

KENT FLOOD RISK MANAGEMENT COMMITTEE

Tuesday, 21st March, 2023

2.00 pm

Council Chamber, Sessions House,
County Hall, Maidstone





AGENDA

KENT FLOOD RISK MANAGEMENT COMMITTEE

Tuesday, 21st March, 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 N Baker, Mr P Cole, Ms M McArthur and Ms L Wright

Labour (1): Mr B H Lewis

Liberal Democrat (1): Mr M J Sole

UNRESTRICTED ITEMS

1. Introduction/Webcast announcement
2. Membership
To note that Mr Neil Baker has joined the Committee.
3. Apologies and Substitutes
To receive apologies for absence and notification of any substitutes present.
4. Declarations of Interest by Members in items on the Agenda
To receive any declarations of interest made by Members in relation to any matter on the agenda. Members are reminded to specify the agenda item number to which it refers and the nature of the interest being declared.
5. Minutes of the meeting held on 9 November 2022 (Pages 1 - 6)
To consider and approve the minutes as a correct record.
6. Southern Water - Presentation
7. Met Office - Presentation
8. Introduction to the work of the KCC Sustainable Drainage Team and Schedule 3 of the Flood and Water Management Act - To follow
9. Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity (Pages 7 - 12)

10. Future meeting dates

11 July 2023 (14:00)

14 November 2023 (14:00)

14 March 2024 (10:00)

26 June 2024 (10:00)

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, 13 March 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, 9 November 2022.

PRESENT: Mr A R Hills (Chairman), Mr P Cole, Ms J Meade, Ms M McArthur, Mr M J Sole and Ms L Wright

ALSO PRESENT: Mr M Dendor, Cllr M Forest (Portfolio Holder for Environment, Property and Recreation, Ashford Borough Council), Cllr M Round (Lead Member for Environmental Services, Maidstone Borough Council), Mrs G Brown (KALC) and Mr J Williamson (River Stour Internal Drainage Board)

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

18. Declarations of Interest

(Item 3)

No declarations were received.

19. Minutes of the meeting held on 5 July 2022

(Item 4)

RESOLVED that the minutes of the meeting of the Kent Flood Risk Management Committee held on 5 July 2022 are correctly recorded and that they be signed by the Chairman.

20. Storm Overflows, Pollution and Pathfinder Projects - Presentation by Southern Water

(Item 5)

Sally Dodman-Edwards (Pathfinder Delivery Lead, Southern Water) was in attendance for this item.

1. Mrs Dodman-Edwards gave a presentation. The contents of the presentation included: an overview of the Storm Overflow Task Force; Deal, Swale and Margate Pathfinder projects; 'Slow the flow' passive water butts installation trials; household and non-household sustainable drainage systems; connectivity surveys; sewer level monitors; rain gauges; and flow monitoring.
2. Following a question from a Member on the release mechanisms in place for smart water butts, Mrs Dodman Edwards explained that automatic slow

release systems, drip features as well as altered down pipes and outflows were measures which slowed the flow and prevented rain water backup.

3. A Member asked how the three pathfinder scheme areas were chosen and what other areas could do to be involved in future schemes. Mrs Dodman-Edwards confirmed that the three areas had been chosen based on modelling, which indicated that they were susceptible to flooding overflows. She added that Southern Water had collaborated with KCC to choose the sites.
4. A Member asked that an indication of the timeline for planning future pathfinder projects, be shared at a future meeting of the Committee.
5. Mrs Dodman-Edwards confirmed, in response to a question from a Member, that local businesses, stakeholders, schools and the NHS had been engaged and provided with educational materials on how to reduce rain flow into combined sewers and manage runoff from flat rooves.
6. A Member asked whether there was a risk that future development would nullify the improvements made by the schemes mentioned in the presentation. Mr Tant reassured Members that KCC ordinarily objected to significant developments which planned to connect to combined sewers. He noted that heightened flood risk in urban areas was primarily created by increased density, insufficient runoffs and the replacement of green space with hard surfaces, which when coupled with climate change had increased risk. He added that KCC were working with Southern Water on scaling up the pathfinder projects and initiatives with similar goals.
7. Mr Tant confirmed, after a question from a Member, that, whilst Thames Water did not have any similar schemes in Kent, they offered customers discounts on water butts.
8. A Member asked whether any roadside rain gardens had been installed in the county. Mr Tant confirmed that roadside rain gardens had been installed by the Flood and Water Management team, he gave installations on Dolphins Road, Folkestone as an example. He noted that rain gardens reduced on street parking.
9. The Chairman thanked Ms Dodman-Edwards for her presentation, answers to the Committee's questions and commitment to update Members.

