Irish Water

Leakage Reduction Programme

First Fix Leak Repair Scheme

For Domestic Water Customers

Quarterly Report

H1 2021

1. Introduction to the Leakage Reduction Programme[1]

Water is one of our most valuable resources. Clean potable water is expensive to produce and distribute and one of Irish Water's (IW) key priorities is to reduce the level of water wasted through leakage. IW produces approximately 1.7 billion litres of treated water every day. In 2020, some 587 million litres per day were utilised by domestic households, 349 million litres per day were utilised by non-domestic customers with approximately 678 million litres per day reported as unaccounted for water (UFW)[2]. To date, IW has reported on UFW which represents the difference between "net production" (the volume of water delivered into IW's network) and "consumption" (the volume of water that can be accounted for by legitimate consumption, metered or not). The difference includes water losses due to leaks.

In order to calculate UFW, IW subtracts the following factors of consumption from net production or distribution input (DI) to IW's water network:

- Water Delivered to Customers: an estimate of the water demanded by domestic and non-domestic customers; includes measured and unmeasured demand, water lost to leaks on the customer's property, under registration of water use due to treatment, old or broken meters and water used on IW sites and treatment plants (water taken legally);

- Distribution system operational use: IW's estimate (1% of DI) of water it uses on the distribution system, for example to clean and flush water mains; and

- Water taken legally unbilled: estimate of water used by fire services, water treatment plants, operational use and other unbilled use.

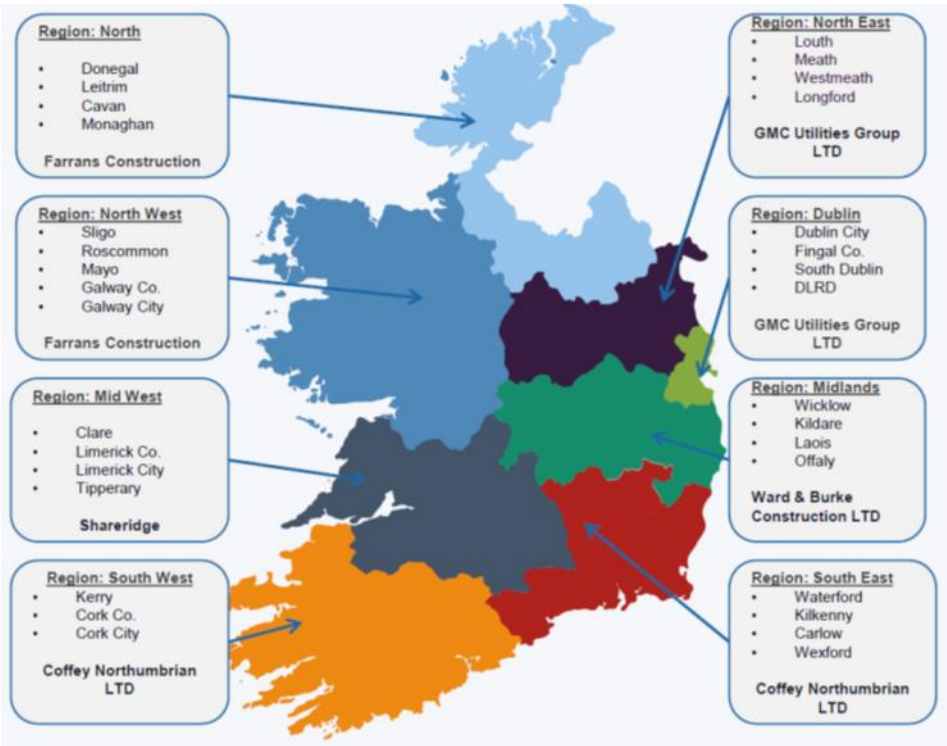
IW categorises the remainder of the water put into the distribution network as UFW[3], which is an indication of the amount of water lost to leaks on IW's public network. As highlighted above, under the current UFW calculation, water lost to leaks on the customer's property is included in the 'accounted for water' category. To enable robust, consistent reporting on Leakage, IW has implemented a new National Leakage Management System (LMS). The LMS will provide IW with accurate and timely leakage information required to target and prioritise leakage reduction, along with the ability to report on the effectiveness of leakage reduction activities. IW will reference national leakage instead of UFW from the H2 2021 First Fix report to align with the reporting format agreed as part of the Performance Assessment (PA) Framework[4].

