Norfolk County Council

Scrutiny Committee

Date: **Wednesday 20 March 2024**

Time: **10 am**

Venue: **Council Chamber, County Hall, Martineau Lane, Norwich NR1 2DH**

Supplementary Agenda

Tom McCabe
Chief Executive
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Date Supplementary Agenda published: 14 March 2024

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Scrutiny Committee

Item No: 7

Report Title: Combined Sewer/Storm Water Overflows

Date of Meeting: 20 March 2024

Responsible Body: Anglian Water / Environment Agency

Executive Summary

Members requested an update on combined sewer/storm water overflows at the March 2023 meeting of the Scrutiny Committee. The Appended paper (appendix A) provides members with an updated overview of the issue, and an outline of activity carried out by both Anglian Water and the Environment Agency to monitor and prevent sewerage and drainage issues since the last update to Committee. Members will also receive a presentation from Anglian Water officers and a verbal update on recent severe weather and flooding events.

Recommendations

The committee is asked to:

1. **Consider the appended report provided by Anglian Water, providing feedback and recommendations where appropriate.**
2. **Consider the verbal evidence provided by the Environment Agency.**
3. **Discuss the potential for further scrutiny activity in the future and outline an expected timeline.**

1. Background and Purpose

1.1 Members of the Scrutiny Committee last received an update from Anglian Water regarding storm water overflows/sewage discharges at the March 2023 meeting of the Scrutiny Committee. The papers, minutes and associated actions for this meeting can be found here.

1.2 Storm overflows are designed for occasions where there is too much water in pipes, for example due to excessive rainfall, which causes safety release valve to open and reduce the pressure in the pipe network, thereby leading to release of the excess water directly into the rivers or sea. This is a process that is regulated by the Environment Agency by permits which allow storm overflows to operate under certain conditions and helps to prevent systems backing up,

causing uncontrolled release into communities, the road network, open spaces and properties.

1.3 The Rivers Trust collates data on sewage network discharges and overflows which is available via the Environment Agency, and presents that data as an interactive mapping tool on its website here, which presents the most recently available data and allows interrogation of previous years' data.

1.4 Anglian water also produces a similar mapping tool, called the 'get river positive map'. This includes an outline of improvement works mapped to local areas. You can find the data and full monitoring information relating to overflows collected by Event Duration Monitors (EDMs) here.

1.5 The appended report provided from Anglian Water (appendix A) provides an overview of data regarding the following areas:

- Storm water overflow occurrences and frequency, including specific data for Norfolk (this data is currently incomplete, but an update will be provided at the meeting).
- National regulations and performance against required standards.
- Performance against Anglian Water targets to reduce overflows.
- Future investment and planned water infrastructure improvements, including an outline of named spill reduction schemes.
- The Anglian Water environmental programme 2025-2030.

1.6 While the paper provides a specific focus on storm water overflows/sewage discharges, members are invited to participate in a broader discussion with Anglian Water representatives around the issues of recent flooding activity/severe weather events and availability of water.

1.7 The following will also be in attendance at the meeting to observe and provide input where required:

- Cllr Eric Vardy, Cabinet Member for Environment and Waste
- Henry Cator OBE, Chairman of the Norfolk Strategic Flood Alliance
- Mark Ogden, Flood and Water Manager, NCC.
- Rory Sanderson, Environment Manager for Norfolk - Environment Agency.
- Rachael Storr, Team Leader, Norfolk and Suffolk Land and Water Team – Environment Agency.

1.8 Members are reminded that the annual update on broader flood prevention activity in Norfolk is to be scheduled for a Scrutiny Committee meeting in November 2024, still to be confirmed.

2. Recommendations

The committee is asked to:

- **Consider the appended report and presentation provided by Anglian Water, providing feedback and recommendations where appropriate.**
- **Consider the verbal evidence provided by the Environment Agency.**
- **Discuss the potential for further scrutiny activity in the future and outline an expected timeline.**

3. Background Papers

3.1 Appendix A: Anglian Water Update – Storm Overflows

Officer Contact
If you have any questions about matters contained within this paper, please get in touch with:

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Norfolk Scrutiny Committee
Anglian Water Update – Storm Overflows

Gail Pickles
Head of Spill Strategy
Anglian Water

March 2024

What are storm overflows? And why they are necessary today?

What they are...

