

Overview of Kent South London and East Sussex Area winter and spring flooding

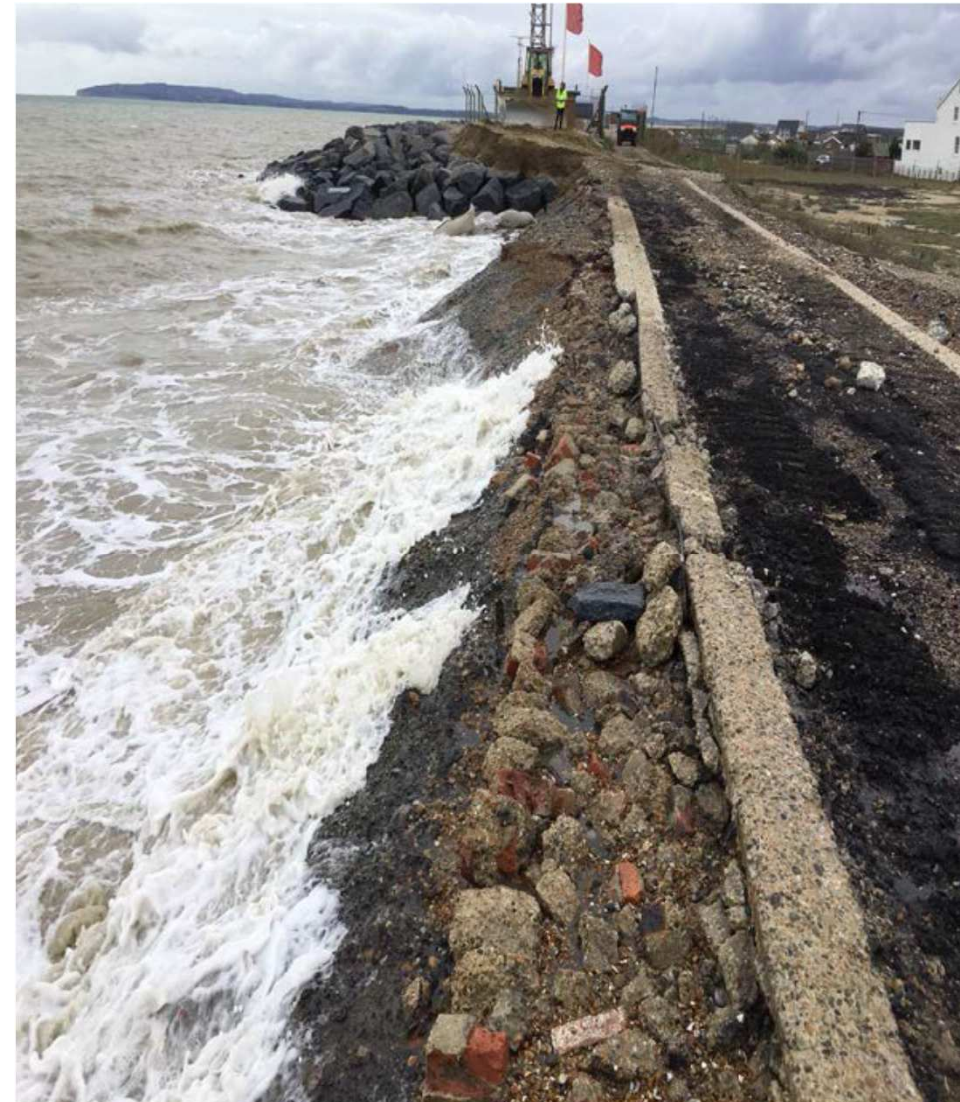
September –October High tide event

Combination of wet and windy weather conditions and high tides from Sunday 29 September to Wednesday 2 October

