

# Annual environmental performance report for Dŵr Cymru Welsh Water 2021

Prepared by the Water, Land, Biodiversity & Marine Regulatory Approaches team

## 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. We also assess Hafren Dyfrdwy's performance which you can find on our [website](#).

## Report contents

We publish this annual environmental performance report to set out Dŵr Cymru's performance; the report is in two parts. In the first part we assess Dŵr Cymru's performance against the six 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.

- Part 1: Dŵr Cymru's Environmental Performance Assessment Page 2-10
- Part 2: Dŵr Cymru's wider environmental performance Page 11-18
- Performance expectations for 2022 Page 19
- Annexes Page 20-21

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<sup>1</sup> Companies House information: DWR CYMRU CYFYNGEDIG, Company number 02366777, registered office address: Linea, Fortran Road, St Mellons, Cardiff, CF3 0LT.

# Part 1: Dŵr Cymru's 2021 Environmental Performance Assessment

In 2021 Dŵr Cymru achieved green status across three EPA metrics and amber status across three EPA metrics. This means the company achieved 'good company' status (3-star). It is disappointing to see Dŵr Cymru's performance has dropped from their 4-star 'industry leading' rating achieved in 2020.

The EPA metric thresholds are reviewed every five years to continually drive improvements. This report on 2021 performance is the first year we assess performance against the tighter and broader EPA metrics of the new 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. Here is a summary of Dŵr Cymru's performance:

EPA metric	2021 result	Comparison to previous performance
Metric 1: Total pollution incidents (sewerage)	23 (Green)	Remained green
Metric 2: Serious pollution incidents (sewerage and water supply assets)	3 (Amber)	Dropped back to amber after achieving green for 2 years
Metric 3: Self-reporting of pollution incidents (sewerage and water supply assets)	76% (Amber)	Dropped back to amber after achieving green for 1 year
Metric 4: Discharge permit compliance (numeric)	98.3% (Amber)	Dropped back to amber after achieving green for 1 year
Metric 5: Asset Management Plan National Environment Programme Delivery	100% (Green)	Remained green
Metric 6: Supply Demand Balance Index	100 (Green)	Remained green
Overall company star status	3-star	Dropped back to 3-star after achieving 4-star for the first time last year

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 2021 Dŵr Cymru achieved performance close to or slightly below the target on three metrics and performance better than target on three metrics:

- Metric 1: Total number of sewerage pollution incidents (category 1-3) saw a deterioration in performance. Although this metric has remained green, the actual number of pollution incidents increased;
- Metric 2: There was a change to the metric definition to include clean water incidents. There were two serious sewerage pollution incidents and one serious clean water incident. This metric has dropped from green to amber;
- Metric 3: Self-reporting of pollution incidents performance saw a deterioration. This metric has dropped from green to amber;
- Metric 4: Compliance with numeric water quality permit conditions also saw a deterioration in performance. This metric has dropped from green to amber;
- Metric 5: 100% of Dŵr Cymru's Asset Management Plan improvement schemes were delivered. This metric has remained green;
- Metric 6: A Supply Demand Balance Index score of 100 was achieved. This metric has remained green.

It is extremely disappointing two metrics which had the best performance to date in 2020 (self-reporting of pollution incidents and numeric discharge permit compliance) have deteriorated in performance in 2021. The deterioration in performance has been in real terms and cannot be explained by the tightening of the EPA metrics for 2021. The percentage of pollution incidents that have been self-reported has decreased and numeric permit non-compliances has increased. Also, although the total sewage pollution incidents metric remained green, the actual number of pollution incidents increased.

Serious pollution incidents performance in real terms is static, with the same number of serious pollution incidents in 2020 and 2021 (3); the metric has dropped from green to amber due to the inclusion of serious clean water incidents (from water supply assets) into the metric for 2021.

Over the next few pages there is more detailed information on the six 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 20 – explains the methodology we use to assess the company's performance;
- Annex 2 – page 21 – shows how Dŵr Cymru has performed against the EPA metrics since 2012.

# 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 on 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.

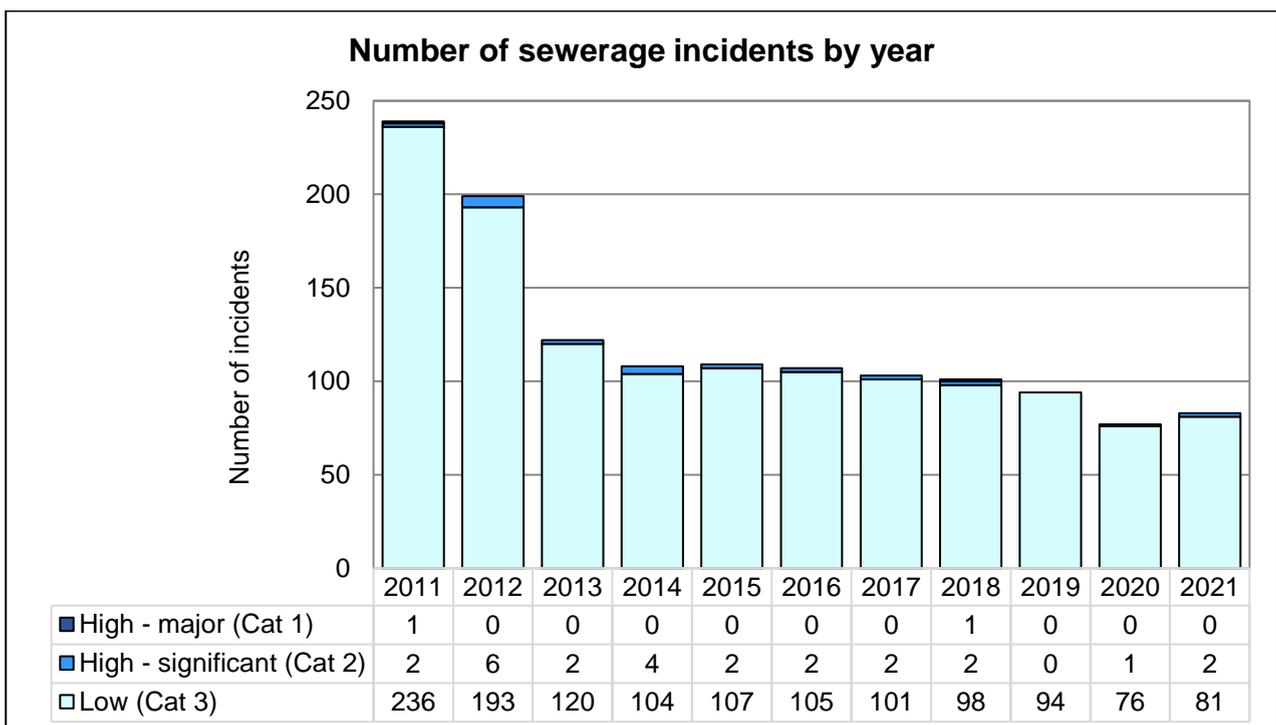
## EPA metric 1: Total pollution incidents (sewerage)

