

QUARTERLY REPORT

No. 4 of 2022

4

February 2023

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Contents

Foreword from the Chairperson	4
Executive Summary	6
Part 1 – Introduction	9
Part 2 – Key Performance Indicators	11
2.1 Infrastructure Delivery and Leakage Reduction Indicators	12
2.2 Improvements in Water Quality, including the elimination of boil water notices	19
2.3 Responsiveness to the needs of Communities and Enterprise	23
2.4 Energy and Emissions	27
Part 3 – Other Key Events	28
3.1 Urban Waste Water Treatment in 2021	28
3.2 Drinking Water Quality in Public Supplies 2021 Report	28
3.3 Scottish Water International Implementation Plan	29
3.4 Irish Water Revenue Control 3 Interim Review	30
3.5 Water Services Innovation Fund Annual Report 2021	31
3.6 Compliance Update on CRU investigations and audits completed in 2022	32
Glossary of Terms	34



Foreword

Welcome to the fourth Quarterly Report of 2022 by the Water Advisory Body (the WAB). This is also the last Quarterly Report from the WAB.

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Paul McGowan *Chairperson*

New accountability arrangements for Uisce Éireann (Irish Water)* were set out in the Water Services (Amendment) Act 2022 (No. 39 of 2022), which was signed into law on 7 December 2022. As a result, the WAB will cease to have advisory and reporting functions and the dissolution of the WAB will take effect from 28 April 2023. Therefore, this is the last Quarterly Report from the WAB.

The final Report of the WAB will be the WAB Annual Report 2022, which will be published by the end of April 2023.

For the last five years the Water Advisory Body has sought to provide objective, transparent reporting on the performance of Uisce Éireann, with a view to increasing public confidence in Uisce Éireann. We have focused on infrastructure delivery, cost reduction and efficiency, improvements in water quality, procurement policy and responsiveness to the needs of communities. We have used a series of Key Performance Indicators and analysis of publicly available reports, alongside customised audit and consumer surveys to undertake our statutory remit.

It is and it will continue to be important for the Public Accounts Committee, the Environmental Protection Agency, the Commission for Regulation of Utilities and An Fóram Uisce to scrutinise and continually challenge Uisce Éireann to deliver high quality water and wastewater services, environment compliance and efficient, consumer focused outcomes.

For our part, the members of the Water Advisory Body wish to thank all stakeholders, including Uisce Éireann, for their positive and constructive engagement with our work. We especially want to thank the Secretariat for their continued dedication and professionalism in their support of WAB.

In Part 2 of this, our twelfth and final Quarterly Report, we highlight changes to seven of 13 Performance Indicators. We have used these Performance Indicators to monitor how well Uisce Éireann has performed. We have also reviewed reports produced by the Environmental Protection Agency (“EPA”) and the Commission for Regulation of Utilities (“CRU”), which feature in Part 3 of the Report - Other Key Events.

These include;

- ▶ The EPA Urban Waste Water Treatment in 2021 Report;
- ▶ The EPA Drinking Water in Public Supplies 2021 Report;
- ▶ The CRU Scottish Water International Implementation Plan Update;
- ▶ The CRU Irish Water Revenue Control 3 Interim Review Decision Paper;
- ▶ The CRU Water Services Innovation Fund Annual Report 2021; and
- ▶ A compliance update on CRU investigations and audits completed in 2022.



Paul McGowan

Chairperson of the Water Advisory Body

***Note:** With effect from 1 January 2023, Irish Water is now called Uisce Éireann, as provided for in the Water Services (Amendment) Act 2022. In all sections of this report, the two names are used interchangeably, as appropriate.

Executive Summary

This is the twelfth and final quarterly report published by the WAB, and the fourth report of 2022.

The WAB was established on 1 June 2018. The purpose of the WAB is to advise the Minister on measures needed to improve the transparency and accountability of Irish Water and to report on a quarterly basis to an Oireachtas Committee on the performance by Irish Water in the implementation of its Strategic Funding Plan.

A set of performance indicators has been selected to represent the activity of Irish Water in relation to the performance of its functions. Data in respect of these indicators is collated and published as part of the Quarterly Reports of the WAB in order to provide objective information on Irish Water's performance. This information is relevant to Irish Water itself, to track its own performance over time, but also to further inform both the Minister for Housing, Local Government and Heritage and the Oireachtas on the performance of Irish Water.

A detailed explanation of each key performance indicator can be found in the Appendix to this Report.

The information published within this report is accurate as of 31 December 2022. The following findings from the report are of note, with specific reference to the 7 Key Performance Indicators that have been updated since the last report.

Remedial Action List (Water)

The WAB notes with concern that at the end of Quarter 4 2022, the Remedial Action List (RAL) contained 58 water supplies, which is an increase of six supplies since the end of Quarter 4 2021. The number of people served by RAL supplies reached a high of over 1 million in 2019. This has since reduced, mainly due to Leixlip water treatment plant, which services a population of 590,000 coming off the list. Since then, the RAL has fluctuated with the population served by RAL supplies increasing in 2022. This recent increase is an unwelcome trend and the WAB would expect to see a continual reduction in the number of supplies on the RAL.

Priority Urban Area List (Wastewater)

The WAB is pleased to note that the number of priority urban areas listed at the end of 2022 is 91, which is significantly lower than the figure of 148 in 2017. One area was removed from the list since the indicator was last updated in the Water Advisory Body Quarterly Report No. 2 of 2022. Work is underway to upgrade and improve treatment at Ringsend and is expected to be complete in 2025.

The inclusion of an urban area on the list means that Irish Water must improve waste water treatment in that area. By making improvements at the areas on the list Irish Water can stop raw sewage from discharging into our environment, make sure Ireland complies with EU requirements to collect and treat waste water properly, prevent waste water from harming water bodies such as rivers that are most at risk of pollution and protect some globally endangered species living in our rivers.

Lead service connections replaced

Of the 51,669 lead connections which have been replaced to the end of Q4 2022, 12,616 are shared or back yard services and 39,053 are individual public side services. The target for the five-year term of Revenue Control Period 3 (2020-2024) is to replace 13,231 lead connections.

The WAB notes that Irish Water has continued to encounter difficulties in accessing shared and backyard service replacements, as some homeowners have refused to sign the necessary consent forms for works to be carried out on private property. Irish Water continues to engage with these homeowners to get these consent forms signed. With an increased budget for 2022, Irish Water expected to significantly increase lead replacements to >10,000 connections this year – and the final figure achieved in 2022 was 10,103. While this has improved, the replacement rate has still not recovered to the 15,000 annual replacements achieved in 2019.

Overall compliance with microbiological indicators for drinking water

The WAB notes that compliance with the microbiological standards is high and has remained over 99% in the period 2014 – 2021. The results show that water quality from public supplies remains very good and people can be confident that it is safe to drink. In 2021, four public water supplies showed samples which failed to meet the standards for E. coli. The WAB welcomes the consistent high level of compliance in our public water supplies and notes that continued effort is needed by Uisce Éireann to eliminate all E. coli failures.

Boil Water Notices

When Irish Water took charge of water supplies in 2014, it set a target to eliminate all boil water notices that were in place at that time. This target was achieved. The WAB's main concern now is that current and future boil water notices are limited in frequency and short in duration.

At the end of Quarter 4 2022, 27,822 people were on boil water notices which is higher than that typically seen over previous years. Following from two significant incidents during 2021 (at Gorey and Ballymore Eustace water treatment plants) the WAB notes that the EPA instructed Irish Water to implement actions in response to these incidents including training on incident awareness, escalation, and management for all staff.

Compliance of Urban Waste Water Treatment (UWWT): Plants with Environmental Protection Agency discharge licences

The overall rate of compliance with the treatment standards set by the Environmental Protection Agency set out in discharge licences remains low. While the percentage of urban areas complying with discharge licences increased from 41% in 2020 to 42% in 2021, the percentage of the population served by plants that were compliant decreased slightly during this period from 28% to 27%.

In order to improve compliance, waste water treatment infrastructure will need to be upgraded when required and improvements in how plants are operated and maintained should be made, so that they can consistently perform at their best.

Agglomerations with no Wastewater Treatment

In 2013, there were 50 towns and villages in Ireland discharging untreated waste water into the environment. Between 2014 and 2022, Irish Water connected 21 of these areas to treatment plants and reduced the number of areas with no waste water treatment to 29.

As outlined in previous WAB reports, a target of zero agglomerations with no treatment or preliminary treatment only by the end of 2024 was placed on Irish Water. Irish Water will fall far short of this target. The WAB is of the view that a discharge of untreated waste water is an environmental concern for a wide range of stakeholders across Ireland and is not acceptable.

Key Events

Part 3 of the report sets out a number of reports relevant to Uisce Éireann's performance.

The EPA's report on Urban Waste Treatment in 2021 highlights that just half of Ireland's sewage was treated to European Union standards, well below the EU average of 90%. The report notes that Uisce Éireann still need to provide clear action plans to deal with one-third of the 91 priority areas identified.