Storm overflows or **CSOs** are a designed part of our sewerage system that act as **'pressure-release-valves'** to avoid the network backing up and flooding properties when there is heavy rain

Sewers have not been designed like this for many years, but **urban creep**, changing **rainfall** patterns with **climate change**, and a lack of natural drainage, are all increasing pressures on these outdated systems

Storm overflows are **common** across Europe, with a total of **650,000** storm overflows across the continent. **15,000** of these are in England and **1,500** in the Anglian Water region.

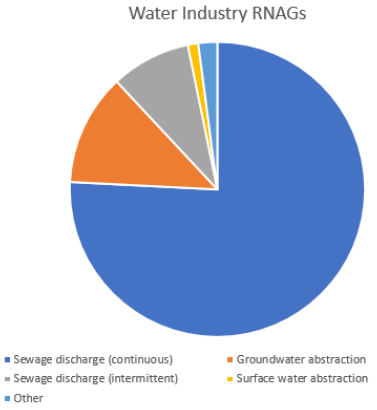
During **wet weather** and **snow melt**, storm overflows release diluted wastewater into rivers, preventing a combination of sewage and rain from overloading the sewers and backing up into homes and businesses.

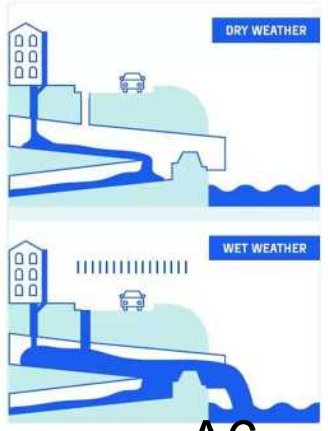
Why they're a problem

Despite storm discharges being predominantly rainwater, it is never desirable for untreated sewage to be released to the environment

Storm overflows are amongst the reasons why rivers fall short of 'Good Ecological Status', though only account for around 4% of these reasons nationally, and less than 1% of the reasons in our region

Storm overflows operate under permits from the Environment Agency, and none of our storm overflows are considered by them to be 'unsatisfactory'.





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How are Anglian Water performing?

We are absolutely committed and working towards our ambitious vision that by 2050 storm overflows are no longer required with a laser focus on how to make sure this becomes reality faster.

Commitment 1

We will reduce storm spills to an average of 20 per year by 2025

A prioritised approach to reducing storm overflows

Storm storage increases at our water recycling centres ensure we reduce the number and severity of spills to the environment. In the past year, we have increased storm capacity at 40 sites adding over 11,000m3 of storm storage volume to the network. 63% of these schemes were delivered early.

Over the next two years we will be increasing capacity at a further 56 sites plus a host of other measures in line with reducing spills from the highest priority storm overflows.

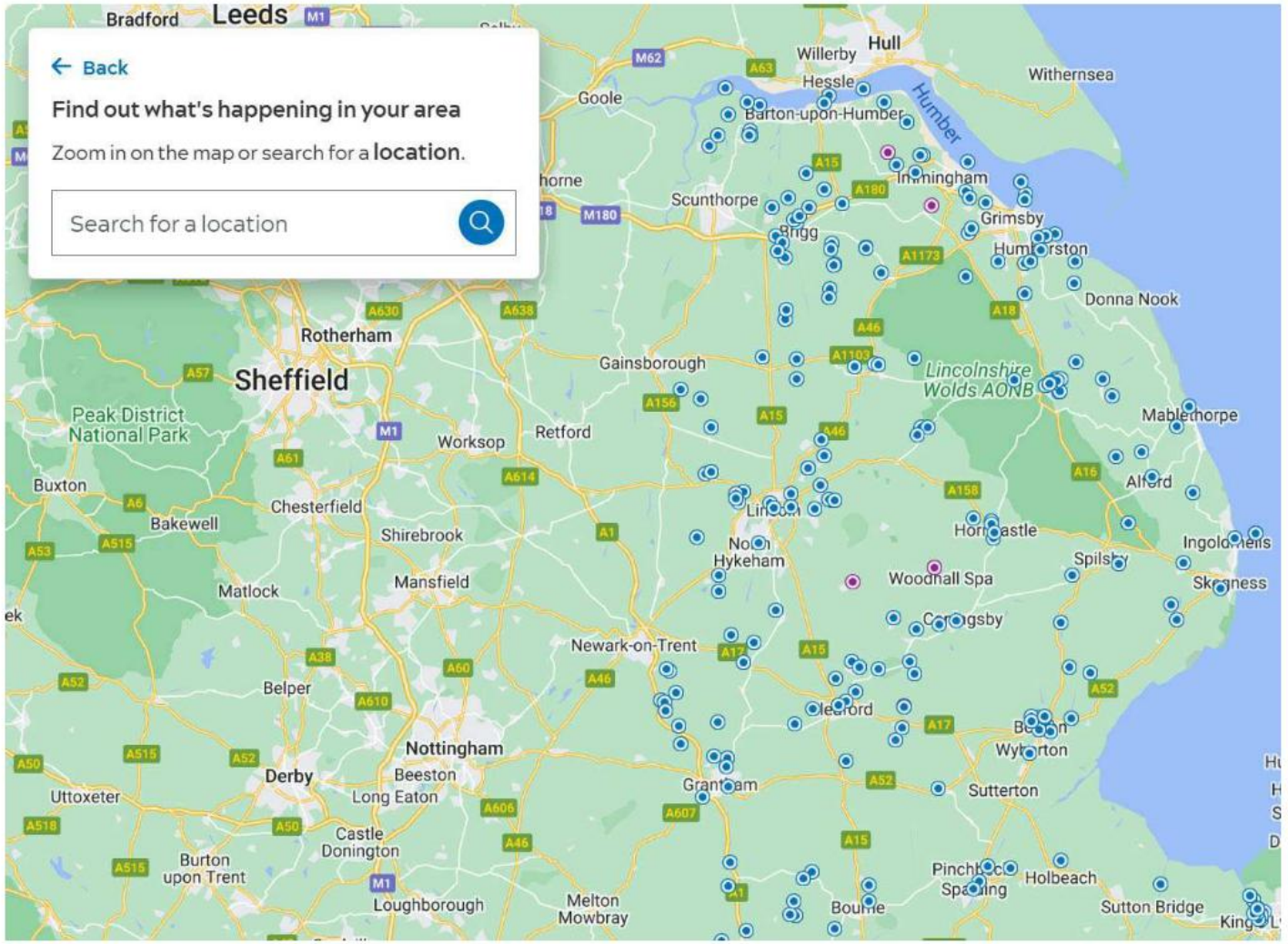
Click here to visit our Storm Overflow map.