We issued 31 Flood Alerts and 12 Flood Warnings

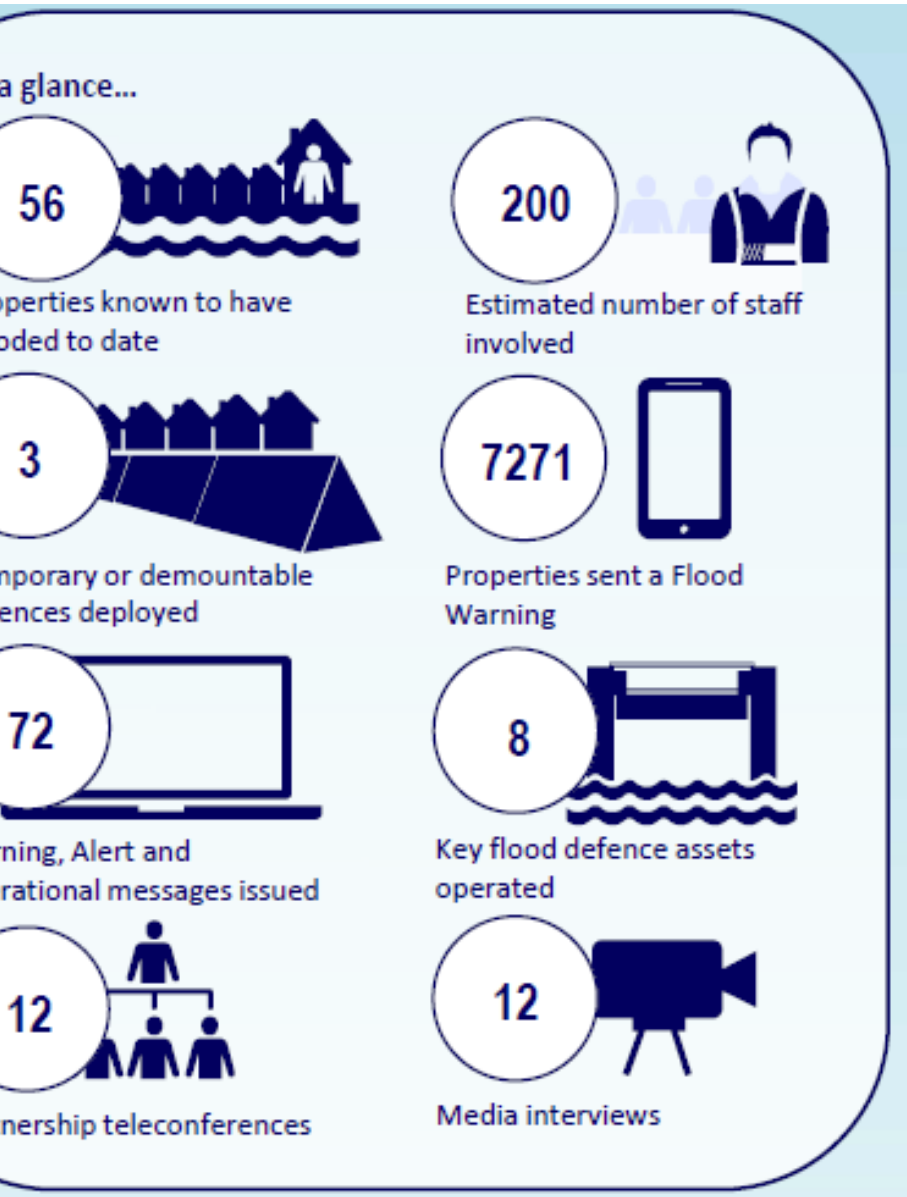
Closures of the Thames Barrier and Associated Gates, and operation of assets in north and south Kent.

Our field teams were out at various locations around the Kent coastline checking defences, replenishing shingle on the beaches and distributing sandbags. One of the key areas affected was Jury's Gap, near Rye.





December 2019 flooding event



Canterbury



Nailbourne and Little Stour flows early 2020

Nailbourne & Little Stour system flowed full length for first time since 2016

The EA chaired a Multi-agency group through the incident to share information and co-ordinate operational actions

Highway gulleys were cleared, temporary barriers installed, fords closed, Littlebourne relief channel operated

Flows peaked on 5 March following a day of very heavy rain across East Kent

Flood Alerts were issued ahead of this peak and were removed in April

There were no reports of internal flooding to property or groundwater flooding to basements
Southern water witnessed some surcharging of their network and used tankers to relieve loading



February 2020 storm events

worst storm conditions since 2013/14.
Storm Ciara and Dennis brought strong winds and heavy rain to parts of the country
The issued 55 Flood Alerts and 24 Flood Warnings. 17 of the Flood Warnings were from Storm Dennis alone.
Flood Storage Areas such as Leigh, Aldington, Northfield, Stonar Cut and Coult Stream were also used
The also deployed temporary defences at Westgate Gardens in Canterbury to protect 40 properties and carried out a partial closure of the Robertsbridge
mountable defences to protect 28 homes.
The Medway Partnership enacted the Medway Confluence plan to coordinate sandbag deployment, road closures and support for the communities.
The Leigh Flood Storage Area impounded to hold the peak of the flood waters on the Medway and reduced risk to over 1,200 properties in Tonbridge and Edenborough