IW is progressing the National Leakage Reduction Programme, LRP, which targets resources at areas of highest leakage and lowest headroom across water networks. As part of our Investment Plan 2020 to 2024, we plan to spend circa €400m on Leakage Reduction Programmes. We also plan to spend circa €37m on the First Fix Scheme from 2020 to 2024.

[1] Following the completion of the Metering Programme in Q1 2017, the First Fix Leak Repair scheme moved to become part of the wider national Leakage Reduction Programme.
[2] See section 13.1.3 of the CRU's Energy and Water Monitoring Report for 2020 here
[3] Real water losses (loss of water on the distribution due to network leakage), water used by IW to flush mains and apparent losses (unauthorised water use, e.g. illegal use of standpipes and under-recorded customer use because of incomplete data).
[4] The PA Framework is designed to assess IW's overall performance in delivering defined services to its customers for the money it is allowed to spend by the CRU. See here for further information on IW's reporting under the PA Framework.

The overall aim of these works is to reduce leakage on a national scale to economically sustainable levels, leading to improved water network performance and reliability. The Leakage Reduction Programme and associated works will ensure a clean, safe and reliable public water supply now and into the future to support our growing population and economy.

For this programme, IW has sub-divided the country into eight regions and is working in partnership with local authorities and regional contractors to plan and complete activities. Details of the Leakage Reduction Programme regions and contractors can be seen below.



The scope of the works included in the Leakage Reduction Programme (LRP) includes undertaking improvements under the following seven principal work streams;

1. **DMA (District Metering Area) Works**

This involves the identification of groups of premises and the installation of a district meter to monitor water usage. This identifies works needed within the DMA to ensure efficient operations.

2. **Find & Fix**

The Find & Fix scheme involves leak detection crews undertaking surveys using sounding equipment to locate leaks on pavements and other public areas. If a public side leak is identified, IW will carry out the necessary repairs.

3. **First Fix Free**

The First Fix Free scheme offers free leak investigations and free repairs for qualifying properties where a constant flow of water is found on the external water supply pipe. IW estimates that over 169 million litres of water per day have been saved as a result of this scheme to the end of H1 2021 including, 4.72 million litres per day saved in H1 2021. Further information on the First Fix Free scheme can be found at https://www.water.ie/water-supply/first-fix/.

4. **Mains Renewal including Shared & Backyard Services**

Water mains renewal works usually include the replacement or renewal of ageing public water mains to improve water quality and supply. As our water pipes are underground, we need to dig down to inspect the pipes and carry out any necessary repairs or replacements.

A shared service connection means that two or more properties are fed by a single water pipe. These connections pipes are often made of iron or lead and prone to leaks.

In some older properties water connections may be installed to the back of the property and run through customer's back gardens. These connections are prone to leaks and can cause reduced levels of service and poor water pressure.

5. **Lead Services**

Lead in drinking water is a recognised health concern. We will be investigating the pipes that connect individual properties to the public water mains and replacing any lead pipes with new plastic pipes.

6. **Non-Domestic Metering**

IW is replacing old non-domestic meters installed by the Local Authorities with new meters that have Automatic Meter Reading technology. The new meters allow for more accurate and timely billing for customers and better identification of leakage on non-domestic customer sites.

7. **Pressure Management**

Pressure management works are required to improve the quality and security of water supply to customers. The aim of these works is to reduce leakage within the mains network and to ensure a consistent supply of water to all customers. Too much pressure in the network can result in burst pipes and leakage. This can then result in a low water supply pressure for customers at the tap.

2. Overview of First Fix Free Scheme

In May 2014 the Government announced funding of €51m for a scheme to address water leakage on pipework within customer properties under a "First Fix" scheme. Following a public consultation in August 2015 the Commission for Regulation of Utilities (CRU) approved IW's proposed First Fix Leak Repair Scheme. The First Fix Leak Repair scheme was mobilised under the national Domestic Metering Programme. In its RC3 determination[5] the CRU outlines its ongoing support for the First Fix Leak Repair scheme. On 19th April 2021, following a public consultation, the CRU published a decision to expand the eligibility criteria for the First Fix Scheme.

[5] Published on 5 December 2019 and available at www.cru.ie

Under the First Fix Leak Repair scheme, IW assists customers by notifying them where suspected leakage is occurring within the boundary of their property. Eligible Customers who have a leak on the external supply pipe serving a property are offered a free leak repair. The First Fix Leak Repair scheme does not apply to leaks within a dwelling.