In 2021, according to the EPA's report on Water Quality in Public Supplies, water quality remained high with 99.7% compliance with bacterial and chemical limits. Water is safe to drink and there is an improved vigilance on water quality following some high profile incidents, such as at Gorey. However, progress on removing lead from drinking water networks is too slow.

The CRU published a report on Uisce Éireann's progress in addressing issues in its investment planning process identified following a review by Scottish Water International. Uisce Éireann has now closed out most of the required deliverables as it nears the end of the implementation period; a welcome development.

The CRU also addressed the impacts of the unprecedented rise in inflation on Uisce Éireann due to Covid-19 and the energy shock arising from the Russian invasion of Ukraine. In the Irish Water Revenue Control 3 - Interim Review Decision Paper, the CRU approved significant additional funds for operating and capital expenditure and noted that Uisce Éireann's investment and delivery performance will be comprehensively assessed at the end of RC3.

A number of innovation projects were completed or continue to be pursued in 2021 by Uisce Éireann under CRU's Water Services Innovation Fund. These are projects which have the future potential to improve how water services are delivered.

Finally, the CRU published the outcome of investigations into Uisce Éireann's conduct following water quality incidents at Cavanhill and Gorey public water supplies. These highlighted an inconsistent and unclear approach to customer contact handling which can make it difficult for customers' complaints to be registered. Uisce Éireann are conducting a review of its contact handling processes.

Part 1

Introduction

The Water Advisory Body (the WAB) is established under statute. The WAB consists of five members:



▼
Paul McGowan *Chairperson*



▼
Martin Sisk



▼
Miriam McDonald



▼
Dónal Purcell



▼
Noel Byrne (interim member)

Improving the transparency and accountability of Irish Water

Our overall function is to advise the Minister on the measures needed to improve the transparency and accountability of Irish Water for the purpose of increasing the confidence of members of the public in Irish Water. The WAB's functions are set out in the Water Services Act 2017.

Irish Water's Strategic Funding Plan is a public document and available on Irish Water's website www.water.ie. This report sets out the WAB's view on how Irish Water is performing against its Strategic Funding Plan. We use a series of performance indicators and commentaries on specific events to fulfill this requirement.

Each report is prepared for the Oireachtas and is published on the WAB's website - www.wateradvisorybody.ie.

Performance Indicators in this Report

The WAB has chosen a set of performance indicators to provide a broad view of Irish Water's performance. The WAB has kept these performance indicators under review to make sure that they remain relevant and continue to be good measures of performance. In the accompanying Appendix, we explain each indicator and why it is important.

There are some areas of interest to the WAB where data are not available. These include cost reduction and efficiency improvements, procurement, remuneration and staffing policies of Irish Water. They also include Irish Water's performance in terms of responsiveness to the needs of communities and enterprises.

The absence of data requires the WAB to take a different approach to measuring performance in these areas. For example, in relation to procurement, remuneration and staffing policies Irish Water commissioned an independent audit on procurement, reporting directly to the WAB. The "Review of Irish Waters procurement and contract policies and procedures to ensure compliance against PD02 and PD03" covered procurement policies and procedures with the full report available at <https://wateradvisorybody.ie/other-publications/>

Part 2

Key Performance Indicators

The WAB has selected thirteen performance indicators, each measuring the performance of Irish Water under a different heading.

These headings are:

- ▶ infrastructure delivery and leakage reduction (6 indicators);
- ▶ improvements in water quality (4 indicators);
- ▶ the responsiveness of Irish Water to the needs of communities and enterprise (2 indicators); and
- ▶ Energy and Emissions (1 indicator).

This report displays each of the thirteen performance indicators. A commentary is provided only on those performance indicators which have been updated in this Quarterly Report. Where available, the targets that Irish Water is working to in relation to each indicator are also set out.

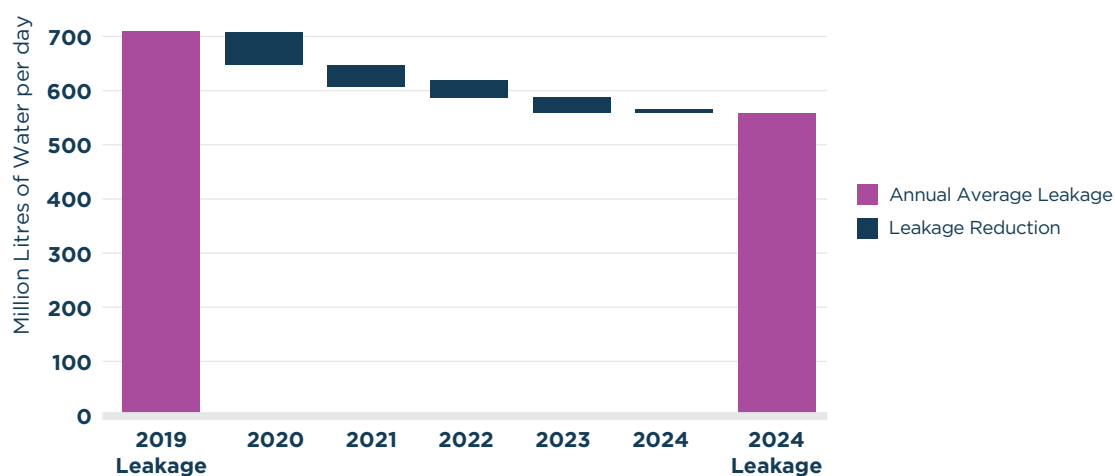
For each indicator, the Appendix to this report includes a brief explanation of the indicator and the reason why the indicator is important.

2.1 Infrastructure Delivery and Leakage Reduction Indicators

This metric separately monitors the amount of water lost on the public network pipes and the amount of water lost on customer supply pipes. This metric has not been updated in this report. This metric was last updated in the Water Advisory Body Quarterly Report No. 1 of 2022.

2.1.1 Performance Indicator 1 - Leakage

Figure 1
Public Side Leakage Reduction



The following leakage reduction targets have been placed on Uisce Éireann to be achieved by the end of 2024:

- ▶ 161 million litres of water per day of water lost on the public network
- ▶ 15 million litres of water per day of water lost on customer supply pipes

In setting annual targets, Uisce Éireann is to follow the targets as set out in Figure 1 for reducing public side leakage. Separately, a straight-line target has been placed on Uisce Éireann to reduce the annual average amount of water leaking on customer supply pipes by 3 million litres of water per day, in each of the years 2020 to 2024.

2.1.2 Performance Indicator 2 - First Fix Scheme

This metric separately monitors the number of leak repairs and the combined total savings (in Megalitres/day).

This metric has not been updated in this report. This metric was last updated in the Water Advisory Body Quarterly Report No. 3 of 2022.

Figure 2

Combined total of Irish Water and Customer Leak Repairs completed half-yearly.

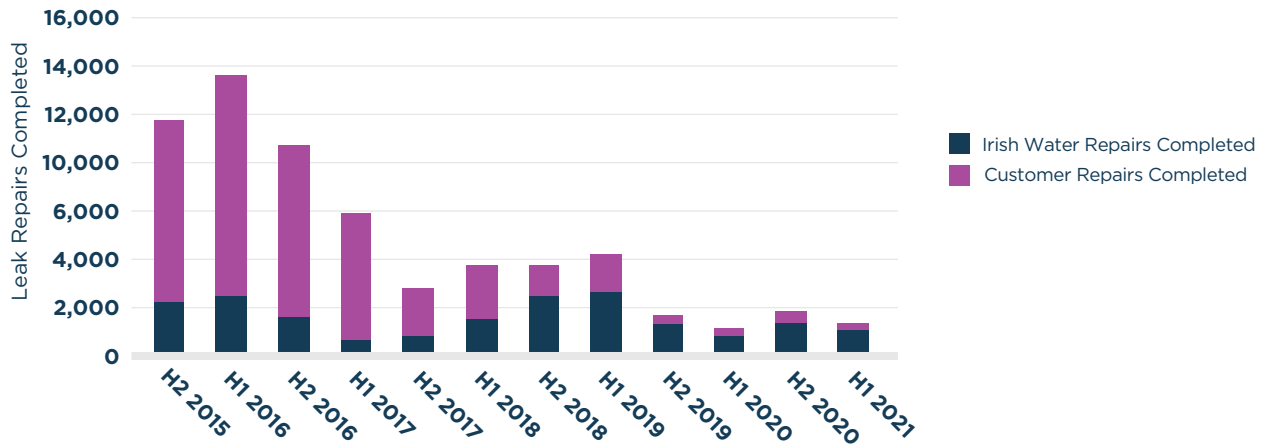
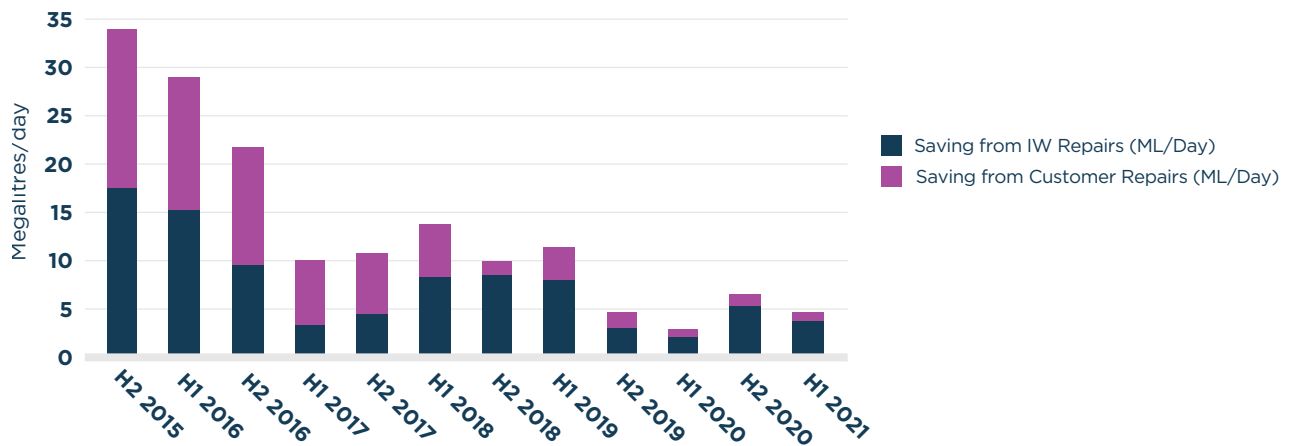