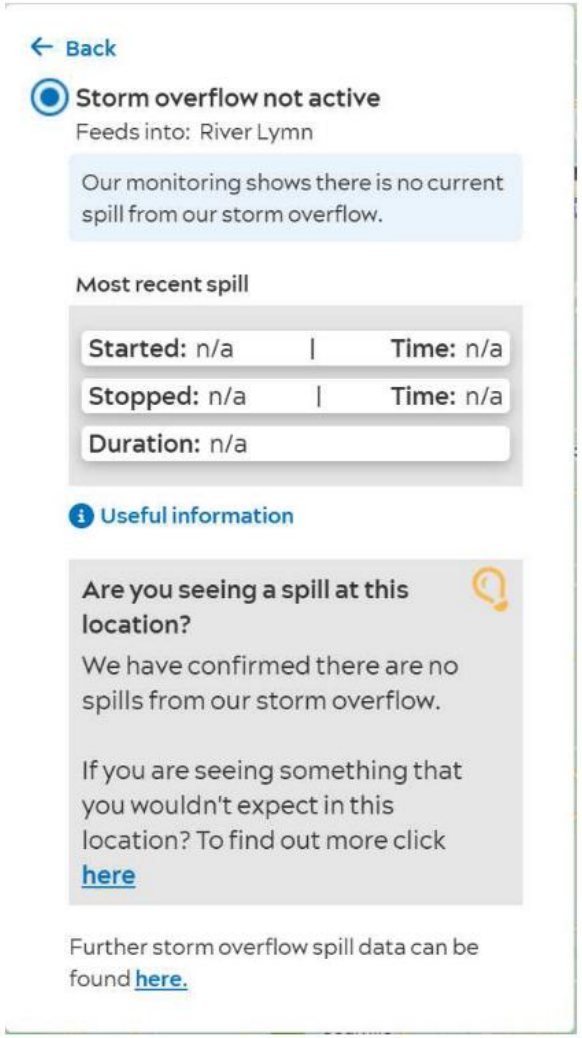
More on p24

- The average duration of spills per EDM equals **84 hours** during 2022 compared with 232 hours in 2021 and 405 hours in 2018 when we first reported EDM information.
- The average number of spills across all storm overflows was **15**, down from 25 the year before.
- At the end of 2023, our EDM coverage is **100%**, up from 68% in 2022 – this gives us greater insight than ever before

While we are pleased with our progress, but there is absolutely more to do!

How can I find out more?





What does it look like for Norfolk?