RESOLVED to note the content of the presentation.

21. Highways Drainage Systems - Presentation by KCC Highways (Item 6)

Earl Bourner (Drainage Asset Manager, KCC) was in attendance for this item.

1. Mr Bourner gave a presentation to the Committee. His presentation included: an overview of KCC's drainage responsibilities as a Highway Authority, including the responsibility to mitigate flood risk to the public highway; Highway drainage assets and functions; main issues with drainage and flooding over previous three months; risk based approach for gully

management and cleansing, which included over 12,500 drains cleansed per month and emergency responses; impact of water runoff from private land; new asset management software; recent highways drainage schemes, including drainage upgrades; and future challenges.

2. A Member asked for an update on the development of the fault reporting tool. Mr Bourner confirmed that the tool was operational and that intelligence had been input into the system.
3. Mr Bourner explained, following a question from a Member, that a proactive approach to drainage clearance had been adopted to maximise service effectiveness and utilised data to prioritise drains with the highest associated risk.
4. Mr Bourner confirmed, in response to a question from a guest, that KCC had a five-year programme of drainage works, which utilised external consultants for surveying and design to supplement internal expertise.
5. A Member asked how contractor works were assessed in order to ensure that gullies were installed to a good standard and not blocked by asphalt. Mr Bourner explained that whilst the Highways Drainage team did not directly monitor works, works were inspected, gullies were completed after general resurfacing work and the team oversaw maintenance.
6. A Member asked whether there was an emergency drainage blockage line. Mr Bourner provided Members with the contact number and agreed to explore how best it could be publicised on KCC's public website.
7. Mr Bourner clarified, following a question from a Member, that new developments were required to have a higher sewer capacity and enhanced highway drainage systems, which were designed to withstand a 1 in 100 year flood in addition to a 30% increase in capacity for climate change.
8. The Chairman thanked Mr Bourner for his presentation and answers to the Committee's questions.

RESOLVED to note the content of the presentation.

22. Sea Defence and Low Carbon Solutions - Presentation by the Environment Agency
(Item 7)

Sam Gawad (Project Executive, Environment Agency) was in attendance for this item.

1. Mr Gawad gave a presentation to the Committee. The contents of the presentation included: a background on the environmental history of Romney Marsh; the Environment Agency's Folkestone to Cliff End Strategy, which sought to protect 14,500 homes, 700 businesses and nationally important critical infrastructure from the risk of flooding; Lydd Ranges Flood Alleviation Scheme, across a 4.6 miles (7.4km) frontage, which comprised a groyne field, Green Wall and Sewer Outfall; net zero by 2030, which required a 6750ton

CO2 reduction from the Scheme; and a targeted approach to carbon reduction, including the use of low carbon concrete, with it noted that the Lydd Ranges Scheme had achieved a 45% carbon reduction from the benchmark scheme, with hydrotreated vegetable oil used in dredgers and production of low carbon concrete plant located in Kent.

2. Mr Gawad showed the Committee a video on the Lydd Ranges Flood Alleviation Scheme, which can be accessed at: www.vimeo.com/592156207/5b32a36ae2.
3. The Chairman emphasised the importance of innovative approaches to carbon reduction in sea defences.
4. A Member asked for an explanation of the criteria which determined which sections of the coast were protected by flood defences. The Chairman explained that Shoreline Management Plans determined how areas were protected, with it noted that existing plans were being refreshed. He emphasised that further effort was required to spread awareness of the Plans as well as their implications on coastal communities. He assured Members that the Committee would receive a presentation on Shoreline Management Plans at a future meeting.
5. Following a question from a Member on the Lydd Ranges Flood Alleviation Scheme, Mr Gawad confirmed that the Scheme had a lifespan of 25 years, with no drop in performance expected over that time. He added that the Environment Agency had legally committed to maintain the scheme for its lifespan and that a specific type of shingle had to be used to meet regulations.
6. The Chairman thanked Mr Gawad for his presentation and answers to the Committee's questions.

RESOLVED to note the content of the presentation.

