

# Annual environmental performance report for Hafren Dyfrdwy 2020

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

## Introduction

Natural Resources Wales' 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 that 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 delivering environmental improvement schemes. We then publish an annual assessment of their performance.

Hafren Dyfrdwy<sup>1</sup> came into existence on 1 July 2018, forming a water and sewerage company that is wholly within Wales' political boundary. All<sup>2</sup> assets that were previously owned and managed by Severn Trent Water and Dee Valley Water in Wales were transferred to Hafren Dyfrdwy. To maintain reporting frequency and to aid year-on-year comparisons, this report uses a combination of Hafren Dyfrdwy data and the corresponding Severn Trent Water and Dee Valley Water data from the operating area Hafren Dyfrdwy are now responsible for. See Annex 1 for more information on this.

This report focuses on Hafren Dyfrdwy's environmental performance for 2020. We also assess Dŵr Cymru Welsh Water's performance which you can find on our [website](#).

The Environment Performance Assessment (EPA) metrics used for the 10 largest water and sewerage companies in England and Wales are not applicable to Hafren Dyfrdwy. However, we use similar themes, for example pollution incidents and permit compliance.

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<sup>1</sup> Companies House information: HAFREN DYFRDWY CYFYNGEDIG, Company number 0352762, registered office address: Packsaddle Wrexham Road, Rhostyllen, Wrexham, Clwyd, LL14 4EH.

<sup>2</sup> The only exception is Elan Valley water treatment works which, although located in Wales, will continue to be owned and managed by Severn Trent Water. NRW will regulate this site and provide environmental performance data to the Environment Agency, so that it can be included in Severn Trent Water reporting.

# Headline performance messages

2020 was a particularly challenging year due to the Coronavirus pandemic with the restrictions that were brought in significantly changing the way we live and work. However, the company and the regulators maintained the ability to monitor assets and respond to pollution incidents. 2020 saw the driest start to spring in Wales (April and May) since records began in 1910, which coincided with the beginning of lockdown restrictions, significantly increasing demand for domestic water use. We maintained good liaison with water companies as the pandemic restrictions were updated to ensure that the short- and longer-term effects of the pandemic didn't impact on the workforce and work programmes.

In 2020 Hafren Dyfrdwy had:

- improved performance on self-reporting, with 100% of incidents self-reported;
- continued good performance on serious pollution incidents with zero serious pollution incidents;
- 100% compliance with numeric water discharge permit conditions;
- improved descriptive condition compliance;
- a Security of Supply Index score of 100;
- 100% for delivery of their AMP7 NEP schemes.

But improvement is needed in these areas:

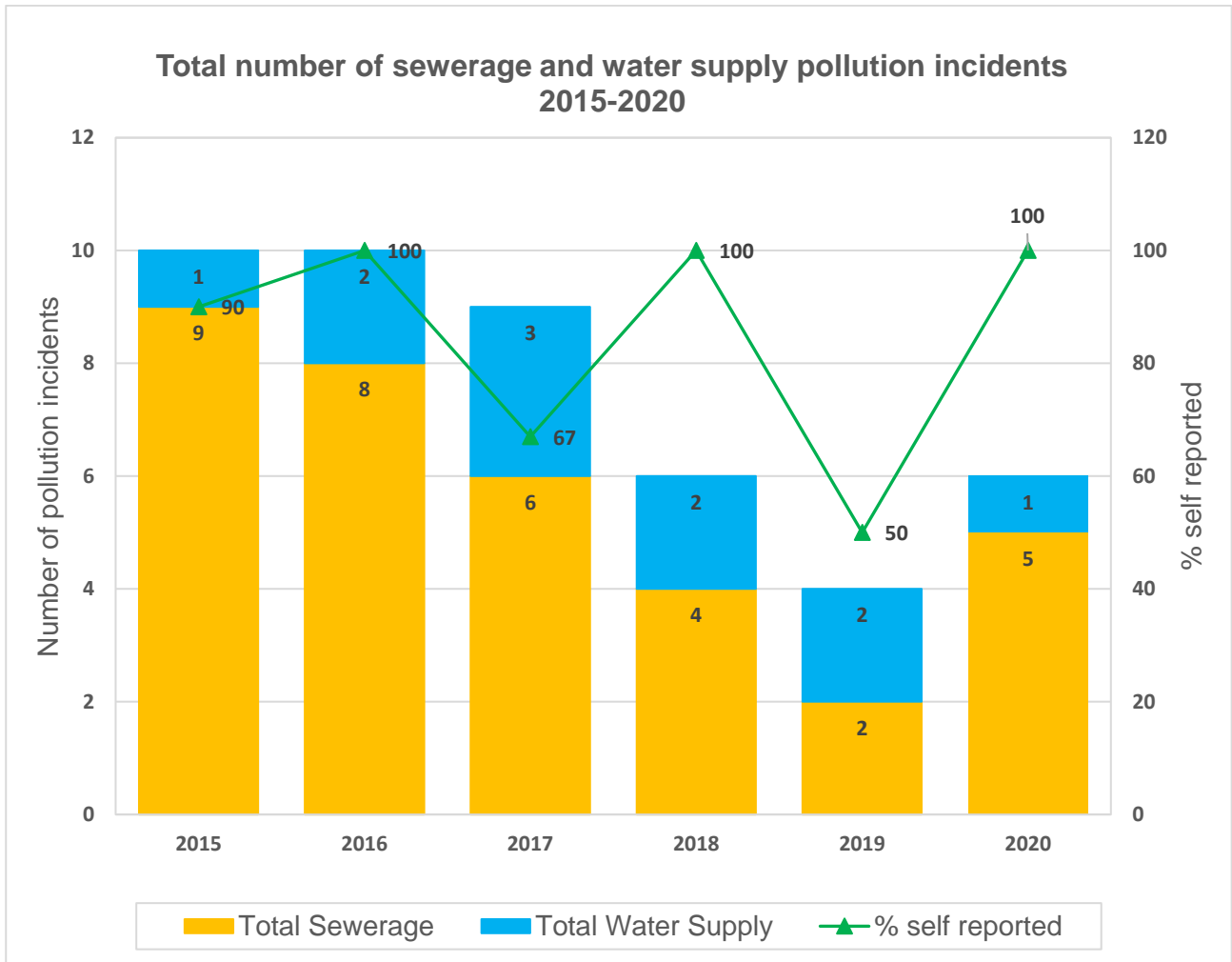
- total number of pollution incidents, as they increased in 2020, with 6 pollution incidents (sewerage and water supply combined);
- Water Resources licence compliance.

## Pollution incidents

As a regulator 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. We expect no serious (High) incidents.

As shown in the graph overleaf, Hafren Dyfrdwy had varied performance in 2020 for pollution incidents. The company:

- maintained zero serious (High) pollution incidents; and
- had fewer incidents from water supply assets – one in 2020, compared to two in 2019. In 2020 the single incident was from the water distribution network and it had Low environmental impact (Category 3); but
- had an increased number of sewerage incidents – five in 2020, compared to two in 2019. In 2020, two were from sewage treatment works, 1 was from a permitted combined sewer overflow and two were from foul sewer; all five had Low environmental impact (Category 3).



## Self-reporting incidents

We would like to see all water companies self-report<sup>3</sup> at least 80% of their pollution incidents. This means we can be more confident that 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.

It is positive to see that Hafren Dyfrdwy's self-reporting performance has returned to 100% (6 out of 6 self-reported) after dropping to 50% in 2019. We expect the company to maintain this high level of self-reporting in 2021 and we encourage the company to consider other initiatives used across the industry to stabilise their performance in this area.

<sup>3</sup> To report an incident to us, call our Incident Hotline on 03000 65 3000

# Water discharge permit compliance

We issue permits for water discharges, including treated discharges from water company sewage treatment works and water treatment works. The permits require the discharge to meet specific criteria to make sure there's no deterioration to the water environment. Water companies self-monitor their discharges and provide data to us which we assess for compliance. We expect all permit conditions to be complied with.