Figure 3

Combined total Savings in Megalitres/day of Irish Water and Customer Leak Repairs completed half-yearly.



Specific targets have not been set for Irish Water in respect of the First Fix Scheme. This is because availing of a leak investigation and possible First Fix requires a good level of customer engagement to meet any target.

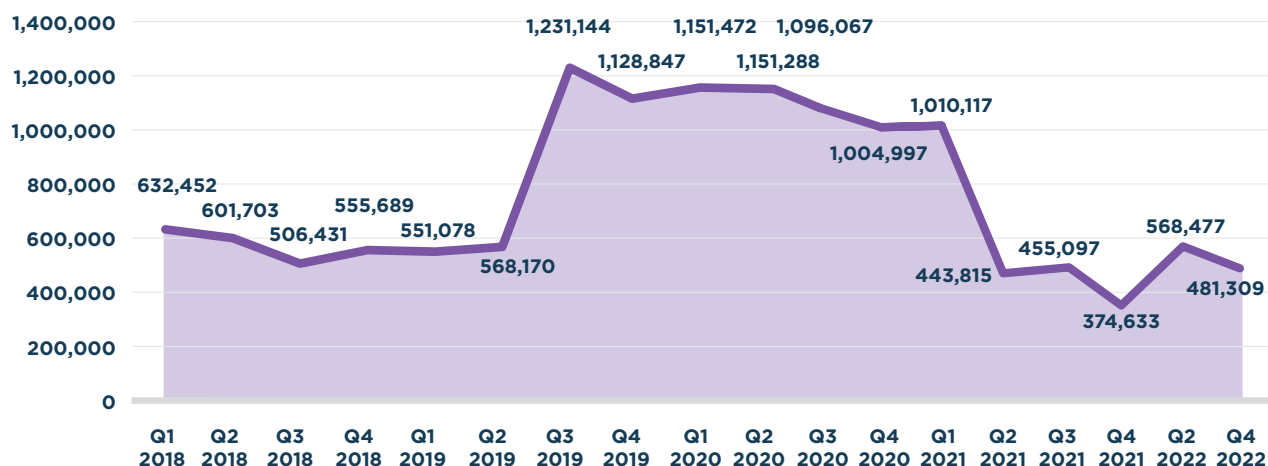
2.1.3 Performance Indicator 3 - Remedial Action List (Water)

This Performance Metric has been updated in this report and is based on information up to the end of 2022.

Figure 4 shows the population served by drinking water supplies included on the list from Quarter 1 2018 to the end of Quarter 4 2022. The number of people served by RAL supplies reached a high of over 1 million in 2019. This has since reduced, mainly due to Leixlip water treatment plant, which services a population of 590,000 coming off the list. Since then, the RAL has fluctuated with the population served by RAL supplies increasing in 2022. This recent increase is an unwelcome trend and the WAB would expect to see a continual reduction in the number of supplies on the RAL.

Figure 4

Population Served by Supplies on the Remedial Action List.



Commentary

At the end of Quarter 4 2022 the Remedial Action List contained 58 water supplies, which is an increase of six supplies since the end of Quarter 4 2021. A total of 5 supplies were removed and a total of 6 supplies were added to the RAL in Q4 2022 (when compared to Q2 2022).

Five supplies were removed from the Remedial Action List (removed in Quarter 4 2022) namely:

- ▶ Lee Road, Cork City
- ▶ Newcastlewest
- ▶ Ballymahon
- ▶ Shercock
- ▶ Dowra

These were removed following either improvements at the treatment plants or compliance with standards over an appropriate time period.

Six water supply zones were added to the Remedial Action List (added in Quarter 4 2022) namely:

- ▶ Roscrea
- ▶ Ballyclough & Mount North
- ▶ Kilcash
- ▶ Templetuohy
- ▶ Fermoy
- ▶ Macroom

These supplies were added due to inadequate treatment or operational management issues at the plants.

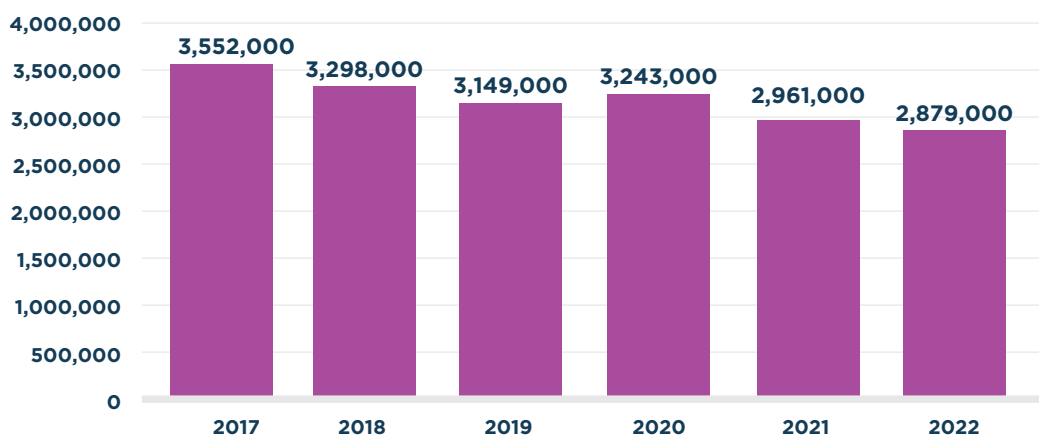
The number of supplies on the Remedial Action List has increased in Q4 2022. The WAB notes this trend with concern.

2.1.4 Performance Indicator 4 - Priority Urban Area List (Wastewater)

This metric has been updated in this report and is based on information up to the end of 2022.

Figure 5

Population equivalent served by priority areas.



Commentary

Figure 5 shows the population equivalent served by priority areas included on the priority areas list for the years 2017 to 2022.

One area was removed from the priority urban area list since this indicator was last updated in the WAB report of Q2 2022. The number of priority urban areas at the end of 2022 is 91, down from 148 in 2017. The inclusion of an urban area on the list means that Irish Water must improve waste water treatment in that area.

By making improvements at the areas on the list Irish Water can stop raw sewage from discharging into our environment, make sure Ireland complies with EU requirements to collect and treat waste water properly, prevent waste water from harming water bodies such as rivers that are most at risk of pollution and protect some globally endangered species living in our rivers.

There can be a range of actions that Irish Water may need to take, depending on the reason an urban area was added to the list. These may include:

- ▶ Infrastructural upgrades to the waste water treatment plant to treat sewage to the required standards;
- ▶ Upgrades to the collecting systems (sewers and pump stations) to ensure waste water is collected properly and conveyed to the treatment plant;
- ▶ Operational improvements to optimise treatment plant performance.