23. Environment Agency and Met Office Alerts and Warnings and KCC severe weather response activity

(Item 8)

1. The Committee were provided with a report which detailed on the current water situation, weather statistics, Environment Agency and Met Office Warnings, and flood response activity since the last meeting on 5 July.
2. Mr Harwood updated the Committee on the alerts, warnings and weather response activity since publication of the report. He confirmed that 14 additional flood alerts and 4 weather warnings had been issued since 1 November. He addressed KCC's response to severe weather events since the previous meeting, which included the county's first red warning for heat. It was noted that the summer had been unusually dry, with wildfires, slow aquifer recharge, lower river levels and fish kills experienced across Kent. He noted that the hot summer was expected to have a long-term impact on ecology. The impact of heavy autumn rain on infrastructure and the exacerbation of issues due to losses of urban drainage, runoffs and dropped curbs were addressed.

He confirmed that KCC had carried out Exercise Manu, with partners, which tested the county's response to severe flooding.

3. In response to a question from a guest, Mr Harwood confirmed that Resilience and Emergency Planning had been involved in the strategic discussion on community resilience, as part of formation of the emergency planning template which had been made available to Kent Association of Local Councils (KALC). He added that the service's input had focused on ensuring that agency preventive measures and spatial policies factored in community resilience and emergency planning, with communities at the most risk prioritised. It was noted that the document would evolve, as it remained in the development stage. He assured the Committee that whilst resources were under pressure, different ways of working and better partner working would make the county more resilient.

RESOLVED to note the warnings received since the last meeting of the Committee and contribute to planning and response policy and practice through oversight and debate.

24. Other items which the Chairman decides are Urgent
(Item 9)

No urgent items were received.

The Chairman thanked the district and borough Environment Cabinet and Lead Members present for their attendance and welcomed their continued engagement with the Committee.

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To: Kent Flood Risk Management Committee – 21st March 2023
From: Rebecca Spore, Director of Infrastructure, Deputy Chief Executive's Department
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 9th November 2022.

1. Background

- 1.1 This report is the latest of the regular updates to the Committee addressing the current water situation and severe weather and flood response activity.
- 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 Despite a cold snap with some localised snowfall between 11th and 18th December, the month ended only 0.9% cooler than the long-term average. Indeed, the rapid thaw that following a week of cold weather resulted in water leaks, pipe bursts and technical problems at a number of reservoirs. This led to widespread and sometimes prolonged water supply disruption across parts of Kent.
- 2.2 The first area of the county to be significantly impacted by water supply disruption was Tunbridge Wells, with some 5,000 addresses identified as at risk of supply interruptions. A combination of smaller leaks and a large trunk main burst caused some local reservoirs to trip out. A pipe burst at nearby Paddock Wood and another leak at Southborough, compounded these problems. It was not until 23rd December that water pressure was fully restored to the Tunbridge Wells area.

- 2.3 Broadstairs and suits environs were also affected by freeze-thaw damage to water supply infrastructure from 19th December, with some 13 to 19,000 addresses identified as vulnerable to disruption. Bottled water was delivered to hundreds of vulnerable customers, while static water stations operated at local schools. Supply in Broadstairs was restored by 20th December.
- 2.4 The water supply disruption of the longest duration affected some of Kent's rural communities, including Challock, Molash Charing, Cranbrook, Biddenden, Collier Street, Polhill and Staplehurst. Identifying and supporting vulnerable customers, including care homes and sheltered housing, required a significant multiagency effort, while Kent Fire and Rescue Service used their tanker and bowser fleet to ensure the welfare of livestock at local farms and smallholdings. Staplehurst, in Maidstone Borough, did not see normal supply fully return until the evening of Christmas day and some localised outages persisted in the Biddenden area until 28th December.
- 2.5 Kent went on to experience a drier than average start to 2023. Following the near average rainfall seen in December and January, the month of February was notably dry in Kent, with only 13% of long-term average rainfall recorded. Across England as a whole, February was the driest since 1993 and the fifth mildest since records began.
- 2.6 Kent, South London and East Sussex Environment Agency moved from 'Drought' into 'Recovery' from 16th January 2023. However, it is important to note that whilst the overall situation has improved, not all water resources are back to normal status and the Environment Agency continues to monitor the situation closely.
- 2.7 The latest river flow data available from the Environment Agency, which covers the last week in February, indicates that the Rivers Medway and Rother currently support **notably low flows**, while the Stour is at **below normal**.
- 2.9 Following a wet November and near average rainfall levels in December and the first part of January, the groundwater situation across Kent's Lower Greensand and Chalk aquifers improved considerably, attaining **normal** status in west and **above normal** in east Kent. Following a drier end of January and a notably dry February, groundwater levels in Kent are no longer rising.
- 2.10 Levels at the Bough Beech and Bewl reservoirs are currently **normal**.
- 2.11 79 flood alerts and seven warnings were issued by the EA since the last meeting of the Committee (73 fluvial and 13 coastal)¹. This contrasts with 61 flood alerts and five warnings (14 fluvial and 52 coastal) in the corresponding period in 2021/22.
- 2.12 The Met Office issued 27 yellow weather warnings between November 2022 and March 2023 (seven for fog, six for snow and ice, five for ice, four for rain, two for wind and rain, two for snow and one for thunderstorm)². This contrasts

¹ Please see appendix 1

² Please see appendix 2

with 23 weather warnings between November and February (15 warnings for wind, five for fog, two for thunderstorms and one for snow) in the same period in 2021/11.