In 2021 Dŵr Cymru had 83 High-Low (Category 1-3) sewerage pollution incidents. Of those, 81 had a Low (Category 3) environmental impact and two had a High - significant (Category 2) environmental impact.

The EPA normalises incident numbers by the total sewer length the company is responsible for (36,249km), therefore in 2021 Dŵr Cymru achieved green for this metric:

EPA metric	Unit of measurement	What this metric means	2021 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	23 (Green)

As the graph below shows, between 2011 and 2014 there was a steady yearly decrease in pollution numbers. Then between 2014 and 2019 there was only a marginal decrease of 14 incidents over six years. In 2020 there was a significant decrease of 17 incidents, to achieve green status for the first time. Although the total sewage pollution incidents metric remained green, in 2021 there has been an increase of six incidents (from 77 in 2020 to 83 in 2021). It is disappointing Dŵr Cymru have not sustained their improvement in this metric from last year.



We expect Dŵr Cymru to focus efforts on reducing incident numbers to achieve zero incidents. We expect Dŵr Cymru to use best practice from across the sector to continually drive down pollution and lead the way.

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

This metric looks at the total number of serious pollution incidents. As shown in the graph above, there were two serious sewerage incidents in 2021 that had a High (Category 2) environmental impact. In 2021, there was a change to the metric definition to now include incidents from water supply assets. There was one serious clean water incident in 2021 that had a High (Category 2) environmental impact.

EPA metric	Unit of measurement	What this metric means	2021 result (metric status)
<b>Serious pollution incidents (sewerage and water supply assets)</b>	Total number of incidents (Categories 1 and 2)	How many serious sewerage and clean water pollution incidents occurred, of Category 1-2, total number	3 (Amber)

It is disappointing Dŵr Cymru had two serious sewerage pollution incidents in 2021 after having 0 in 2019 and 1 in 2020. We expect Dŵr Cymru to push for improvement to ensure there are no serious incidents from sewerage or water supply assets in 2022, using best practice, such as post incident reviews, to ensure any improvements are implemented promptly following any serious incident.

## 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 to 3 from sewerage and water supply assets)

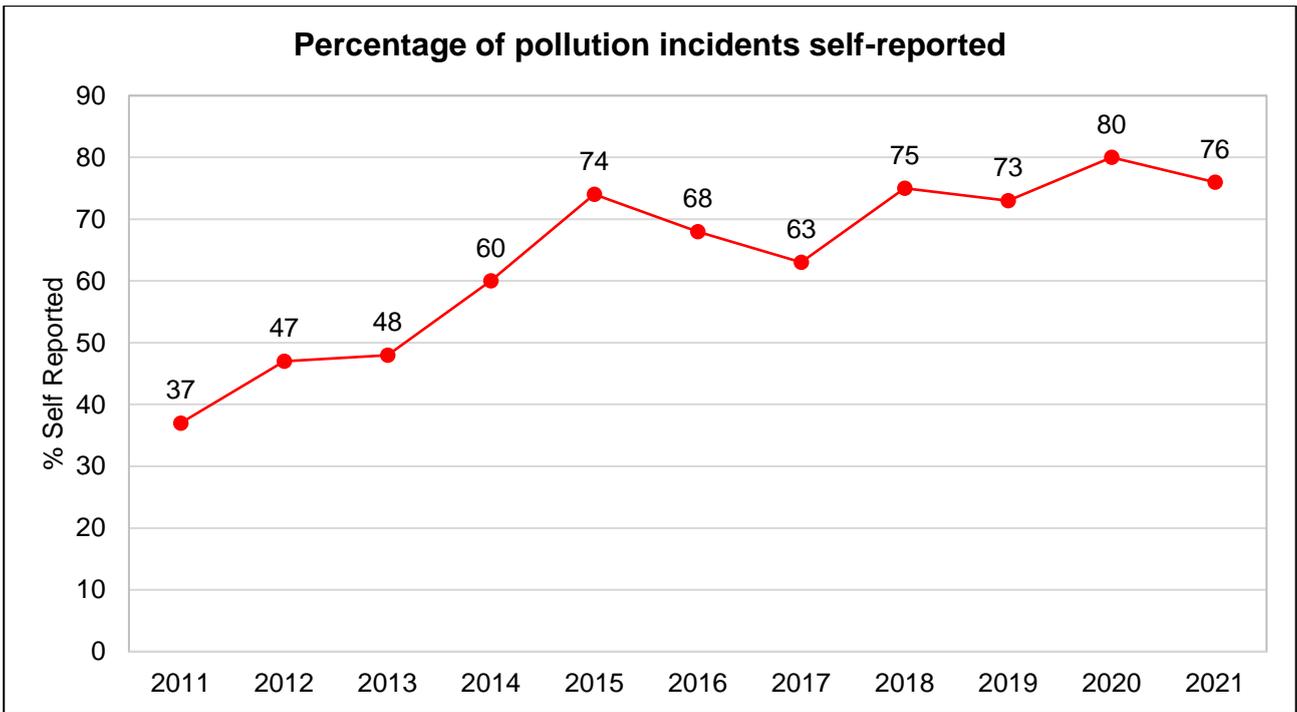
In previous reports we have pushed Dŵr Cymru to aim to self-report at least 80% of their pollution incidents. In 2021 Dŵr Cymru failed to reach 80%, achieving 76%:

As the graph below shows, Dŵr Cymru's performance in this metric continues to be unstable. They achieved their highest rate of self-reporting in 2020 (80%). In 2021, the company has dropped to amber status, achieving only 76%.

EPA metric	Unit of measurement	What this metric means	2021 result (metric status)
Self-reporting of pollution incidents (sewerage and water supply assets)	%	Percentage of pollution incidents the company self-reported	76/61 (Amber)

Under the tighter and broader EPA metrics of the new 5-year EPA period (2021-25), Dŵr Cymru can only achieve green status if they also self-report 90% of all incidents at Pumping Stations (PSs) and sewage treatment works (STWs) combined. In 2021, Dŵr Cymru achieved 61% of self-reporting for PS and STW combined. The company need to make significant improvements to be able to achieve 90% in 2022.

It is disappointing Dŵr Cymru have not sustained their improvement in this metric from last year. We expect Dŵr Cymru to push for improvement to self-report at least 80% of their pollution incidents in 2022 and reach green status again. We encourage Dŵr Cymru to consider other initiatives used across the industry to keep improving their rate of self-reporting.



## Water discharge permit compliance

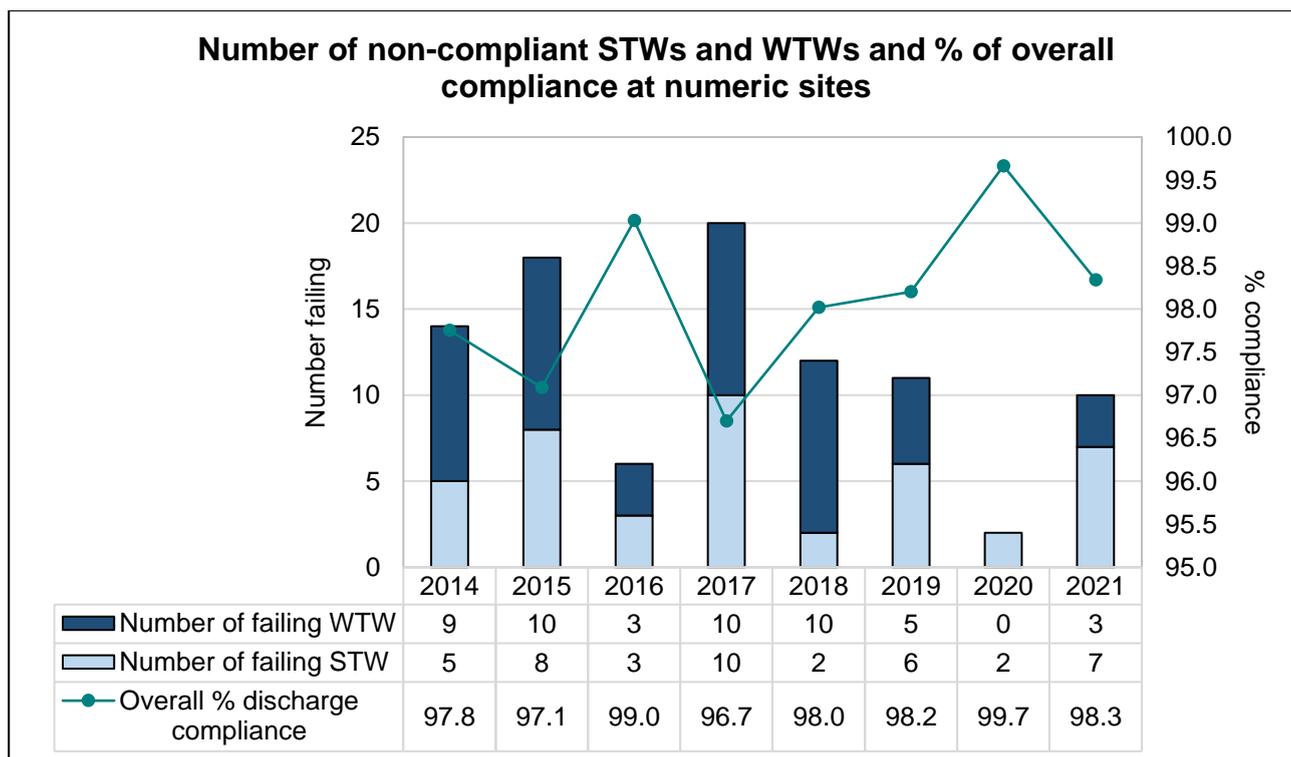
NRW and the Environment Agency issue permits for water discharges, including treated discharges from water company STWs and water treatment works (WTWs). The permits require the discharges to meet specific criteria to make sure there is no deterioration to the water environment. Water companies self-monitor their discharges and are required to provide data to us which we assess for compliance. We expect all permit conditions to be complied with.