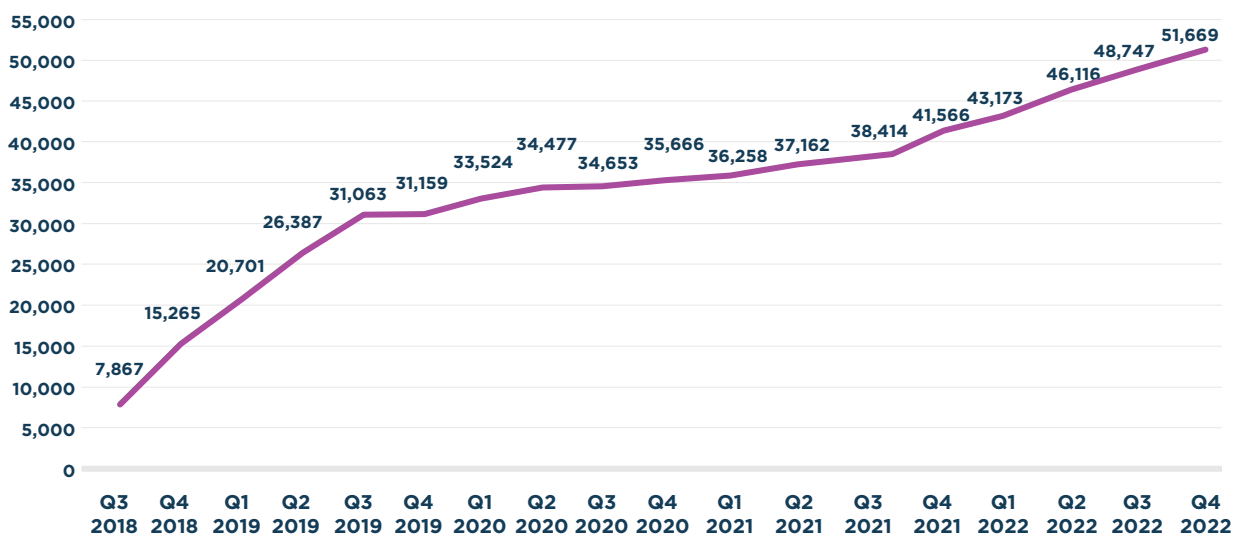
The WAB notes the Environmental Protection Agency’s latest report on urban waste water treatment, published in Q4 2022. This Report identified that the improvement works needed at many priority urban areas will not be completed during Irish Water’s current investment plan, which runs until the end of 2024. The WAB also notes the Environmental Protection Agency’s report highlights the importance of Irish Water allocating sufficient funding and resources in its next investment plan to complete all outstanding work needed to resolve the environmental concerns at these priority urban areas.

2.1.5 Performance Indicator 5 - Lead service connections replaced

This Performance Metric has been updated in this report and is based on information valid up to the end of Quarter 4 2022.

Figure 6

Total lead connections replaced (cumulative)



Commentary

Irish Water has stated that the target for 2022 is > 10,000 replacements. A target of 13,231 for the entirety of Revenue Control 3 was previously set by Irish Water in December 2019. During Quarter 4 2022, Irish Water replaced 2,984 lead service connections.

Figure 6 above shows the rate of progress of lead connection replacements up to the end of Quarter 4 2022. This demonstrates that progress has slowed significantly when compared to the progress made during 2019. Replacement of lead connections was paused due to Covid-19 restrictions but recommenced in Quarter 3 2020, following the lifting of restrictions.

Of the 51,669 lead connections which have been replaced to the end of Quarter 4 2022, 12,616 are shared or backyard services and 39,053 are individual public side services.

Irish Water has continued to encounter difficulties in accessing shared and backyard service replacements. It continues to engage with these homeowners to get consent forms signed. With an increased budget for 2022, Irish Water had expected to significantly increase lead replacements to > 10,000 this year and was successful, as the number reached 10,103. While this is improved, the replacement rate has still not recovered to the level of the 15,000 replacements achieved in 2019.

2.1.6 Performance Indicator 6 - Unplanned Interruptions to Water Supply

This metric monitors the number of properties experiencing unplanned interruptions to their supply for greater than 12 and 24 hours. This metric has not been updated and is based on information valid up to the end of 2020. This metric was last updated in the Water Advisory Body Quarterly Report No. 2 of 2022.

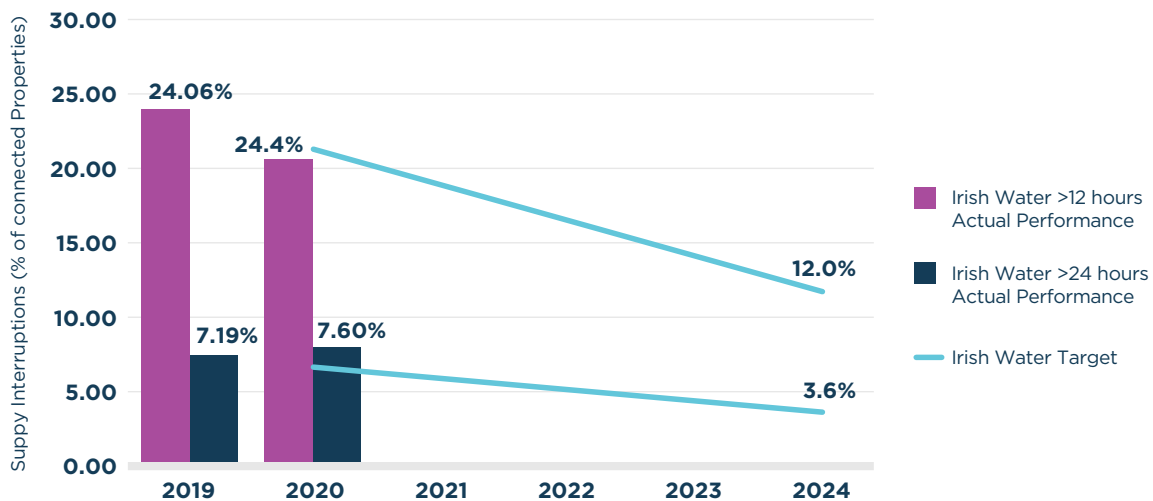
Figure 7

Number of Estimated Properties Experiencing an Unplanned Interruption to Supply.

Unplanned Interruption	Q 3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Total (Q3 2019 - Q4 2020)
>12 Hours	220,984	74,570	53,105	84,050	140,577	89,271	662,557
>24 Hours	35,043	31,889	35,076	27,281	49,241	25,672	204,202

Figure 8

Unplanned Interruptions to Supply 2020 - 2024 Target.



At a minimum, Irish Water has been set the following targets:

- ▶ less than 12% of connected properties should experience an unplanned interruption for greater than 12 hours by end 2024 based on the ‘revised estimated number of properties’; **and**
- ▶ less than 3.6% of connected properties should experience an unplanned interruption for greater than 24 hours by end 2024 based on the ‘revised estimated number of properties’.

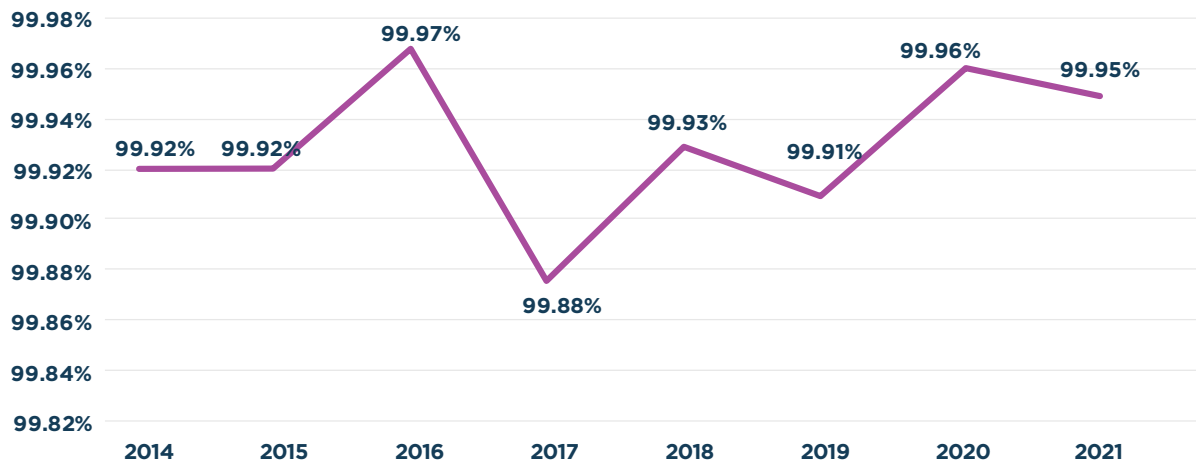
2.2 Improvements in Water Quality, including the elimination of boil water notices

2.2.1 Performance Indicator 7 - Overall compliance with microbiological indicators for drinking water

This Performance Metric has been updated in this report and is based on information valid up to the end of Quarter 4 2021.

Figure 9

Percentage of Samples complying with the E. coli Standard



Commentary

The WAB notes that compliance with the microbiological standards is high and has remained over 99% in the period 2014 – 2021. The results show that water quality from public supplies remains very good and people can be confident that it is safe to drink. In 2021, four public water supplies showed samples which failed to meet the standards for E. coli. WAB welcomes the consistent high level of compliance in our public water supplies and notes that continued effort is needed by Uisce Éireann to eliminate all E. coli failures.

2.2.2 Performance Indicator 8 - Boil Water Notices

This Performance Metric has been updated in this report and is based on information valid up to the end of Quarter 4 2022.

