

KENT FLOOD RISK MANAGEMENT COMMITTEE

Tuesday, 14th November, 2023

2.00 pm

Council Chamber, Sessions House,
County Hall, Maidstone





AGENDA

KENT FLOOD RISK MANAGEMENT COMMITTEE

Tuesday, 14th November, 2023, at 2.00 pm

Ask for: **Matt Dentten**

**Council Chamber, Sessions House,
County Hall, Maidstone**

Telephone **03000 418381**

Membership (7)

Conservative (5): Mr A R Hills (Chairman), Mr D Crow-Brown, Mr P Cole,
Mrs M McArthur and Ms L Wright

Labour (1): Ms M Dawkins

Green and
Independent (1): Mr M Hood

UNRESTRICTED ITEMS

(During these items the meeting is likely to be open to the public)

1. Introduction/Webcast announcement
2. Membership
To note that Mr Crow-Brown and Mr Hood have joined the Committee.
3. Apologies and Substitutes
4. Declarations of Interest by Members in items on the Agenda
5. Minutes of the meeting held on 12 July 2023 (Pages 1 - 4)
6. Southern Water - Presentation
7. Environment Agency River Basin Management Plans - Presentation
8. Met Office - Presentation
9. Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity (Pages 5 - 12)
10. Local Flood Risk Management Strategy (Pages 13 - 38)

EXEMPT ITEMS

(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)

Benjamin Watts
General Counsel
03000 416814

Monday, 6 November 2023

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KENT COUNTY COUNCIL

KENT FLOOD RISK MANAGEMENT COMMITTEE

MINUTES of a meeting of the Kent Flood Risk Management Committee held in the Council Chamber, Sessions House, County Hall, Maidstone on Wednesday, 12 July 2023.

PRESENT: Mr A R Hills (Chairman), Mr N Baker, Mr P Cole, Ms M Dawkins, Jenni Hawkins, Mrs M McArthur and Ms L Wright

ALSO PRESENT: Mr G Brooker, Mrs G Brown, Cllr P Garten, Mr C Mackonochie

IN ATTENDANCE: Mr M Tant (Flood and Water Manager), Mr T Harwood (Resilience and Emergency Planning Manager) and Mr M Dentten (Democratic Services Officer)

UNRESTRICTED ITEMS

32. Declarations of Interest
(Item 4)

No declarations were made.

33. Minutes of the meeting held on 21 March 2023
(Item 5)

RESOLVED that the minutes of the meeting held on 21 March 2023 were an accurate record and that they be signed by the Chairman.

34. Southern Water - Presentation
(Item 6)

Jon Yates (Pathfinder Delivery Lead (East), Southern Water) and John Mealey (Stakeholder Engagement Manager (Kent), Southern Water) were in attendance for this item.

1. Mr Yates gave a presentation which updated Members on the work of Southern Water's Clean Rivers and Seas Taskforce since the Committee's last meeting. The contents of the presentation included:
 - a. the objectives of the Swalecliffe, Margate and Deal pathfinder projects;
 - b. source control, optimisation of existing infrastructure and construction of larger infrastructure as the three main types of intervention; and
 - c. sustainable drainage systems in Whitstable and Deal, which included the installation of five free raingarden planters at 13 schools, education

sessions and a successful bid to the Department for Education to work with a further 50 schools in 2023/24.

2. A Member asked whether there was sufficient public awareness and understanding of sustainable drainage systems (SuDS). Mr Yates acknowledged that there was insufficient public understanding of SuDS and water usage. He explained that Southern Water had undertaken a significant amount of community outreach and expanded the Taskforce's staff from 6 to 20 in recent weeks which included professionals with education and communications expertise.
3. In response to a question from a Member, Mr Yates agreed to provide an update on the Beachbuoy initiative at the Committee's next meeting.
4. Mr Yates agreed to provide the Committee with a copy of the business plan for combined sewer overflow infrastructure.
5. The Chairman thanked Mr Yates for his presentation and answers to the Committee's questions.

RESOLVED to note the content of the presentation.

35. Shoreline Management Plans - Presentation
(Item 7)

Priscilla Haselhurst (Clerk and Engineer, Lower Medway Internal Drainage Board) was in attendance for this item.

1. Ms Haselhurst gave a presentation. The contents of her presentation included:
 - a. the purpose of Shoreline Management Plans, as a policy framework for managing flood and coastal erosion risk, which were developed by seven strategic coastal groups, with consideration of the developed, historic and natural environments;
 - b. that management policies fell into one of four categories, Hold the Line, Managed Realignment, No Active Intervention or Advance the Line;
 - c. that the proposed solutions had to be technically feasible, environmentally acceptable and economically sustainable;
 - d. Kent's coastal risk; and
 - e. the Shoreline Management Plans refresh process.
2. Members asked how the importance of a section of coastline was judged in Plans. Ms Haselhurst explained that economic impact and the scope for environmental improvement were key factors and also significantly influenced funding opportunities.

3. In response to a question from a Member, Ms Haselhurst confirmed that shoreline flood defences were monitored extensively, considering their condition and effectiveness. She noted that monitoring on privately owned shoreline was a challenge.
4. A Member asked to what extent existing infrastructure influenced a plan's policies and for further information on the Shoreline Management Plan affecting Whitstable. Ms Haselhurst agreed to provide the requested information following the meeting.
5. The Chairman stressed the importance of keeping communities informed on the impact Plans would have on their local shoreline and how that impacted flood risk.
6. The Chairman thanked Ms Haselhurst for her presentation and answers to the Committee's questions.

RESOLVED to note the content of the presentation.

36. Local Flood Risk Management Strategy development - Presentation
(Item 8)

1. Mr Tant updated the Committee on the Council's responsibilities as the Lead Local Flood Authority concerning surface water, groundwater and ordinary watercourses. He explained that KCC had a duty to produce a Local Flood Risk Management Strategy and acknowledged the progress made under the existing 2017-2023 Strategy. He highlighted areas for further improvement, Flood Risk Regulations and the timeframe for the future Strategy which was to be decided.
2. Members examined whether the Council was working closely enough with water companies to ensure that the management of surface water did not have an unforeseen impact.
3. Following a question from a Member, Mr Tant explained KCC's role as a statutory consultee on all major planning applications regarding surface water as well as local planning authorities' obligations to undertake a local flood risk assessment on any sites proposed for development. He confirmed that the Environment Agency's was required to comment on and object to development on the floodplains.

RESOLVED to note the content of the presentation.

37. Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity
(Item 9)

1. Mr Harwood introduced the report which updated Members on water levels, weather statistics, Environment Agency and Met Office warnings, and flood response activity since the last meeting of the Committee. The report stated that 20 flood alerts warnings had been issued by the Environment Agency

which contrasted with no flood alerts in the corresponding period in 2022. He noted that March and April 2023 had seen rainfall above the long-term average in Kent, whilst May and June had been much drier at 45% of the long-term rainfall average. He added that June had been the hottest on record and negatively impacted infrastructure, with pipe loss and damage experienced. The Kent Resilience Forum's response activity was drawn to the Committee's attention. It was explained that the summer temporary use (hosepipe) ban had reduced water use by 4%.

