EDM Storm Overflow Annual Return Summary Reporting 2022

Table 1: 2022 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)	Water Company Totals / Average
Total no. storm overflows listed in the annual return in 2022	1,552	126	1,564	2,466	1,342	978	777	2,254	1,300	2,221	14,580
Total no. storm overflows with EDM commissioned	1,058	126	1,542	2,457	1,333	963	480	2,004	1,182	2,178	13,323
% storm overflows listed with EDM commissioned	68.2%	100%	98.6%	99.6%	99.3%	98.5%	61.8%	88.9%	90.9%	98.1%	91%
Total no. storm overflows with spill data in 2022	1,054	120	1,463	2,438	1,323	939	472	1,971	1,182	2,118	13,080
Average no. spills per storm overflow with spill data in 2022	15.3	23.3	20.3	18.4	28.5	17.8	17.0	35.1	18.5	25.6	23.0
Average duration (hrs) per monitored spill event in 2022	5.6	3.4	3.6	5.6	7.7	8.8	9.3	6.1	5.9	4.3	5.8
Table 2: 2022 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)	Water Company Totals / Average
Total no. number of monitored spill events in 2022	16,082	2,800	29,697	44,765	37,649	16,688	8,014	69,245	21,878	54,273	301,091
Average no. spills per storm overflow with spill data in 2022	15.3	23.3	20.3	18.4	28.5	17.8	17.0	35.1	18.5	25.6	23.0
Total duration (hrs) of monitored spill events in 2022	89,514	9,470	107,536	249,116	290,271	146,819	74,693	425,491	129,957	232,054	1,754,921
Average duration (hrs) per monitored spill event in 2022	5.6	3.4	3.6	5.6	7.7	8.8	9.3	6.1	5.9	4.3	5.8
% storm overflows spilled ≤10 times in 2022	55.7%	45.8%	47.4%	54.2%	48.6%	51.8%	54.2%	39.5%	48.2%	44.3%	48.4%
Percentage time operating [spilling] during 2022 per overflow (average)	1.0%	0.9%	0.8%	1.2%	2.5%	1.8%	1.8%	2.5%	1.3%	1.3%	1.5%
Table 3: 2022 EDM Device Operation	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)	Water Company Totals / Average
Total no. storm overflows with EDM Operation data	1.058	126	1.542	2.457	1.333	963	479	1,863	1.182	2,178	13,181
% storm overflows with EDM Operation data provided where expected	100%	100%	100%	100%	100%	100%	100%	93.0%	100%	100%	98.9%
% storm overflows with 0% EDM Operation during reporting period	0.4%	4.8%	5.1%	0.8%	0.8%	2.5%	1.5%	0%	0%	2.8%	1.6%
% storm overflows with ≥90% EDM Operation during reporting period	91.1%	82.5%	82.0%	70.7%	84.8%	87.2%	85.8%	95.9%	93.7%	76.8%	83.6%
% storm overflows with <90% EDM Operation during reporting period	8.9%	17.5%	18.0%	29.3%	15.2%	12.8%	14.2%	4.2%	6.3%	23.2%	16.4%
% of those with <90% operability with reason provided	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	10070	10070	10070	10070	10070	10070	10070	10070	10070	10070	
Table 4: 2022 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)	Water Company Totals / Average
% with EDM installed & provided count data - with 0 spill count (did not spill)	13.1%	15.8%	14.2%	20.1%	23.6%	19.6%	19.9%	15.3%	16.0%	16.8%	18%
% storm overflows with spill data - recorded ≥1 spill count	86.9%	84.2%	85.8%	79.9%	76.4%	80.4%	80.1%	84.7%	84.0%	83.2%	82%
% recorded 5 spills or less	38.8%	30.8%	34.9%	43.6%	39.5%	41.4%	40.0%	30.6%	36.0%	35.6%	37%
% recorded 10 spills or less	55.7%	45.8%	47.4%	54.2%	48.6%	51.8%	54.2%	39.5%	48.2%	44.3%	48%
% recorded >10 spills	44.3%	54.2%	52.6%	45.8%	51.4%	48.2%	45.8%	60.5%	51.8%	55.7%	52%
% recorded 20 spills or more	28.7%	44.2%	38.8%	32.9%	40.5%	34.1%	30.9%	49.7%	36.5%	43.6%	39%
% recorded 40 spills or more	9.8%	24.2%	17.6%	14.4%	25.1%	15.1%	15.3%	33.4%	14.6%	25.7%	20%
% recorded 60 spills or more	3.1%	8.3%	6.5%	7.3%	16.9%	5.2%	6.6%	21.8%	4.5%	14.1%	11%
% recorded 100 spills or more	0.5%	1.7%	1.2%	1.5%	6.7%	0.7%	0.2%	7.8%	1.0%	2.5%	3%
% recorded 200 spills or more	0%	0%	0%	0.2%	0.7%	0%	0%	0.8%	0%	0.1%	0%
Table 5: 2022 Storm Overflow Spill Reasons Please note these metrics are in development. In 2022 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)	Water Company Totals / Average
No. monitored storm overflows that spilled >60 in one year	29	10	93	166	219	49	31	421	48	289	1,355
Of those that spilled over SOAF thresholds of >60x in one year, % with a	100%	50.0%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%
reason provided	/ .	55.070	. 30 / 0	. 30 / 5	. 30 /0	. 30 /0	. 30 / 0	. 30 / 0	. 30 /0	/ .	501070
exceptional rainfall throughout the year?	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Of those that spilled over SOAF thresholds of >60x in one year, what % due to exceptional rightand throughout the year?
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These are fully defined in the Storm Overflow Assessment Framework (SOAF) and summarised below:

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 water situation reports or (2) local rainfall records. If rainfall was exceptional and develop the annual return (column W). Asset Maintenance: Where the asset (storm overflow) and potentially parts of the upstream & downstream sever network 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 this is indicated in the annual return (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 spiling storm overflow (over 60 times per year) is nellher "exceptional rainfail" nor "asset maintenance" then 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 typical rainfail entering the sever network.

Link to: Storm Overflow Assessment Framework (SOAF)

Table 6: 2022 EDM Storm Overflow Annual Return Data Entry	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)	Water Company Totals / Average
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% storm overflows listed with EDM commissioned	68.2%	100%	98.6%	99.6%	99.3%	98.5%	61.8%	88.9%	90.9%	98.1%	91%
Total no. storm overflows with EDM device operability data	1,058	126	1,542	2,457	1,333	963	479	1,863	1,182	2,178	13,181
% storm overflows with EDM Operation data provided where expected	100%	100%	100%	100%	100%	100%	100%	93.0%	100%	100%	98.9%
Total no. storm overflows with spill data	1,054	120	1,463	2,438	1,323	939	472	1,971	1,182	2,118	13,080
% storm overflows listed with spill data	67.9%	95.2%	93.5%	98.9%	98.6%	96.0%	60.7%	87.4%	90.9%	95.4%	89.7%
% storm overflows with <90% operability where valid reason provided	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
% of storm overflows >60 spills in one year with a reason provided	100%	50%	100%	100%	100%	100%	100%	100%	100%	100%	99.6%

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