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

In 2021, Dŵr Cymru achieved amber for this metric as they were 98.3% compliant with the water quality limits on their numeric permits for STWs and WTWs. This is a noticeable deterioration compared to 2020 when the metric was green for the first time since 2016. In 2021 there were seven non-compliant STWs out of 562 that Dŵr Cymru operate and three non-compliant WTWs out of 34 that Dŵr Cymru operate.

EPA metric	Unit of measurement	What this metric means	2021 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>98.3 (Amber)</b>

As the graph below shows, Dŵr Cymru's performance on this metric had fluctuated for several years, before the company achieved their best performance in 2020. It is disappointing Dŵr Cymru have not sustained their improvement in this metric from last year.



We expect the 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, where we have significant concerns following two years of poor performance in 2020 and 2021. It

is important Dŵr Cymru comply with the conditions within their permits in 2022. See pages 8-9 for more detail on descriptive condition compliance.

## EPA metric 5: AMP National Environment Programme delivery

This metric looks at how Dŵr Cymru have delivered against their 5-year Asset Management Plan (AMP) period, April 2021-March 2022. It looks at the percentage of schemes delivered compared to schemes planned from 2020-2025.

EPA metric	Unit of measurement	What this metric means	2021 result (metric status)
<b>AMP National Environment Programme Delivery</b>	<b>% of planned delivery</b>	Whether the Asset Management Plan National Environment Programme is being delivered to plan	100 (Green)

In 2021/22 Dŵr Cymru delivered all 63 schemes as planned – 17 in England, 46 in Wales. 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 2022.

## EPA metric 6: Supply Demand Balance Index

The EPA includes the Supply Demand Balance Index (SDBI) for the first time. This metric replaces our Security of Supply (SoSi) reported in the EPA until 2020. 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. The SDBI score for 2021 is 100, therefore the EPA metric is green:

EPA metric	Unit of measurement	What this metric means	2021 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)	100 (Green)

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

Following consultation, we are working to introduce an additional performance metric for Welsh companies only – descriptive permit condition compliance. Descriptive conditions relate to non-numeric aspects such as maintenance, management and reporting. With descriptive condition performance noticeably lower than numeric condition performance, we wanted 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 aim to introduce red/amber/green performance thresholds from the start of the next 5-year EPA reporting period (2026-2030).

	<b>Descriptive condition compliance</b>	<b>Number of non-compliant sites</b>
<b>2019</b>	93%	50
<b>2020</b>	63%	317
<b>2021</b>	87%	112

In 2019, overall descriptive condition compliance was only 93%. In 2020, Dŵr Cymru's performance had a significant deterioration, with overall descriptive condition compliance dropping to only 63%. In 2021, Dŵr Cymru's performance with overall descriptive condition compliance at STWs and WTWs was only 87%. Out of 854 STWs and WTWs (numeric and descriptive permitted sites), 112 were non-compliant. Whilst this is an improvement from last year, this performance is well below performance in 2019 and also below our expectation of 100% compliance, which is a concern.

The majority of the 112 sites were non-compliant due to breaches related to monitoring, reporting and notification of Operator Self-Monitoring, Urban Wastewater and UV monitoring programmes that we identified during our compliance assessment. They were either non-compliance category 3 or 4<sup>2</sup>.

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 2021 are rectified as soon as possible;
- improve their overall 2022 descriptive condition performance year-on-year (compared to 2019 performance), aiming for 100% compliance;
- focus on stopping all Category 1 and 2 descriptive condition non-compliances as these have the most potential for serious environmental impact.

## Storm overflow permit compliance assessment

Through our normal incident response and compliance assessment work carried out in 2021, we found 60 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.

- 11 sites were non-compliant due to issues with screens, which in most cases caused sewage debris to escape from the asset and enter the environment. All these non-

<sup>2</sup> We use non-compliance categories to score permit or licence breaches. They are on a scale of 1-4:

- 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.

compliances were assessed as Category 3 (potential to have a minor impact), and the majority were issued with a Warning.

- 16 sites were non-compliant due to discharging in non-storm conditions. The majority were related to sewer blockages. The non-compliances were categorised as follows: three as Category 2, 12 as Category 3 and one as Category 4; the majority were issued with a Warning.
- 28 sites were non-compliant for failing to submit their 2020 EDM data as required; the majority were issued with a Warning; most of these have since been resolved.

