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Ask for:
Date: 12 March 2019

Dear Member

KENT FLOOD RISK MANAGEMENT COMMITTEE - MONDAY, 11 MARCH 2019

I am now able to enclose the following presentation that was given to the meeting of the Kent Flood Risk Management Committee on Monday, 11 March 2019.

Agenda Item No

5

Environment Agency - Flood Risk Vision for the future of Kent - Presentation by Mark Douch, Area Flood and Coastal Risk Manager (Pages 3 - 14)

Yours sincerely

A handwritten signature in black ink, appearing to read 'B. Watts', is written over a faint, illegible printed name.

Benjamin Watts
General Counsel

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Flood and Coastal Risk Management vision in Kent

Name: Frank Heeley PSO Team Leader SE London & North Kent
Date: 11 March 2019

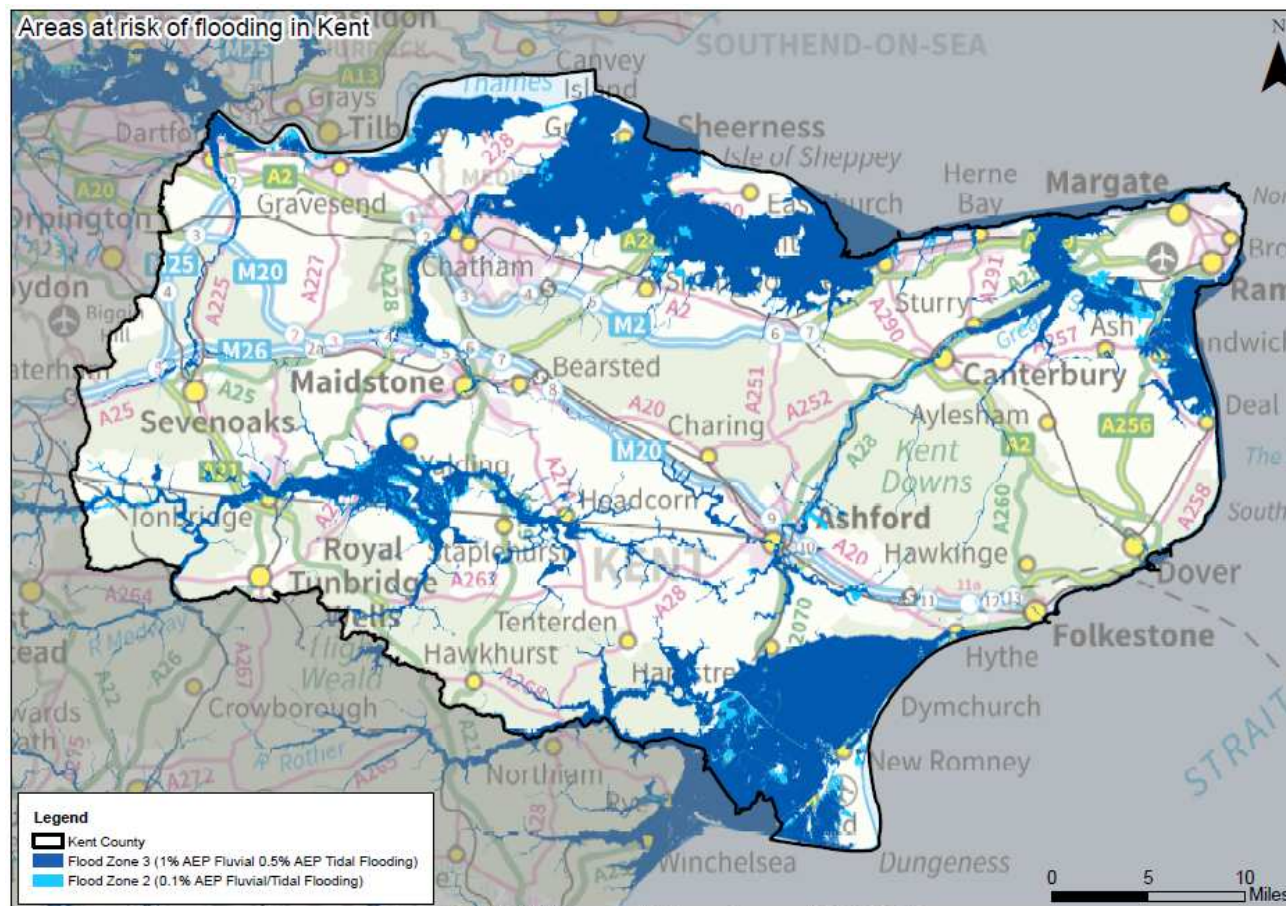
National flood and coastal risk management strategy