Figure 10

Boil water notices at the end of each quarter

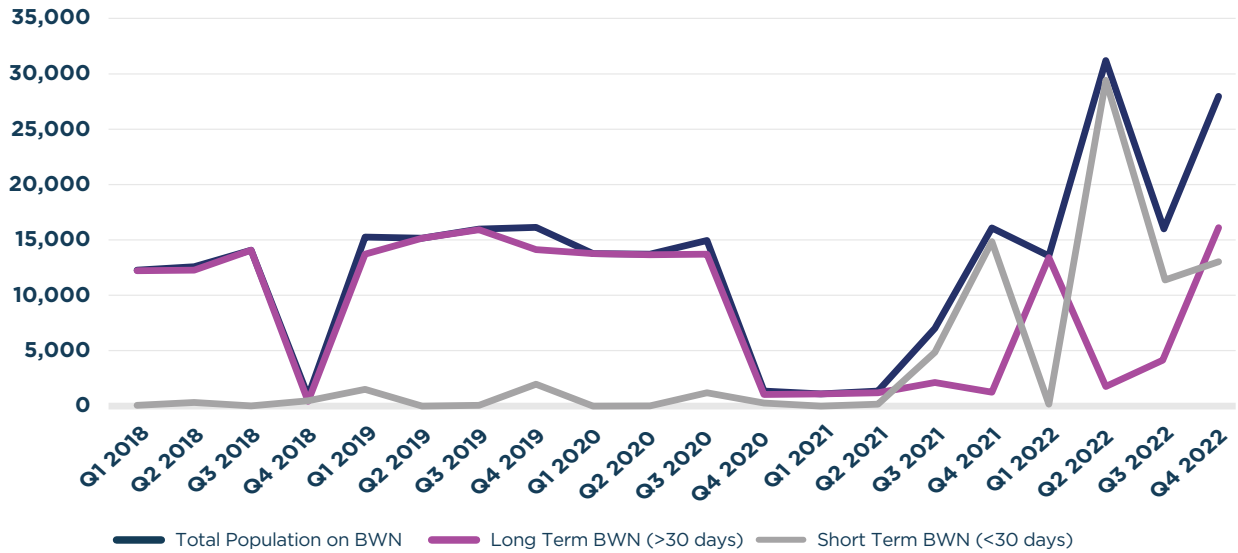


Figure 10 shows the total population on boil water notices at the end of Quarter 4 2022. The graph also shows how long those boil water notices have been in place by showing the population on boil water notices for less than thirty days and the population on boil water notices for more than thirty days.

Commentary

Under normal circumstances the WAB expects that no consumer should be on a long-term Boil Water Notice. Boil water notices should be kept at low levels and for as short a period as possible - while also recognising the need for vigilance to protect public health.

At the end of Quarter 4 2022 - 27,822 people were on boil water notices which is higher than that typically seen over previous years. Following from two significant incidents during 2021 (at Gorey and Ballymore Eustace water treatment plants) the WAB notes that the EPA instructed Irish Water to implement actions in response to these incidents including training on incident awareness, escalation, and management for all staff. Better vigilance by Irish Water following these incidents has resulted in increased detection of problems. These problems have been managed by the temporary imposition of increased numbers of protective boil water notices in 2021, and this increase has followed into 2022. This improved vigilance is a positive development and will result in a safer water supply for all consumers.

Of the 17 boil water notices in place at the end of Quarter 4, 2022, 14 of those notices were long term boil water notices which means the notice was in place for longer than 30 days. This means that the solution to fix the problem with the plant could not be addressed quickly and requires significant investment by Irish Water.

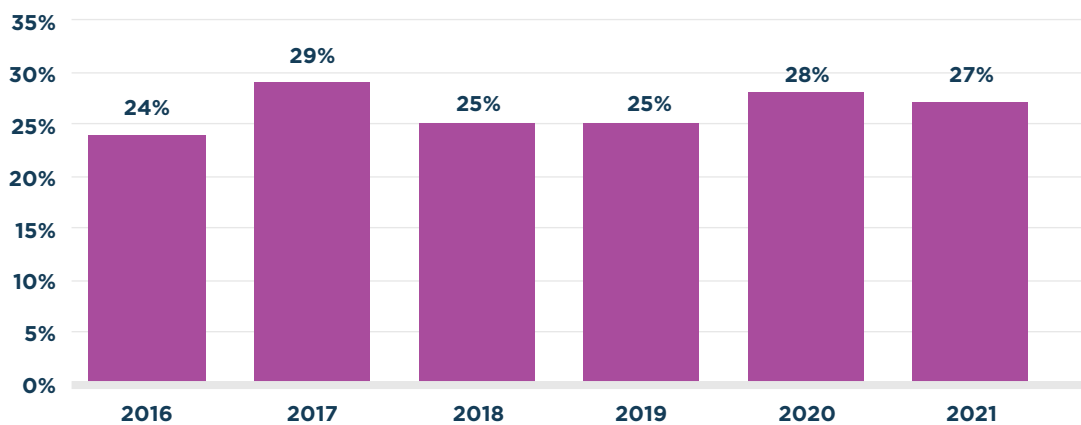
When Irish Water took charge of water supplies in 2014 it set a target to eliminate all boil water notices that were in place at that time. This target was achieved and while no specific future targets have been set, Irish Water is working to continue reducing the number of people affected by boil water notices.

2.2.3 Performance Indicator 9 - Compliance of Urban Waste Water Treatment (UWWT); Plants with Environmental Protection Agency discharge licences

This metric has been updated in this report and is based on information up to the end of 2021.

Figure 11

Percentage of Population served by compliant Urban Waste Water Treatment plants (by population equivalent)



Commentary

The overall rate of compliance with the treatment standards set by the Environmental Protection Agency set out in discharge licences remains low. While the percentage of urban areas complying with discharge licences increased from 41% in 2020 to 42% in 2021, the percentage of the population served by plants that were compliant decreased slightly during this period from 28% to 27%.

Two main actions are required to improve compliance:

- ▶ Upgrade waste water treatment infrastructure where this is needed to comply with discharge licences.
- ▶ Continue to improve how plants are operated and maintained so that they consistently perform at their best.

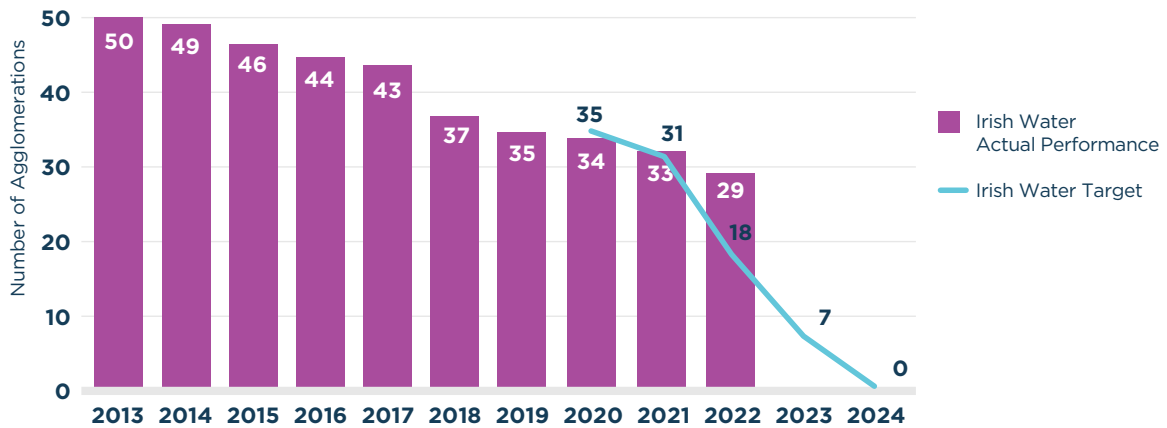
One waste water treatment plant, namely Ringsend in Dublin, accounts for more than half of the population equivalent served by non-compliant plants. A major upgrade of this treatment plant began in 2018 and is due to be completed in 2025. This upgrade is expected to deliver a significant improvement in the percentage of the population served by compliant treatment plants.

2.2.4 Performance Indicator 10 - Agglomerations with no Wastewater Treatment

This Performance Indicator has been updated and is based on information up to the end of 2022.

Figure 12

Agglomerations with No Treatment or Preliminary Treatment Only Targets.



Commentary

In 2013, there were 50 towns and villages in Ireland discharging untreated waste water into the environment. Between 2014 and 2022, Irish Water connected 21 of these areas to treatment plants and reduced the number of areas with no waste water treatment to 29.

As outlined in previous WAB reports, a target of zero agglomerations with no treatment or preliminary treatment only by the end of 2024 was placed on Irish Water. Irish Water will fall far short of this target. Based on Irish Water’s latest plans from Quarter 4 2022, there will still be 13 towns and villages discharging untreated waste water at the end of 2024 and the final four of these areas are not scheduled to be connected to treatment until 2028. The changing nature of Irish Water’s plans to connect these areas to treatment is a significant concern and the delays in providing treatment are prolonging risks to the environment and public health.

The WAB is of the view that a discharge of untreated waste water is an environmental concern for a wide range of stakeholders across Ireland and is not acceptable.

