EDM Storm Overflow Annual Return Summary Reporting 2023

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Table 1: 2023 EDM Headlines	Anglian Water (AWS)	Dwr Cymru Welsh Water (DC/WW) (in England)	Northumbrian Water (NW)	Severn Trent Water (SvT)	South West Water (SWW)	Southern Water (SW)	Thames Water (TW)	United Utilities (UU)	Wessex Water (WSSX)	Yorkshire Water (YWS)
Total no. storm overflows listed in the annual return in 2023	1,563	127	1,565	2,472	1,374	977	698	2,264	1,295	2,195
Total no. active storm overflows listed in the annual return in 2023 ¹	1,432	127	1,565	2,426	1,356	976	619	2,255	1,295	2,190
Total no. storm overflows with EDM commissioned ²	1,432	127	1,565	2,426	1,356	976	619	2,255	1,295	2,190
% active storm overflows listed with EDM commissioned 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total no. storm overflows with spill data in 2023	1,423	120	1,546	2,421	1,342	962	610	2,147	1,295	2,165
Average no. spills per storm overflow with spill data in 2023	22.2	35.0	30.1	24.9	43.4	30.7	27.9	45.4	32.0	35.9
Average duration (hrs) per monitored spill event in 2023	8.6	5.6	6.0	7.3	9.1	10.8	11.6	6.7	9.0	6.6

³ Statistic updated to % active storm overflows listed with EDM commissioned to provide clarity on how the statistic is calculated.

Table 2: 2023 EDM Summary Statistics	Anglian Water (AWS)	Dwr Cymru Welsh Water (DC/WW) (in England)	Northumbrian Water (NW)	Severn Trent Water (SvT)	South West Water (SWW)	Southern Water (SW)	Thames Water (TW)	United Utilities (UU)	Wessex Water (WSSX)	Yorkshire Water (YWS)
Total no. number of monitored spill events in 2023	31,623	4,204	46,492	60,253	58,249	29,494	16,990	97,537	41,453	77,761
Average no. spills per storm overflow with spill data in 2023	22.2	35.0	30.1	24.9	43.4	30.7	27.9	45.4	32.0	35.9
Total duration (hrs) of monitored spill events in 2023	273,163	23,354	280,029	440,446	530,737	317,285	196,414	656,014	372,341	516,386
Average duration (hrs) per monitored spill event in 2023	8.6	5.6	6.0	7.3	9.1	10.8	11.6	6.7	9.0	6.6
% storm overflows spilled ≤10 times in 2023	51.7%	35.0%	37.7%	48.2%	37.6%	42.7%	48.2%	30.7%	37.8%	37.1%
Percentage time operating [spilling] during 2023 per overflow (average)	2.2%	2.2%	2.1%	2.1%	4.5%	3.8%	3.7%	3.5%	3.3%	2.7%

Table 3: 2023 EDM Device Operation	Anglian Water (AWS)	Dwr Cymru Welsh Water (DC/WW) (in England)	Northumbrian Water (NW)	Sevem Trent Water (SvT)	South West Water (SWW)	Southern Water (SW)	Thames Water (TW)	United Utilkies (UU)	Wessex Water (WSSX)	Yorkshire Water (YWS)
Total no. storm overflows with EDM Operation data	1,432	127	1,565	2,426	1,356	976	619	2,255	1,295	2,190
% storm overflows with EDM Operation data provided where expected	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
% storm overflows with 0% EDM Operation during reporting period	0.6%	5.5%	1.2%	0.2%	1.0%	1.4%	1.5%	4.8%	0%	1.1%
% storm overflows with ≥90% EDM Operation during reporting period	93.2%	83.5%	86.8%	83.0%	87.1%	85.5%	75.4%	88.4%	95.6%	81.7%
% storm overflows with <90% EDM Operation during reporting period	6.8%	17%	13.2%	17.0%	12.9%	14.5%	24.6%	11.6%	4.4%	18.3%
% of those with <90% operability with reason provided	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 4: 2023 Storm Overflow Spill Performance	Anglian Water (AWS)	Dwr Cymru Welsh Water (DC/WW) (in England)	Northumbrian Water (NW)	Severn Trent Water (SvT)	South West Water (SWW)	Southern Water (SW)	Thames Water (TW)	United Utilities (UU)	Wessex Water (WSSX)	Yorkshire Water (YWS)
% with EDM installed & provided count data - with 0 spill count (did not spill)	17.8%	7.5%	10.6%	14.5%	16.8%	15.2%	19.0%	9.5%	13.7%	14.0%
% storm overflows with spill data - recorded ≥1 spill count	82.2%	92.5%	89.4%	85.5%	83.2%	84.8%	81.0%	90.5%	86.3%	86.0%
% recorded 5 spills or less	41.0%	21.7%	29.3%	37.2%	29.1%	33.7%	39.7%	23.1%	29.3%	29.1%
% recorded 10 spills or less	51.7%	35.0%	37.7%	48.2%	37.6%	42.7%	48.2%	30.7%	37.8%	37.1%
% recorded >10 spills	48.3%	65.0%	62.3%	51.8%	62.4%	57.3%	51.8%	69.3%	62.2%	62.9%
% recorded 20 spills or more	37.0%	54.2%	50.8%	39.4%	54.2%	46.5%	39.2%	58.9%	50.6%	53.8%
% recorded 40 spills or more	20.3%	33.3%	30.1%	22.7%	40.1%	29.4%	24.4%	43.7%	31.1%	35.5%
% recorded 60 spills or more	11.6%	21.7%	16.0%	12.7%	29.6%	18.7%	17.5%	31.6%	18.6%	23.4%
% recorded 100 spills or more	3.2%	6.7%	4.3%	4.4%	12.9%	5.7%	7.7%	13.1%	5.8%	8.2%
% recorded 200 spills or more	0.1%	0%	0.3%	0.2%	1.4%	0.3%	0%	0.9%	0.2%	0.3%

