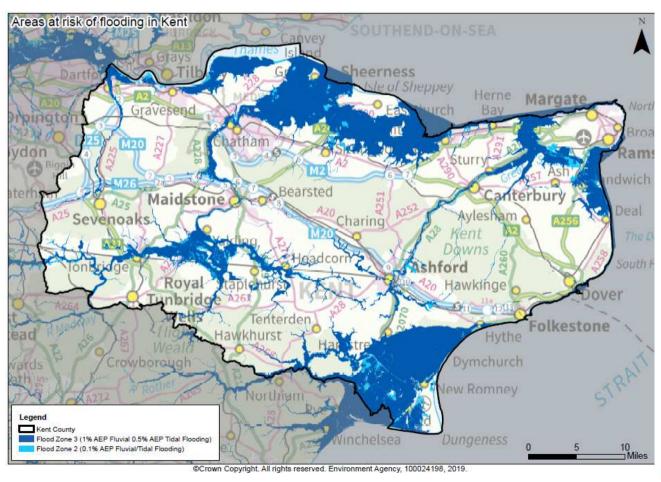






Flood risk in Kent overview

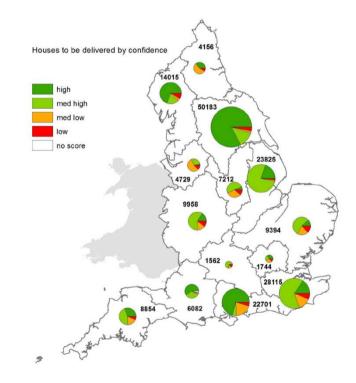
◆ In Kent currently there are 60,000 properties (residential and commercial) at risk of flooding from rivers and the sea





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

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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



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

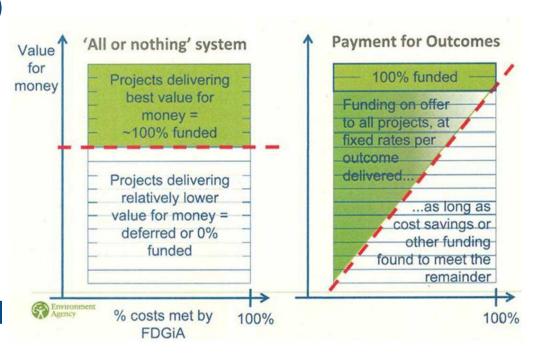


Capital programme £5.78M (2019-21)



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 – Future schemes

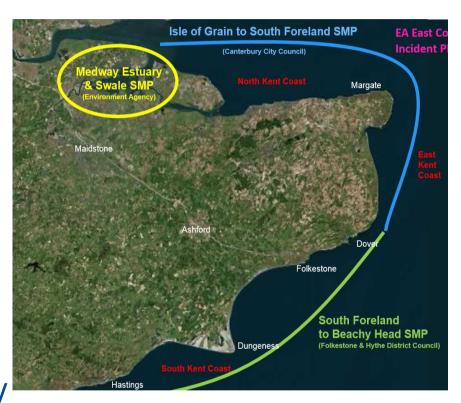
- Some schemes are unfunded in the next two years
 - ◆ Great Stour Flood Alleviation Scheme ~ 300 properties at risk Canterbury and the middle Stour
 - ◆ Initial appraisal work undertaken including contributions from KCC and CCC, further work to be allocated in the next 6 year programme
 - ◆ East Peckham 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
 - Local levy funding secured to progress schemes working with the multi-agency flood group
 Environment Agency

Forward look – Next 6 year capital programme 2021 and beyond

- Medway Estuary and Swale FCRM Strategy
 - The strategy has been approved and we will now start to look at implementing the schemes identified
- Pipeline projects
 - 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)
 - We will need to work together to approach businesses for funding and submit bids for LEP
 Enviro

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
- SMP refresh currently underway
- This will update the action plans with work completed and look at making SMPs more visible to the public



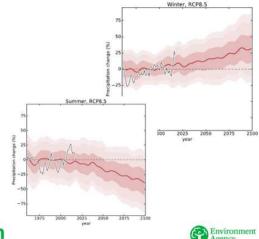
SMPs covering the Kent coastline



Accounting for climate change

- 2018 UKCP18 climate change projections released
- Variability in rainfall in increasing, need to be more resilient
- We are incorporating the updated predictions into our plans, strategies, schemes and flood risk models
- ◆ Funding gap could increase on the capital programme if scheme costs increase to account for climate change
- Future proofing and adaptation will be key

- 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



Future precipitation



Activity alongside capital programme

- ◆ Town & Country Planning: EA responds to around 1000 planning consultations per year
- Local Plans an effective route to align expectations with developers at an early stage
- Engagement across community Infrastructure Levy/SE LEP
- Modelling and flood mapping
- Our role as Cat 1 incident responder