- 2.13 The Thames Barrier was closed on five occasions since the last meeting of the Committee (two for operational and three for test purposes)³. The figure for the corresponding period last year was also five (all for operational purposes).

3. Outlook

- 3.1 The Met Office three month outlook summary indicates a 15% chance that March to May will be cooler than average, a 50% chance that it will be near average and a 35% chance that it will be warmer than average. In terms of rainfall, the summary indicates a 30% chance the season will be drier than average, 60% chance that it will be near average and a 10% chance it will be wetter than average. As regards likely wind speeds, the summary suggests a 30% chance that it will be calmer than average, a 55% that they will be near average and 15% chance of windier than average conditions.
- 3.2 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 around 27th March. However, coastal flooding can still occur outside of high spring tides.
- 3.3 To support local contingency planning for flood response, the county council is facilitating a reservoir inundation exercise for key partners in May.
- 3.4 Kent Flood Risk Management Committee will continue to receive regular updates on water resources, flood alerts, weather warnings and response.

4. Recommendations

- 4.1 That Members note the warnings received since the last meeting of the Committee; and contribute to planning and response policy and practice through oversight and debate.

5. 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

³ Please see appendix 3

Appendix 1: EA Flood Alerts and Warnings issued since 9th November 2022

Date issued	Flood Zone	Status
09/11/2022	Upper River Medway Area	Alert
15/11/2022	River Medway from Forest Row to Penshurst, including Ashurst	Alert
15/11/2022	Rivers Eden and Eden Brook	Alert
16/11/2022	Upper River Stour	Alert
16/11/2022	River Bourne from Hadlow to East Peckham	Alert
16/11/2022	Lower River Medway	Warning
16/11/2022	River Rother and its tributaries	Alert
16/11/2022	River Teise from Lamberhurst to Goudhurst	Alert
16/11/2022	River Teise and Lesser Teise from Horsmonden to Yalding	Alert
16/11/2022	River Teise and Lesser Teise area from Horsmonden to Yalding	Warning
16/11/2022	River Medway between Forest Row and Penshurst	Warning
16/11/2022	River Darent from Westerham to Dartford	Warning
16/11/2022	Rivers Eden and Eden Brook	Alert
16/11/2022	Middle River Medway	Alert
16/11/2022	Whitewater and Ruckinge Dykes	Warning
17/11/2022	River Teise and Lesser Teise	Warning
17/11/2022	Rivers Eden and Eden Brook, from Crowhurst and Blindley Heath to Penshurst	Warning
17/11/2022	River Beult from Pluckley and Bethersden to Stilebridge	Alert
17/11/2022	Lower River Stour	Alert
17/11/2022	New Romney Sewage Arm	Alert
26/11/2022	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert
26/11/2022	Upper River Medway Area	Alert
26/11/2022	Rivers Eden and Eden Brook	Alert
27/11/2022	Upper River Stour	Alert
27/11/2022	Hamstreet Arm area	Alert
27/11/2022	New Romney Sewage Arm	Alert
27/11/2022	Lower River Medway	Alert
28/11/2022	River Beult from Pluckley and Bethersden to Hampstead Lock at Yalding	Alert
28/11/2022	Tidal Stour Area from Fordwich to Stonar Cut	Alert
19/12/2022	Upper River Medway Area	Alert
19/12/2022	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert
19/12/2022	Nailbourne and Little Stour Area	Alert
19/12/2022	Upper River Stour	Alert
19/12/2022	River Beult from Pluckley and Bethersden to Hampstead Lock at Yalding	Alert
19/12/2022	Lower River Medway Area	Alert
19/12/2022	Middle River Medway Area	Alert
19/12/2022	Rivers Eden and Eden Brook	Alert
23/12/2022	Upper River Medway Area	Alert
23/12/2022	Upper River Stour	Alert
23/12/2022	Rivers Eden and Eden Brook Area	Alert
23/12/2022	Rivers on the Isle of Sheppey	Alert
23/12/2022	Lower River Medway	Alert
26/12/2022	Coast from Dartford to Allhallows	Alert
26/12/2022	Coast from Whitstable to Margate	Alert

