

# Annual environmental performance report for Dŵr Cymru Welsh Water 2023

## Introduction

Our purpose is to pursue the sustainable management of natural resources in all our work. This means looking after the air, land, water, wildlife, plants and soil to improve Wales' well-being, and provide a better future for everyone.

We monitor the activities of water companies to minimise the impact their assets and activities have on the environment. We do this by checking their environmental performance throughout the year in areas such as reducing pollution incidents, complying with permits and licences and delivering environmental improvement schemes.

We regulate Dŵr Cymru Welsh Water<sup>1</sup>'s ("Dŵr Cymru") operations in Wales and the Environment Agency regulate Dŵr Cymru's operations in England; therefore, the Environment Agency have contributed to the performance assessment process and this report. All data reported in this report is for Dŵr Cymru's performance as a whole company so is combined for England and Wales, unless otherwise stated. We also assess Hafren Dyfrdwy's performance which you can find on our [website](#).

## Report contents

This annual environmental performance report is in two parts. In the first part, we assess Dŵr Cymru's performance against the seven metrics in the Environmental Performance Assessment (EPA). The EPA is standardised across England and Wales. This allows the performance of the ten largest water and sewerage companies to be monitored and assessed in a consistent way by the environmental regulators. In the second part we monitor and assess the performance of other key work areas not covered by the EPA metrics. This report does not cover every aspect of water company regulation.

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# Part 1: Dŵr Cymru’s 2023 Environmental Performance Assessment

The EPA metric thresholds are reviewed every five years to continually drive improvements. This report on 2023 performance is the third year we assess performance against the tighter and broader EPA metrics of the 5-year EPA period (2021-25). The changes to the metrics ensure we continue to press the water companies to meet their statutory obligations and ensure our expectation for the water companies to continue to push for improvement are clear.

In 2023 Dŵr Cymru achieved green status for two EPA metrics, amber status for three EPA metrics and red status for two EPA metrics. This means the company achieved a 2-star overall company rating, which means the ‘company requires improvement’. It is disappointing to see Dŵr Cymru’s performance has remained at 2-star for two consecutive years following their 3-star ‘good company’ rating in 2021, and 4-star ‘industry leading company’ rating in 2020.

Here is a summary of Dŵr Cymru’s performance:

EPA metric	2023 result	Comparison to previous years’ performance
Metric 1: Total pollution incidents (sewerage)	30 (Amber)	Remained at amber
Metric 2: Serious pollution incidents (sewerage and water supply assets)	7 (Red)	Remained at red
Metric 3: Self-reporting of pollution incidents (sewerage and water supply assets)	70% (Amber)	Remained at amber
Metric 4: Discharge permit compliance (numeric)	98% (Red)	Dropped to red after several years amber/green
Metric 5: Satisfactory sludge use and disposal	99.84% (Green)	Excluded metric 2018-2020, green in 2022 and 2023
Metric 6: Asset Management Plan National Environment Programme Delivery	100% (Green)	Remained green
Metric 7: Supply Demand Balance Index	99 (Amber)	Dropped to amber after 5 years green
Overall company star status	<b>2-star</b>	Remained at 2-star, the same status as 2022

Key: Metric status

Green	Performance better than target
Amber	Performance below target
Red	Performance significantly below target

Key: Overall company star rating

4-star	Industry leading company
3-star	Good company
2-star	Company requires improvement
1-star	Poor performing company

## Headline performance messages

As summarised on page 2, in 2023 Dŵr Cymru achieved performance significantly below target for two metrics, performance close to or below the target on three metrics and performance better than target on two metrics:

- **Metric 1:** The total number of sewerage pollution incidents (category 1-3) metric saw a deterioration in performance. It remained at amber, but pollution incidents increased by around 20% compared to 2022;
- **Metric 2:** There were seven serious sewerage pollution incidents (a relative increase of 40% compared to the previous year) meaning this metric remained red;
- **Metric 3:** Self-reporting of pollution incidents performance increased by 1% compared to 2022, remaining at amber;
- **Metric 4:** Compliance with numeric water quality permit conditions deteriorated to 98%, dropping to red;
- **Metric 5:** The satisfactory sludge use and disposal metric remained green at 99.84%;
- **Metric 6:** 100% of Dŵr Cymru's Asset Management Plan improvement schemes were delivered. This metric has remained green;
- **Metric 7:** A Supply Demand Balance Index score of 99 was achieved dropping the metric to amber.

The reporting year 2023 is Dŵr Cymru's worst performance to date. It is extremely disappointing that there were two red metrics for 2023, with discharge permit compliance dropping to red and serious pollution incidents remaining red, and that three metrics were amber (total incidents, self-reporting of pollution incidents and SDBI). The deterioration in performance has been in real terms and cannot be explained by the tightening of the EPA metrics which occurred in 2021.

Over the next few pages there is more detailed information on the seven EPA metrics.

### Reference information on EPA

For more detail on the EPA methodology and a table of previous years' performance, please refer to these annexes:

- [Annex 1](#) – page 22 – explains the methodology we use to assess the company's performance;
- [Annex 2](#) – page 23 – shows how Dŵr Cymru has performed against the EPA metrics since 2013.

# Pollution incidents

As regulators we respond to a wide variety of pollution incidents, some of which are from water company assets and networks. We report how many incidents each water company is responsible for. This is to drive continued reduction in the number of pollution incidents, aiming to reduce incidents to zero.

There are 4 different categories of incidents:

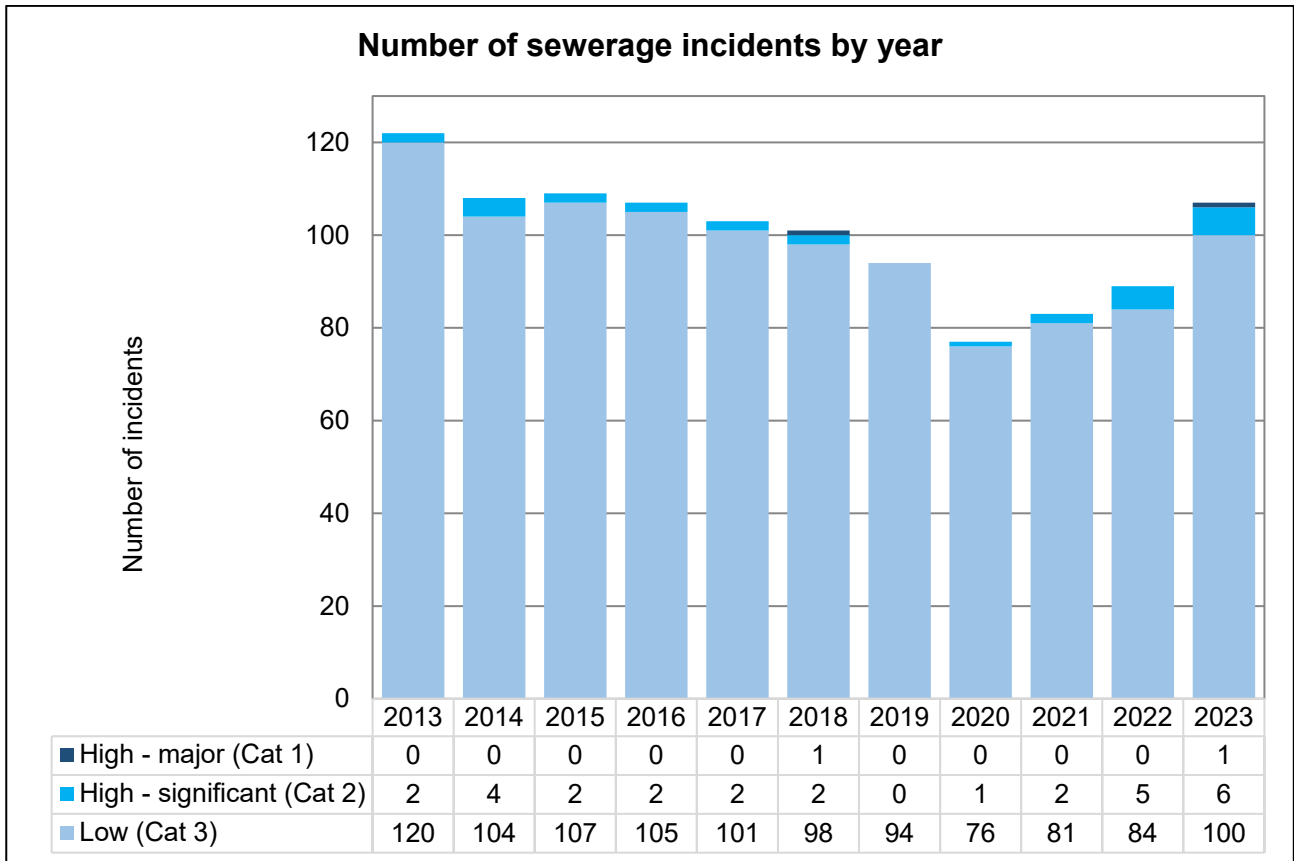
- Category 1 – Major: potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property;
- Category 2 – Significant: potential to have a significant impact or effect on the environment, people and/or property;
- Category 3 – Minor: potential to have a minor or minimal impact or effect on the environment, people and/or property;
- Category 4 – No impact: non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property.

## EPA metric 1: Total pollution incidents (sewerage)

In 2023, Dŵr Cymru had 107 High-Low (Category 1-3) sewerage pollution incidents; 100 had a Low (Category 3) environmental impact, 6 had a High-Significant (Category 2) environmental impact and 1 had a High-Major environmental impact (Category 1).

The EPA normalises incident numbers by the total sewer length the company is responsible for (36,249 km), therefore in 2023 Dŵr Cymru achieved amber for this metric:

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>Total pollution incidents (sewerage)</b>	Category 1-3 incidents per 10,000 km of sewer	How many sewerage pollution incidents occurred, of Category 1-3, by sewer length	30 (Amber)



As the graph above shows, between 2013 and 2019 there was a marginal decrease of 28 incidents over six years. In 2020 there was a decrease of 17 incidents, to achieve green status for the first time, and this good performance continued in 2021. Since 2021 there has been a year on year increase of 24 incidents (from 83 in 2021 up to 107 in 2023). It is disappointing Dŵr Cymru did not sustain their improvement in this metric from 2020.

There was an increase in incidents from assets in England from 11 in 2022 to 31 in 2023, the vast majority being from sewage treatment works and water supply assets.

We expect Dŵr Cymru to take accountability for this increase in pollution incident numbers and make a concerted effort to focus their initiatives to reverse this deteriorating trend reduce incident numbers to achieve below 70 incidents by the end of the cycle (2025), and work towards the long term goal of zero incidents. We expect Dŵr Cymru to use best practice from across the sector to continually drive down pollution.

## **EPA metric 2: Serious pollution incidents (category 1 and 2 from sewerage and water supply assets)**

This metric looks at the number of serious pollution incidents. As shown in the graph above, there were six serious incidents in 2023 that had a High-Significant (Category 2) environmental impact, and one serious incident that had a High-Major (Category 1) environmental impact. Since 2021, serious clean water incidents (from water supply assets) have been included in the metric. However, all 2023 serious incidents were sewerage related.

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>Serious pollution incidents (sewerage and water supply assets)</b>	Total number of incidents (Category 1-2)	How many serious sewerage and clean water pollution incidents occurred, of Category 1-2, total number	7 (Red)

The 2023 reporting year is Dŵr Cymru’s worst performance in this metric for ten years. There was a relative increase in serious sewerage pollution incidents of 40% from five in 2022 to seven in 2023, and there has been a troubling year on year increase since 2020. We expect Dŵr Cymru to push for improvement in this area and work quickly towards reducing serious incidents from sewerage assets and ensure there continue to be zero from water supply assets, utilising industry best practice and acting quickly on findings from post incident root cause analysis.

## Self-reporting incidents

As a regulator we want water companies to self-report as many of the pollution incidents as possible. This means we can be more confident the water company:

- understands their assets and networks better;
- continually looks for ways to improve how they predict pollution incidents, including using their own telemetry data to improve levels of self-reporting;
- use their data to identify hot spots and target high risk locations and specific asset types;
- attends and reacts to incidents quickly to stop any impact as soon as possible.

### EPA metric 3: Self-reporting of pollution incidents (category 1-3 from sewerage and water supply assets)

As the graph below shows, Dŵr Cymru’s performance in this metric has shown a small improvement for 2023. In previous reports we have pushed Dŵr Cymru to aim to self-report at least 80% of their pollution incidents.

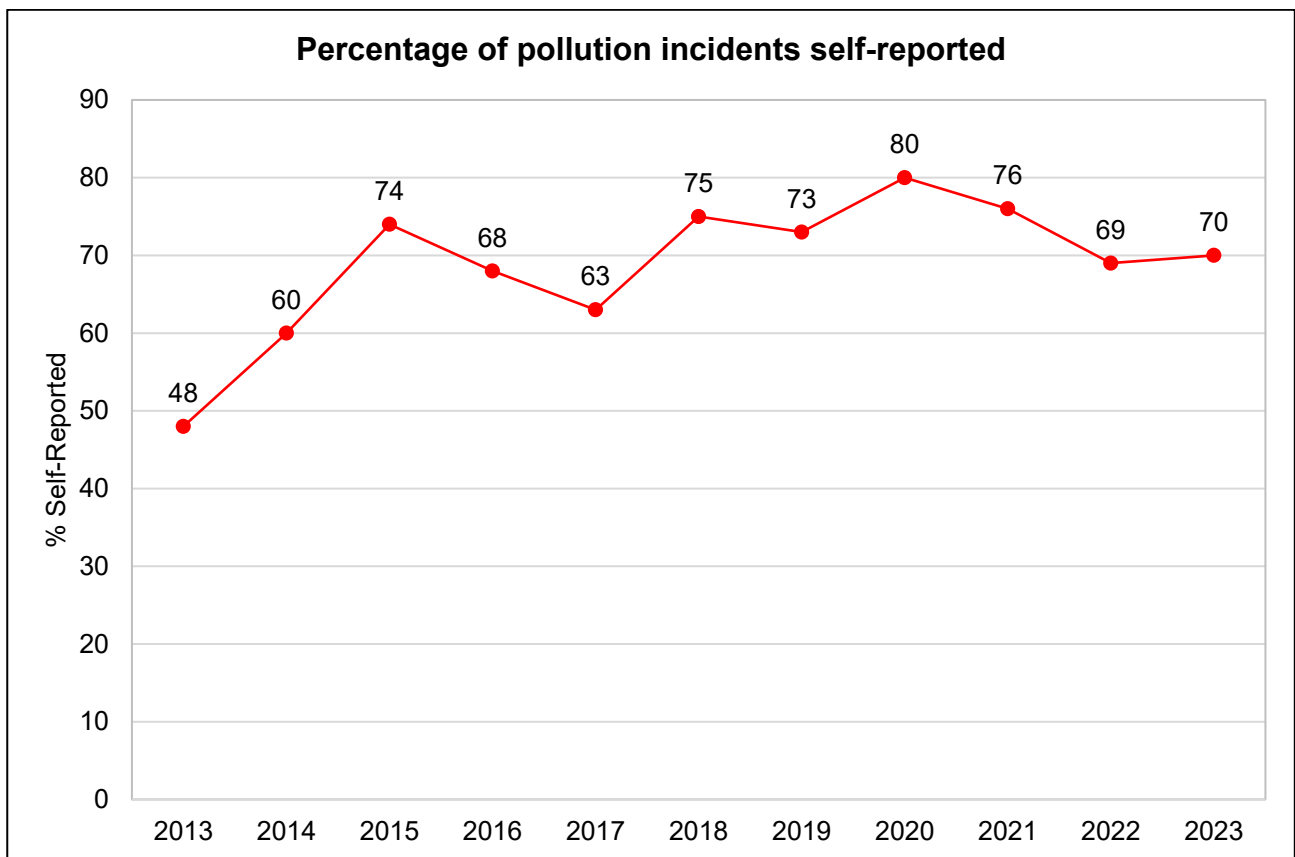
The company achieved their highest rate of self-reporting in 2020 (80%), but in 2021 the company dropped to 76% (amber) and further again in 2022 to 69%. This year showed a slight improvement, increasing by 1% to 70%.