2. Following a question from a Member, Mr Harwood reassured the Committee that KCC worked with all local utility providers and handled incidents through the Kent Resilience Forum Utilities Group. He confirmed that KCC were cognisant of developments with Thames Water and that contingencies had been discussed with government.
3. In response to a question from a Member concerning preparedness for hot weather, Mr Harwood confirmed that Emergency Planning worked with the Director of Public Health through Kent's Health Protection Board and considered the responses required to protect vulnerable residents.

RESOLVED to note the warnings received since the last meeting of the Committee.

From: Rebecca Spore, Director of Infrastructure
To: Kent Flood Risk Management Committee – 14th November 2023
Subject: Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity.
Classification: Unrestricted

Summary: To update Kent Flood Risk Management Committee on the current water situation, weather statistics, Environment Agency and Met Office Warnings, and flood response activity since the last meeting of the Committee on 12th July 2023.

1. Background

- 1.1 This report is the latest of the regular updates to the Committee addressing the current water situation and recent severe weather and associated emergency response activity in Kent.
- 1.2 The KCC Resilience and Emergency Planning Service Duty Emergency Planning Officer (DEPO) and Contact Point receive Environment Agency (EA) and Met Office alerts and warnings regarding severe weather on a 24/7 basis. Any site-specific severe weather impacts are notified to the DEPO by the emergency services and other resilience partners, with reports from the public received by Contact Point and passed on to the DEPO and/or Kent Highways. DEPO further initiates multiagency reporting using the County Council's innovative Severe Weather Impacts System (SWIMS) to capture resources and costs arising from severe weather incidents.
- 1.3 Some 85,500 residential and commercial addresses across Kent are located within areas identified as at risk from fluvial (river) or tidal (coastal) flooding. Where possible, flood vulnerable properties are offered a Flood Warning Service by the EA. Early warning of flood risk to communities (including areas outside of floodplains) is delivered through Flood Guidance Statements, Severe Weather Warnings and mobilisation of the Kent Resilience Forum (KRF) Severe Weather Advisory Group (SWAG).

2. Kent water situation and weather statistics

- 2.1 July 2023 recorded rainfall 151% above the long-term average for Kent, with temperatures around average. This wet start to the summer assisted further the trend towards local recovery of groundwater, soil moisture deficits and river flows seen in the spring, following the extended period of drought experienced in 2022, which only saw Kent move into recovery status in January 2023.
- 2.2 August was a drier month across the County, with 90% of long-term rainfall average recorded, with mean temperatures again around average.
- 2.3 This drier trend intensified in September, which saw just 57% of long-term average rainfall. However, the key headline was the very warm weather,

exceeding the mean maximum temperature by +3.8°C and making it the joint warmest September on record (in a series which goes back to 1884).

- 2.4 An unseasonably wet and warm October saw 167% of long-term average rainfall and temperatures +2.4% above the mean maximum.
- 2.5 2nd November saw Kent's Channel coast battered by Storm Ciarán, with a wind speed of 78 mph recorded at Langdon Bay and some significant rainfall totals recorded across the County. Impacts from the named storm saw some 10,000 addresses affected by power outages (including critical infrastructure), significant disruption to ferry and rail services (triggering Brock Zero), dislocation across parts of the strategic and local road networks (with the County Council's out-of-hours contact centre handling 500% of usual call volumes), more than 20 schools were closed and floodwater was impounded at Leigh Flood Storage Area, Aldington and Hothfield Reservoirs.
- 2.6 In terms of command and control for Storm Ciarán, the County Council initiated internal Cross Directorate Resilience Forum meetings and multi-agency SWAG, Tactical Co-ordinating Group (TCG) and Strategic Co-ordinating Group (SCG) meetings between 30th October and 2nd November. Rebecca Spore (Director of Infrastructure) chaired the Cross Directorate Resilience Forum, while Tony Harwood (Resilience and Emergency Planning Manager) chaired the SWAG and TCG, and Jim Beale (Director of Adult Social Care) chaired the SCG. A Media and Communications Cell was also established to co-ordinate vital warning and informing activities.
- 2.6 The latest river flow data available from the Environment Agency, covering September, saw most catchments within the **normal** category. The River Stour at Horton and East Stour at South Willesborough being the only two monitoring sites where **below normal** monthly mean river flows were observed. **Above normal** flows were only observed on the River Dour at Crabble Mill, heavily supported by groundwater.
- 2.7 Groundwater levels were **normal** in the Kentish Lower Greensand and most Kent chalk aquifers, the exception being in east Kent. Groundwater levels across the whole area declined during September in line with below average rainfall, with any variation from recent rainfall yet to be assessed.
- 2.8 Levels at the Bough Beech and Bewl Reservoirs were at 59% and 70% of overall capacity respectively by the end of September, both **normal** for the time of year. Levels at all Kent reservoirs declined in September but have experienced some recharge during the wet October and early November.
- 2.9 54 flood alerts and warnings were issued by the EA since the last meeting of the Committee (24 fluvial and 30 coastal)¹. This contrasts with nine flood alerts in the corresponding period in 2022 (four fluvial and five coastal).

¹ Please see appendix 1

- 2.10 The Met Office issued 41 yellow and two amber weather warnings between June and 3rd November 2023 (20 for rain, 22 for thunderstorm, seven for wind and one for wind and rain)².
- 2.11 The Thames Barrier was closed on five occasions since the last meeting of the Committee (one for operational and four for test purposes)³. The figure for the corresponding period last year was three (all for test purposes).
- 2.12 Kent's 326-mile coastline encompasses iconic seascapes, internationally significant wildlife habitats and seaside towns with economies integrally linked with the health of our marine environment. During the summer of 2023, a marine heatwave developed in the northeast Atlantic, leading to pockets of extremely warm water around parts of the UK, including in the North Sea and English Channel. The surface temperature of the world's oceans hit their highest ever level during August 2023, when global average daily sea surface temperatures (SST) reached 20.96°C, breaking the previous 2016 record of 20.95°C, according to the European Union Copernicus Climate Modelling Service.
- 2.13 The drivers of this phenomenon are complex but are likely to include weaker trade winds leading to lower evaporation and more uptake of solar radiation. An El Niño event is also underway in the tropical Pacific, this is the warm phase of the Pacific's natural cycle, and it can last up to 2 years. During El Niño events the global oceans tend to store more heat than usual. There may also be other more complicated feedbacks involved in driving the UK's marine heatwaves. These natural warming events must be superimposed onto recent anthropogenic ocean warming - therefore the starting point is higher (around 1°C on average in the North Atlantic). The latest data from Centre for Environment, Fisheries and Aquaculture Science shows that sea surface warming around the UK to date has been more intense in the shallower North Sea than in the deeper western waters, with the most rapid rise being observed in the southern North Sea. The warmest sea temperature recorded in UK waters on the 3rd November 2023 was 15.7°C at Dover, the ten year average for this location is 13.5°C at this time of year.

3. Recent Flood Incident Response and Exercises

- 3.1 The Medway Confluence Plan was triggered on 2nd November, in response to heavy rainfall associated with Storm Ciarán, with a series of multi-agency meetings progressed to manage local impacts and Environment Agency assets deployed.
- 3.2 On 10th October the County Council participated, alongside Environment Agency colleagues, in a Kent Fire and Rescue Service training event at the Kent and Medway Road Safety Experience, Rochester.