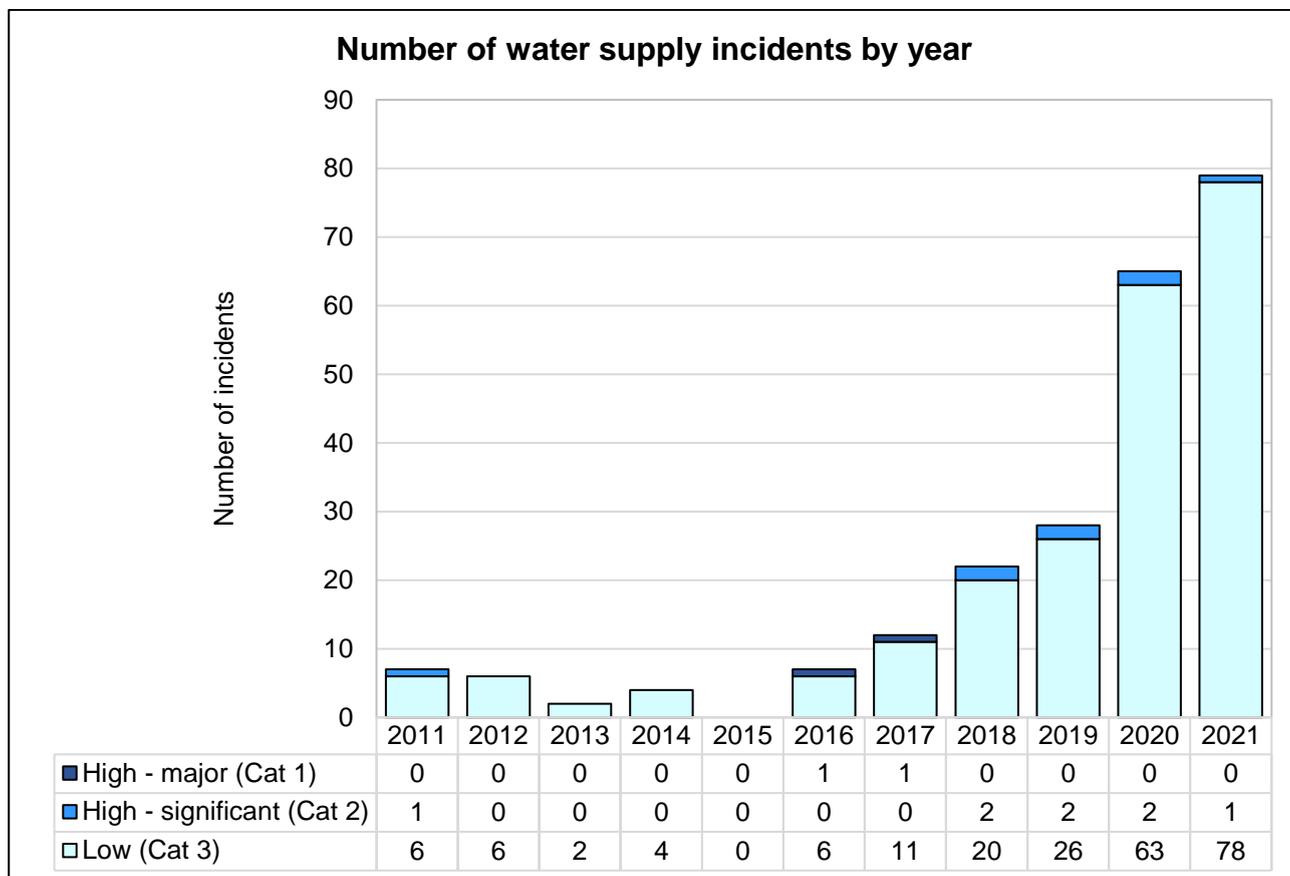
## Part 2: Dŵr Cymru’s wider environmental performance

The six EPA metrics are a subset of environmental performance. There are many 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 2021 there were 79 clean water pollution incidents – one of which was significant (High/Category 2) and 78 were Low/Category 3:



The overall performance for water supply incidents is unacceptable. We are calling for urgent action from Dŵr Cymru after 2021 saw the sixth consecutive year where the number of incidents from water supply assets increased. We welcome the inclusion of serious incidents from water supply assets in the serious pollution incidents EPA metric from 2021 to bring more focus on this area of performance.

We expect Dŵr Cymru to reduce the number of all incidents (sewerage and water supply) to zero.

## **Flow compliance at sewage treatment works**

Dŵr Cymru provided Dry Weather Flow (DWF) data in accordance with their permit requirements. Eight STWs in Wales and two in England were reported as exceeding their DWF permit limits in 2021, resulting in the sites discharging more treated sewage than permitted. Dŵr Cymru are required to carry out investigations and report the cause of exceedance to us and where appropriate complete remedial action within an agreed timescale.

Eleven STWs in Wales were reported as having experienced data issues in 2021 which the company is working to resolve.

Thirteen works in Wales and two in England are also 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.

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 were compliant with MCERTS re-certification requirements in 2021.

In late 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 causes 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.

The small number outstanding have plans in place to install EDM by the end of 2023.

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

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

## 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.

## EDM data we are reporting

For the purposes of this report, we have used the 2020 EDM summary data. This data is from the annual regulatory return submitted by the water company for permitted storm overflows in Wales only. We have carried out data quality checks and excluded data that could not be confirmed at this time. The excluded data will be further analysed and included in future reports.

We will also be completing checks on the 2021 EDM data so it can be included in subsequent reports, aligned to the work in the Better River Water Quality Taskforce.

## 2020 Event Duration Monitoring regulatory return – Wales only

Dŵr Cymru had a total of 1,583 permits with EDM conditions in force in 2020. We have continued to issue EDM variations to storm overflow permits, with more issued during 2021 and 2022. Out of the 1,583, we confirmed 2020 EDM data for 1,441 permitted storm overflows for inclusion in this report. We used this data to produce the graphs and percentages below.