While it not essential for a property to be metered to avail of the First Fix Leak Repair scheme, utilising meter read data to identify the most significant leaks has proven key to operating the First Fix Leak Repair scheme efficiently. Prior to the introduction of the First Fix Leak Repair scheme, leakage programmes had been based around time-consuming and labour-intensive sampling of areas in order try detect anomalies on pipework. The IW domestic metering programme has provided both the platform and the technology-based solution to address this challenge. Data obtained from meter reading information highlights unusual water usage patterns and allows IW to isolate the source of leaks to a particular property, thereby reducing the time required for leak investigation. The technology used for monitoring water flow developed further during the initial years of the operation of the First Fix Leak Repair Scheme. Since the CRU's decision to expand the eligibility criteria of the Scheme was published in April 2021, IW has used alternative methods to measure water flow for unmetered properties. These methods include identifying high water usage through District Metered Areas (DMAs) analysis[6], Step-Testing[7] and analysis of nightline[8]. This means that IW now has the means to detect leakage where the customer does not have a meter.

Given the need to prioritise water conservation & capital expenditure, IW prioritises repairs under the First Fix Leak Repair scheme by size, based on the estimated volume of water lost. A constant flow of water, (that is 6 litres per hour over a 48-hour period), will trigger a constant flow alarm (CFA) on the meter, indicating a potential leak. The largest leaks wasting the most water are priorities to be fixed first.

By H1 2021, it is estimated that over 169 million litres of water per day have been saved as a result of First Fix repairs.

3. How to avail of the scheme

Customers can avail of the scheme, once they are aware of a leak on their property. The CFA alarm is triggered where a constant flow of water to the property is identified (6 litres per hour over a 48-hour period). When a CFA alarm is recorded, customers are issued with a letter from IW, indicating a potential leak on their property.

Customers with a visible leak on their property can also contact IW to avail of a free leak investigation.

As a result of the changes in criteria made by the CRU in its decision of April 2021, the following customers were brought within the scope of the First Fix Leak Repair Scheme:

- Unmetered domestic Customers
- Customers with properties without an ISV
- Customers with properties with suspected shared or backyard services

[6] A district metered area (DMA) is a discrete area of a water distribution network. DMA's allow IW to closely monitor flow and pressures through its telemetry system. DMAs vary in size and depend on the nature of the water supply scheme and can differ between urban and rural areas. Typically, it is in the region of about 2,000 properties.

[7] Step Testing facilitates the monitoring the flow of water and pinpointing leaks.

[8] Analysis of data collected from night-time flow measurements for unexpected increases in water consumption that might suggest a leak.

- Some mixed-use customers[9]
- Customers that are not registered with IW

Eligibility criteria and the process for availing of the scheme are outlined on the IW website[10]. A handy infographic outlining the customer journey is also available on the IW website.[11]

4. Initiatives to increase Customer Engagement Levels

Following the completion of the First Fix Scheme under the Metering Programme in February 2017, IW analysed engagement levels in order to establish initiatives to improve the First Fix process and increase productivity.

The First Fix scheme was initially relying on the following in order to achieve water reduction:

- The First Fix letter reaching its desired destination to inform the customer of the possible leak;
- The customer engaging with IW in order to arrange a leak investigation, and
- The customer returning the signed waiver allowing IW to repair the leak on their property.

The following changes have been implemented to increase customer engagement levels:

First Fix Letter

In order to increase uptake of the scheme, IW pursued the following initiatives:

- Once COVID-19 restrictions were lifted[12], IW sent 2,685 First Fix letters to properties with a constant flow alarm (CFA) in June 2021. Letters were issued to properties with a constant flow alarm plus usage **in excess of 1,000 litres per day**. Targeting customers above this level for the First Fix scheme is an attempt to engage customers in properties that are using over twice the national average usage. (342 litres per property per day, as calculated by the CRU (CRU/17/339)).
- The average daily usage of the property and the expected daily usage of 129 litres[13] per person per day were included on the notification letter. This informs the customer of the quantity of excess usage at their property and will encourage the customer to engage with us in order to arrange a leak investigation.
- In order to improve customer engagement, IW improved the information it provided customers on the CFA notification letters (for example, by equating the amount of litres used at the premises to the equivalent average usage by a person).