Data still being formatted

We welcome scrutiny on our water recycling and pollutions

Over 2020-2025 we're investing £811 million as part of our Water Industry Natural Environment Programme – the largest programme of any water company. This includes £200m of direct investment in reducing storm overflow spills

Setting the scene: the big picture

Across the UK combined sewer overflows contribute just 4% of the reasons why UK rivers are not high quality (and only 1% in the East of England).

Other drivers impacting river water quality include:

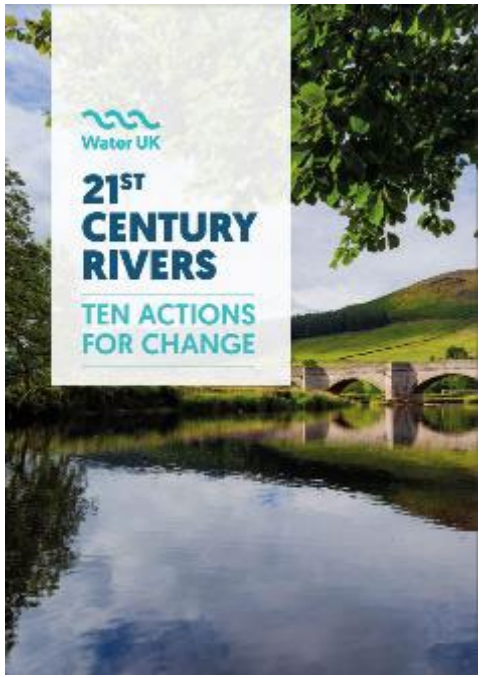
- Agriculture and rural management
- Urban development and transport
- Non-native species
- Misconnected plumbing

Storm spills investment in numbers

- **Accelerated £200 million+ AMP7 programme**
- **Installing more storm tanks: £80 million**
- **Increasing capacity at water recycling centres, reducing the risk of spills to the environment: £56 million**
- **Targeting investment to increase monitoring, directly reduce spills and pollutions, and protect the environment: £46 million**
- **Improving bathing water quality: £21.5 million**
- **Installing sustainable drainage solutions: £20 million**

The future we want to see

- The statutory need to tackle storm overflows ensuring prioritisation through the price review process
- A new, jointly owned national plan for rivers
- An end to the automatic right to connect
- A ban on wet wipes that don't meet Fine to Flush standards
- Collaborative action to restore rivers and natural habitats



love every drop anglianwater

Investment Details 2020-2025: Going beyond the regulations

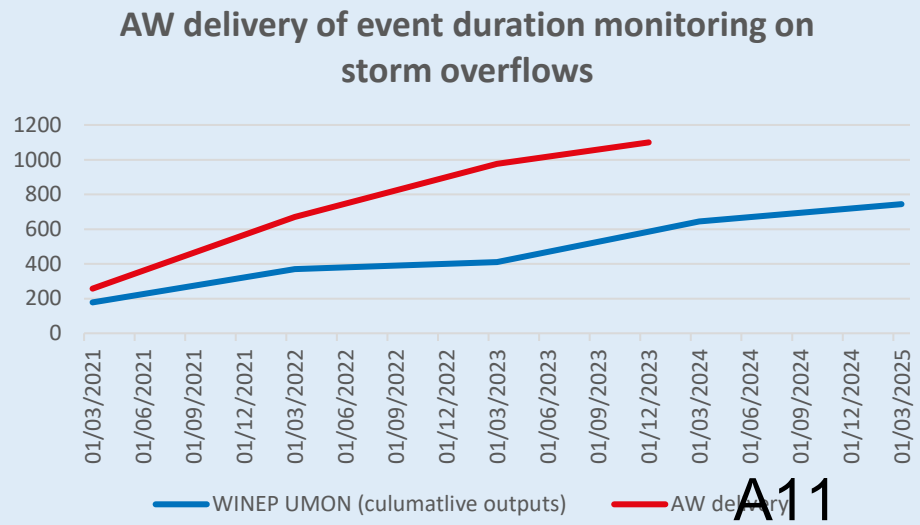
In the period 2020-2025 Anglian Water were funded to deliver the following environmental improvements for storm overflows:

- Deliver 77% event duration monitoring coverage on storm overflows by 2025
- Deliver 10 storm overflow improvement schemes on the highest risk overflows (in terms of ecological impact) reducing spills to 40 per year.