2.3 Responsiveness to the needs of Communities and Enterprise

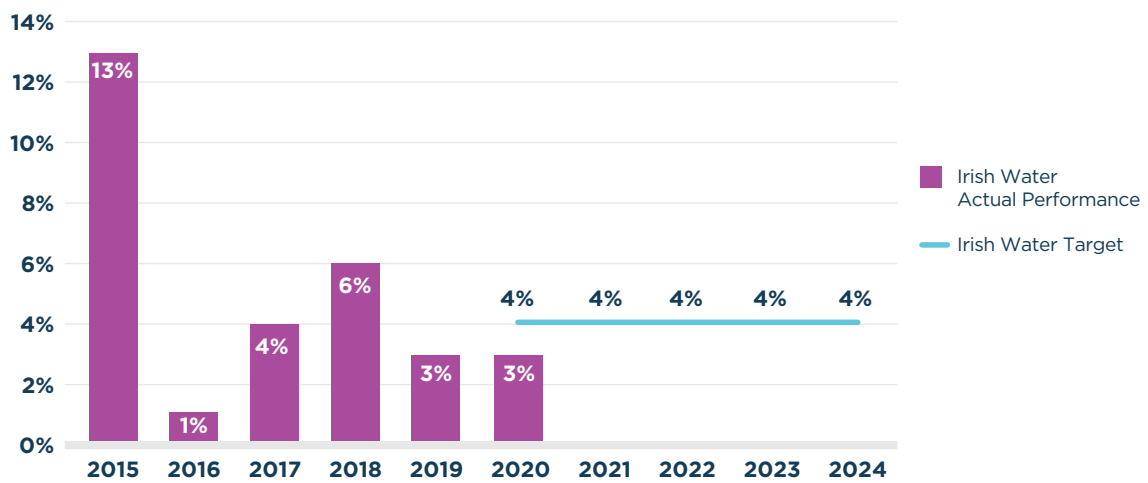
This metric has not been updated and is based on information valid up to the end of 2020. This metric was last updated in the Water Advisory Body Quarterly Report No. 2 of 2022.

2.3.1 Performance Indicator 11 – Ease of Contact

There are 3 separate metrics within the Ease of Contact performance indicator:

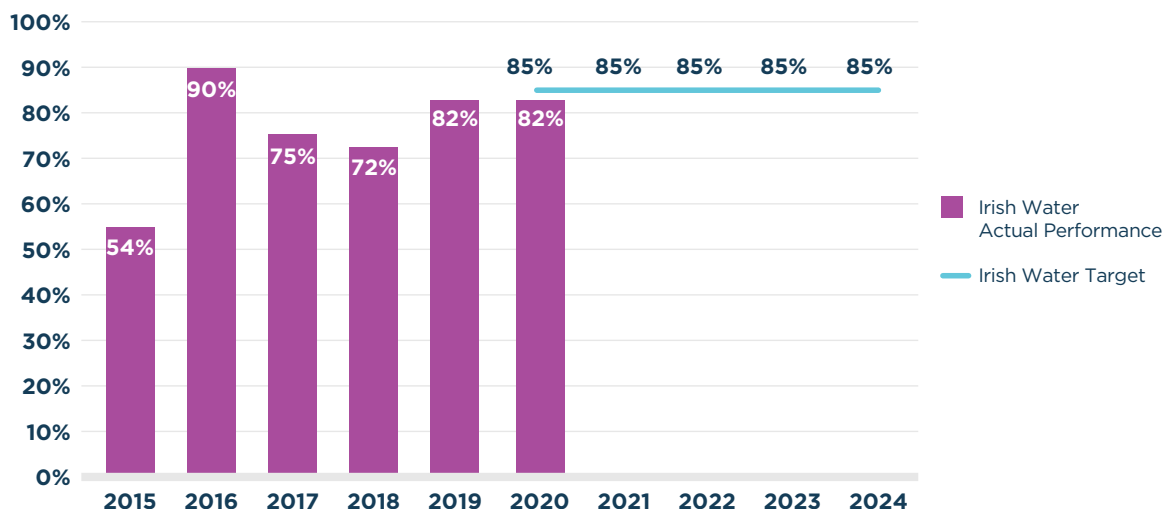
Figure 13

Call Abandonment Rate



The Call Abandonment Rate metric is the percentage of calls that are abandoned while a caller is waiting in the queue to speak to an agent. It is designed to incentivise Irish Water to shorten the length of time customers may spend in the queue. A target call abandonment rate of 4% or less has been placed on Irish Water for each of the years 2020-2024.

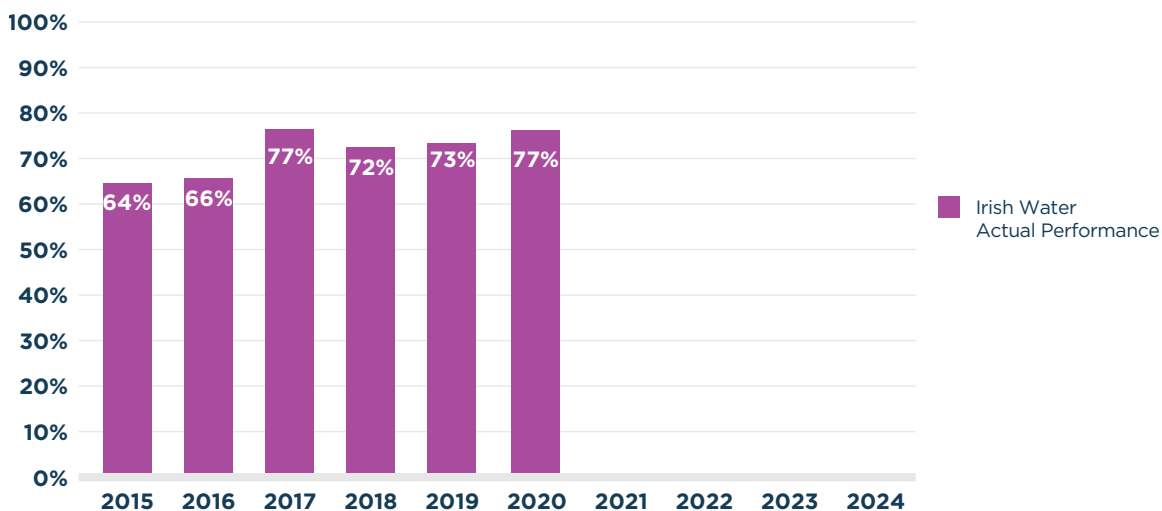
Figure 14
Speed of Telephone Response.



The Speed of telephone response by Irish Water measures the percentage of calls that enter a queue to speak to an agent which are answered within 20 seconds.

A target of at least 85% of calls answered by an agent within 20 seconds of being in the queue has been placed on Irish Water for each of the years 2020-2024.

Figure 15
Customer Satisfaction Survey.



The Customer Satisfaction metric measures customer satisfaction levels of their experience dealing with Irish Water through phone contact. No specific incremental customer satisfaction score targets have been placed on Irish Water over the period 2020-2024. Irish Water’s performance (under the current survey method) is required to improve in 2020 over that achieved in 2019 and continue to do so. CRU has proposed that a new survey approach is implemented in the future which may allow comparison with other Irish and UK utilities, and against which targets will be set.

2.3.2 Performance Indicator 12 - Irish Water Customer Complaints management

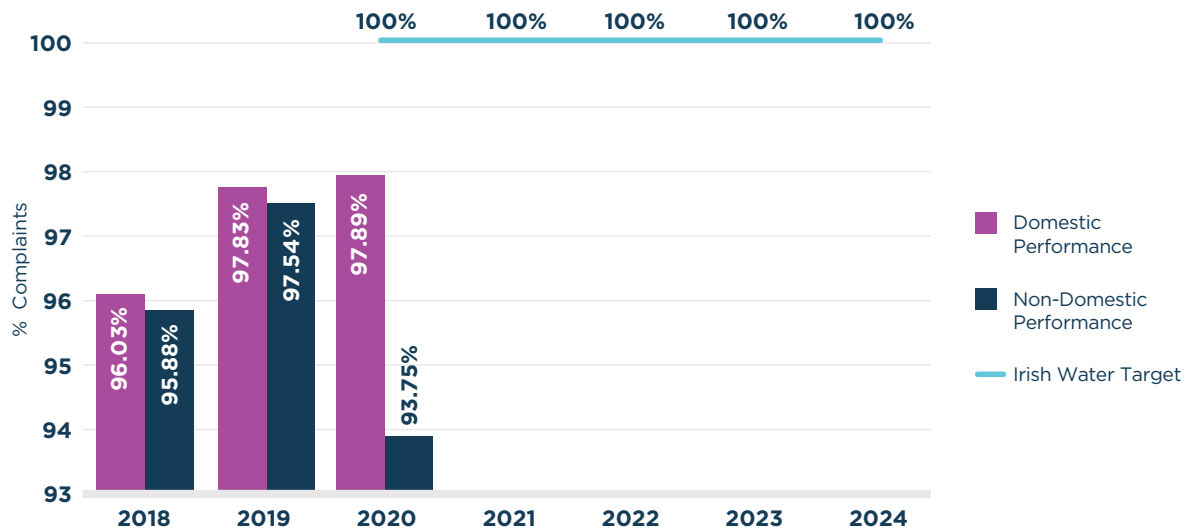
This metric has not been updated and is based on information valid up to the end of 2020. This metric was last updated in the Water Advisory Body Quarterly Report No. 2 of 2022.