² Please see appendix 2

³ Please see appendix 3

4. Outlook

- 4.1 The Met Office three-month outlook summary indicates a 20% chance that November to January will be milder than average (1.0 times the normal chance), a 65% chance that it will be near average (1.1 times the usual chance) and a 15% chance that it will be colder than average (0.8 times the usual chance). In terms of rainfall, the summary indicates a 15% chance the season will be drier than average, 60% chance that it will be near average and a 25% chance it will be wetter than average. As regards likely wind speeds, the summary suggests a 20% chance that it will be calmer than average, a 65% chance that they will be near average and 15% chance of windier than average conditions.
- 4.2 The EA continuously runs surge forecasts, informed by astronomical tide calculations. If a risk of coastal flooding is forecast, then this information is communicated to partners. Indeed, the next notably high equinoctial spring tides, with a corresponding elevated risk of coastal flooding, if in combination with high winds, are forecast for 26th – 28th November. However, coastal flooding can still occur outside of high spring tides.
- 4.3 Kent Flood Risk Management Committee will continue to receive regular updates on water resources, flood alerts, weather warnings and response.

5. Recommendations

- 5.1 The Committee is asked to note the warnings received since the last meeting of the Committee.

6. Contact Details

Report Author: Tony Harwood (Resilience and Emergency Planning Manager), Infrastructure, Deputy Chief Executive's Department, tel. 03000 413 386, e-mail tony.harwood@kent.gov.uk

Relevant Director: Rebecca Spore (Director of Infrastructure), Deputy Chief Executive's Department tel. 03000 412 064, email rebecca.spore@kent.gov.uk

Appendix 1: EA Flood Alerts and Warnings issued since 12th July 2023

| Date issued | Flood Zone | Status |
|--------------------|--|---------------|
| 02/08/2023 | Coast from St Margaret's at Cliffe to Sandgate | Flood Alert |
| 02/08/2023 | Coast from Ramsgate to Kingsdown | Flood Alert |
| 02/08/2023 | Isle of Sheppey and Coast from Kemsley to Seasalter | Flood Alert |
| 02/08/2023 | Shuttle and Cray | Flood Alert |
| 03/08/2023 | Coast from Whitstable to Margate | Flood Alert |
| 03/08/2023 | Isle of Sheppey and Coast from Kemsley to Seasalter | Flood Alert |
| 03/08/2023 | Tidal Medway, Medway estuary and Isle of Grain | Flood Alert |
| 03/08/2023 | Coast from Dartford to Allhallows | Flood Alert |
| 31/08/2023 | Isle of Sheppey and Coast from Kemsley to Seasalter | Flood Alert |
| 01/09/2023 | Coast from St Margaret's at Cliffe to Sandgate | Flood Alert |
| 01/09/2023 | Coast from Fairlight to Dungeness Including Tidal Rother | Flood Alert |
| 01/09/2023 | Coast from Sandgate to Dungeness | Flood Alert |
| 01/09/2023 | Coast from Dartford to Allhallows | Flood Alert |
| 01/09/2023 | Coast from Whitstable to Margate | Flood Alert |
| 01/09/2023 | Tidal Medway, Medway estuary and Isle of Grain | Flood Alert |
| 03/09/2023 | New Romney Sewage Arm Area | Flood Alert |
| 03/09/2023 | Tidal Thames riverside from Dartford Creek and The Mardyke to the Thames Barrier | Flood Alert |
| 29/09/2023 | Coast from St Margaret's at Cliffe to Sandgate | Flood Alert |
| 29/09/2023 | Coast from Ramsgate to Kingsdown | Flood Alert |
| 01/10/2023 | Coast from St Margaret's at Cliffe to Sandgate | Flood Alert |
| 01/10/2023 | Coast from Ramsgate to Kingsdown | Flood Alert |
| 28/10/2023 | New Romney Sewage Arm Area | Flood Alert |
| 28/10/2023 | Coast from Sandgate to Dungeness | Flood Alert |
| 28/10/2023 | Coast from Fairlight to Dungeness Including Tidal Rother | Flood Alert |
| 29/10/2023 | Rivers Eden and Eden Brook Area | Flood Alert |
| 29/10/2023 | Lower River Medway Area | Flood Alert |
| 29/10/2023 | Coast from St Margaret's at Cliffe to Sandgate | Flood Alert |
| 29/10/2023 | Coast from Ramsgate to Kingsdown | Flood Alert |
| 30/10/2023 | Tidal Medway, Medway estuary and Isle of Grain | Flood Alert |
| 30/10/2023 | Coast from Dartford to Allhallows | Flood Alert |
| 30/10/2023 | Isle of Sheppey and Coast from Kemsley to Seasalter | Flood Alert |
| 30/10/2023 | Coast from Whitstable to Margate | Flood Alert |
| 30/10/2023 | Tidal Stour Area from Fordwich to Stonar Cut | Flood Alert |
| 31/10/2023 | Tidal Thames riverside from Dartford Creek and The Mardyke to the Thames Barrier | Flood Alert |
| 02/11/2023 | River Bourne from Hadlow to East Peckham | Flood Alert |
| 02/11/2023 | Rivers Eden and Eden Brook Area | Flood Alert |
| 02/11/2023 | Upper River Stour | Flood Alert |
| 02/11/2023 | Upper River Medway Area | Flood Alert |
| 02/11/2023 | River Teise area from Lamberhurst to Goudhurst | Flood Alert |
| 02/11/2023 | River Darent from Westerham to Dartford | Flood Alert |
| 02/11/2023 | River Rother and its tributaries from Turks Bridge to the Royal Military Canal | Flood Alert |
| 02/11/2023 | Lower River Medway Area | Flood Alert |
| 02/11/2023 | Middle River Medway Area | Flood Alert |

| | | |
|------------|---|---------------|
| 04/11/2023 | Rivers Eden and Eden Brook Area | Flood Alert |
| 04/11/2023 | Upper River Medway Area | Flood Alert |
| 04/11/2023 | Middle River Medway Area | Flood Alert |
| 04/11/2023 | Lower River Medway Area | Flood Alert |
| 04/11/2023 | Upper River Stour | Flood Alert |
| 04/11/2023 | River Rother and its tributaries from Turks Bridge to the Royal Military Canal | Flood Alert |
| 04/11/2023 | New Romney Sewage Arm Area | Flood Warning |
| 04/11/2023 | Lower River Stour | Flood Alert |
| 04/11/2023 | River Beult from Pluckley | Flood Alert |
| 04/11/2023 | Whitewater and Ruckinge Dykes | Flood Warning |
| 05/11/2023 | Tidal Stour Area from Fordwich to Stonar Cut | Flood Alert |

Appendix 2: Met Office Severe Weather Warnings – 1st June to 3rd November 2023

| Weather Element | Number of Warnings | No of Different Events | Dates covered by Events |
|------------------------|---------------------------|-------------------------------|--|
| Rain | 20 | 10 | 20 – 21 September 12 – 13, 19 – 20, 24 – 25, 27 – 30 October 4 November |
| Thunderstorm | 22 | 14 | 10, 17 – 18, 20 June 8 July 2, 5, 18 – 19, 24 August 1, 12, 17-18 September |
| Wind | 7 | 4 | 15 July 8 August 1 – 2 November |
| Wind and Rain | 1 | 1 | 1-2 November |