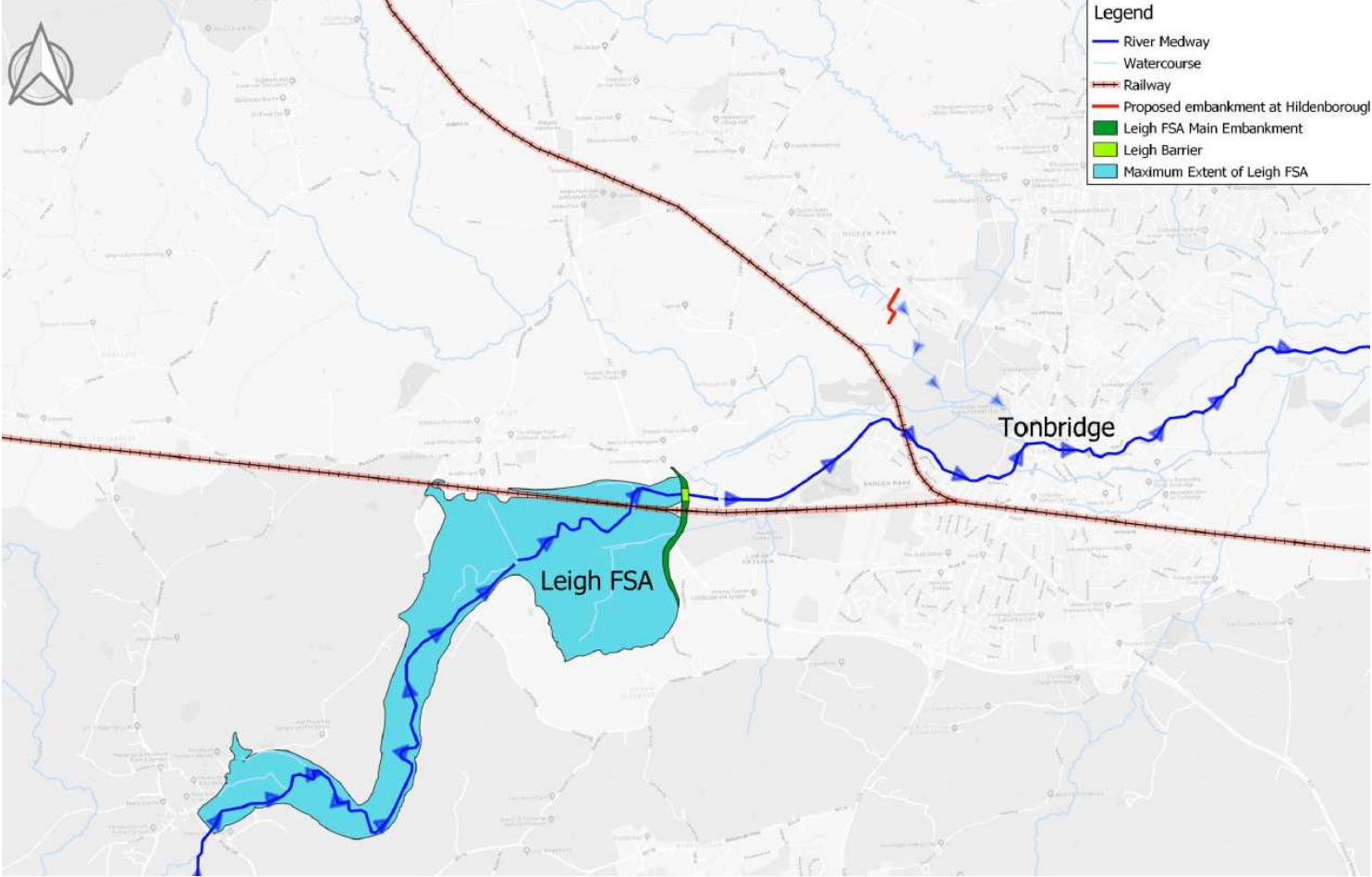




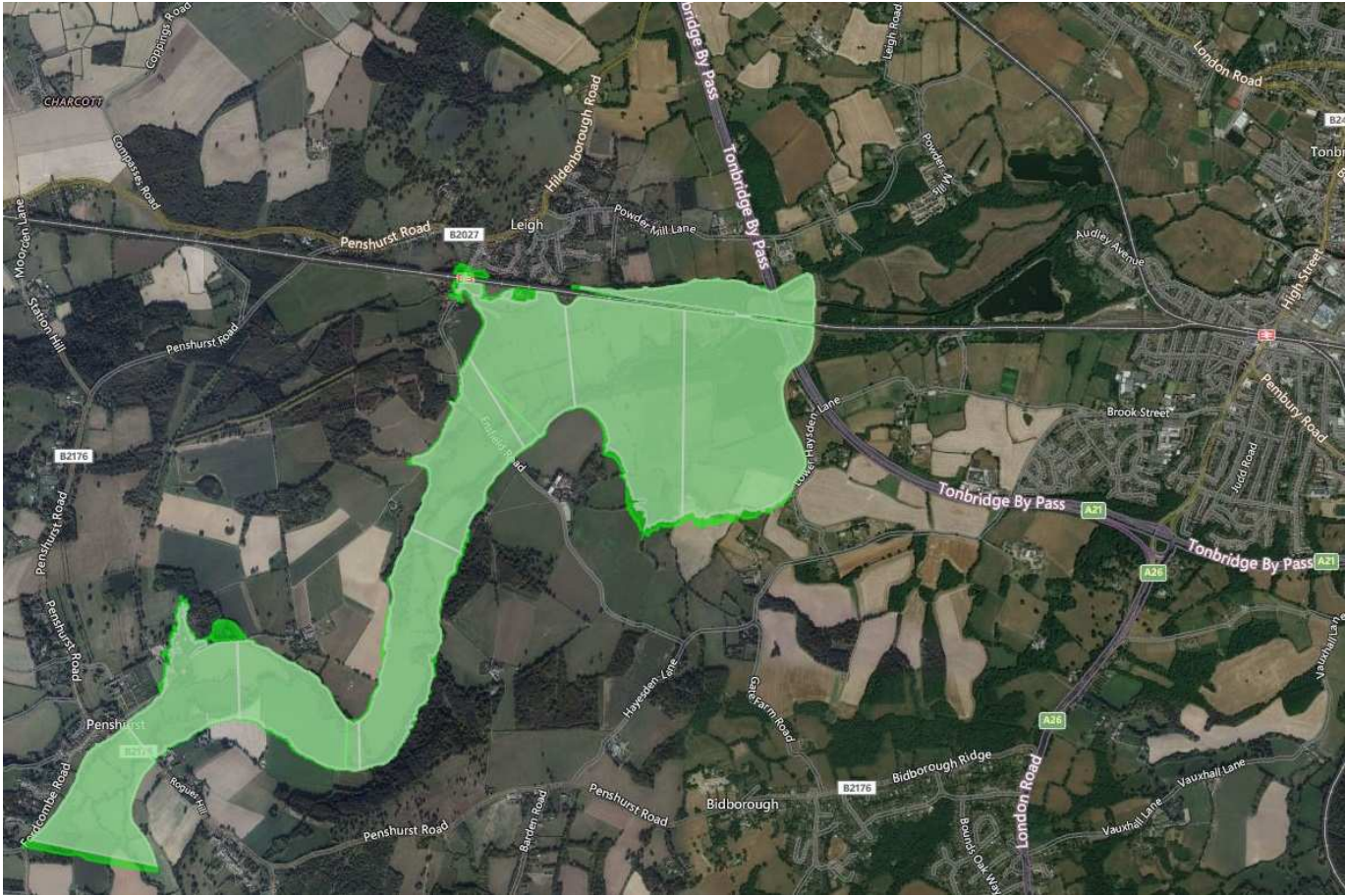
Leigh Expansion and Hildenborough Embankments Scheme (LEHES)