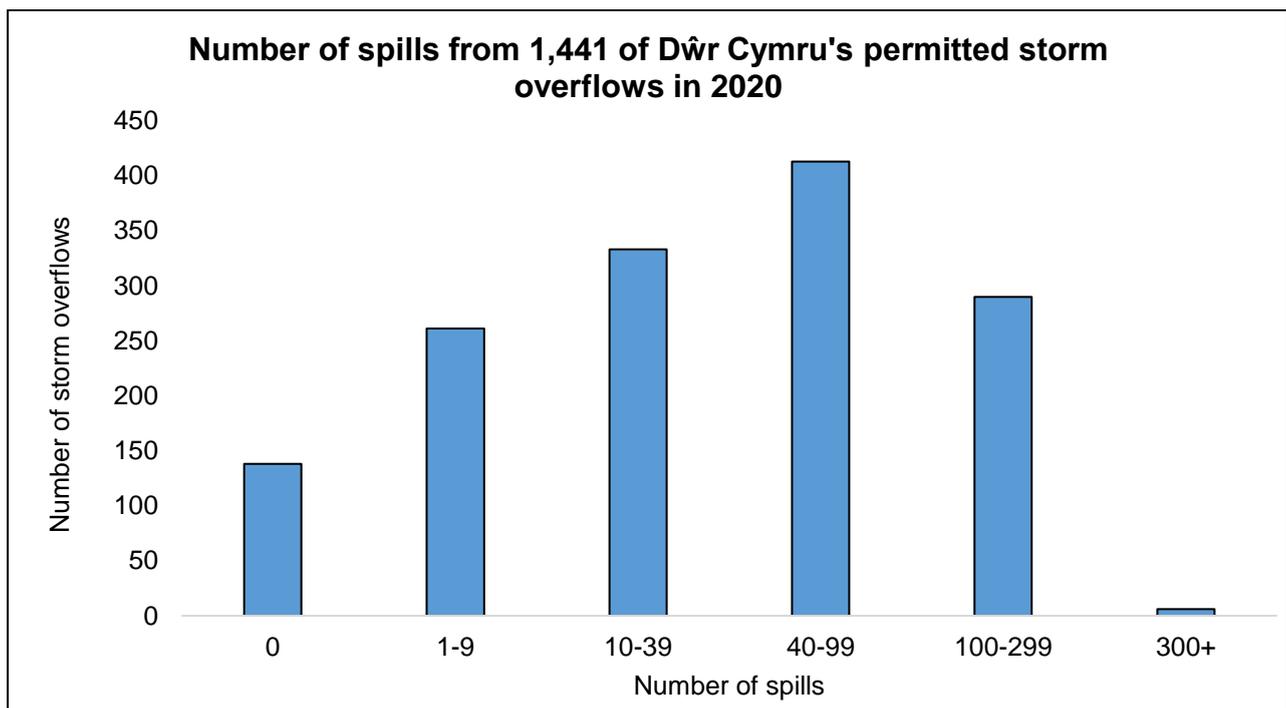
We recognise that in 2020, Wales experienced its fifth wettest year since 1865, with 10 named storms impacting the UK. February 2020 was a particularly wet month with three named storms which resulted in the wettest month for Wales since 1865. However, until we have completed our work developing a robust way to identify when spills are occurring in dry weather, we cannot yet make any inferences on any trends or patterns in this report.

## Number of spills

The 2020 EDM data for 1,441 of Dŵr Cymru's permitted storm overflows, on the number of spills (using the block counting methodology<sup>3</sup>), tells us:

- 10% (138) had 0 spills;
- 18% (261) spilled between 1 and 9 times;
- 23% (333) spilled between 10 and 39 times;
- 29% (413) spilled between 40 and 99 times;
- 20% (290) spilled between 100 and 299 times;
- Less than 1% (6) spilled more than 300 times.

The graph below displays this data.



<sup>3</sup> The block counting methodology used to count spills from storm overflows is the 12/24 counting method:

1. Start counting when the first discharge occurs.
2. Any discharge (or discharges) in the first 12-hour block are counted as one spill.
3. Any discharge (or discharges) in the next, and subsequent 24-hour blocks, are each counted as one additional spill per block.
4. 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.

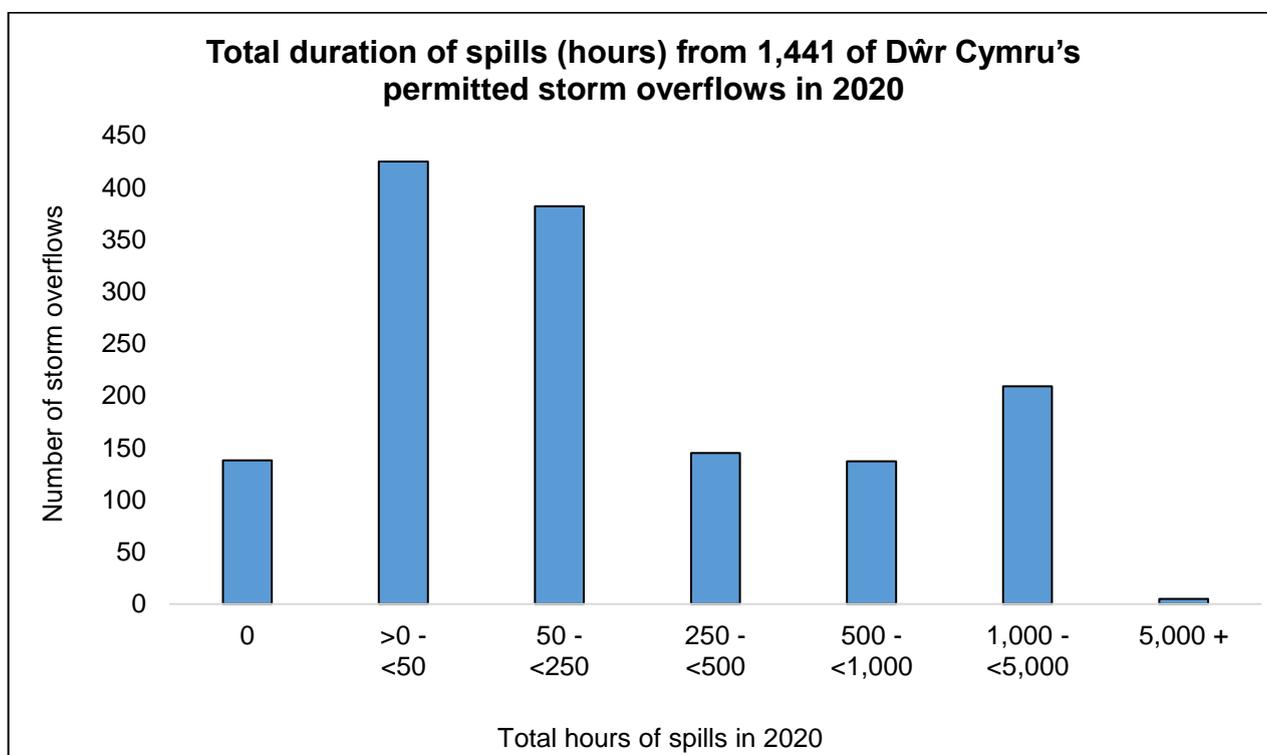
NRW and the Environment Agency use this same approach for consistency across water companies.