- ➔ 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

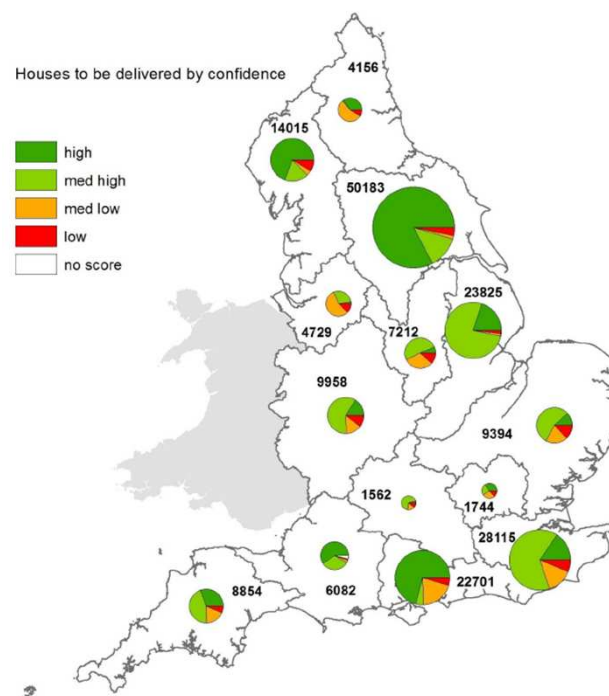
- In Kent currently there are 60,000 properties (residential and commercial) at risk of flooding from rivers and the sea



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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

EA FCRM Capital Schemes 2019-21

Project name	Project expenditure (£)			Total Project Expenditure (£) 19/20 - 20/21 total	OM2 - 2019/20	OM2 - 2020/21	OM2b - 2019/20	OM2b - 2020/21
	GiA funding - 2019/20	GiA funding - 2020/21	Contributions (£) 19/20 - 20/21 total					
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

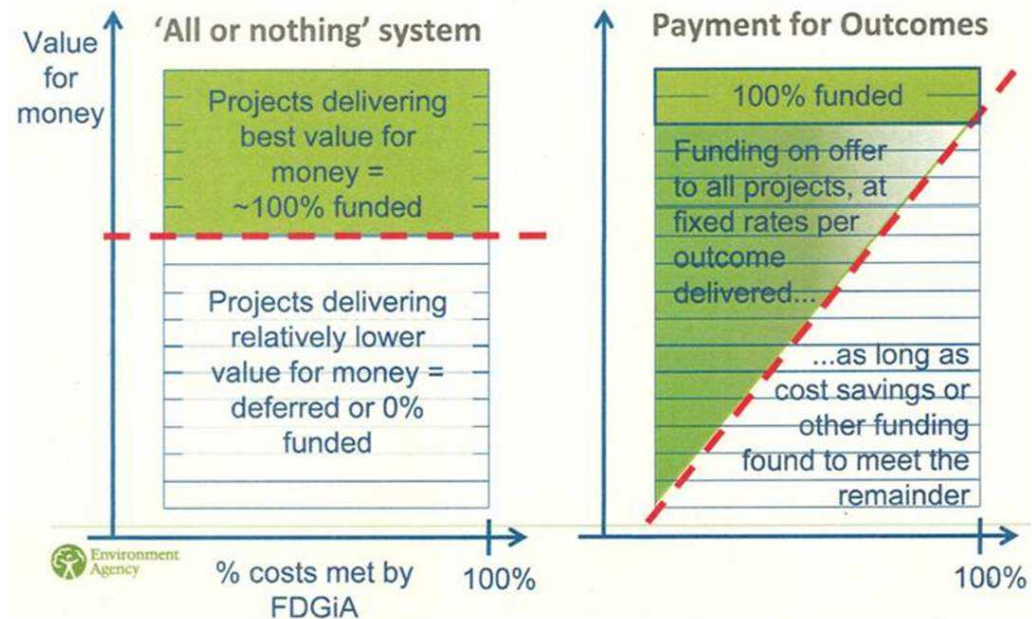
Project name	Lead RMA	Project expenditure (£)			Total Project Expenditure (£) 19/20 - 20/21 total	Outcome Measures (OM3 - 2019/20)	Outcome Measures (OM3 - 2020/21)
		GiA funding - 2019/20	GiA funding - 2020/21	Local Levy funding - 2019/20			
Chatham Waterfront	Medway	25,000	0	0	25,000	0	0
Hythe to Folkestone 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
 - 8 working with the multi-agency flood group

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

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

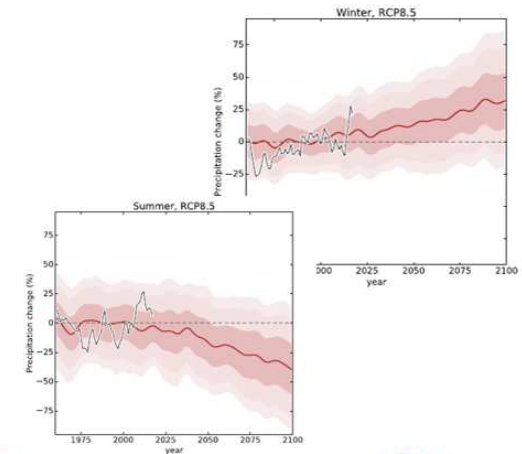


SMPs covering the Kent coastline

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 expected 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