James Kennedy – Project Executive

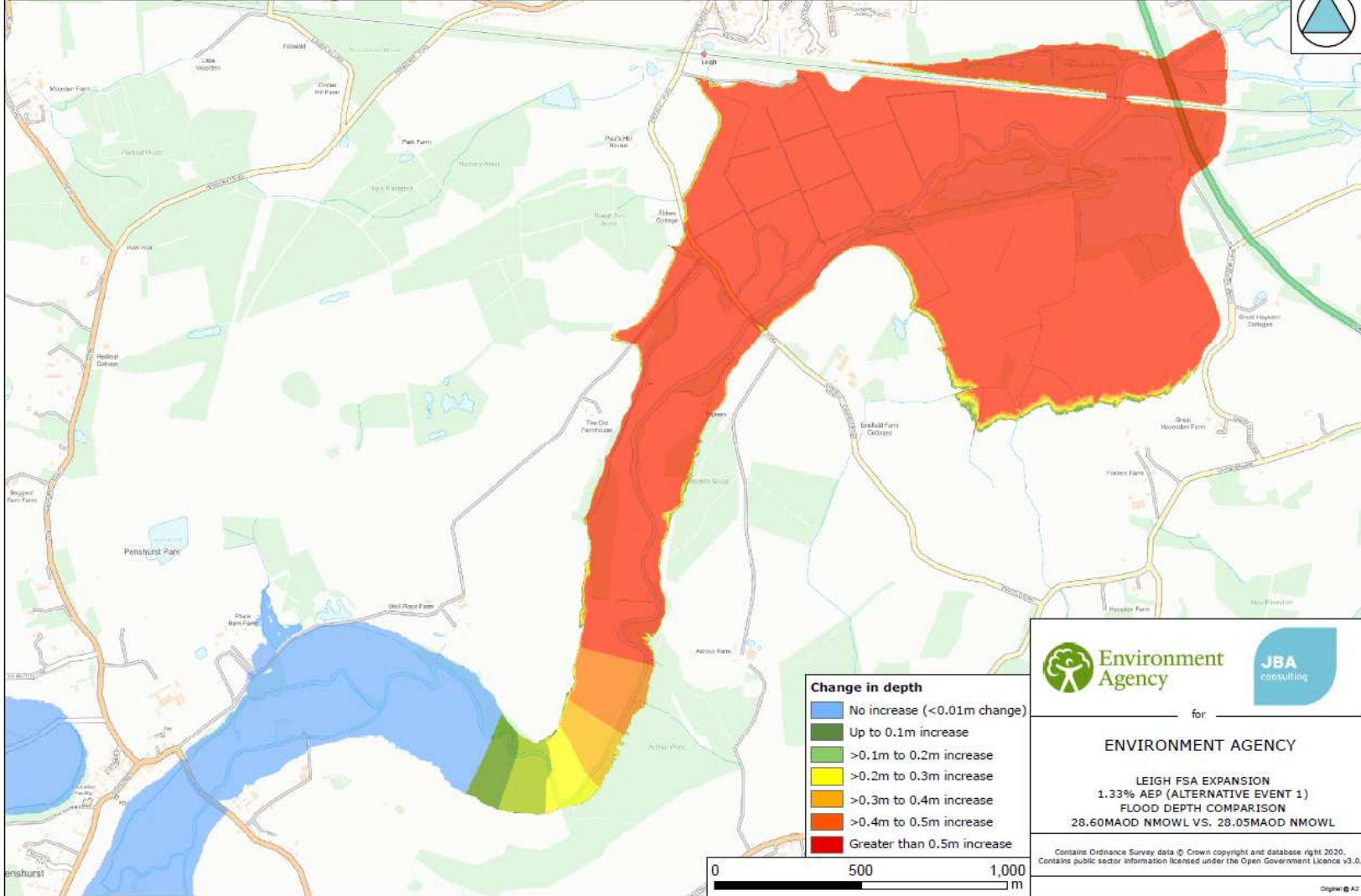
Project Location



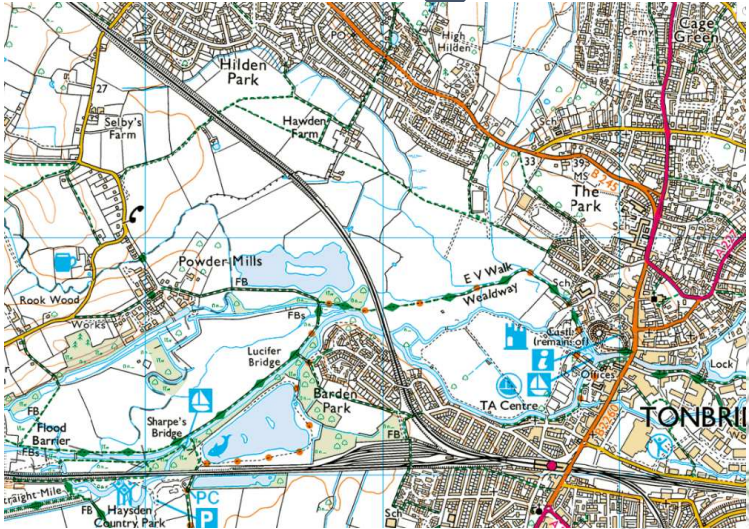
Leigh Flood Storage Area - Operation