26/12/2022	Tidal River Medway and Medway estuary	Alert
26/12/2022	Isle of Sheppey and Coast from Kemsley to Seasalter	Alert
26/12/2022	Tidal Thames Riverside from Dartford Creek and The Mardyke to the Thames Barrier	Alert
28/12/2022	Upper River Medway	Alert
28/12/2022	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert
29/12/2022	Lower River Medway	Alert
30/12/2022	Upper River Medway	Alert
30/12/2022	River Beult from Pluckley and Bethersden to Hampstead Lock at Yalding	Alert
30/12/2022	Upper River Stour	Alert
30/12/2022	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert
31/12/2022	New Romney Sewage Arm	Alert
31/12/2022	River Teise area from Lamberhurst to Goudhurst	Alert
31/12/2022	Rivers Eden and Eden Brook	Alert
31/12/2022	Middle River Medway	Alert
01/01/2023	Plenty, Swalecliffe and West Brooks	Alert
01/01/2023	River Teise and Lesser Teise area from Horsmonden to Yalding	Alert
01/01/2023	River Beult from Pluckley and Bethersden to Hampstead Lock at Yalding	Alert
01/01/2023	Lower River Stour	Alert
02/01/2023	River Beult from Stilebridge to Hampstead Lock at Yalding	Alert
14/01/2023	Upper River Medway Area	Alert
14/01/2023	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert
14/01/2023	Upper River Stour	Alert
14/01/2023	River Teise from Lamberhurst to Goudhurst	Alert
14/01/2023	Lower River Medway	Alert
14/01/2023	River Eden and Eden Brook	Alert
16/01/2023	Upper River Stour	Alert
16/01/2023	New Romney Sewage Arm	Alert
16/01/2023	Upper River Medway Area	Alert
16/01/2023	River Rother and its tributaries from Turks Bridge to the Royal Military Canal	Alert
16/01/2023	River Beult from Pluckley and Bethersden to Hampstead Lock at Yalding	Alert
16/01/2023	Upper River Stour	Alert
16/01/2023	Lower River Medway	Alert
16/01/2023	Lower River Stour	Alert
20/02/2023	Coast from St Margaret's at Cliffe to Sandgate	Alert
20/02/2023	Coast from Ramsgate to Kingsdown	Alert
22/02/2023	Coast from Ramsgate to Kingsdown	Alert
22/02/2023	Coast from St Margaret's at Cliffe to Sandgate	Alert
22/02/2023	Isle of Sheppey from Kemsley to Seasalter	Alert
22/02/2023	Coast from Dartford to Allhallows	Alert
22/02/2023	Coast from Whitstable to Margate	Alert
22/02/2023	Tidal Medway, Medway Estuary and Isle of Grain	Alert
24/02/2023	Isle of Sheppey from Kemsley to Seasalter	Alert
24/02/2023	Coast from Dartford to Allhallows	Alert
24/02/2023	Tidal Medway, Medway Estuary and Isle of Grain	Alert

24/02/2023	Coast from Whitstable to Margate	Alert
24/02/2023	Coast from Ramsgate to Kingsdown	Alert
24/02/2023	Coast from St Margaret's at Cliffe to Sandgate	Alert

Appendix 2: Met Office Severe Weather Warnings - November 2022 to March 2023

Weather Element	Number of Warnings	No of Different Events	Dates covered by Events
Fog	7	5	14 th November 2022 11 th & 12 th December 2022 22 nd January 2023 8 th February 2023 14 th February 2023
Ice	5	3	12 th & 13 th December 2022 18 th December 2022 17 th & 18 th January 2023
Rain	4	3	31 st November 2022 6 th & 7 th November 2022 16 th & 17 th November 2022
Snow	2	2	16 th January 2023 6 th & 7 th March 2023
Snow & Ice	5	2	11 th & 12 th December 2022 8 th March 2023
Thunderstorm	1	1	3 rd & 4 th November 2022
Wind & Rain	2	1	24 th November 2022

Appendix 3: Environment Agency Thames Barrier closures since 9th November 2022

Thames Barrier closures	Date	Status
Thames Barrier closed	14/11/2022	Test
Thames Barrier closed	14/12/2022	Test
Thames Barrier closed	25/12/2022	Operational
Thames Barrier closed	26/12/2022	Operational
Thames Barrier closed	09/02/2023	Test