In 2020 all of Hafren Dyfrdwy's sewage treatment works and water treatment works complied with their numeric permit limits. It is reassuring to see consistent high levels of numeric compliance, which has been 100% since 2017, as this demonstrates that Hafren Dyfrdwy are managing their 39 numeric sewage treatment works, and 6 numeric water treatment works well.

## Water discharge descriptive permit condition compliance

Descriptive conditions relate to non-numeric aspects such as maintenance, management and reporting.

Overall, descriptive condition compliance at STWs and WTWs with numeric and descriptive permits in 2020 was 96.7%. There were two non-compliant discharges out of a total of 60 discharges. At the two non-compliant discharge we identified one CCS3 breach and four CCS4<sup>4</sup> breaches.

It is positive to see an improvement in descriptive condition performance in 2020, compared to 2019, where performance was 93% compliance. We expect to see a continued improvement in the performance of compliance against descriptive permit conditions.

We also found one combined sewer overflow permitted site to be non-compliant with its permit conditions (CCS4).

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<sup>3</sup> Non-compliance categories are the way we categorise breaches with permit or licence conditions. They are on a scale between 1-4:

- CCS1 – Major: potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property
- CCS2 – Significant: potential to have a significant impact or effect on the environment, people and/or property
- CCS3 – Minor: Potential to have a minor or minimal impact or effect on the environment, people and/or property
- CCS4 – No impact: non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property

## Flow compliance at sewage treatment works

Three sites exceeded their Dry Weather Flow (DWF) permitted limit, meaning they received more sewage than permitted. Good progress has been made in obtaining comprehensive reports for exceeding sites.

Hafren Dyfrdwy also continue to investigate any sites they consider to be at risk of failing their flow to full treatment (FFT) permitted limits, which means they may not be treating the amount of flow required by their permits.

All their sites are currently compliant with MCERTS re-certification requirements.

## Storm overflows

We are assessing the data and are continuing to develop our regulatory approach towards storm overflows. This will include working with the water companies to reduce the number of spills from storm overflows and gathering evidence of environmental impact from storm overflows, along with ensuring robust regulatory permits and reporting requirements to help inform future investment plans.

# Water resources

## Water resources licence compliance

In 2020 we carried out six water resources licence compliance assessments; two were compliant, four were non-compliant. We found five permit condition non-compliances at the four sites – four were CCS3 breaches and one was CCS4. We expect to see an improvement in compliance for 2021.

## Security of Supply index

The Security of Supply Index (SoSI) measures the extent to which the company can guarantee provision of its levels of service for restrictions of water supply (e.g. Temporary Use Bans) if the previous year had been dry. Hafren Dyfrdwy's SoSI index score for 2020/21 is 100.

## 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 statutory requirement for water companies in Wales to prepare, maintain and publish water resources management and drought plans. These are published every five years.

For the latest information on Hafren Dyfrdwy's water resources management plans (WRMPs) please refer to their website: [www.hdcymru.co.uk/about-us/plan-and-strategy/water-resource-planning/water-resource-management-plan](http://www.hdcymru.co.uk/about-us/plan-and-strategy/water-resource-planning/water-resource-management-plan)

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

- Water Resources Planning: [naturalresources.wales/about-us/what-we-do/water/water-resource-management-planning](https://naturalresources.wales/about-us/what-we-do/water/water-resource-management-planning)
- Drought: [naturalresources.wales/guidance-and-advice/environmental-topics/water-management-and-quality/drought](https://naturalresources.wales/guidance-and-advice/environmental-topics/water-management-and-quality/drought)

## Leakage and water use

Hafren Dyfrdwy reported in its annual review for 2020/21 that the average per capita consumption, which is how much water each person uses, was 153 litres per person per day; this is an increase of 10.3 litres per person per day from the previous reported annual average of 142.7 litres per person per day. This increase is mainly due to peak demands experienced during the 'stay home' pandemic restrictions.

We expect the company to continue to work and engage with the Wales Water Efficiency groups to improve water efficiency in the home and business to ensure that enough water is available in the environment and projected increase in population and impacts from Climate Change.