Appendix 3: Environment Agency Thames Barrier closures since 12th July 2023

| Thames Barrier closures | Date | Status |
|--------------------------------|-------------|---------------|
| Thames Barrier closed | 21/08/23 | Test |
| Thames Barrier closed | 02/09/23 | Test |
| Thames Barrier closed | 03/09/23 | Test |
| Thames Barrier closed | 18/10/23 | Test |
| Thames Barrier closed | 31/10/23 | Operational |

From: Roger Gough, Leader of the Council

To: Kent Flood Risk Management Committee – 14th November 2023

Subject: Local Flood Risk Management Strategy

Classification: Unrestricted

Summary: The development of a Local Flood Risk Management Strategy is a statutory duty for KCC as Lead Local Flood Authority, which sets out how local flooding (flooding from surface water, groundwater and ordinary watercourses) will be managed in the county over the next ten years. It presents the aims and objectives for local flood risk management and how the delivery of these objectives will be monitored. The Local Flood Risk Management Strategy will be formally adopted by the council following public consultation.

Recommendation:

The Committee is asked to:

- a) Note the report and draft Local Flood Risk Management Strategy; and
- b) Provide any comments or feedback prior to it going to public consultation.

1 Introduction

- 1.1 As the Lead Local Flood Authority, KCC must prepare a Local Flood Risk Management Strategy (Local Strategy), as required by the Flood and Water Management Act 2010.
- 1.2 KCC must prepare a Local Strategy that sets out how local flooding will be managed in the county. Local flooding is flooding that arises from surface runoff, ordinary watercourses and groundwater.
- 1.3 This is the third Local Strategy KCC has prepared. The previous [Local Strategy](#) was adopted in 2017. and covered a period of six years. Prior to that KCC adopted the first Local Strategy in 2013.

2 Approach

- 2.1 The previous Local Strategy was shorter than the first, it was a more focused document that centred on the strategic approach to local flood risk management, whereas the previous version had been broader in scope, as the Lead Local Flood Authority role was new. The latest version continues this trend and is shorter and more focused still.
- 2.2 The previous Local Strategy was supported by other policy documents, including the [Land Drainage Strategy](#) and the [Section 19 strategy](#), which set out how we will exercise some of the powers and duties we have as a Lead Local Flood Authority.
- 2.3 It is also supported by the [Flood Risk to Communities Documents](#) that set out the flood risks in each district and borough council in Kent. This allowed the Local Strategy to be shorter than the first one, as detail about flood risk management authorities and flood risk in the county was covered in another document.

2.4 The Flood Risk to Communities Documents will be refreshed and will continue to support the Local Strategy. The Environment Agency is due to release new flood risk data that the Flood Risk to Communities documents rely on next year, so major updates will wait until then.

3 Aim and objectives

3.1 The work we have done over the previous Local Strategy period has led to further progress and improvements in local flood risk management. In particular, there have been improvements in our understanding of how to get funding for local flood risk management schemes and our ability to deliver them. This is partly due to changes in funding rules for flood projects. The projects that we have delivered can be found on KCC's [Flooding Project webpage](#). There have also been improved opportunities for partnership working, particularly from Southern Water, who are focussing on partnership opportunities to help reduce storm overflows.

3.2 Challenges remain in delivering local flood risk management schemes. In particular, funding and resources available to deliver local flood risk management measures affects the scale of the flood risk management we can achieve. Climate change is also having a significant effect on surface water flood risks. Heavier and more frequent rainfall events are leading to more surface water flooding.

3.3 This Local Strategy will build upon this progress and try to address the challenges we have identified, where we can.

3.4 The aim of the Local Strategy is:

to improve the safety and wellbeing of Kent's residents and the economy of Kent through appropriate local flood risk management.

To do this we will:

work effectively with communities and partners, incorporate climate adaptation, and utilise natural processes to provide multiple benefits, where possible.

3.5 The Local Strategy has four objectives, which are similar objectives to the previous Local Strategy. They are:

3.5.1 Understanding flood risks

Risk Management Authorities in Kent have a clear understanding of local flood risk mechanisms including risks resulting from climate change, and will share these with partners to create an evidence base for flood risk and climate adaption.

3.5.2 Reduce the risk of flooding

To protect the people and businesses of Kent from flooding through the delivery of flood risk management projects and programmes using new or innovative techniques where appropriate.

3.5.3 Resilient planning

Development and infrastructure delivery in Kent takes an active role in flood risk management, taking opportunities to manage on-site and off-site flood risk.

3.5.4 Support resilient communities

Residents and businesses of Kent are able to help themselves to understand and manage their own flood risk, as appropriate, by having access to relevant flood risk information and support from risk management authorities.

Communities and individuals are empowered to act to protect themselves from flooding through individual efforts, partnerships and joint working.

3.6 These objectives each have measures set out in the Local Strategy that will help to deliver them.

4 Monitoring the delivery of the Local Strategy

4.1 KCC will provide an annual monitoring report of the Local Strategy. Metrics and other activities that will be reported on are based on the measures set out to support the delivery of the objectives. These are set out in Section 6 and Appendix 1 of the Local Strategy.

4.2 The measures that support the delivery of the objectives will be reviewed as part of the annual report, as will the metrics and activities we report on.

5 Consultation

5.1 The Local Strategy will be consulted on publicly over the winter. The consultation is due to start on 22 November 2023 and run to 30 January 2024. Once this has been completed and the responses have been considered, it will be taken to the Environment and Transportation Cabinet Committee prior to a key decision by the Cabinet Member for Environment.

6 Recommendations

The Committee is asked to:

- a) Note the report and draft Local Flood Risk Management Strategy; and
- b) Provide any comments or feedback prior to it going to public consultation.

Contact Officer:

Max Tant

Flood and Water Manager

03000 413466

max.tant@kent.gov.uk

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Kent Local Flood Risk Management Strategy

2024 – 2034

Consultation Draft

November 2023

Consultation

Have your say

We would like to hear your views on our draft Kent Local Flood Risk Management Strategy 2024 - 2034 which sets out how local flood risk will be managed in the county by the risk management authorities involved.

Your feedback is important in helping us to ensure we have set a suitably ambitious, but achievable strategy; one which meets the needs and expectations of Kent residents.

The consultation will be open from 22 November 2023 to 30 January 2024. Please visit www.kent.gov.uk/localfloodrisk to complete the online questionnaire.

If you have any questions regarding the draft Kent Local Flood Risk Management Strategy 2024 - 2034, please email flood@kent.gov.uk using the reference 'Kent Local Flood Risk Management Strategy Consultation'.

What happens next?

Following the end of the consultation, a report will be produced to summarise feedback received. This feedback will be used to help finalise the strategy which, alongside the consultation report, will be presented to the Environment and Transport Cabinet Committee before the strategy is agreed and adopted.

Alternative formats

Large print versions of the strategy and the consultation questionnaire are available from the consultation webpage or on request.

If you require any of the documents in any other alternative formats or language, please email alternativeformats@kent.gov.uk or call 03000 42 15 53 (text relay service number: 18001 03000 42 15 53). This number goes to an answering machine which is monitored during office hours.