Table 5: 2023 Storm Overflow Spill Reasons Please note these metrics are in development. In 2023 there is some inconsistency in approach by different Water & Sewerage Companies	Anglian Water (AWS)	Dwr Cymru Welsh Water (DC/WW) (in England)	Northumbrian Water (NW)	Severn Trent Water (SvT)	South West Water (SWW)	Southern Water (SW)	Thames Water (TW)	United Utilities (UU)	Wessex Water (WSSX)	Yorkshire Water (YWS)
No. monitored storm overflows that spilled >60 in one year	161	24	234	300	390	177	104	666	230	493
Of those that spilled over SOAF thresholds of >60x in one year, % with a reason provided	100%	58.3%	100%	100%	100%	100%	100%	100%	100%	100%
Of those that spilled over SOAF thresholds of >60x in one year, what % due to exceptional rainfall throughout the year?	77.6%	0%	14.5%	48.0%	12%	22%	0%	6.8%	26.1%	7.1%
Of those that spilled over SOAF thresholds of >60x in one year, what % due to other operational (incl. asset maintenance)?	7.5%	4.2%	7.3%	13.0%	13.8%	65.0%	40.4%	19.2%	31.3%	6.3%
Of those that spilled over SOAF thresholds of >60x in one year, what % due to hydraulic capacity reasons?	9.9%	12.5%	66.7%	32.0%	19.2%	11.9%	49.0%	66.5%	29.6%	83.6%
Of those that spilled over SOAF thresholds of >60x in one year, what % N/A - Ongoing Investigation for primary reason?	5.0%	41.7%	11.5%	7.0%	55.1%	1.1%	10.6%	7.5%	13.0%	3.0%

Storm overflows are permitted to operate due to rate due to represent the root cause for high spill frequency can be attributed to three main reasons over and above response to typical rainfall. These are fully defined in the Storm Overflow Asset Exceptional rainfall: This does not refer to individual rainfall events, but rather the rainfall across the reporting year. Two datasets can be used to determine whether rainfall in the reporting year was "exceptional" or not (over & above typical rainfall) – (1) Environment Agency If rainfall was exceptional and deemed the primary reason for high spill count then this is indicated in the annual return (Column W).

Asset Maintenance: Where the asset (form overflow) and potentially passed to the upstream & downstream seven relevok have not operated as designed/expected, high spill counts (over 60 times per year) can be caused.
If asset maintenance is deemed the primary reason for high spill count his is indicated in the annual relaum (column W). The different asset maintenance categories are listed in the EDM dataset README guide Appendix A.
Hydraulic capacity: If the reason for a high spilling starm ownforw (over 60 times per year) is neither "overgothoral rainfall" in "overgothoral rainfall" in the reason is classified under the "Hydraulic capacity" category.
This indicates there is insufficient capacity (conveyance or storage) in the sever network to cope with the wastewater flow plus hybrial rainfall entering the sever network.

Link to: Storm Overflow Assessment Framework (SOAF)

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% 'active' storm overflows listed with EDM commissioned	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total no. storm overflows with EDM device operability data	1,432	127	1,565	2,426	1,356	976	619	2,255	1,295	2,190
% storm overflows with EDM Operation data provided where expected	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total no. storm overflows with spill data	1,423	120	1,546	2,421	1,342	962	610	2,147	1,295	2,165
% storm overflows listed with spill data	91.0%	94.5%	98.8%	97.9%	97.7%	98.5%	87.4%	94.8%	100%	98.6%
% storm overflows with <90% operability where valid reason provided	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
% of storm overflows >60 spills in one year with a reason provided	100%	58.3%	100%	100%	100%	100%	100%	100%	100%	100%

¹ Inclusion of Total no. active storm overflows with EDM commissioned is calculated using the no. of active storm overflows. In previous years, all storm overflows were considered, including sites no longer operations.