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>Self-reporting of pollution incidents (sewerage and water supply assets)</b>	%	Percentage of pollution incidents the company self-reported	70% overall 65% at STWs and PSs (Amber)

With the tighter EPA metrics, Dŵr Cymru can only achieve green status if they achieve 80% overall and also self-report 90% of all incidents at Pumping Stations (PSs) and sewage treatment works (STWs).

Dŵr Cymru’s minor improvement in performance in this metric is positive, though they need to make a marked improvement to reach green status. The jump from 46% to 65% of incidents self-reported at PSs and STWs is a positive step change, however there is work to do. If the company had self-reported 100% of the 45 incidents at STWs and PSs, self-reporting would have been over 80% overall. These types of assets are expected to have telemetry installed allowing early notification and self-reporting, so the company need to make further improvements at these two asset types to be able to achieve 90% in 2024 and reach green status again.

We encourage Dŵr Cymru to consider initiatives and innovative technologies used across the industry to ensure a further step change in self-reporting, particularly for STWs and PSs.



## Water discharge permit compliance

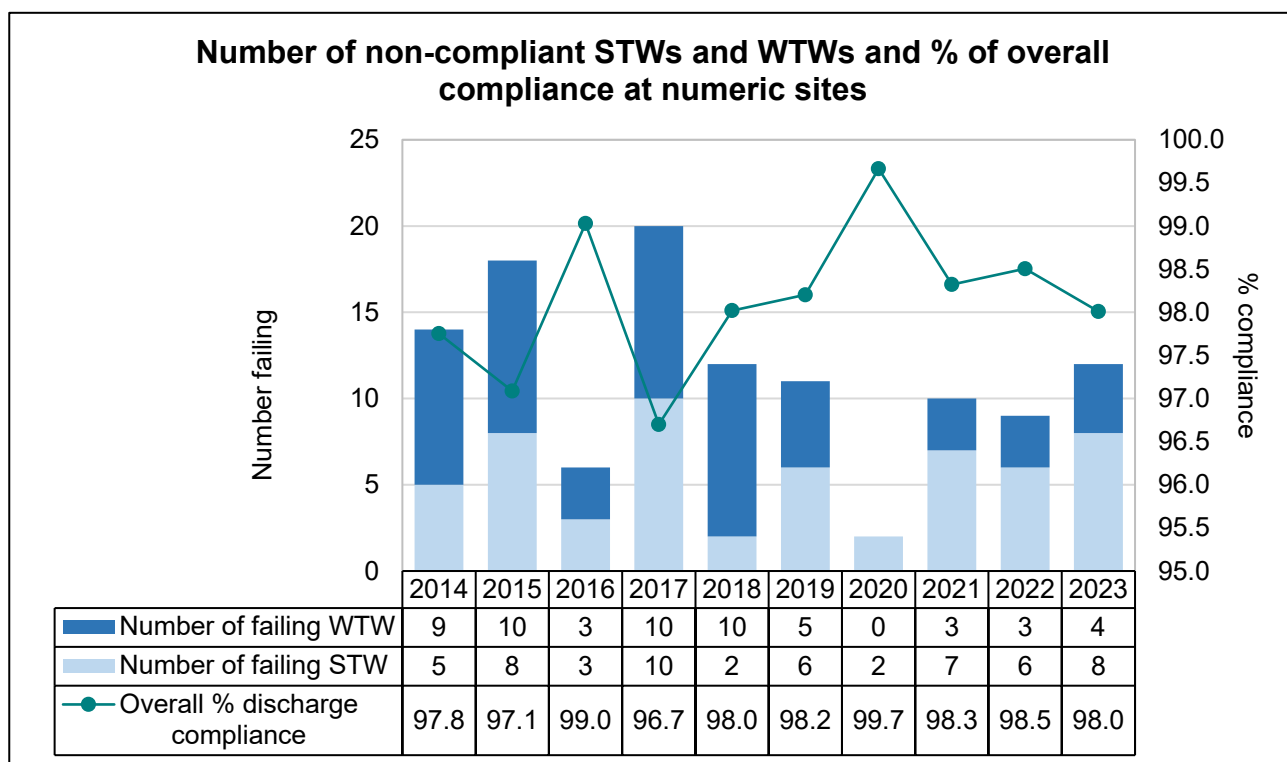
Natural Resources Wales and the Environment Agency issue permits for water discharges, including treated discharges from water company STWs and WTWs. The permits require the discharges to meet specific criteria to make sure there is no deterioration to the water environment. Water companies self-monitor their discharges and are required to provide data to us which we assess for compliance. Both regulators have increased their compliance assessment activities, including site inspections and audits, and we expect all permit conditions to be complied with.



## EPA metric 4: Discharge Permit Compliance (STWs & WTWs)

In 2023, Dŵr Cymru achieved red for this metric as they were 98% compliant with the water quality limits on their numeric permits for STWs and WTWs. This is similar to their performance in 2022 (98.5%) but drops below the requirement for amber. In 2023, of the sites Dŵr Cymru operate there were eight non-compliant STWs out of 563 and four non-compliant WTWs out of 40.

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>Discharge permit compliance (STWs &amp; WTWs)</b>	%	Percentage compliance of Sewage Treatment Works and Water Treatment Works with water quality limits on their discharge	<b>98 (Red)</b>



As the graph above shows, Dŵr Cymru’s performance on this metric had fluctuated for several years, before the company achieved their best performance in 2020. It is the worst Dŵr Cymru have performed in this metric since 2017.