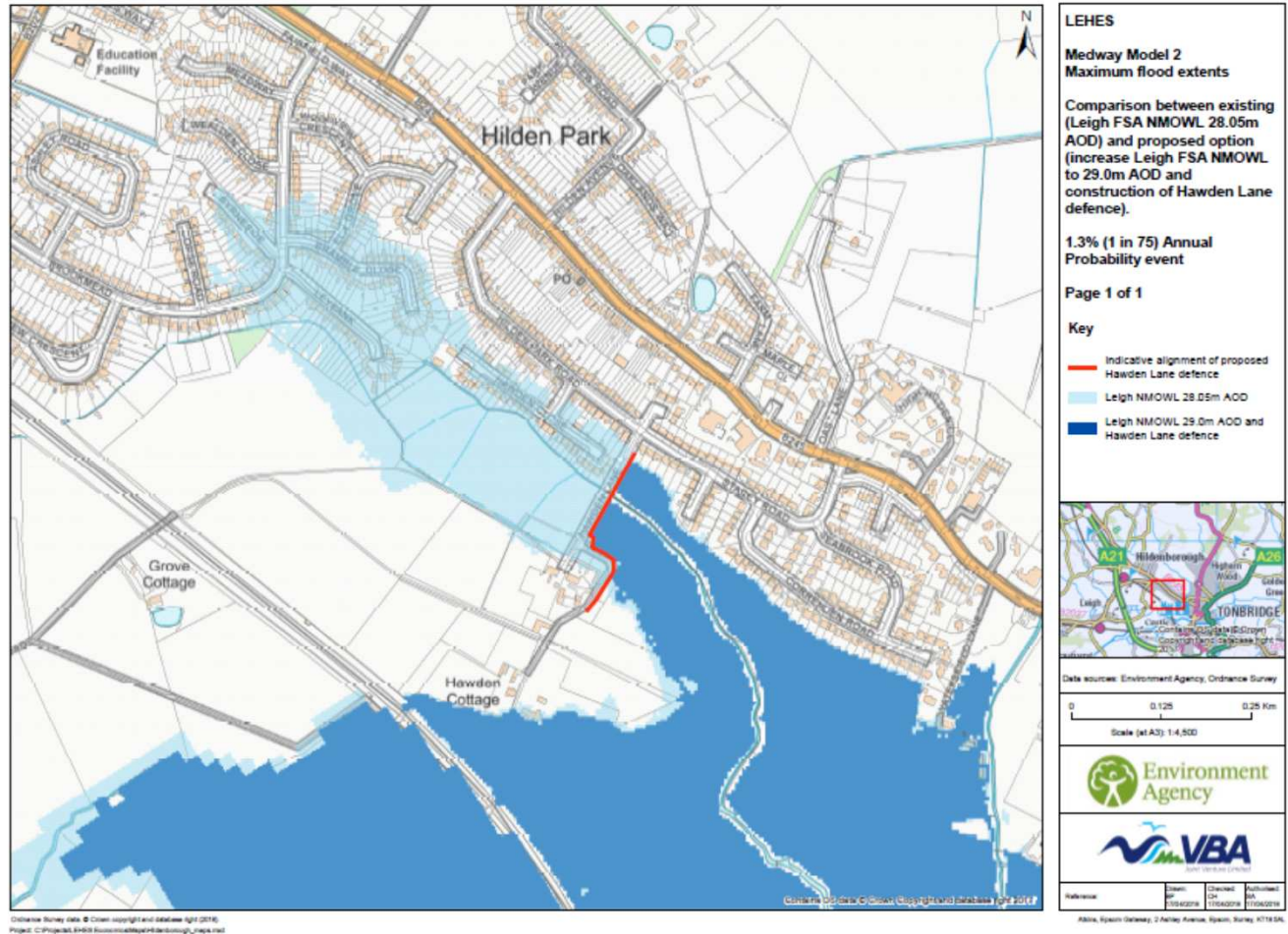
LEIGH FSA EXPANSION
1.33% AEP (alternative 1) EVENT (ID at FSA: 09Aug4206): 28.60mAOD NMOWL scenario peak flood depth minus 28.05mAOD NMOWL scenario peak flood depth