## Duration of spills

The 2020 EDM data for 1,441 of Dŵr Cymru's permitted storm overflows, on the duration of spills, tells us:

- 10% (138) had 0 hours of spills;
- 29% (425) spilled for more than 0 but less than 50 hours;
- 27% (382) spilled for at least 50 hours but less than 250 hours;
- 10% (145) spilled for at least 250 hours but less than 500 hours;
- 10% (137) spilled for at least 500 hours but less than 1,000 hours;
- 15% (209) spilled for at least 1,000 hours but less than 5,000 hours;
- Less than 1% (5) spilled for more than 5,000 hours.

The graph below displays this data.



## 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 spilling in dry weather.

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

We carried out 27 water resources licence compliance assessments in 2021. We identified 18 breaches of licence conditions during 10 of the assessments. This is only a minor improvement compared to 2020 when 11 out of 14 assessments were non-compliant.

All the non-compliances identified were Category 3 or 4<sup>4</sup> and although these are lower categories of environmental risk, we still expect to see further improvement to ensure full compliance in the future.

## 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 WRMPs and Drought Plans. The latest WRMP was published in 2019 with the latest Drought Plan published in March 2021. Dŵr Cymru are currently undertaking their WRMP24 and we are working with them to ensure this meets requirements. These 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 2019: <https://www.dwrcymru.com/en/My-Water/Water-Resources/Final-Water-Resources-Management-Plan-2019.aspx>
- Water Resources Management plan 2024 (draft): <https://www.dwrcymru.com/en/our-services/water/water-resources/draft-water-resources-management-plan-2024>
- Drought Plan 2020-2025: <https://www.dwrcymru.com/en/our-services/water/water-resources/final-drought-plan-2020>
- Please also have a look at our webpages for more information on these topics:
- Water Resources Planning: <https://naturalresources.wales/about-us/what-we-do/water/water-resource-management-planning/?lang=en>
- Drought: <https://naturalresources.wales/guidance-and-advice/environmental-topics/water-management-and-quality/drought-planning-and-management/?lang=en>
- Drought plan guidance: <https://cdn.naturalresources.wales/media/684414/final-wc-drought-plan-guidance-2017.pdf?mode=pad&rnd=131656713580000000>

## Leakage and water use

Water companies submit a wide variety of data to us and Ofwat, which includes leakage rates and water use. Dŵr Cymru's leakage rates and water use information for 2021/22 will soon be available at [discoverwater.co.uk](https://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

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<sup>4</sup> We use compliance categories to score licence breaches. They are on a scale of 1-4, with Category 1 having the potential of a major impact on the environment, people and/or property, and Category 4 having no impact. A Category 3 is likely to have a minor impact.

activities we assess compliance against permit conditions and score any non-compliances. We carried out compliance assessments for three sites in 2021. We identified a total of four breaches of permit conditions during two of the three assessments.

All the non-compliances identified were classed as Category 3s. Although this is a lower category of environmental risk, we expect to see improvements to ensure full compliance.

In 2021, there were no pollution incidents from waste activities operated by Dŵr Cymru.

## Sludge

The satisfactory sludge use/disposal metric from the EPA methodology was suspended from 2018 to 2020 while we reviewed how we assess and report performance consistently across the water companies on this activity. In the published annual performance report for 2020 we included a narrative on the sector performance on satisfactory sludge use and disposal.

We have reinstated the satisfactory sludge/use disposal metric from 1 January 2022 as a shadow metric for the 2021 reporting year (2022). The shadow metric will not affect Dŵr Cymru's star rating. Operating as a shadow metric in the 2021 reporting year will allow us to review and, if necessary, adjust the metric.

The current shadow metric does not reflect on Dŵr Cymru's previous or current performance in terms of sludge use; our previous reviews of the sludge use practices did not highlight any non-compliances with the data reported. The satisfactory use and disposal of sewage sludge has remained at 100%. Dŵr Cymru has continued to store sludge in line with the S3 waste storage exemption and use the sludge in line with the Sludge Use in Agriculture Regulations and the Biosolids Assurance Scheme. In Wales, we are working with Dŵr Cymru on additional agreements to improve on the requirements within the existing regulations, such as improved notification.

## Enforcement (higher than a Warning)

In 2021 we completed our enforcement response to two pollution incidents in Wales that were higher than a Warning.

In 2021 Dŵr Cymru were prosecuted for a pollution incident, permit breach and fish kill that occurred in September 2018 at their Five Fords Wastewater Treatment Works, where they committed offences under the Environmental Permitting (England and Wales) Regulations 2016 and Salmon and Freshwater Fisheries Act 1975. The courts imposed a fine of £180,000, costs of £25,701.50 and a victim surcharge of £170.