We expect Dŵr Cymru to seek opportunities to monitor and proactively identify STWs and WTWs which may be dropping in performance in-year, with the aim of achieving 100% compliance with this metric. Whilst Dŵr Cymru have never achieved 100%, this target has been achieved by other companies in the sector.

Closely related to numeric condition compliance is descriptive condition compliance, which had a poor year in 2020 but has improved since. It is important Dŵr Cymru comply with all conditions within their permits, so there is still work to be done to improve compliance. See pages 10-11 for more detail on descriptive condition compliance.



## EPA metric 5: Satisfactory sludge use and disposal metric

The satisfactory sludge use/disposal metric was suspended from 2018 to 2020 to review how we assess and report performance consistently across the water companies on this activity. In 2021 the metric was run as a shadow metric and it was then reinstated as a full reporting metric for the 2022 reporting year.

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>Satisfactory sludge use and disposal metric</b>	%	Whether compliance with relevant legislation relating to the storage, recycling and/or disposal of sewage sludge is being adhered to	99.84 (Green)

Dŵr Cymru achieved 99.84% and green status for this metric, which they have achieved every year this metric has been reported. There was a marginal drop from 100% this year, and we expect them to increase performance to 100% for 2024 by continuing to inspect their S3 stockpiles to ensure they are secure.

## EPA metric 6: AMP National Environment Programme delivery

This metric looks at how Dŵr Cymru have delivered against their 5-year Asset Management Plan (AMP) period, April 2023-March 2024. It looks at the percentage of schemes delivered compared to the cumulative schemes planned from 2020-2025.

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>AMP National Environment Programme Delivery</b>	% of planned delivery	Whether the Asset Management Plan National Environment Programme is being delivered to plan	100 (Green)

In 2023/24 Dŵr Cymru delivered 265 schemes as planned – four improvement schemes, 221 investigation schemes and 40 monitoring schemes. The cumulative total of AMP NEP schemes completed to date is 328. The improvements delivered by the programme will mean assets achieve higher standards and deliver water quality improvements. We expect Dŵr Cymru to maintain green status for 2024.

## EPA metric 7: Supply Demand Balance Index

The Supply Demand Balance index (SDBI) metric measures how the actual supply demand balance has performed compared to what is set out in a water company's Water Resources Management Plan (WRMP). We expect companies to have a score of 100.

In 2023/24, Dŵr Cymru had a SDBI score of 99. This metric saw a deterioration in performance, dropping to amber. The score of 99 was due to the company reporting a small deficit in one water resource zone (Mid and South Ceredigion). This means that this zone was at a greater risk of needing customer restrictions if that area of Wales had experienced drought conditions in 2023/24. The company stated that it did not have a

water supply risk during the actual year. We expect the company to increase its efforts in leakage control and water efficiency to reduce the demand for water to maintain a secure water supply in all zones this year and achieve a score of 100 for 2024/25.

EPA metric	Unit of measurement	What this metric means	2023 result (metric status)
<b>Supply Demand Balance Index</b>	SDBI score, max. 100	How the actual supply demand balance has performed compared to what is set out in their Water Resources Management Plan (WRMP)	99 (Amber)

## Metric – in development: water quality descriptive permit condition compliance

In addition to the EPA metrics, it is important to also look at descriptive permit condition compliance trends at STWs and WTWs. Descriptive conditions relate to non-numeric aspects such as maintenance, management and reporting. With descriptive condition performance noticeably lower than numeric condition performance each year, we want more scrutiny on descriptive conditions.

This metric is currently in development so we can ensure it is robust and reported accurately. We will continue to report on Dŵr Cymru’s performance against this ‘metric – in development’ annually. We expect to see improving performance year-on-year. We will consider how descriptive compliance can be formally brought into the next 5-year EPA reporting period (2026-2030).

	Percentage of sites compliant with their descriptive conditions	Number of non-compliant sites
<b>2020</b>	63%	317
<b>2021</b>	87%	112
<b>2022</b>	91%	74
<b>2023</b>	87%	110

As the table shows, there has been a noticeable improvement in descriptive condition compliance at STWs and WTWs since the poor performance in 2020, increasing from 63% of sites to 91% in 2022. However in 2023, 110 sites were non-compliant out of 844 STWs and WTWs (numeric and descriptive permitted sites). Whilst this is an improvement from 2020, it is a drop since last year, and is below our expectation of 100% compliance, so we expect to see this downturn in 2023 reversed in 2024.

The majority of the 110 sites were non-compliant due to breaches related to monitoring, reporting and notification of Operator Self-Monitoring and Urban Wastewater monitoring programmes that we identified during our compliance assessment. The majority had non-compliances categorised as 3 or 4, with 20 category 2 non-compliances, which are classed a significant.

For descriptive condition compliance overall, we expect the company to:

- take swift and positive action to ensure that the root cause of the non-compliances seen in 2023 are rectified as soon as possible;

- improve their overall descriptive condition performance year-on-year aiming for 100% compliance;
- focus on stopping all Category 1 and 2 descriptive condition non-compliances as these have the potential for serious environmental impact.

### **Storm overflow permit compliance assessment**

Through our normal incident response and compliance assessment work carried out in 2023, we found 72 permitted storm overflows (sewage pumping stations, combined sewer overflows and storm discharges from STWs) to be non-compliant for a variety of reasons. The three most common types of non-compliance are described below.

- 38 sites have been evidenced as non-compliant due to discharging in non-storm or non-emergency conditions from issues such as sewer blockages and maintenance. One site had a category 1 non-compliance, six sites had a category 2 non-compliance, 26 sites had a category 3 non-compliance, and five sites had a category 4 non-compliance; remedial actions were required and the majority were issued with a Warning, with some being considered for higher levels of enforcement.
- 15 sites were non-compliant for failing to submit their 2023 Event Duration Monitoring (EDM) data as required, or if the EDM equipment was operational for less than 90% of the year. We required remedial action and recorded 14 sites with a category 3 non-compliance and one site with a category 4 non-compliance; the majority were issued with a Warning.
- 11 sites were non-compliant for failing to submit a Trigger Exceedance Notification (TEN) or the required report three months after; seven sites were recorded with a category 3 non-compliance and four sites were recorded with a category 4 non-compliance; the majority were issued with a Warning, with some being considered for higher levels of enforcement.