Hildenborough

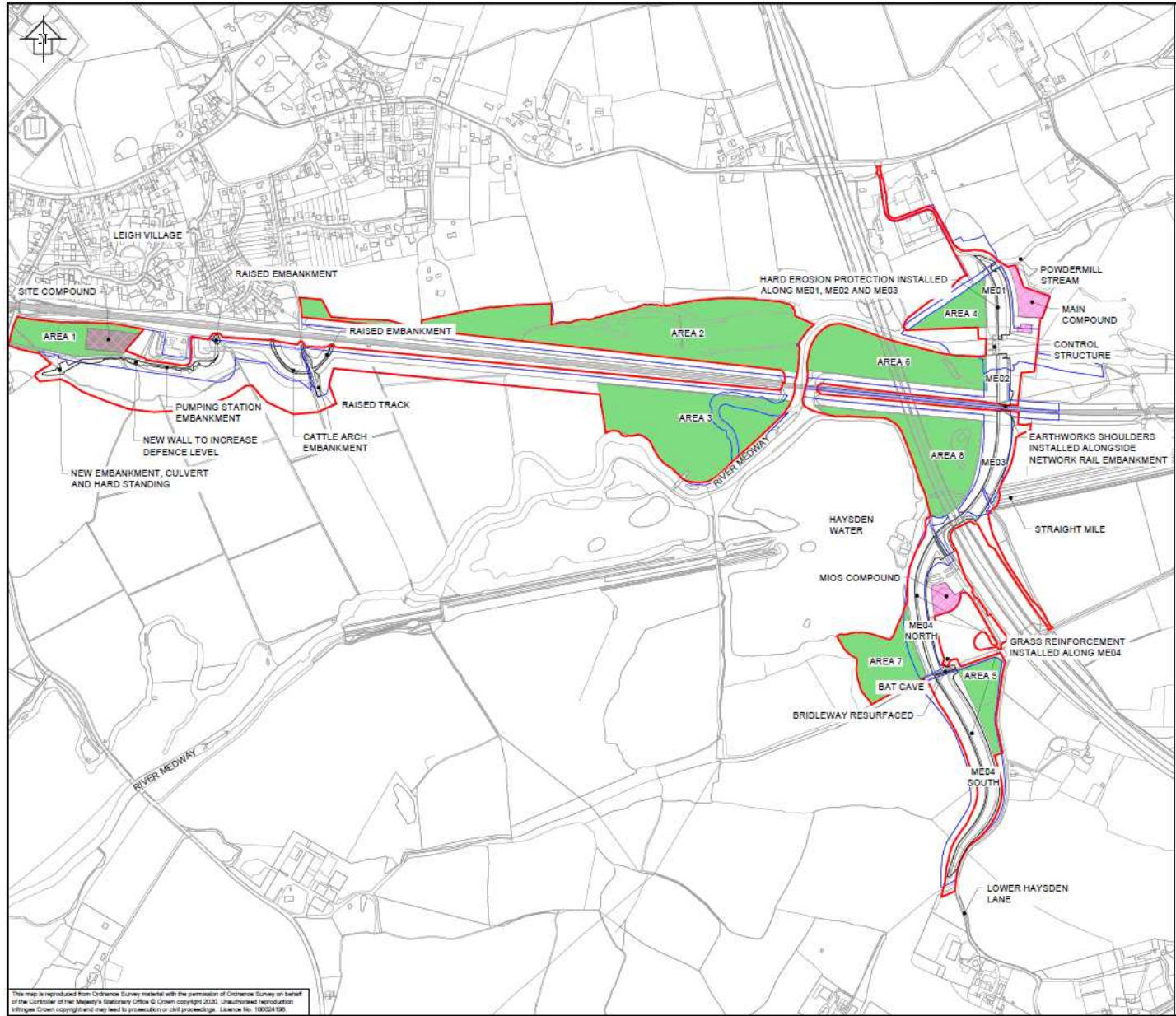


Hildenborough Operating



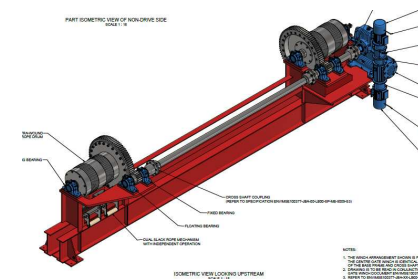
Visualisations





Project progress

- Planning application for main works validated 27th August
 - Decision date 17th December 2020
- Hildenborough – separate application in Winter 2020
- Amendment to Medway Flood Relief (1976) Act submitted to Defra
 - 11 objections – working towards responding to all of them
 - Likely there will be an inspector appointed for an enquiry
- Construction Q1 2021/22 – Q3/4 2023/24
- Design of new gate drive system ongoing



Key project risks

- **Stakeholders** –
 - Hildenborough alignment agreement
- **Funding**
 - Grant in Aid Allocation
 - Full Business Case approval
- **Flood Relief Act amendment**
 - Objections & enquiry, timescale and determination
- **Planning**
 - Objections
- **Covid 19 related delays**
- **Flooding**



Key messages

- Outcome Measures confirmed:
 - 1,570 properties and business better protected
 - Up to 657 Outcome Measure 2 (properties no longer flooding in 1.3% event)
- Flood storage level 28.05 to 28.60m (AOD)
 - Widespread benefits in Hildenborough
 - 24% increase in capacity (5.8million 7.3million cubic metres)
 - Minimal impact to residents and stakeholders
- Investment in resilience over the next two years
 - Security, powers, control systems, access & public safety