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1 Introduction

Kent County Council (KCC) is the Lead Local Flood Authority (LLFA) for Kent. As the LLFA, we have an overview role for local flooding, which is flooding that arises from these sources:

- **Surface runoff**
- **Ordinary watercourses**
- **Groundwater**

One of our duties as the LLFA is to develop, maintain, apply, and monitor a Local Flood Risk Management Strategy (Local Strategy) that sets out how we will propose to manage these flood risks.

Local flooding is generally more localised than flooding from rivers and the sea, and managing it often relies on several systems working together effectively; especially drainage networks, sewers, and ordinary watercourses. These systems are often managed by different authorities, so cooperation and integrated planning are required from these authorities to manage local flooding effectively, which this Local Strategy aims to support.

This is the third Local Strategy that KCC has adopted, it will build upon the lessons we have learned from past Local Strategies (see Section 5). It has been developed in partnership with the other risk management authorities in Kent and other stakeholders to help us to work together and continue to reduce local flood risks, to develop our understanding of flood risk and to further improve our working relationships with partners and communities. It also reflects the Environment Agency's [National Flood and Coastal Erosion Risk Management Strategy for England](#).

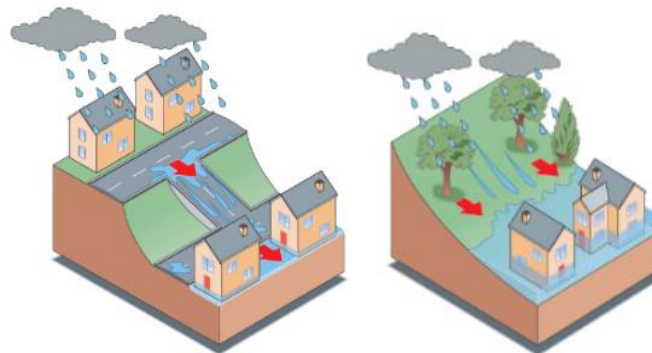
The Local Strategy sets out the flood risk in the county, the roles and responsibilities of risk management authorities operating in the county, the aims and objectives of the strategy, progress and ongoing challenges since the previous Local Strategy, and how we will deliver and monitor it.

2 Flood Risk

2.1 Sources of flood risk

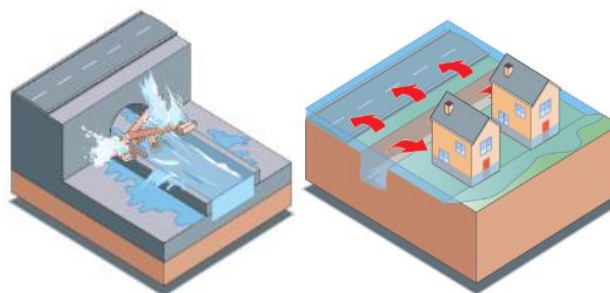
Surface water

Flooding occurs when the rate of rainfall is higher than the rate at which water can drain into the ground or enter a drainage system, creating runoff, running downhill, and pooling in low points.



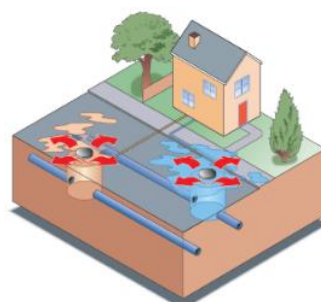
Main river and ordinary watercourses (fluvial)

There are two categories of watercourse: main rivers (those that present the greatest risk to life and property) and ordinary watercourses (which covers all other watercourses, such as streams and ditches). Floods occur when the water flowing in a watercourse (which may be culverted), exceeds the capacity of the channel and goes over its banks. The capacity of the watercourse may be reduced by blockages and debris in the channel.



Sewers (including foul sewers)

Floods occur when the sewerage system fails due to blockages or is overwhelmed by surface water.



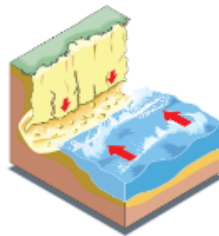
Groundwater

Floods may occur when water stored in the ground rises to the surface. This is most likely in areas with porous underlying rock (such as, chalk).



Coastal erosion

Flooding can occur when the coastline is eroded by the action of the sea, leading to land loss. Whilst coastal protection works are not the same as coastal flood defences, they can contribute to the effectiveness of flood defence along a shoreline.



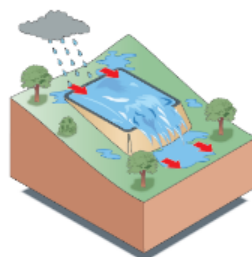
Coastlines

Flooding occurs when the coastline and/or coastal flood defences are either overwhelmed or breached by high tides or a storm surge.



Reservoirs

Reservoir flooding is extremely unlikely. When the amount of water entering the reservoir is greater than the amount being discharged, water may overtop the reservoir and flow downstream (some reservoirs are designed to manage excess flows in this way). Occasionally, a poorly designed reservoir structure can fail, releasing water.



2.2 Flood risk in Kent

Kent has a resident population of over 1.5 million (2021 census).

The county has a land area of 1,368 square miles and approximately 350 miles of coastline. Nine of Kent's districts and boroughs have a higher proportion of land within National Flood Zone 3¹ than the national average². This presents unique flood risk management challenges.

Over 20,000 properties in Kent are estimated to be at risk of flooding from **surface water runoff**. Kent has one of the highest risks of surface water runoff of LLFAs in England. All areas in Kent are at some risk of surface water flooding, but risks tend to be concentrated in urban areas.

Ordinary watercourses (from small ditches to small rivers) are a significant source of flood risk in Kent. However, at present there is no national estimate of the risk from this source.

In Kent, there are many areas with numerous ordinary watercourses within a concentrated area. This is often because the watercourses play an important role in land drainage and for flood risk management in flat impermeable areas. Ordinary watercourses in locations with steep topography can also present significant flood risk to towns and villages.

Groundwater also presents a significant source of flooding in parts of Kent, due to large areas of permeable bedrock, such as the chalk aquifers of the North Downs (most notably along the Elham Valley, where the Nailbourne chalk stream flows when groundwater is high).

There are over 60,000 properties estimated to be at risk of flooding from **coastal and fluvial flooding** in Kent. Romney Marshes, Dartford, and Gravesend are at particular high risk of coastal and tidal flooding. To reduce this risk, the Environment Agency operate and manage flood defences in many coastal and tidal areas.

Further information about flood risk in Kent is available in the draft [Flood Risk to Communities](#) documents (currently excludes Dartford and Gravesham).

¹ National Flood Zone 3 is defined by the Environment Agency as land having a 1 in 100 greater annual probability of river flooding or land having a 1 in 200 or greater annual probability of sea flooding. Flood Zone 3 also includes areas of land where water must flow or be stored in times of flood.

² [Land Use in Kent](#)

2.3 Development planning applications

New developments, such as housing, have the potential to increase flood risk³. Planning applications should set out how this is assessed and describe how any risks are mitigated.

As the LLFA, KCC is consulted on the surface water drainage aspects of all major planning⁴ applications in the county. Our Drainage and Planning Policy can be obtained by emailing suds.gov.uk.

³ Guidance for new developments is set out in the [National Planning Policy Framework](#) and local policy documents (such as, Local Plans), that may include more localised planning guidance on flood risk.