## **Part 2: Dŵr Cymru's wider environmental performance**

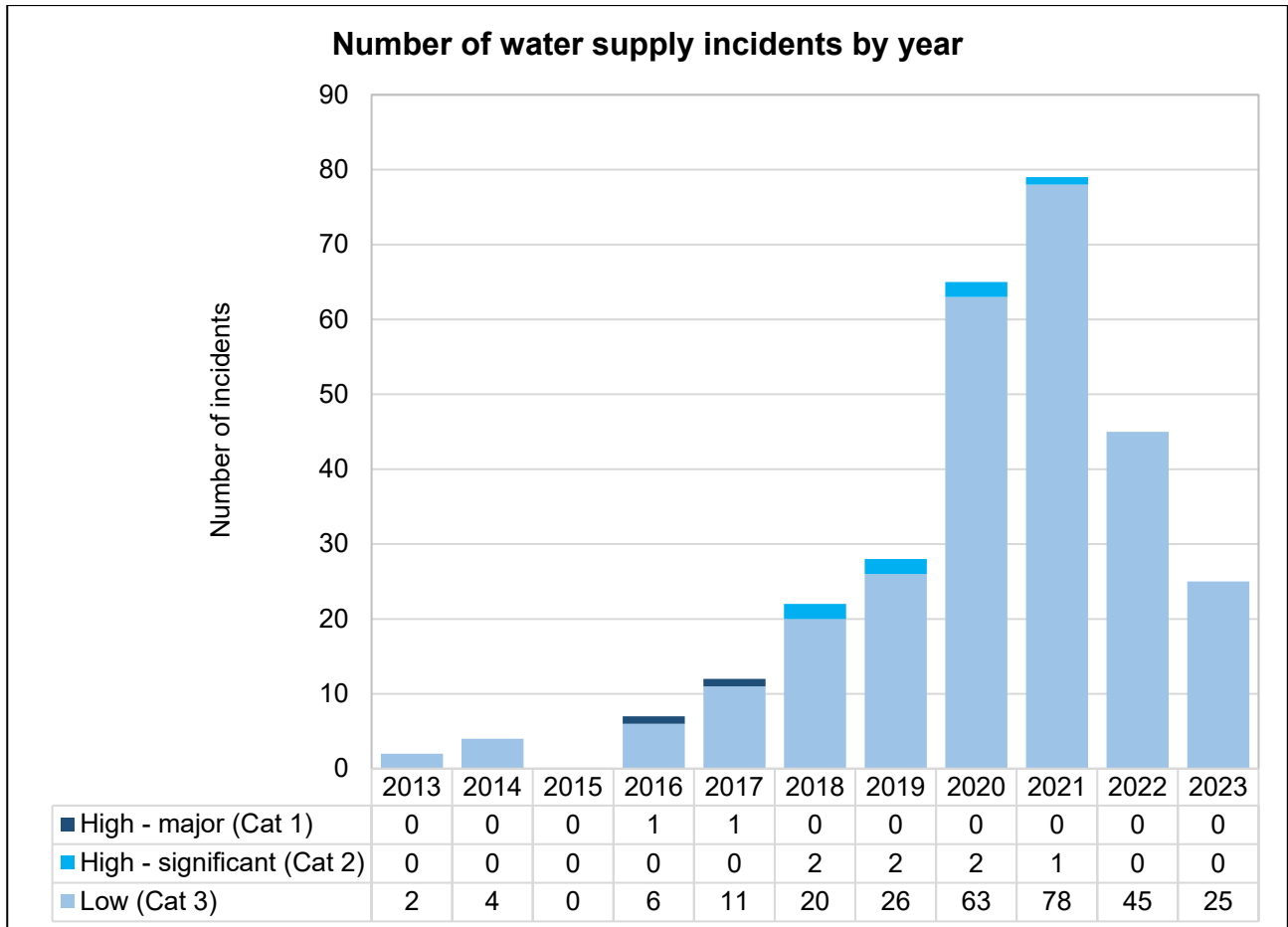
The seven EPA metrics are a subset of environmental performance. There are other areas of monitoring, reporting and regulatory work we carry out related to Dŵr Cymru's activities, some of which are in Part 2 of this report. Some aspects are closely related to the EPA metrics, such as pollution incidents and compliance, whereas some are wider.

### **Pollution incidents (water supply assets)**

As well as sewerage incidents, we also monitor the number of incidents from assets related to the supply of drinking water. Although they are not included in the pollution incidents (sewerage) EPA metric 1, they are an important aspect of environmental performance. These incidents often involve the discharge of partially or fully treated drinking water from water supply assets, such as WTWs and water distribution systems (water mains). The discharges have the potential to contain chemicals such as chlorine,

aluminium or iron; they can often discharge at high velocity, so can cause pollution incidents related to silt in the watercourse.

In 2023 there were 25 pollution incidents from water supply assets – all incidents were Low (Category 3), with there were no serious (Category 1-2) incidents.



The overall performance for water supply incidents improved further in 2023, following a peak in incidents over 2020-21. This is likely linked to the run-to-waste permitting efforts at various Water Treatment Works.

We expect Dŵr Cymru to reduce the number of all incidents (sewerage and water supply), so we want to see continued reduction in incidents from water supply assets.

## Flow compliance at sewage treatment works

Dŵr Cymru provided Dry Weather Flow (DWF) data in accordance with their permit requirements.

26 Wastewater Treatment Works (WwTWs) in Wales exceeded their DWF permit limits during 2022 where the measured Q90 DWF was greater than the permitted flow limit. This includes both previously reported and first-time exceedances.

There were also 6 WwTWs in England where the measured Q90 DWF was greater than the permitted flow limit during 2022.

These exceedances resulted in the sites discharging more treated sewage than permitted.

Dŵr Cymru are required to carry out investigations and report the cause of the exceedance to us, and, where appropriate complete remedial action within an agreed timescale.

33 WwTWs in Wales and 5 in England were reported as having experienced data issues in 2022 which the company is working to resolve.

During 2022, in Wales 101 sites were reported as being investigated by Dŵr Cymru due to queries over their flow to full treatment (FFT) permitted limits, which means they may not be treating the flow required by their permits. A number of these have been resolved during 2022 and are now considered compliant with no further work required. Recent increased monitoring as part of the NEP W\_U\_MON3 and W\_U\_MON4 installations and associated new permit conditions for Flow Passed Forward (FPF) are considered a factor in the increased number of reportable risks.

Dŵr Cymru has made progress with their internal management system for MCERTS certification, a system which independently audits and certifies the suitability and accuracy of their flow monitoring equipment. All their sites in England and Wales were compliant with MCERTS re-certification requirements in 2022.

Late in 2021 the Environment Agency and Ofwat announced they would investigate potential non-compliances with FFT permit conditions from STWs in England. The investigations are analysing information submitted by water companies to regulators that highlight potential permit non-compliances.

In Wales, we do not plan to undertake a similar investigation at present, as we already have a compliance response in place. Dŵr Cymru has been sharing similar information with us since 2014. This work identified sites that needed investigation by Dŵr Cymru who then looked at the cause/s of non-compliance. We have worked with Dŵr Cymru to ensure the sites return to compliance with their permit at the earliest opportunity.

We will continue to monitor the investigations by the Environment Agency and Ofwat in England and are working closely with both organisations to understand the outcomes of the investigation. We will review our current regulatory approach in Wales, if necessary.

## Permitted storm overflows – Wales only

Dŵr Cymru have installed event duration monitors (EDM) to monitor the number and duration of spills, on the majority of their permitted storm overflows in Wales. This means EDM will be installed on the following assets:

- storm overflows on the sewer network (combined sewer overflows);
- storm overflows from pumping stations;
- storm overflows at STWs.

In this section, we share data on permitted storm overflows only. For storm overflows currently operating without a permit, we have a significant programme of work underway to bring them within our regulatory framework, where appropriate.

More information on storm overflows can be found on our [website](#).

In 2023 Wales experienced an exceptionally wet March (the fifth wettest March in over 180 years), followed by a prolonged dry spring. April – June (combined) saw 60% of the expected rainfall for the same three-month equivalent period and prolonged dry weather was declared for mid-June until early August. June was also confirmed as one of the hottest on record: [Climate change impacts June temperature records - Met Office](#).

The second half of July 2023 saw the return of wet weather. This resulted in July receiving 180% of rainfall expected – making this one of the wettest July's on record. We declared a return to normal status (in respect to drought) by early August.