[9] See section 3 of the CRU's First Fix Scheme Policy Decision, April 2021 here
[10] See IW website here.
[11] See IW website here.
[12] The issuing of First Fix letters was paused from January to May 2021 while COVID-19 restrictions were in place. When restrictions eased, activities recommenced with letters issuing again to customers from June.
[13] As calculated by the CRU and outlined in CRU/17/339.

Waiver Return Process

Under the metering programme, waivers were posted to customers that qualified for a leak repair following the investigation. The customer was required to sign the waiver and post it back to IW. It was found that there was a delay in customers returning the waivers and in some cases the waiver was not returned.

Under the leakage reduction programme this process has been amended to increase the return of the signed waivers:

- Upon completion of the Leak Investigation, the crew issue the waiver to the customer and answer any questions the customer may have. If the customer is willing to sign the waiver at the time, the crew will return the signed waiver to IW and a repair can be scheduled. They will also leave a copy of the waiver with the customer for their own reference.
- If the customer is not willing to sign the waiver at this time, the crew will issue the waiver and a pre-paid envelope to the customer in the hope the customer will sign the waiver and post it back to IW.

IW is also encouraging our contractors to be pro-active and contact customers that have received a first fix letter but have not engaged with the scheme.

5. First Fix Update

In H1 2021, a significant number of large leaks, identified as properties with usage in excess of 1,000 litres per day, appeared on the CFA list. When contacting customers, IW start with the largest users (properties with usage in excess of 5,000 litres per day). It was found that 2,418 properties were using more than 5,000 litres per day based on meter readings and were accountable for over 26 million litres of Potential Leakage (PL) per day (47%).

Targeting these users first will result in greater savings from fewer repairs and reduce the PL more effectively. The remaining 19,930 properties using less than 5,000 litres per day but greater than 1,000 litres per day accounted for over 29 million litres of PL per day (53%). The following table is calculated using information from the CFA list and figures calculated by the CRU (CRU/17/339) suggesting an average household consumes 342 litres of water per day.

Item	QTY of Leaks	Average usage (Litres)/day)	Total Usage (Litres/day)	Expected Usage (Litres/day)	PL (Litres/day)	% of PL
>5 000 Litres	2,418	11,095	26,827,630	826,956	26,000,674	47%
1,000 - 5 000 Litres	19,930	1,809	36,051,120	6,816,060	29,235,060	53%
Total	22,348	2,814	62,878,750	7,643,016	55,235,734	100%

Table 1: Potential Leakage (PL) summary H1 2021

6. Reporting on the scheme

In April 2015, the CRU consulted on IW's proposed First Fix Leak Repair Scheme for Domestic Water Customers and received eight responses. The CRU's decision on the policy, issued on 5 August 2015, was based on a review of the eight submissions received during the consultation period. Among its recommendations, the CRU expects IW to strongly promote the scheme in order to increase customer awareness of the scheme and to encourage customers to engage with IW on the scheme.

The CRU is monitoring the ongoing implementation of the scheme to ensure that the costs allowed are efficiently incurred and that benefits are achieved for customers. In line with the CRU's updated 2021 First Fix Scheme Policy Decision, IW's performance in the First Fix Scheme will now be reported on a six-monthly basis to the CRU[14]. IW previously reported performance on a quarterly basis[15]. The CRU's 2021 policy decision, published in late April, expanded the eligibility criteria to the First Fix Scheme and the impact of these changes will be reported in future six-monthly reports. The following section outlines the progress of the scheme to the end of H1 2021.

Six Month Summary

COVID-19 brought a new working environment which continued to impact IW's First Fix Scheme operational and service delivery, including leak investigations and repairs, and is reflected in H1 2021 performance figures. Restrictions were introduced in January and continued until May which had a negative effect on IW's ability to carry out investigations and repairs. Investigations and repairs were carried out, provided they were in accordance with COVID-19 restrictions/guidelines and approved IW Work Method Statements. Works were also subject to continuous customer engagement. Due to the COVID-19 restrictions in place, the issuing of First Fix Scheme notification letters was paused from January until May as it was felt that customer engagement with the scheme would have been poor at that time.