The number of complaints Irish Water receives is monitored in two ways. They are:

- ▶ the percentage of complaints that are responded to within five working days, with either a resolution or an outline plan of the proposed resolution; and
- ▶ the percentage of complaints to which a final decision is issued within two months.

Figure 16

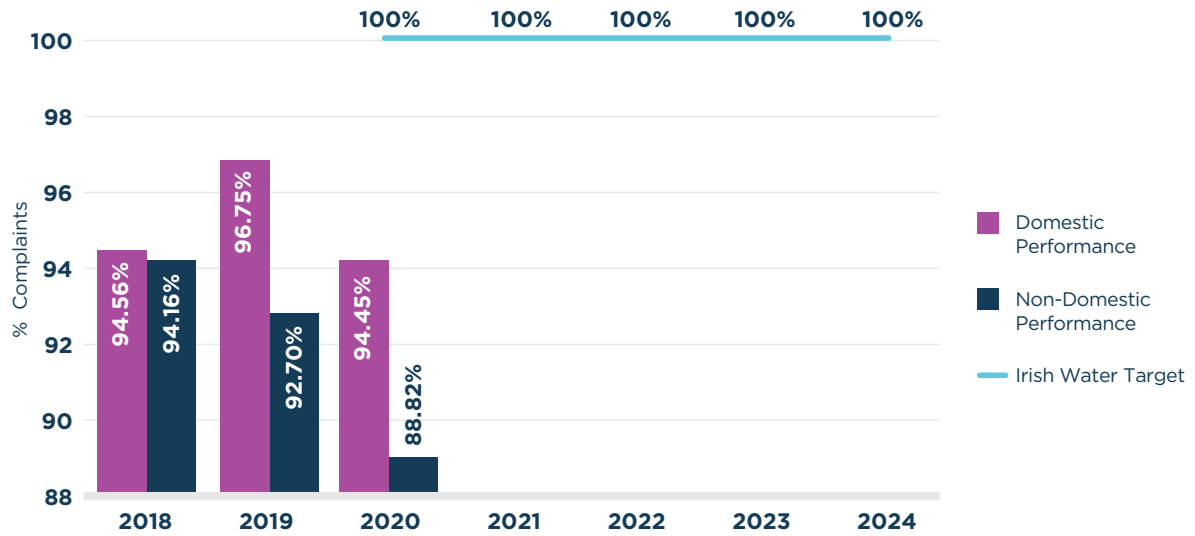
Response to Complaints within 5 working days.



A target of 100% of complaints to be responded to within 5 working days, either with a resolution or an outline plan of the proposed resolution has been placed on Irish Water for each of the years 2020-2024.

Figure 17

Response to Complaints (with Final Decision) within 2 months.



A target of 100% of complaints to be issued a final decision within 2 months has been placed on Irish Water for each of the years 2020-2024.

2.4 Energy and Emissions

2.4.1 Performance Indicator 13 - Energy Consumption Targets

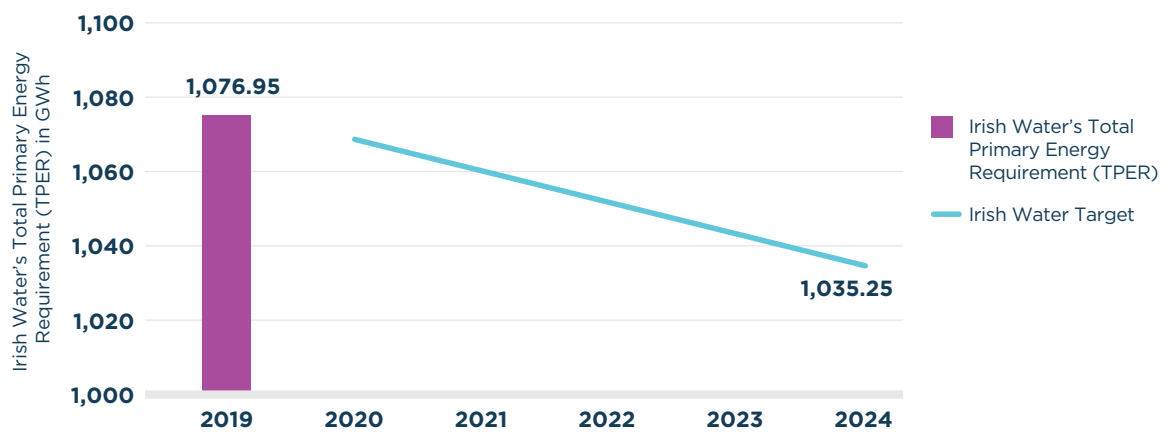
This metric monitors Irish Water’s Total Primary Energy Requirement in Gigawatt hours.

This metric has not been updated. Please see Water Advisory Body Quarterly Report No. 2 of 2022 for further information.

A minimum target reduction of 40.71 Gigawatt hours in Total Primary Energy Requirement (TPER) has been placed on Irish Water by end 2024.

Figure 18

Energy Consumption Targets.



Part 3

Key Events

3.1 Urban Waste Water Treatment in 2021

The EPA's report on Urban Waste Water Treatment in 2021 shows that investment in sewage treatment is delivering some improvements, but treatment at many areas is still not as good as it needs to be and poorly treated sewage continues to harm our environment. In 2021 just half (51%) of Ireland's sewage was treated to European Union standards, well below the EU average of 90%. The report notes that it will take a significant and sustained effort over the next two decades to bring all waste water treatment infrastructure up to standard.

The report identifies 91 priority areas where Irish Water should target resources to deliver improvements where they are most needed and to bring the greatest environmental benefits. Work to improve treatment at some of these priority areas is ongoing but the EPA is concerned that Irish Water has still not provided clear action plans and time frames to deal with one-third of the priority areas and has not allocated resources to complete improvements at these areas. The report calls on Irish Water to provide for all outstanding improvements needed at priority areas in its next investment plan, which covers the period 2025-2029. The WAB notes the concerns raised by the EPA and the necessity for Irish Water to deliver improvements at priority areas a part of their next investment plan.

3.2 Drinking Water Quality in Public Supplies 2021

The EPA Drinking Water Quality in Public Supplies Report 2021 shows that the quality of drinking water in public supplies remains high, with over 99.7% compliance with bacterial and chemical limits. The continued high levels of water quality being achieved are positive for consumers and indicate that water is safe to drink.

However, the report highlighted the following issues;

There were two significant incidents during 2021 at the Gorey and Ballymore Eustace water treatment plants which put the health of approximately 885,000 people at risk, with community illness and hospitalisations occurring in the Gorey incident. These incidents highlighted significant failings in oversight and management by Irish Water.

Additionally, the number of supplies breaching trihalomethane (THM) standards increased in 2021, reversing all progress seen in recent years.

Progress to remove lead from drinking water networks is too slow, with the need for stronger leadership at national level. It will take almost a quarter of a century to address the risks posed to public health from lead in drinking water at the replacement rate observed in 2021.

Increased numbers of protective boil water notices were seen in 2021, and this increase has followed into 2022. While boil water notices themselves are unwelcome, this improved vigilance is a positive development and will result in a safer water supply for all consumers.

While water is safe today, the EPA's Remedial Action List (RAL) of "at-risk" supplies identifies where long-term improvements are needed in our drinking water infrastructure to protect public health. The number of people served by "at-risk" supplies on the EPA's RAL reduced during 2021, arising from upgrade works at two large water supplies: Leixlip and Vartry water treatment plants.

3.3 Scottish Water International Implementation Plan Update

In the Revenue Control 3 (RC3) Decision (CRU20085), the CRU directed Irish Water to implement all recommendations arising from the expert review undertaken by Scottish Water International (SWI) of Irish Water's internal investment planning processes (CRU20085b). The objectives of this review were outlined in the CRU's 2019 RC3 Decision paper (CRU19148) and arose from issues identified by the CRU with Irish Water's investment plan submissions for RC3.

The CRU required that an independent review should be undertaken to identify process deficiencies and potential resolutions with a view to preventing similar recurrences when submitting future investment plans. SWI (a subsidiary of Scottish Water) was appointed to lead the investigation. Following a comprehensive review of Irish Water's capital planning process, SWI provided a copy of its findings (CRU20085b) to the CRU in April 2020. Irish Water was tasked by the CRU with developing an implementation plan to enact all recommendations arising from the SWI investigation and to provide a copy of this plan to the CRU by December 2020. The plan (CRU21134a) details how Irish Water will address each of the SWI recommendations by enacting key deliverables against a defined timeline. The deadline for full implementation of all recommendations was set to the end of Q4 2022 and Irish Water is mandated to provide quarterly progress updates to the CRU up to this deadline. It was agreed with Irish Water that the progress reports are to include details concerning their performance against the agreed deliverables, as well as any identified project risks and corresponding mitigations.

The latest available quarterly progress report (Q3 2022) shows that Irish Water has now closed out most of its deliverables as it nears the end of the implementation period. While several deliverables remain to be finalised, all are now at 70% or greater completion. Resourcing and headcount availability were identified early on as potential pinch-points that could affect delivery of the plan, but these continue to be actively managed. Finally, the CRU intends commissioning an audit of Irish Water's implementation of the plan, due to commence in Q1 2023. This will ensure that the implementation plan has been delivered fully and the utility is on track to provide accurate investment and delivery plans as part of the RC4 (2025-2029) planning, due to begin during 2023.