EA Investment Programme

Next Spending review Draft allocation principles

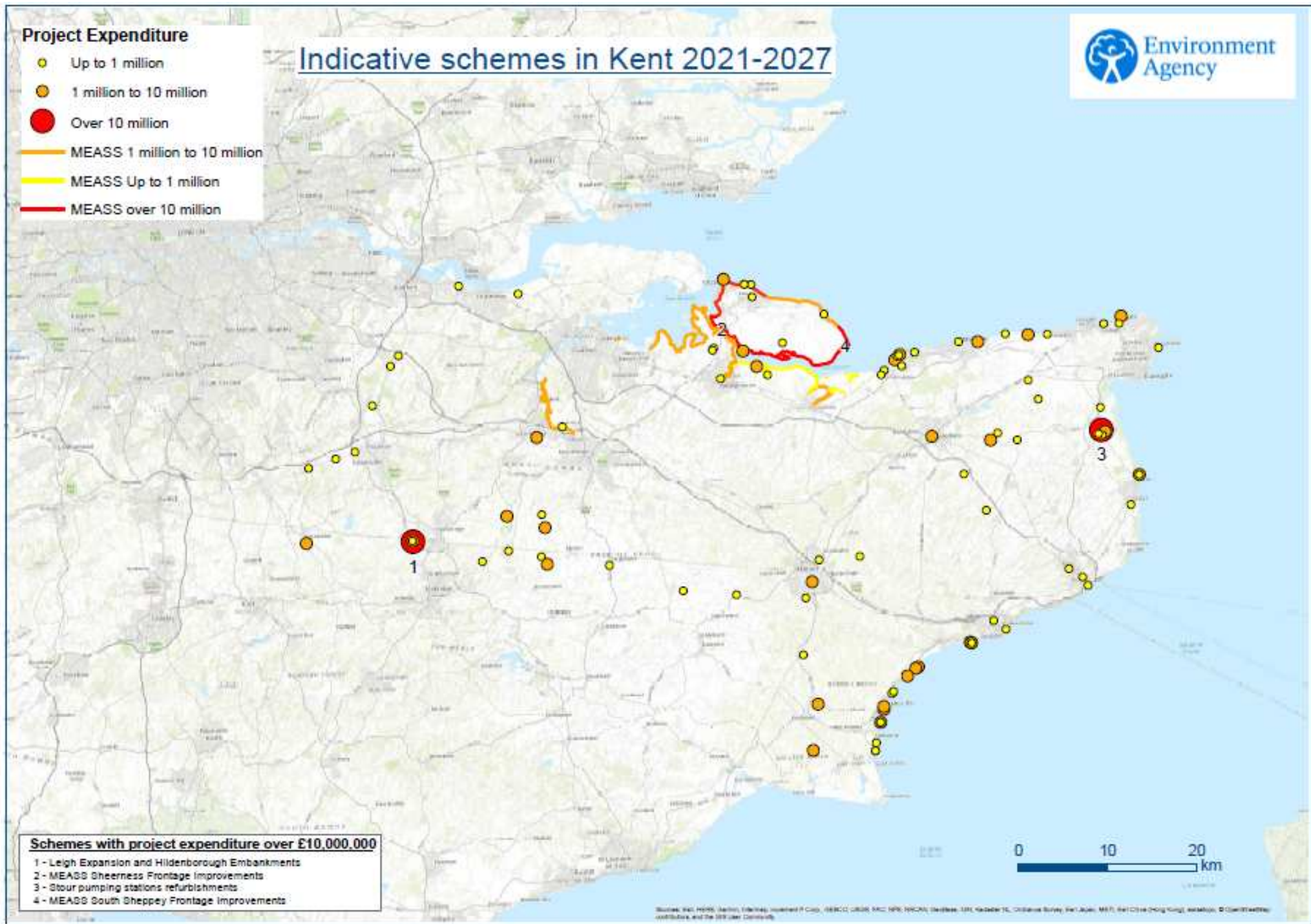
- Invest to achieve our ambition of a nation ready for, and resilient to, flooding and coastal change.
- Invest £5.2bn to better protect properties and infrastructure by 2026/27.
- Support our carbon and sustainability ambitions.
- Invest to achieve a wider range of outcomes
 - Benefit the economy.
 - Maintain our ability to warn and inform people and respond to incidents
 - Enhance the environment.
- Work in collaborative partnerships to deliver multiple benefits.
- Build and deliver balanced programmes.
- Provide appropriate funding towards statutory requirements and essential support services

Project Expenditure

- Up to 1 million
- 1 million to 10 million
- Over 10 million

- MEASS 1 million to 10 million
- MEASS Up to 1 million
- MEASS over 10 million

Indicative schemes in Kent 2021-2027



Schemes with project expenditure over £10,000,000

- 1 - Leigh Expansion and Hildenborough Embankments
- 2 - MEASS Sheerness Frontage Improvements
- 3 - Stour pumping stations refurbishments
- 4 - MEASS South Sheppey Frontage Improvements

Source: EA, HFRS, Sectors, Enterprise P, City, SERCC, USRS, M2, NPS, NPS/CN, Schemes, IRL, Reservoirs, Ordnance Survey, GeoAids, MFR, NPS/CN (High/Low), and others. © Crown Copyright.