Rotherham Metropolitan Borough Council: Combined Sewer Overflow (CSO) briefing

Introduction

We understand public concerns regarding discharges from Combined Sewer Overflows (CSOs). Whilst CSOs have been in use for many decades, electronic monitoring has allowed a better understanding of the performance of these assets.

This briefing provides background to the use of CSOs, as well as outlining our plans to reduce the number of discharges from our network.

What are CSOs?

Combined sewers collect effluent from homes and businesses, as well as surface water (i.e. water that runs of pavements, roads, etc). During normal operations the combined effluent is treated and discharged into water courses as final treated effluent.

However, during heavy rainfall, or if there are blockages in our network, the sewer network can reach capacity. In this case, once the network and emergency storage are full, CSOs act as a relief valve and discharge effluent into a watercourse. In the majority of cases, effluent will pass through a grill to prevent large items leaving the sewer.

The use of overflows therefore stops sewage escaping into homes, gardens, and streets.

Event Duration Monitoring (EDM) i.e. Discharge Data

The recording of discharges has increased as we have installed Event Duration Monitoring (EDM) devices on our network. At Yorkshire Water we have some of the best monitoring in the water sector, with 98.1% of Yorkshire's overflows already monitored compared to an industry average of 89%. We will have 100% coverage by the end of the year.

Increased monitoring has naturally led to an increase in the number of recorded discharges, rather than the number of actual discharges. The distinction is important because whilst increased monitoring has allowed a greater understanding of performance, it does not necessarily mean that the situation has deteriorated.

Recognising the public desire for increased transparency, we have joined the wider water sector in a commitment for near-to live reporting of Combined Sewer Overflow data by January 2024. This is ahead of the timeline set down by Government. The data is near-to live because there will be an approximately 1-hour gap before publication while we conduct collation and verification.

This data will be accessible to the public and interested stakeholders via an online public map. At present we publish our discharge performance annually, with the information accessible for previous years on an interactive map on our website.

Investment before 2025

Under the 2020-25 Yorkshire Water business plan approved by our regulator, £147million of capital investment was included to ensure permit compliance at our wastewater treatment works. This investment focussed on ensuring treatment works have the required capacity to handle flows of effluent, as well as meeting requirements for storm tank storage. Effluent is stored in storm tanks until demands on the treatment works have dropped and the effluent can be treated. This investment is helping to reduce discharges to waterways.

However, we understand the increased public focus on overflows since our business plan was approved, and therefore our owners committed an extra £100million to the business, to allow an additional £180million to be invested in discharge reduction. This additional investment should see an average 20 per cent reduction in total discharges (from 2021 baseline figures),and is due to be completed by the end of this business plan period in 2025.

The work to identify which CSOs will be improved before 2025 is underway and all CSOs discharging more than 40 times in 2021 have been investigated. We have now narrowed down the prospective sites to circa 180 sites, and the priority is reducing total discharge numbers in the shortest time.

Investment from 2025 onwards

Asset Management Period (AMP) 8 begins in 2025 and we will submit our business plan for 2025-30 in October 2023. The Government's Storm Discharge Overflow Reduction Plan (SODRP), published in August 2022, has shaped our planning for investment in storm overflows in AMP8 and beyond.

The SODRP focuses not just on reducing the number of discharges, but prioritises reducing the impact of discharges on sensitive sites, including those of biodiversity or recreational importance. For this reason our investment in AMP8 isn't focussed solely on reducing total discharge numbers, but on tackling those sites with the highest impact.

Within our draft AMP8 business plan, there are 210 overflow sites proposed for investment across Yorkshire, totalling investment of £1billion.

Bills and customer impacts

Whilst our business plan is yet to be finalised and assessed by our regulators, we are conscious of the need to ensure customer bills are affordable and we have been carefully monitoring the impact of our plan on customers' bills.

Under the proposals within our business plan for 2025–30, we aim to increase the number of customers on our main social tariff, WaterSupport, from approximately 66,000 in 2023 to 90,000 per year during 2025–2030. This has already increased from approximately 43,000 in 2022.

Additionally, we plan for WaterSupport to evolve into a three-banded meanstested tariff as opposed to a flat-rate payment. This will ensure that support is targeted to the lowest income households, who we expect may receive a bill reduction in 2025-26 under this new system

We will also maintain successful our debt support schemes to enable customers to access support when required.

Yorkshire Water's total expenditure on customer support will increase from £46million in 2023 to £52million per year (before inflation), with the total number of households supported increasing from 125,000 in 2023 to 146,000.

Outcome for river water quality

The Environment Agency stated that storm overflows are a reason why 7 per cent of waterbodies fail to reach 'good' ecological status. This is compared to 40 per cent for agriculture and 18 per cent for Urban and Transport reasons. Therefore, while it is important that we reduce overflow discharges through investment as set out above, it is not the case that reducing discharges alone will result in good ecological status for waterways.

Other work around river health

While the health of waterbodies is often the responsibility of the Environment Agency, Yorkshire Water does have a direct interest in areas where we collect raw water for treatment and distribution as drinking water. For that reason, in specific areas of our region we support schemes such as peatland restoration and sustainable farming practices.

We have recently launched a new River Health team, which will be a team of approximately 30 once recruitment is completed. The team will engage with interested stakeholders to improve river health.

We have a significant history of working in partnership to improve water quality, particularly at our coastal bathing water sites. In 2012 nine of our coastal bathing water sites were classed as below 'good', whereas that number is now only two.

We are committed to continuing our partnership working on this issue, and look forward to continued engagement with Rotherham Metropolitan Borough Council.

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