⁴ Major development is defined within Part 1, Article 2 of the Town and Country Planning (Development Management Procedure) Order 2015 ([‘major development’ definition](#)).

3 Roles and Responsibilities

Managing local flooding often relies on several systems working effectively; especially drainage networks, sewers, and ordinary watercourses which may be managed by different authorities. Bodies with flood risk management roles are known as risk management authorities, these include KCC, Environment Agency (EA), district and borough councils, internal drainage boards, water companies and sewerage companies. Cooperation and integrated planning are required from these authorities to manage local flooding effectively. A summary of the responsibilities of the different risk management authorities in Kent is set out in Table 1.

It is important to note that whilst risk management authorities manage flood risk, there is no duty on any of them to prevent flooding. Flooding is recognised as a natural phenomenon that cannot always be prevented. Risk management authorities exercise permissive powers to undertake flood risk management works, and they have access to funding to investigate and deliver flood risk management activities. In spending these funds, their work has to be cost effective and value to the taxpayer, they do not have an obligation to prevent all floods.

Table 1: Kent’s Risk Management Authorities and a summary of their responsibilities.

| Risk Management Authority | Responsibilities |
|---|---|
| Kent County Council: Lead Local Flood Authority (LLFA) | <ul style="list-style-type: none"> • Strategic overview of local flooding from ordinary watercourses, surface water and groundwater. • Investigate significant flood events within Kent in Section 19 reports, where five or more properties are internally flooded, critical infrastructure is affected, or the flood mechanism is complex. • Permissive powers to implement the Land Drainage Act (1991) and consent for works on ordinary watercourses. • Maintain an asset register. • Develop and maintain a Local Flood Risk Management Strategy. • Statutory consultee role to provide technical advice and guidance on surface water drainage strategies, designs and maintenance arrangements put forward by developers for any new major development. |
| Kent County Council: Highway Authority | <ul style="list-style-type: none"> • Maintenance of highway drainage systems. • Emergency responders during flood events on the highway. |
| Internal Drainage Boards (IDBs) | <ul style="list-style-type: none"> • A local public authority that manages water levels, flood risk and land drainage within areas of special drainage need. |

| Risk Management Authority | Responsibilities |
|--------------------------------------|---|
| | <ul style="list-style-type: none"> • Permissive powers to implement the Land Drainage Act (1991) and consent for works on ordinary watercourses. • Under their Byelaws they are also able to consent new surface and treated foul discharges into any ordinary watercourse within their Internal Drainage District as well as consent works within 8 metres of any ordinary watercourse designated as 'Adopted' by the Board. |
| Environment Agency | <ul style="list-style-type: none"> • Managing flood risk from main rivers, seas, and reservoirs. • Strategic overview of all forms of flooding. • Provides a flood warning service. |
| Water Companies | <ul style="list-style-type: none"> • Removing and processing wastewater. • Manage leaks from clean water supplies and manage flooding from sewers. |
| District and Borough Councils | <ul style="list-style-type: none"> • Lead on coastal erosion (where they have a coastline). • Carry out works on ordinary watercourses. • Apply flood risk guidance in determining planning applications. |

4 Aim and Objectives

4.1 Aim

Through this Local Strategy for Kent, our aim is:

- to improve the safety and wellbeing of Kent's residents and the economy of Kent through appropriate local flood risk management.

To do this we will:

- work effectively with communities and partners, incorporate climate adaptation, and utilise natural processes to provide multiple benefits, where possible.

4.2 Objectives

After review of the previous Local Strategy (2017-2023), we want to continue to deliver our objectives: 'understanding flood risk', 'reduce the risk of flooding', 'resilient planning', and 'resilient communities'. Actions to support the delivery of these objectives were identified from the review, which are outlined below.

Objective 1: Understanding Flood Risk

Risk Management Authorities in Kent have a clear understanding of local flood risk mechanisms including risks resulting from climate change, and will share these with partners to create an evidence base for flood risk and climate adaptation.

To achieve this we will...

- improve communication and data sharing between risk management authorities following flood events
- continue to undertake Section 19 investigations of significant floods in Kent
- support the next round of water company Drainage and Wastewater Management Plans
- maintain the asset register and work with partners to understand opportunities to improve it
- include climate change assessments in flood risk investigations

Objective 2: Reduce the Risk of Flooding

To protect the people and businesses of Kent from flooding through the delivery of flood risk management projects and programmes using new or innovative techniques where appropriate.

To achieve this we will...

- deliver more schemes to reduce the risk of local flooding
- work with partners to co-deliver schemes
- support Southern Water's Clean Rivers and Seas Taskforce
- ensure multiple benefits are included in flood risk management schemes
- continue to provide advice on land drainage and riparian responsibilities

Objective 3: Resilient Planning

Development and infrastructure delivery in Kent takes an active role in flood risk management, taking opportunities to manage on-site and off-site flood risk.

To achieve this we will...

- continue to encourage and support planning applications to appropriately consider the delivery of Sustainable Drainage Systems and reduce flood risk where possible
- implement Schedule 3 of the Flood and Water Management Act 2010
- work with local planning authorities to ensure local flood risk is considered in local plan making and opportunities to proactively reduce flood risk are included

Objective 4: Resilient Communities

Residents and businesses of Kent are able to better prepare, understand and manage their own flood risk as appropriate, by having access to relevant flood risk information and support from risk management authorities. Communities and individuals are empowered to act to protect themselves from flooding through individual efforts, partnerships and joint working.

To achieve this we will...

- improve communities' access to appropriate data and information to understand flood risk in their area
- support communities to establish and maintain Flood Action Groups
- continue to promote the voluntary role of flood warden within flood risk communities, in partnership with the Environment Agency
- encourage communities to prepare local flood plans

5 Progress since previous Local Strategy

5.1 Local Strategy 2017-2023

The 2017 Local Strategy included four objectives: 'Understanding Risk', 'Reducing the Risk of Flooding', 'Resilient Planning' and 'Resilient Communities'. We have reviewed the delivery of the previous Local Strategy under each of these objectives since 2017, to identify where we have made progress and where work is still required.

5.1.1 Objective 1: Understanding risk

Drainage and Wastewater Management Plans have helped to improve our understanding of sewer flooding and how it is planned and invested in; which was an important gap at the time of the previous Local Strategy. Drainage and Wastewater Management Plans provide opportunities to work with sewerage undertakers to jointly manage surface water, and we hope that as these plans develop, collaborative opportunities will arise from them.

Our improved understanding of the economic benefits of schemes that we deliver, and the changes made by the Environment Agency to the funding rules, mean that we are expecting more schemes to be deliverable through partnership funding. In the previous Local Strategy, we had only developed one business case using these new rules, which has shown that it may provide more funding for the kind of schemes we need to deliver, and we will continue to develop more business cases with this.

Overall, there is improved understanding of joint risks, however, more can still be done to improve our understanding.

5.1.2 Objective 2: Reducing the risk of flood

KCC has delivered more projects that reduce flood risk in the county, the projects we have delivered can be found [here](#). However, these projects have been fairly small scale and at the current rate of delivery there is no realistic prospect of significantly reducing the risk of surface water flooding at a countywide scale. There are several reasons for this, including resources for staff to project manage these schemes and capital to fund the delivery (see Sections 5.2.2 and 5.2.4).