The WAB welcomes this Report on progress made by Irish Water.

3.4 Irish Water Revenue Control 3 – Interim Review Decision Paper

In November 2022, the CRU published its decision concerning an interim review of Irish Water’s Revenue Control 3 (RC3). This paper (CRU2022977) set out the CRU’s final decision concerning additional capital expenditure (capex) and operational expenditure (opex) allowances for Irish Water. This review took place in response to an unprecedented rise in inflation and energy costs arising from the impact of the COVID-19 pandemic on supply chains, as well as energy increases driven by the Russian invasion of Ukraine.

In a prior consultation paper published in July 2022 (CRU202267), the CRU presented a framework assessment for assessing whether Irish Water required additional revenues, beyond those previously decided at RC3 (see CRU19148 and CRU21093). This framework evaluated whether the external inflationary factors being faced by Irish Water were real, material and beyond the ability of Irish Water’s management to control. Additionally, the consultation paper sought stakeholder feedback regarding three separate mechanisms to address the shortfall in revenue and, separately, a detailed submission from Irish Water.

Having applied the framework as set out above, the CRU has concluded that Irish Water is facing real inflationary pressures which are material and beyond the full extent of management control. Furthermore, absent an adjustment to the RC3 allowance, the resultant underfunding could lead to undesirable consequences for water and wastewater customers. The CRU considered all stakeholder responses and, following due deliberation of Irish Water’s submissions, the CRU Decision Paper set out the following approach:

- ▶ Irish Water will be granted access to €556m (2017 monies) of previously ring-fenced funds for investment across its broader capex budget. This allowance includes a provision for Irish Water to deliver further rehabilitated mains for an additional allowance of €110m (2017 monies).
- ▶ Irish Water will be allocated an additional 2023 controllable opex allowance of €137m (2017 monies) to address deficits caused by inflation and energy increases. As this sum represents a significant supplementary opex allowance, the CRU will also require Irish Water to submit a plan detailing the efficiency measures it intends to enact to drive down energy costs by end Q1 2023.

At the end of RC3, Irish Water’s investment and delivery performance will be comprehensively assessed on a value-for-money basis as part of the RC3 lookback process. Furthermore, the CRU is committed to its ongoing monitoring program and assessment of Irish Water’s efficient capital investment and operational delivery. This is delivered through the annual Investment Plan and Performance Assessment Framework monitoring programmes.

The WAB notes and welcomes the fact that at the end of RC3, Irish Water’s performance will be comprehensively assessed on a value-for-money basis.

3.5 Water Services Innovation Fund Annual Report 2021

In December 2022, the CRU published the Water Services Innovation Fund Annual Report 2021 (CRU 2022995). This report provides an update on the projects undertaken by Irish Water in 2021 that are supported by this fund.

The Water Services Innovation Fund (the Fund) was established by the CRU in 2015 to encourage Irish Water investment in research projects – outside of ‘business as usual’ activities – that have the potential to improve how water services are delivered. These projects may be undertaken in collaboration with research partners such as universities or consultancy firms. As these innovative projects are riskier by nature and may not deliver defined outcomes, a separate fund is provided outside of normal operating costs and investment plans.

Proposed projects under the Fund must further at least one of the following objectives:

- ▶ Provision of safe, secure, and reliable water services.
- ▶ Increased understanding of customer behaviours and their drivers and effective customer engagement.
- ▶ Enhanced energy savings in the provision of water services.
- ▶ Achievement of relevant environmental standards and the objectives of the Water Framework Directive.
- ▶ Mitigation of negative climate change impacts.
- ▶ Provision of water services in an economic and efficient manner.
- ▶ Improved conservation of water resources.



The CRU allowed €4 million under the Fund as part of Irish Water's first Revenue Control (IRC1 2014-2016) and access to this continued into the second Revenue Control (IRC2 2017-2019). Of this, Irish Water spent just over €1 million and accessed a further budget of €2 million. €4 million has been allowed under the Fund as part of Irish Water's third Revenue Control (RC3 2020-2024). As at end 2021, Irish Water has spent €15,000 and accessed over €1.5 million of this. Spent amounts refer to the total money spent by Irish Water on completed projects. Accessed amounts refer to the budgets approved by the CRU to be spent by Irish Water on the ongoing projects.

This report provides an update on the projects undertaken in 2021 that are supported by the Fund. During 2021, three projects were ongoing. These were:

- ▶ Enhancing Existing Wastewater Treatment Plants Through Aerobic Granular Sludge Addition,
- ▶ The Development of Pilot Sludge Treatment Reed Beds for Use in Treating & Dewatering Water Sludge Containing Aluminium Sulphate, and
- ▶ Effecting Transformational Change in Leakage Reduction within the Greater Dublin Area (GDA).

Two projects were completed in 2021:

- ▶ WRc Collaborative Research Project with UK Utilities - CP609 Manhole Rehabilitation: Assessing Condition & Rehabilitation Options, and
- ▶ Developing the Evidence Base for Treatment Wetlands Targeting Phosphorus Removal and Delivery of Co-Benefit.

Finally, two projects were approved by the CRU at the end of 2021: Kaamera Production & Applications and Customer Re-connect.

Further information and updates on all of these projects are provided in more detail in the CRU's Water Services Innovation Fund Annual Report 2021. Further information regarding projects completed prior to 2021 can be found in this report and also on Irish Water's website.

3.6 Compliance update on CRU investigations and audits completed in 2022

On 3 October 2022, the CRU published its findings in relation to two investigations it had conducted following water quality incidents that took place at Cavanhill Public Water Supply (PWS) and Gorey Regional Creagh PWS. The investigations focused on Irish Water's communication with customers and contact handling during these incidents.

The WAB notes with concern that the findings highlighted an inconsistent and unclear approach to contact handling, which can make it difficult for customers' complaints to be registered. In some cases, Irish Water did not log a complaint following a customer calling to report discoloured water alongside illness in their household, which the customer attributed to the water.

The CRU also identified problems with Irish Water's communication with customers impacted by water quality incidents. These include delays in providing information and updates on Irish Water's website and failures to follow up with customers who had contacted it in relation to discoloured water and were not provided with an explanation for the issue they were reporting.

The CRU is of the opinion that improvements are needed in Irish Water's contact categorisation and resolution process and has therefore required Irish Water to conduct a review of its contact handling and categorisation processes, from receipt to resolution, against comparable water utilities to identify best practice and potential improvements in its processes. This review is currently underway.

In addition to the two investigations, the CRU also published two audits concerning Irish Water in 2022. The Q4 2021 audit focused on Irish Water's compliance with the updated requirements of the Customer Handbooks (CRU/20/116a and CRU/20/117b). The CRU identified one finding of non-compliance in relation to non-domestic customer communications.

The Q1 2022 audit focused on complaint handling, specifically in relation to the categorisation of customer contacts as queries or complaints and the revised requirements in relation to the complaint handling procedures. There were two findings of non-compliance. Firstly, Irish Water did not accurately categorise a contact as a complaint in one instance. Secondly, Irish Water failed to provide a written notice of closure in relation to the closure of a Stage 2 complaint. A Stage 2 complaint in Irish Water's complaints process occurs where a customer's initial complaint is not resolved and requires escalation.

Glossary of Terms

Agglomeration - an agglomeration is an urban settlement (village, town or city area) which is connected through a pipe network to a wastewater treatment plant.

Chlorination - Water chlorination is the process of adding chlorine or chlorine compounds such as sodium hypochlorite to water. In particular, chlorination is used to prevent the spread of waterborne diseases.

Cryptosporidium - A disease-causing protozoon widely found in surface water sources.

E. coli - Coliforms, specifically Escherichia coli (E. coli), are the universal indicator microorganisms of faecal contamination of water. These bacteria, which are of definite faecal origin (human and animal), are excreted in vast numbers and their presence in a water supply is proof that faecal contamination has occurred and is a definite indication that pathogens may be present.

Gigawatt hours (“GWh”) - A measure of energy volume.

Million litres of water per day (“MLD”) - A measure of water volume per day.

Pathogen - Microorganisms that can cause disease in humans, other organisms or animals and plants. They may be bacteria, viruses, or protozoa and are found in sewage, in runoff from animals, farms or rural areas populated with domestic and/or wild animals, and in water.

Population Equivalent - in waste-water treatment the population equivalent is a reference that describes the specific load of a wastewater treatment plant.

Remuneration - Reward for employment in the form of pay, salary, or wage, including allowances, benefits (such as company car, medical plan, pension plan), bonuses, cash incentives, and monetary value of the noncash incentives.

Trihalomethanes - Trihalomethanes are a group of four chemicals formed, along with other disinfection by-products, when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water.

Turbidity - Turbidity is a measure of the degree to which the water loses its transparency due to the presence of suspended particulates. The more total suspended solids in the water, the murkier it seems and the higher the turbidity. Turbidity is considered as a good measure of the quality of water.