The latter six months of the year (July-December) saw above average rainfall receiving 134% (combined). This six-month period was also one of the wettest six months on record. The year as a whole saw 115% of the annual average expected rainfall. Met Office have confirmed that 2023 was also one of the warmest on record: [2023: The warmest year on record globally - Met Office](#).

Unusually wet periods have the potential to result in increased spill frequency and duration, whilst dry weather has the opposite effect. We are working on a robust method to identify when spills are occurring in dry weather that will allow us to better assess storm overflow performance.

## EDM data we are reporting

In this report, we have used the 2023 EDM summary data submitted by the water company in their annual regulatory return to NRW. EDM summary data from permitted storm overflows in England is not presented in this report.

To improve transparency, for 2022 data onwards, we asked water companies to provide more information in their EDM data submissions. For example, we now require the type of asset to be specified; this could be a storm overflow on the sewer network, at a wastewater treatment works or at a pumping station.

We are planning to provide more detail on EDM data aligned to the work in the Better River Water Quality Taskforce.

Dŵr Cymru listed 1,982 permits in their 2023 return. We continued to issue EDM variations to storm overflow permits during 2023. The small number outstanding have plans in place to install EDM by the end of 2024.

We used the data as received from the water company to produce the graphs and percentages below. We will continue work to improve the data completeness and accuracy for the storm overflow data.

### Data completeness

In 2023, 276 (14%) of the water company's EDMs were in operation for less than 90% of the year, which is below the agreed industry standard. We expect the water company to improve EDM operability so that all EDMs are operating for at least 90% of the time as soon as possible.

## Number of spills

The block counting methodology used to count spills from storm overflows is the 12/24 counting method:

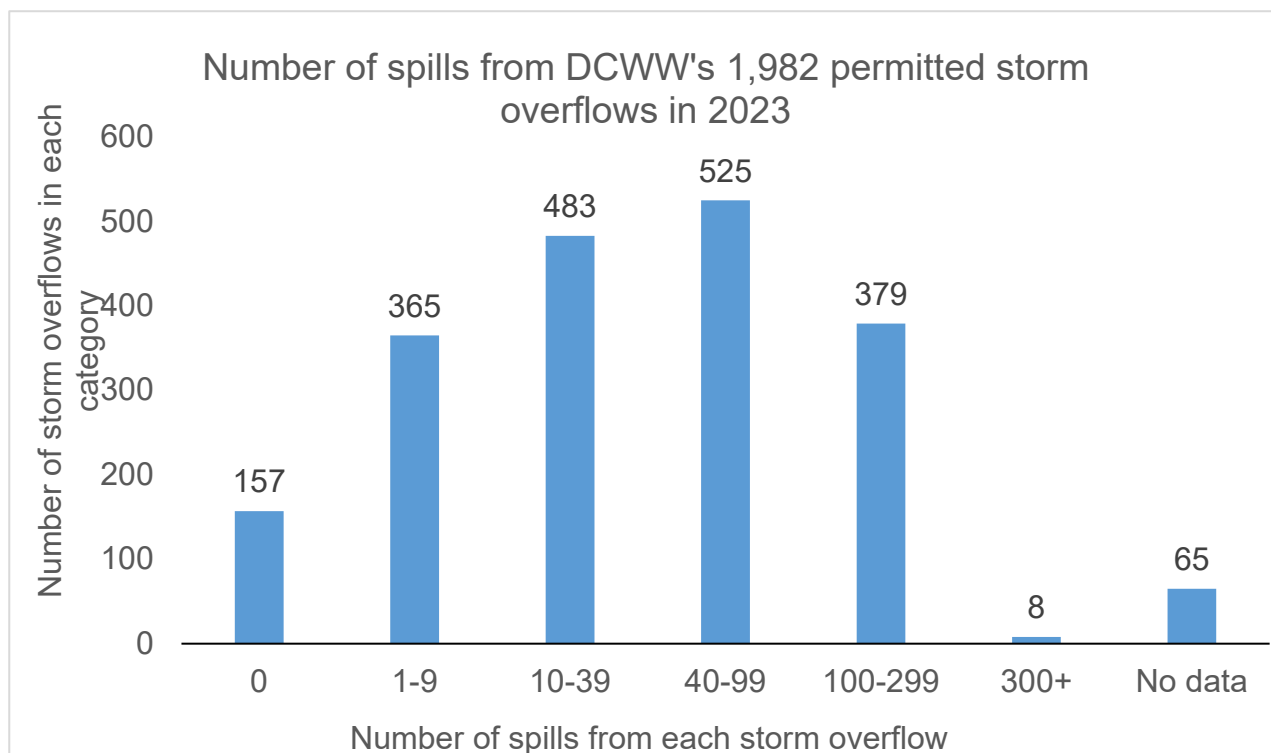
- Start counting when the first discharge occurs.
- Any discharge (or discharges) in the first 12-hour block are counted as one spill.
- Any discharge (or discharges) in the next, and subsequent 24-hour blocks, are each counted as one additional spill per block.
- Continue counting until there's a 24-hour block with no discharge.

For the next discharge after the 24-hour block with no discharge, you begin again with the 12-hour and 24-hour block spill counting sequence. NRW and the Environment Agency use this same approach for consistency across water companies.

The 2023 EDM data for 1,982 of Dŵr Cymru's permitted storm overflows, on the number of spills (using the block counting methodology), tells us:

- 3% (65) had no data provided;
- 8% (157) had 0 spills;
- 18% (365) spilled between 1 and 9 times;
- 24% (483) spilled between 10 and 39 times;
- 26% (525) spilled between 40 and 99 times;
- 19% (379) spilled between 100 and 299 times;
- Less than 1% (8) spilled more than 300 times.

The graph below displays this data:



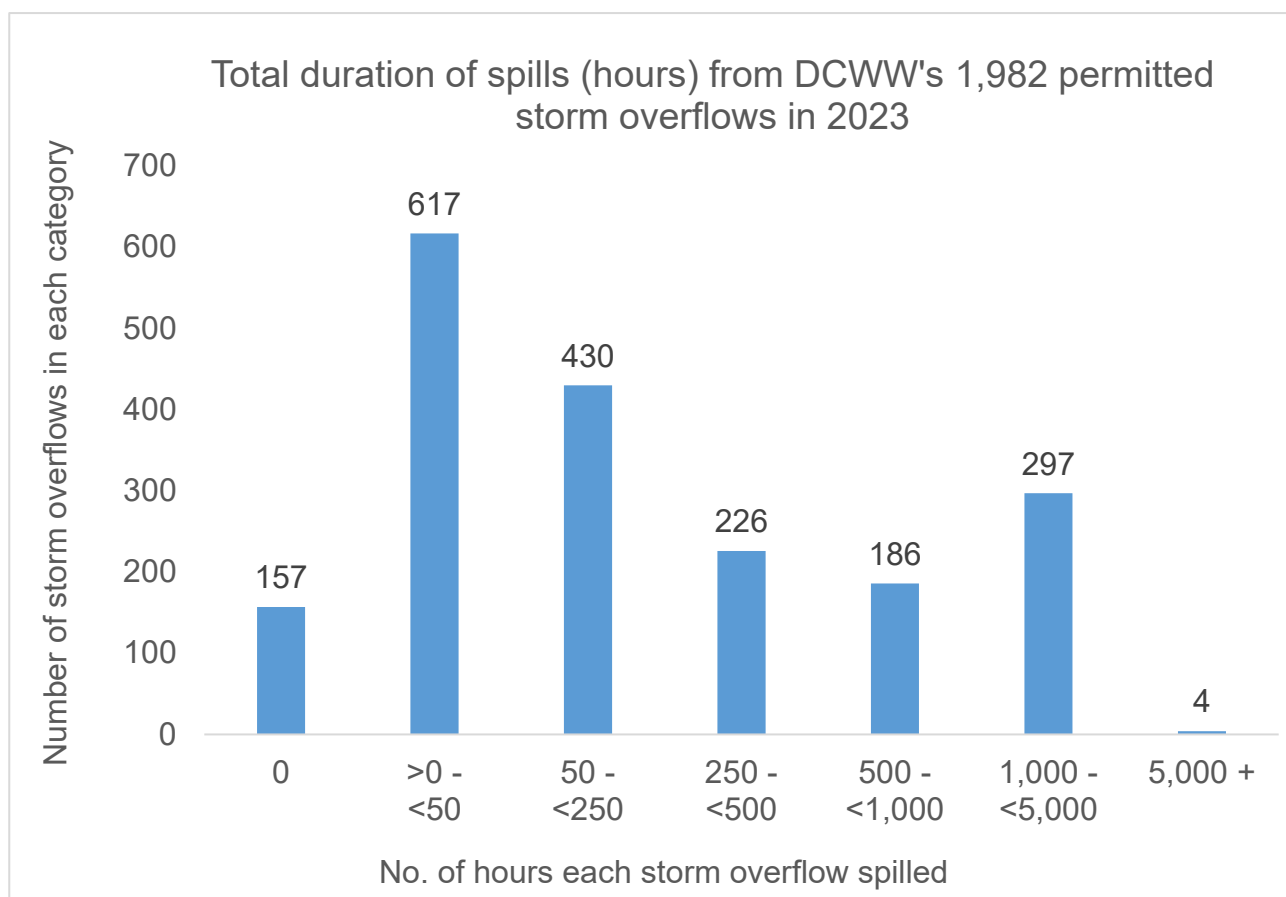


## Duration of spills

The 2023 EDM data for 1,982 of Dŵr Cymru's permitted storm overflows, on the duration of spills, tells us:

- 3% (65) had no data provided;
- 8% (157) had 0 hours of spills;
- 31% (617) spilled for more than 0 but less than 50 hours;
- 22% (430) spilled for at least 50 hours but less than 250 hours;
- 11% (226) spilled for at least 250 hours but less than 500 hours;
- 9% (186) spilled for at least 500 hours but less than 1,000 hours;
- 15% (297) spilled for at least 1,000 hours but less than 5,000 hours;
- Less than 1% (4) spilled for more than 5,000 hours.

The graph below displays this data:



## Better River Water Quality Taskforce

On 5 July 2022 the Better River Water Quality Taskforce published action plans alongside its storm overflow roadmap on our [website](#). These set out objectives and measurable outcomes for delivering improvements to the management and environmental regulation of overflows in Wales. We are a partner on this taskforce alongside Welsh Government, Ofwat, Dŵr Cymru and Hafren Dyfrdwy, which is independently advised by Afonydd Cymru and Consumer Council for Water.

As the action plans in the roadmap set out, we are developing our regulatory framework to ensure water companies address the environmental impact of spills from storm overflows.

We continue our commitment to working with water companies and partners as part of the better River Quality taskforce. As part of our actions we have provided a detailed report of storm overflows alongside this report. You will be able to find it on our [Water Reports webpage](#) from 23 July 2024. For an overview of storm overflows, please read our [Storm Overflows webpage](#).

## Future reporting

We are continuing to develop our regulatory approach in how we verify, assess and use the EDM data the water companies submit to us. This includes developing a robust way of identifying storm overflows which are failing to comply with their permit conditions.

We will continue to develop how we monitor and report performance on storm overflows in line with our actions detailed in the storm overflow action plans, working closely with the Better River Water Quality Taskforce.

We are also progressing work to enable us to share EDM summary data from the regulatory return on our public register.

## Water resources licence compliance

In 2023, we carried out seven compliance assessments of different Dŵr Cymru water resources licences. Six compliance assessments were found to be compliant. However, we found breaches of licence condition during one compliance assessment, where there was a loss of statutory minimum compensation flow for two hours in July. We recorded a Category 3 breach for this.

## Drought planning & Water Resources Management Plans

Water companies have a duty to maintain water supplies in their area, without damaging the environment or affecting the needs of other water users. There is a statutory requirement for water companies to prepare, maintain and publish Water Resources Management Plans (WRMPs) and Drought Plans. The latest draft WRMP was published and consulted on in 2022 and expected to be finalised in Autumn 2024. The latest Drought Plan was published in March 2021 and the next draft is expected to be consulted on later this year. The plans are published every five years. For the latest information on Dŵr Cymru's WRMP and Drought Plan, please see their website:

- [Water Resources Management plan 2024 \(draft\)](#)
- [Drought Plan 2020-2025](#)

Please also have a look at our webpages for more information on these topics:

- [Water Resources Planning](#)
- [Drought](#)
- [Drought plan guidance](#)

## Supply Demand Balance Index

The Supply Demand Balance index (SDBI) metric measures how the actual supply demand balance has performed compared to what is set out in a water company's WRMP. We expect companies to have a score of 100.

Dŵr Cymru's SDBI score for 2023/24 is 99. This metric saw a deterioration in performance, dropping to amber. The score of 99 was due to the company reporting a small deficit in one water resource zone (Mid and South Ceredigion). This means that this zone was at a greater risk of needing customer restrictions if that area of Wales had experienced drought conditions in 2023/24. The company stated that it did not have a water supply risk during the actual year.

We expect the company to increase its efforts in leakage control and water efficiency to reduce the demand for water to maintain a secure water supply in all zones this year and achieve a score of 100 for 2024/25.

## Leakage and water use

Water companies submit a wide variety of data to us and Ofwat, which includes leakage rates and water use. An [investigation by Ofwat](#) found Dŵr Cymru Welsh Water misled customers and regulators on its performance on leakage and per capita consumption (water use per person) over a period of five years. We support Ofwat's findings that the company needs to address its poor performance on leakage and per capita consumption.

We're concerned that the total company leakage for 2023/24 of 261.6 million litres per day (Ml/d) has increased by 8.4 Ml/d from 2022/23. We expect the company to reduce leakage and therefore, we expect the company to review its leakage strategy and increase its effort in leakage control during 2024/25. The company's average per capita consumption has remained around 149 litres per person per day in 2023/24. Going forward using water efficiently and reducing leakage are necessary for building climate resilience for nature and people.

The revised leakage rates and water use information for 2023/24 should soon be available at [www.discoverwater.co.uk](http://www.discoverwater.co.uk).

## Waste permit compliance

Water companies operate a variety of waste activities ranging from biowaste treatment, landfill, biogas combustion, sludge incineration and transfer stations. For permitted activities we assess compliance against permit conditions and score any non-compliances. We carried out five compliance assessments at four sites in 2023. We identified a total of four breaches of permit conditions during the assessments.

The non-compliances identified were all classed as category 3. Although it is a lower category of environmental risk, we expect to see improvements to ensure full compliance.