The recent [National Infrastructure Committee](#) report of surface water has proposed an increase in funding and improved access to capital funding for LLFAs to achieve this. This report is very welcome, though we await the government's response.

The Drainage and Wastewater Management Plans and storm overflow requirements in the [Environment Act 2021](#) have increased focus on surface water management for wastewater management benefits. Sewerage undertakers are taking an increased interest in surface water management because of this Act, which has led to more significant partnership projects.

We have improved the delivery of natural flood management schemes since the last Local Strategy. Natural flood management techniques offer a relatively low-cost option to manage flood risk in rural areas, where landowners are willing to provide land and maintain them. These schemes are usually dependent on landowners being willing to adapt the use of their land. There have been improvements to landowner incentives which seek to compensate them for land given to natural flood management. There are also more initiatives to increase landowners' understanding of the benefits of nature-based solutions; but these have only recently been introduced and it is unclear if they will incentivise landowners to employ these measure. More incentives for landowners to adopt these measures are needed to increase their uptake.

Property flood resilience is a useful way to manage flood risk where there are no effective strategic options, but the resources required to administer these measures creates barriers for wider implementation.

We need to continue to work with partners to deliver local flood risk management at an increased scale.

5.1.3 Objective 3: Resilient planning

Sustainable drainage systems in new major developments are commonplace in Kent for managing surface water. KCC has conducted regular training workshops with developers to ensure sustainable drainage continues to be used effectively and are well-integrated into development. However, we cannot become complacent; we know further training is required for planners and developers. We also feel there is a need to encourage the use of more surface sustainable drainage features that provide multiple benefits.

A more strategic approach to flood risk management from new developments would be beneficial, where new developments actively reduce flood risk downstream. A change to planning policy is required to implement this on a wide scale, however, KCC will continue to encourage planning authorities and developers to consider wider flood risk management in planning.

5.1.4 Objective 4: Resilient communities

More communities have established Flood Action Groups, five new groups have been established, enabling local communities to engage more directly with risk management authorities. To further support Flood Action Groups, a Kent-wide group of Flood Action Groups has been established. We recognise there are still many communities and residents that have a need for an improved understanding of their flood risk. We acknowledge that there are gaps in residents' understanding of flood risk and drainage principles.

The voluntary role of flood wardens has had various levels of uptake from local communities. The EA had focused on increasing enrolment, which was met with some success. However, the main challenge is keeping flood wardens engaged over a long period of time and replacing those that leave the role.

5.2 Challenges

5.2.1 Scale of delivery

There is a significant level of surface water flood risk in Kent, at the present scale of delivery it is not possible to set a timeframe on when this will be well managed. The schemes we deliver are useful at managing flood risk in a local context, but they usually benefit a small number of properties, typically 12 or fewer and we are only able to deliver two or three of these a year. We need to increase the scale at which we can deliver schemes to be able to make a meaningful impact on surface water flood risk at a countywide scale. This requires more resources, which is often out of our control such as, land and funding (see Section 5.2.2). However, we can use opportunities to work more effectively with partners and encourage as many parties as possible to contribute to flood risk management.

In particular, the requirements for reducing combined sewer overflows in the [Environment Act 2021](#) present an opportunity to work with water companies to manage surface water more effectively. Water companies have identified that surface water in combined sewers is a significant cause of overflows; managing surface water more sustainably presents an opportunity to deliver multiple benefits.

Local Nature Recovery Strategies and biodiversity net gain present opportunities to integrate natural flood management and sustainable drainage with measures to deliver ecological improvements. These opportunities may not realise significant improvements of delivery, but they do present a further opportunity to deliver measures like this and to increase awareness of their benefits.

5.2.2 Funding

The delivery of flood risk management requires resources to manage projects and funding to pay for project delivery. More funding is required for both aspects in order to increase the delivery of flood risk management mitigation. The government has changed what it pays for in Flood Defence Grant in Aid so that surface water management schemes are easier to fund, which is welcome. However, funding is still provided for on a project-by-project basis, which increases the resources required to fund it and makes small projects difficult to fund.

Improved access to funding and more resources is necessary, unfortunately these are out of our control. The recent [National Infrastructure Commission \(NIC\) report on surface water flooding](#) highlighted similar issues and proposed solutions to improving this, which we support. We await the government's response to this report.

In the meantime, we will continue to make the most of the opportunities Flood Defence Grant in Aid provides us and work with partners to maximise opportunities to manage flood risk.

5.2.3 Climate Change

We are already seeing evidence of more frequent and more severe weather events. This is particularly significant for surface water flooding, as it results directly from intense rainfall. Surface water flooding is becoming both more common and more

severe, impacting both Kent's economy and people's mental health. Adaptation to climate change must include surface water alongside other climate risks.

At present there is no assessment of the impacts of climate change on surface water flood risk, so there is no way to quantify what the possible impacts are. The Environment Agency are producing an updated set of surface water flood maps that will include climate change scenarios, these are due to be published in 2024. We will review these when they are available.

In the meantime, we must continue to ensure we embed surface water management in climate adaptation plans and prioritise these when more data is available.

5.2.4 Staff Resources

The flood risk management profession is a relatively niche area that requires specific technical skills and training. It is currently under-resourced with multiple vacancies across the sector, in all risk management authorities, not just LLFAs. This makes increasing our capacity to deliver more activities difficult and puts pressure on us when we have vacancies. Increasing the attractiveness of the flood risk management sector is outside the scope of KCC, however we will try to broaden the appeal of our work to attract more entrants to our sector.

5.2.5 Schedule 3

The government has announced that it is planning to implement Schedule 3 of the Flood and Water Management Act 2010, which means LLFAs must adopt and maintain sustainable drainage in new developments. The adoption and maintenance of sustainable drainage is welcome; however, this process presents challenges to LLFAs, particularly county councils who do not own public open spaces where many sustainable drainage systems are located. Many of the details of how Schedule 3 will be implemented are yet to be determined at the time of drafting this strategy, so we cannot be certain exactly what further challenges we may face. However, implementing this new requirement will be of vital importance and presents an opportunity to promote the type of sustainable drainage we want to see in the county.

Significantly more staff resources will be required, which is a challenge in itself (see Section 5.2.4), as well as new processes and policies to manage this. We will work with the government and counterparts nationally to ensure that we are well prepared to implement this new requirement.

5.2.6 Land use changes

Major developments are required to consider the impacts on flooding as part of planning policy (see Section 5.1.3) and new requirements will improve this (see Section 5.2.5), however land use changes continue to increase flood risk. Planning permission is not required for many land use changes, and flood risk assessments are not required for all planning permissions, for instance minor developments.

The increased densification of urban areas, for instance through the paving of gardens, increases the risk of surface water flooding or runoff entering sewers. Diversifying land activities in rural areas, such as removing hedgerows and changing

the crops that are grown can change how surface water runs off the land, effecting flood risk.

Many of these land changes are permitted and there is often no requirement to assess or mitigate any increased flood risk. Changing this is beyond the scope of this strategy. However, we will continue to work with partners to raise awareness of the potential impacts of land use changes and encourage measures that do not increase flood risk.