In recognition of the high public concern regarding storm overflow, Anglian Water has committed to go beyond it's regulatory requirement and Ofwat allowed funding for storm overflows for this period. We have committed to:

- 100% coverage of storm overflows by December 2023.
- 11 storm overflow improvement schemes, aiming to go beyond 40 spill requirements wherever possible.
- 2 of these improvement schemes are located in the Norfolk region

Site name	Environmental obligation	What Anglian Water is delivering
Runton Water Lane TPS SO	n/a	Solution to get to 10 spills / yr in 2025
Feltwell WRC	40 spills per year by 2025	Solution to get to 10 spills / yr in 2025



Investment Details 2025-2030: Environmental programme

Headline figures for Norfolk area

- 192 Storm Overflows in this region
- 59 of these already spill less than 10 times per year (based on 2022 spill monitor data) which is the spill target for 2050.
- Between 2020-2025 we are investing over £2million. This is 20% of the overall spend.
- Between 2025-2030 we will be investing over £123million* on improvements to storm overflows within Norfolk County Council.
- Interventions include: Improved monitoring, storm storage tanks & lagoons (both within the sewer network and at our WRCs), new screens to prevent the visible pollution impact of storm spills and installing sustainable urban drainage system (SuDS) to prevent rain water entering the sewers.

*Note this is before Final Determination from OFWAT

Investment Details 2025-2030: Named spill reduction schemes

We have a number of storm overflows in Norfolk County Council's area that have been identified for spill reduction schemes between 2025-2030 based on collaborative prioritisation meetings with Rivers Trust, EA, Natural England and Anglian Water.

There remains opportunities to swap in / swap out schemes

Site	Provisional Solution Strategy	Estimated Cost
BRISTON STW	Increase the pass forward flows at the WRC	£2,211,379.70
BURNHAM MARKET STW	Lagoon for storm water storage	£540,626.31
BYLAUGH-NEAR CHURCH STW	Lagoon for storm water storage	£505,561.93
CAISTER STW	Blended solution to include sustainable urban drainage system (SuDS) - rain gardens and storm storage tanks	£26,341,419.97
DOWNHAM MARKET-RAILWAY SSO	Offline storm water storage	£705,655.18
FAKENHAM STW (NEW)	Sustainable urban drainage system (SuDS) - wet swales and surface water disconnection	£581,027.35
FAKENHAM-NORWICH ROAD OV	Sustainable urban drainage system (SuDS) - surface water disconnection	£1,959.22
GORLESTON BRUSH BEND OV	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£7,199,741.27
GORLESTON-BAKER ST SP	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£7,683,286.94
GT YARMOUTH SUFFLING RD SP	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£4,744,842.13
GT YARMOUTH-BOUNDARY RD SP	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£8,410,003.93
GT YARMOUTH-BRYANTS QUAY SM	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£4,190,331.57
GT YARMOUTH-GARRISON RD SP	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£2,419,638.37
GT YARMOUTH-TOWN HALL SP	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£1,565,858.90
GT YARMTH-N DENES/JELLICO R SP	Sustainable urban drainage system (SuDS) - wet swales & surface water disconnection	£1,630,789.98
HORNING-KNACKERS WOOD STW	Wetland storm water storage	£1,280,247.98
HUNSTANTON SOUTH END ROAD TPS	Offline storm water storage	£1,002,918.90
HUNSTANTON-SMUGGLERS LANE SP	Online man hole storm water storage	£7,354.24
KINGS LYNN-GAYWOOD OUTFALL OV	Offline storm water storage	£647,633.31
KINGS LYNN-GAYWOOD OUTFALL SSO	Offline storm water storage	£647,633.31
KINGS LYNN-NAR LANE SP	Offline storm water storage	£2,000,000.00
KINGS LYNN-PURFLEET QUAY SP	Offline storm water storage	£1,839,633.11
MUNDESLEY-DELL CHALET PK OV	Offline storm water storage	£650,000.00
NORWICH ANGEL ROAD	Offline storm water storage	£826,882.69
NORWICH, COW TOWER O/F SSO	Offline storm water storage	£1,090,571.18
NORWICH-FYE BRIDGE (N) SSO	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£3,520,776.36
NORWICH-GIBRALTER GARDENS CSO	Offline storm water storage	£2,137,113.47
NORWICH-KING STREET SSO #2	Blended solution to include Sustainable urban drainage system (SuDS) - rain gardens and offline storm water storage	£14,714,075.31
SWAFFHAM STW	Sustainable urban drainage system (SuDS) – surface water disconnection & a smart network to control network storage	£1,812,773.16
WHITLINGHAM TROWSE STW	Lagoon for storm water storage	£1,083,749.26
WYMONDHAM STW	Storm water storage tanks	£13,676,577.91

Thank you for listening