## Enforcement (higher than a Warning)

There are numerous open investigations in Wales. There were two formal cautions and 34 Warning letters issued in the 2023 calendar year.

## Reservoir Safety

Dŵr Cymru manages 134 large, raised reservoirs; 100 of which have been designated as a “high-risk reservoir”. High-risk reservoirs are large, raised reservoirs which we designate because we think human life could be endangered in the event the dam fails, causing an uncontrolled release of water.

We recorded four non-compliances at four reservoirs during 2023. The first table shows the number of non-compliances recorded for each indicator.

	Q1	Q2	Q3	Q4
Construction	--	--	--	--
Inspection	--	--	--	--
Safety measures	2	2	4	4

The table below shows the compliance, per reservoir, as a percentage of all Dŵr Cymru’s registered reservoirs:

	Q1	Q2	Q3	Q4
Construction	100%	100%	100%	100%
Inspection	100%	100%	100%	100%
Safety measures	98.5%	98.5%	97.0%	97.0%

Dŵr Cymru’s compliance is high. The decrease in compliance is largely attributed to several large scale projects complicated by interdependence of water supply and planning consent considerations and resource capacity. None of the non-compliances infer an immediate concern for reservoir safety. Project plans are in place to address all measures and delivery of these is ongoing.

Dŵr Cymru provides regular detailed updates on progress and draw our attention to delays before the statutory deadlines. Measures are in place to protect safety and advice is frequently sought from an independent qualified civil engineer.

## Operator Monitoring Assessment (OMA)

NRW carried out an OMA audit on 20<sup>th</sup> November 2023 jointly with the Environment Agency.

We carry out these audits of operators' self-monitoring arrangements to check that WaSCs are performing the required monitoring to the monitoring standards in our permits and via our Monitoring Certification Scheme (MCERTS). The Operator Monitoring Assessment (OMA) is the systematic tool that we use to carry out these audits in order to highlight areas for improvement and promote best practice.

Of the areas assessed, Dŵr Cymru had ten areas assessed as either Good or Excellent, four areas which were assessed as having Minor non-conformities and one area which was a Major non-conformity. We required a number of improvement actions, which the company have since addressed.

# Performance expectations for 2024

## Challenges for EPA

As we continue to progress through the 5-year EPA reporting period (2021-25), we expect Dŵr Cymru to make positive progress across all seven metrics and reverse deteriorating trends evident in 2023's performance results. The EPA metrics will continue to tighten over this EPA reporting period (2021-25) ensuring targets are challenging for the company. We expect the company to implement measures to regain and maintain high company status, specifically:

- reduce the total number of sewerage incidents year on year;
- stop all serious pollution incidents (both sewerage and water supply) in the short-term;
- improve numeric water quality compliance – to achieve 100%;
- improve self-reporting of pollution incidents, with a specific focus on improving self-reporting at PSs and STWs;
- maintain performance on satisfactory sludge use and disposal;
- maintain 100% of AMP NEP scheme delivery;
- improve performance on the SDBI to reach 100.

## Challenges for wider environmental performance

As set out in Part 2 of the report, there are several other areas of environmental performance which need improvement and attention focused, namely:

- continue the positive reduction of pollution incidents from water supply assets;
- increase descriptive condition compliance to 100%;
- improve flow compliance;
- reduce the impact of storm overflows by delivering their actions in the storm overflow roadmap action plans;
- reduce leakage across the water distribution system.

# Annex 1: Methodology

## Performance assessment methodology we used

Water company performance reporting is carried out annually on a calendar year basis.

Since 2011, we have used the same Environmental Performance Assessment (EPA) metrics and methodology as the Environment Agency. This means we can consistently report and benchmark the performance of Dŵr Cymru against the other large water and sewerage companies in England.

We combine our performance data in Wales with data the Environment Agency provide to us for the Dŵr Cymru area that lies in England. This report therefore reports on performance for Dŵr Cymru as a whole.

The EPA metrics measure performance associated with:

- reducing pollution incidents and increasing company reporting of incidents;
- complying with discharge permits for sewage treatment and water treatment plants;
- compliance with legislation relating to storage, recycling &/or disposal of sewage sludge
- delivering environmental improvement schemes;
- delivering secure supplies of water (SDBI).

The EPA is set for the duration of the water companies' current AMP period which runs from April 2020 to March 2025. The metrics are absolute rather than relative. All companies measured against EPA metrics should therefore be able to achieve 4-star industry leading company status.

## Future reporting

We worked with the Environment Agency to review the EPA metrics for 2021 onwards and consulted externally (including with all the water companies). We adopted the same metrics in Wales as those in England to allow us to continue to benchmark Dŵr Cymru against the other large nine water and sewerage companies in England, and we follow the same methodology "Environment Agency water and sewerage company: Environmental Performance Assessment (EPA) methodology (version 10) for 2021 to 2025". We have decided to include a new EPA 'metric – in development' for Dŵr Cymru since 2020 (see pages 9-10) on descriptive condition compliance as we had concerns in Wales regarding performance in this area.



# Annex 2: Summary of Dŵr Cymru's EPA performance 2013-23

The table below shows how Dŵr Cymru has performed against the seven metrics since 2013:

	2013	2014	2015	2015 E <sup>2</sup>	2016	2017	2018	2019	2020	2021	2022	2023
<b>Pollution incidents (sewerage)</b> Category 1-3 incidents per 10,000 km of sewer	66	59	59	30	30	28	28	26	21	23	25	30
<b>Serious pollution incidents (sewerage &amp; water supply assets)</b> Total incidents (Categories 1 & 2)	1.1	2.2	1	0.6	0.6	0.3	0.8	0	0.3	3 <sup>3</sup>	5	7
<b>Self-reporting pollution incidents %</b>	48	60	74	74	68	63	75	73	80	76	69	70
<b>Discharge permit compliance (STWs &amp; WTWs) %</b>	97.7	97.8	98.6	97.1	99	96.7	98	98.3	99.7	98.3	98.5	98
<b>Satisfactory Sludge Use/Disposal %</b>	100	100	100	100	100	100	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>	100	99.84
<b>AMP National Environment Programme delivery % of planned delivery</b>	100	100	100	100	100	100	100	100	100	100	100	100
<b>Supply Demand Balance index (SDBI)</b>	N/A	N/A	N/A	100	100	98	100	100	100	100	100	99
<b>Company star rating</b>	3-star	3-star	3-star	3-star	3-star	2-star	3-star	3-star	4-star	3-star	2-star	2-star

Key: Company star rating

4-star	Industry leading company
3-star	Good company
2-star	Company requires improvement
1-star	Poor performing company

<sup>2</sup> The column headed 2015E refers to the 2015 dataset which has been assessed using the EPA criteria (2016-2020). This has been included for comparison purposes only. Every five years the Red/Amber/Green thresholds are reviewed.

<sup>3</sup> Under the tighter and broader EPA metrics of the new 5-year EPA period (2021-25), the serious pollution incidents metric now includes serious clean water incidents (from water supply assets).

<sup>4</sup> We suspended reporting of the sludge metric from 2018-2020 while we reviewed how we assess and report performance consistently across the water companies on this activity in the future. The sludge metric was reinstated as a shadow metric for the 2021 reporting year (2022), and as a full metric for the 2022 reporting year (2023).