- **Customer Response Rates and Engagement Levels**

A total of 3,877 customers have engaged with the scheme in H1 2021. This number is made up of the following;

3,642 Customers requesting a free leak investigation survey

235 Customer repairs completed from data collected from the meter

- **Leak Investigations**

A total of 3,642 investigations were requested, which include repeat visits where customers installed an Internal Stop Valve (ISV) after an initial leak investigation visit. Following on from the CRU's updated First Fix

[14] See section 4.3 of the CRU's First Fix Scheme Policy Decision, April 2021 here

[15] See IW's First Fix reports from Q3 2015 to Q2 2020 here

Policy Decision in late April, homes without an ISV and homes served through a shared or backyard service were eligible for the scheme. However, as the CRU decision was towards the end of the period it had minimal impact on the figures reported for H1 2021. The H2 2021 will reflect the extended First Fix Scheme.

IW contacts customers within 10 business days to arrange a convenient time for an appointment to carry out the free leak investigation at a property. A total of 3,081 leak investigations were undertaken in H1 2021. This figure includes some investigations that were requested in H2 2020; similarly, some investigations requested in H1 2021 will be carried out in H2 2021.

From the 3,081 completed leak investigations, 1,129 leaks on external supply pipes were identified as qualifying. IW has offered these customers with leaks on their external supply pipe a free leak repair under the scheme. The remaining 1,952 non-qualifying leaks are broken down as follows:

1) A total of 50 properties surveyed did not have an operational Internal Stop Valve (ISV) and the survey could not be progressed or required a further point of entry dig to establish the leak location. In many of these cases, the ISV was present but not operational. Since 19th April 2021, the eligibility criteria of the scheme is extended to include customers who do not have a working ISV so these will no longer be included as non-qualifying leaks in future reports.
2) In addition, a total of 76 properties have been identified through the First Fix process where the property does not qualify or the survey could not progress as it is served through a shared or backyard service. Since 19th April 2021, the eligibility criteria of the scheme is extended to include properties that have a shared or backyard service so these will no longer be included as non-qualifying leaks in future reports
3) The investigations identified 934 internal plumbing and other issues, which come under the remit of the home owner. As with all internal repair and maintenance in a customer's home, if a leak is confirmed internal to the house then it should be repaired by the homeowner.
4) The remaining 892 properties were identified as having leaks either on the public side, inaccessible leaks or otherwise out of the scope of the First Fix for Free Scheme.

- **Leak Repairs**

Customers are asked to review the terms and conditions of the leak repair offer and sign the offer documentation after which IW will contact the customer to schedule the leak repair at a suitable time. On receipt of the documentation, IW contacts customers within 10 working days to arrange a convenient time for an appointment to carry out the free leak repair at a property.

During H1 2021 IW completed 1,091 free leak repairs under the First Fix Leak Repair scheme. This figure includes some leaks that were detected in H2 2020 and repaired in H1 2021; similarly, some leaks detected in H1 2021 will be repaired in H2 2021.

- **Customer Repairs**

From the data collected through meter reading we know that 235 customers have repaired leaks on their property themselves after receiving a constant flow advice letter. IW would like to thank all customers who repaired leaks on their property. These repairs have made a significant contribution to national water conservation.

- **Gross Water Savings**

All references below to water savings are gross. The issuance of constant flow advice letters has targeted the largest leaks first and the result of this can be seen from the estimated incremental savings of 3.84 million litres of water per day achieved in H1 2021 from contractor repairs and a further 0.88 million litres from customer repairs.

Period	**IW First Fix Repair**		**Customer Repairs**		**2018 Annual Cumulative**	
2018	Repairs #	Savings (ML/Day)	Repairs #	Savings (ML/Day)	Total Repairs	Total Savings (ML/Day)
H1	1,653	8.01	1,986	5.27	3,639	13.28
H2	2,512	8.25	1,151	1.58	3,663	9.93
2019					2019 Annual Cumulative	
H1	2,819	7.67	1,252	3.83	4,071	11.5
H2	1,392	3.3	301	1.41	1,693	4.71
2020					2020 Annual Cumulative	
H1	952	2.01	159	0.7	1,111	2.71
H2	1,453	5.34	488	1.34	1,941	6.68
2021					2021 Annual Cumulative	
H1	1,091	3.84	235	0.88	1,326	4.72
Total	**11,872**	**38.42**	**5,572**	**15.01**	**17,498**	**53.53**

Table 2: Estimated water savings from the First Fix Scheme and Customer Repairs for 2018, 2019, 2020 and H1 2021.