Dŵr Cymru also accepted a formal caution in 2021 for a pollution incident in September 2019 at their Maerdy Treatment Works, where they committed an offence under the Environmental Permitting (England and Wales) Regulations 2016.

Within the English part of their operations, there was no enforcement action taken higher than a Warning during 2021.

## Reservoir Safety

At the end of 2021, Dŵr Cymru were managing 134 large, raised reservoirs (2 in England, 132 in Wales) with a raised capacity greater than 10,000m<sup>3</sup>, which we regulate under the Reservoirs Act 1975. This act ensures fundamental actions are implemented to prevent an uncontrolled release of water and subsequent flooding of downstream communities. The actions include the appointment of specialist reservoir panel engineers and acting promptly on their recommendations.

Reservoirs which are designated as a High-Risk Reservoir must undergo statutory periodic inspection and implement the recommendations made by an independent Inspecting Engineer. Also, these reservoirs must always be supervised by a qualified civil engineer and records kept of principal information and monitoring activities.

Dŵr Cymru's compliance against the key safety indicators remained high throughout the year, with only one breach in April-June 2021 against the key safety indicator of 'completion of safety measures within statutory timescales.' The breach occurred because of statutory safety works at Llandegfedd reservoir not being completed within the timescale recommended by the Inspecting Engineer. This was foreseen and notified to us more than a year before the compliance date. The 2021 inspection confirmed satisfactory progress and identified subsequent work which is to be completed by 2025.

## Flood Risk Management

Under the Flood and Water Management Act 2010, water and sewerage companies are defined as risk management authorities. They are required to act in a manner consistent with the National Strategy for Flood and Coastal Erosion Risk Management in Wales and the National Flood and Coastal Erosion Risk Management Strategy for England. They have a duty to cooperate with other risk management authorities in England and Wales.

Every few years we produce a report for the Welsh Ministers about how flood risk and coastal erosion is managed across Wales and about the activities underway to raise awareness and increase resilience of those who are at risk. We do this on behalf of all Risk Management Authorities who operate in Wales and therefore include Dŵr Cymru. The next report is due in October 2022 (2 years from the publication of the Welsh Government National Strategy for Flood and Coastal Erosion Risk Management in Wales) and every 2 years thereafter. Please see our [Flood and coastal erosion risk in Wales](#) webpage for more information.

# Performance expectations for 2022

## Challenges for EPA

As we progress through the new 5-year EPA reporting period (2021-25), we expect Dŵr Cymru to make positive progress across all six metrics. The new EPA metrics continue to tighten over this EPA reporting period (2021-25) ensuring targets are challenging for the company. We expect them to implement measures to regain and maintain high company status as we progress through the new EPA reporting period (2021-25). Specifically:

- reduce the total number of sewerage incidents year on year – aiming for zero;
- stop all serious pollution incidents (both sewerage and water supply) in the short-term;
- improve numeric water quality compliance – to achieve 100%;
- improve and stabilise self-reporting of pollution incidents;
- maintain 100% of AMP NEP scheme delivery;
- maintain performance on the SDBI.

## 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:

- make significant improvements in descriptive condition compliance at STWs and WTWs (EPA metric – in development);
- reverse the worsening trend for water supply incidents;
- continue improvements in water resource licence compliance;
- reduce the impact of storm overflows by delivering their actions in the storm overflow roadmap action plans.

# 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;
- 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 have been working with the Environment Agency to review the EPA metrics for 2021 onwards and consulted externally (including with all the water companies). We have agreed to adopt 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. We have decided to include a new EPA 'metric – in development' for Dŵr Cymru since 2020 (see pages 8-9) on descriptive condition compliance as we had concerns in Wales regarding performance in this area.

# Annex 2: Summary of Dŵr Cymru's EPA performance 2012-21

The table below shows how the company has performed against the metrics since 2012:

	2012	2013	2014	2015	2015E <sup>5</sup>	2016	2017	2018	2019	2020	2021
<b>Pollution incidents (sewerage)</b> Category 1-3 incidents per 10,000 km of sewer	110	66	59	59	30	30	28	28	26	21	23
<b>Serious pollution incidents (sewerage &amp; water supply assets)</b> Total incidents (Categories 1 & 2)	3.3	1.1	2.2	1	0.6	0.6	0.3	0.8	0	0.3	3 <sup>6</sup>
<b>Self-reporting pollution incidents %</b>	47	48	60	74	74	68	63	75	73	80	76
<b>Discharge Permit Compliance (STWs &amp; WTWs) %</b>	98.6	97.7	97.8	98.6	97.1	99.0	96.7	98.0	98.3	99.7	98.3
<b>AMP National Environment Programme delivery</b> % of planned delivery	116	100	100	100	100	100	100	99	100	100	100
<b>Supply Demand Balance Index (SDBI)</b>	N/A	N/A	N/A	N/A	100	100	98	100	100	100	100
<b>Satisfactory Sludge Use/Disposal %</b>	100	100	100	100	100	100	100	N/A <sup>7</sup>	N/A <sup>7</sup>	N/A <sup>7</sup>	N/A <sup>7</sup>
<b>Company star rating</b>	3-star	3-star	3-star	3-star	3-star	3-star	2-star	3-star	3-star	4-star	3-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>5</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>6</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>7</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. We have reinstated the sludge metric as a shadow metric for the 2021 reporting year (2022). The shadow metric will not affect water company's star rating, but will allow us to review and, if necessary, adjust the metric.