5.2.7 Integration

Effective flood risk management will best be achieved through a more integrated approach, where only the most severe or extreme issues are dealt with through flood risk management projects. The general incorporation of flood risk management measures in all activities is a more efficient approach.

At present new developments are only required to consider how they increase flood risk and how to manage that. This often means that areas that might be useful for flood risk management to the wider area, cannot be realised (notwithstanding issues of funding and land ownership). An approach that requires new developments to reduce flood risk in the local area, irrespective of their impact on it, would make flood mitigation and climate adaptation easier.

An approach like this would require a change to national policy and is out of scope for this strategy. However, we will work with partners to explore opportunities to adopt a policy that proactively manages flood risk through new development.

6 Delivering the Local Strategy

KCC is the LLFA for Kent and responsible for this Local Strategy; however, delivering this strategy will rely on working with partners and stakeholders. It will also rely on resources, both finance and staff.

6.1 Partnerships

Kent County Council works closely with a variety of risk management authorities and partners, to reduce flood risk in Kent. We work with partners to deliver flood risk management in Kent by collaborating on projects, providing resources (such as funding), and sharing information. Details on the projects KCC have delivered with partners can be found on our [flood project webpage](#).

To ensure the risk management authorities are kept accountable, KCC hosts a Strategic Flood Risk Management Group was set up. This group holds regular meetings to provide updates, discuss challenges, and coordinate the allocation of resources among its members. They will have a role in overseeing the progress of the Local Strategy.

6.2 Flood risk management priorities

There are areas of Kent that we recognise as needing further investigation or intervention to manage flood risk. In the previous strategy, we identified priority areas for focus, and we made progress in these areas to varying degrees. These areas are still places we will continue to focus on; however, other areas were brought to our attention during the delivery of the previous strategy, and we have since directed resources to these areas too. This reflects the high level of flood risk in the county, with our priorities for flood risk management changing alongside our increased understanding of the risks and opportunities. The priorities of partners also influence our priorities for flood risk management. Given the length of time this Local Strategy spans, and the likelihood that new information and priorities will arise within this time, we have not identified specific areas to focus on.

This section sets out how we assess and prioritise flood risk management opportunities in the county:

6.2.1 Section 19 investigations

Section 19 investigations are one of the main ways we identify new areas for further investigation. Under Section 19 of the Flood and Water Management Act 2010, Lead local flood authorities have a duty to undertake investigations for some incidents of flooding in their area. The purpose of a Section 19 investigation is to identify which risk management authorities have risk management functions in respect of the flood in question and whether they have exercised those functions; a report of the findings is then published. Our Section 19 investigations also set out the facts of the flood event and provide some background to the drainage in the area. They do not include modelling or assessments of options to manage flood risk, though they may highlight

opportunities for further investigation. KCC's Section 19 Investigations can be found [here](#).

6.2.2 Surface Water Management Plans

Surface Water Management Plans undertaken over relatively large areas to assess flood risks where we are aware of flood risk management issues and wish to assess these in detail. They may be used to provide an overview of flooding in a large area (for instance, a district or borough) to identify areas for further investigation. Or Surface Water Management Plans may be more localised (for instance, a town) to identify more specific flood risk management options. These plans are ultimately used to devise an action plan for reducing flood risk in the defined area.

More detailed investigations of flood risk management interventions are invigorating additional localised studies, although further investigations are required to develop flood risk management schemes. SWMPs also provide useful information for our planning consultee role. More information about SWMPs in Kent can be found [here](#).

6.2.3 Partners

Partner priorities may differ from KCC's, though this may still represent an important opportunity to realise our flood risk management objectives. KCC will continue to work with partners on flood risk management projects to help support the delivery of this Local Strategy.

6.3 Funding

The government has a grant fund for flood risk management works, known as Flood Defence Grant in Aid. This fund will pay towards flood risk management outcomes; however, this may not be enough to cover the full costs of the project. If this is the case, additional funding from partners must be found for the project to be undertaken, this scheme is called partnership funding. Partnership funding also provides funding for multiple benefits, including health and biodiversity benefits, though the flood risk management benefits must outweigh the costs of the project to be eligible for Flood Defence Grant in Aid. A business case must be prepared to receive partnership funding contributions, which sets out how the scheme is cost beneficial and how it will be financed.

KCC has allocated funding to surface water management works annually in the capital budget. This funding is for the delivery of projects to reduce local flood risks and support adaptation to the increased risks of local flooding from climate change. It can be used to provide partnership funding contributions to schemes to unlock government contributions and to fund smaller schemes where the cost of developing a business case is too high to justify.

KCC flood risk management projects need to demonstrate how they achieve multiple environmental and social benefits for Kent communities, whilst reducing flood risk to properties and businesses. They also need to demonstrate how they will be cost beneficial.

6.4 Monitoring and review

KCC will publish an annual summary of progress report on the delivery of the Local Strategy. Metrics that record the progress of the Local Strategy have been developed that will be reported on annually, these are set out in Appendix 1. We will also provide a overview of other activities that we will deliver that cannot be measured with metrics, these are also set out in Appendix 1.

The activities to support the delivery of the objectives and the metrics we report on will be reviewed annually and updated as needed, to ensure they remain relevant and useful in measuring the progress of the Local Strategy. Where appropriate new activities will be added and new metrics developed to report on. Changes to the activities and metrics will be agreed with the Kent Strategic Flood Risk Management Group.

APPENDIX 1: Reporting progress

The annual report on the progress of the Local Strategy will include the metrics set out in Table A1-1, will also include a summary of the flood risk management activities set out in Table A1-2.

Table A1-1: Metrics used to measure activities of each objective within the Local Strategy.

| Objective 1 Activities | Objective 1 Metrics |
|--|--|
| Section 19 reports published | Number of reports published Number of properties flooded in each event |
| Flood risk studies | Number of studies completed Number of studies with climate change impacts included |
| Asset register | Number of assets added to the asset register |
| Objective 2 Activities | Objective 2 Metrics |
| Flood risk management schemes delivered | Number of schemes Number of properties benefitting Scheme costs Partnership income |
| Schemes delivered as part of the Clean Rivers and Seas Taskforce | Number of schemes delivered |
| Land drainage advice | Number of land drainage consents issued Number of land drainage enquiries responded to |
| Objective 3 Activities | Objective 3 Metrics |
| Planning application consultations | Number of consultations Number of consultation responses provided in 21 days Number of sites disconnected from the foul/combined sewer Number of sites with a connection to the foul/combined sewer Reduction in discharge rate to the foul/combined sewer |
| Objective 4 Activities | Objective 4 Metrics |
| Flood Action Groups | Number of Flood Action Groups active in Kent Number of new Flood Action Groups established |

| | |
|---------------|---|
| Flood wardens | Number of flood wardens in Kent Number of people attending flood warden training |
|---------------|---|

Table A1-2: Flood risk management activities to be reported on each year, for the Local Strategy objectives.

| |
|--|
| Objective 1 Activities |
| Work to improve communication following a flood event |
| Work to improve the flood asset register |
| Objective 2 Activities |
| Multiple benefits delivered through flood risk management schemes |
| Objective 3 Activities |
| Progress on implementing Schedule 3 |
| Additional local flood risk management benefits achieved through the local plan making process |
| Objective 4 Activities |
| Work to improve communities' access to flood risk data and information |