The company's total leakage was 12.23 megalitres per day (Ml/d) for 2020/21; this is a reduction of 0.72 Ml/d from the 12.95 Ml/d reported for 2019/20. Through this current AMP7 period, we expect the company to continue to reduce leakage to ensure they achieve their WRMP19 commitment of 11.96 Ml/d by 2025/26. We would encourage the company to continue exploring new ways of detecting leaks and the potential for using Ofwat's Innovation Fund.

We work with Ofwat to publish a wide variety of water company data which includes leakage rates and water use and this will be available at [discoverwater.co.uk](https://discoverwater.co.uk)

## Other regulatory work

### AMP National Environment Programme delivery

Hafren Dyfrdwy have completed 100% of their expected Year 1 outputs from their Asset Management Plan 7 (AMP 7) National Environment Programme (NEP) by completing two schemes as planned. The improvements delivered by the programme will mean assets achieve higher standards and deliver water quality improvements. We will continue to work with Hafren Dyfrdwy to ensure that their AMP7 programme is delivered by 2025.

### Enforcement (higher than a Warning)

In 2020 we took no enforcement action higher than a warning against Hafren Dyfrdwy.

## Reservoir Safety

At the end of 2020, Hafren Dyfrdwy were managing 15 Large Raised Reservoirs with a raised capacity greater than 10,000m<sup>3</sup> which we regulate under the Reservoirs Act 1975. The purpose of this law is to ensure fundamental actions are implemented to prevent an uncontrolled release of water and subsequent flooding of downstream communities. These 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. These reservoirs must also always be supervised by a qualified civil engineer and records kept of principal information and monitoring activities.

Hafren Dyfrdwy's compliance levels have remained high. From 2021, we will be reporting more detailed metrics on reservoir safety to illustrate the level of compliance with our Key Safety Indicators under the Reservoirs Act, which are:

- (a) Appointment of a Construction or Supervising Engineer
- (b) Appointment of an Inspecting Engineer
- (c) Completion of measures to be taken in the interests of safety within statutory timescales.

An independent review into reservoir safety was recently commissioned by Defra and has been published. The report is substantially written for England, following the major incident at Toddbrook reservoir in Whaley Bridge, however the Reservoirs Act is an England and Wales law and we consider the report to be pertinent for consideration in Wales. The recommendations arising from the report are wide ranging and complex. Hafren Dyfrdwy is a member of our working group which will establish implementation of the recommendations appropriate to Wales.

## 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 have a duty to cooperate with other risk management authorities in 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, therefore we will include Hafren Dyfrdwy. The next report is due in October 2022 (two years from the publication of the Welsh Government National Strategy for Flood and Coastal Erosion Risk Management in Wales) and every 2 years thereafter.

# Performance expectations for 2021

In 2021 we expect Hafren Dyfrdwy to:

- maintain 100% self-reporting of pollution incidents
- continued good performance on serious pollution incidents with zero serious pollution incidents
- maintain 100% compliance with water discharge numeric limits
- continue to improve compliance with descriptive conditions at STWs and WTWs
- maintain the SoSI index score at 100
- continue to deliver Asset Management Plan (AMP) improvement schemes to deadline.

And focus in the following areas to improve performance:

- reduce pollution incident numbers, aiming for zero incidents
- improve compliance with water resources licence conditions.

## Annex 1

Hafren Dyfrdwy was formed on 1 July 2018 but we use data in this report back to 2015.

For incident and self-reporting data, water discharge permit compliance data and water resources licence compliance data detailed in the text and graphs in this report, we have used the following data sources:

- For **2015**, **2016** and **2017**: we combined data from Severn Trent in Wales and Dee Valley Water
- For **2018** we combined two periods (pre formation of Hafren Dyfrdwy on 1 July 2018 and post formation):
  - From 1 January 2018 to 30 June 2018: we combined data from Severn Trent in Wales and Dee Valley Water
  - From 1 July 2018 to 31 December 2018: we combined data from Severn Trent Water in Wales, Dee Valley Water (as some permit variations were completed post 1 July) and Hafren Dyfrdwy.
- For 2019 and 2020 we only used data from Hafren Dyfrdwy.