Table 2 estimates water savings from the First Fix Scheme and Customer Repairs since 2018. Previous reports estimated the savings from Q1 2018 to Q2 2020 on a quarterly basis. To facilitate comparison with H2 2020, table 2 now shows half-yearly estimate water savings since 2018[16].

By H1 2021, total cumulative water savings are estimated at 169.02 ML per day. A cumulative estimated total of 91.88 million litres per day has been saved through First Fix repairs and a further estimated 77.13 million litres per day saved from customer repairs. Savings are calculated from a comparison of meter data collected prior to and after the repair work being undertaken. For customer repairs, the constant flow alert is no longer active, and the meter data shows a supporting drop in water usage over the next two read periods. Finally, we exclude those with less than 1000l/d as it is suspected that below this level usage has been reduced rather than an actual customer leak repair.

8. Project Expenditure

The project expenditure is reported Half-yearly. Table 3 sets out the total project expenditure for H1 2021.

	Investigations	**Repairs**	**Additional Costs**	**Total**
H1 2021	€1,033,602	€1,439,137	€2,808	€2,475,547
RC3 (2020 – H1 2021)	€3,883,908	€4,295,126	€32,387	€8,211,421
2015 - H1 2021	€26,754,206	€22,051,940	€4,332,382	€53,138,528

Table 3: Total expenditure on the First Fix Leak Repair Scheme to date.

Note, some costs incurred across six months may not be captured until the following half yearly figures.

9. Next Steps

IW will continue to implement the First Fix Leak Repair scheme through the LRP. The next report will be issued to the CRU in Q4 2022 and will cover the second half of 2021, both Q3 and Q4.

[16] Please see table 2 in the Q2 2020 report (here) for estimated water savings since 2018 reported on a quarterly basis

Table 3: Project Summary

1	Number of Continuous Flow Alarms Detected	**Total**	**H1 2021**	
			77,870	
2	Number of Customer Notifications Issued	**Period**	**H1 2021**	**Cumulative FF Scheme Total**
		Region		
		North	97	**191,405**
		North West	270	
		South East	224	
		South West	344	
		Dublin	538	
		North East	290	
		Midlands	572	
		Midwest	350	
		Grand Total	2,685	
	2,685 constant flow advice letters were issued in H1 2021.			
3	Customer Responses requesting a Free Leak Investigation	**Period**	**H1 2021**	**Cumulative FF Scheme Total**
		Region		
		North	303	**105,228**
		North West	311	
		South East	298	
		South West	857	
		Dublin	542	
		North East	278	
		Midlands	286	
		Midwest	767	
		Grand Total	3,642	
	3,642 customers requested a First Fix Free Leak Investigation			
4	Leak Investigations Completed	**Period**	**H1 2021**	**Cumulative FF Scheme Total**
		Region		
		North	239	**98,666**
		North West	397	
		South East	307	
		South West	762	
		Dublin	458	
		North East	170	
		Midlands	349	
		Midwest	399	
		Grand Total	3,081	
	3,081 Leak Investigations were carried out in H1 by LRP contractors.			

4a	Leak Repairs Created	**Period**	**H1 2021**	**Cumulative FF Scheme Total**
		Region		
		North	123	**25,239**
		North West	154	
		South East	49	
		South West	252	
		Dublin	254	
		North East	118	
		Midlands	189	
		Midwest	59	
		Grand Total	1,198	
	1,198 Leak Repairs were created in H1 2021			
5	Leak Repairs Completed	**Period**	**H1 2021**	**Cumulative FF Scheme Total**
		Region		
		North	107	**20,690**
		North West	211	
		South East	53	
		South West	247	
		Dublin	192	
		North East	63	
		Midlands	182	
		Midwest	36	
		Grand Total	1,091	
	1,091 confirmed Leak Repairs carried out in H1			
6	Estimated Water Savings from First Fix Repairs (Litres/day)	**Period**	H1 2021	**Cumulative FF Scheme Total**
		Region		
		North	339,400	**91.88 ML**
		North West	773,289	
		South East	130,301	
		South West	889,368	
		Dublin	636,365	
		North East	104,244	
		Midlands	765,799	
		Midwest	205,200	
		Grand Total	3,843,966	
	It is estimated that 3.84 ML per day of water was saved in H1 as a result of repairs carried out by the contractor. This brings the total incremental Water Savings to 91.88 ML from contractor repairs and an overall saving of 169.02 ML per day.			

7	Customer Repairs Completed	**Period**	H1 2021	**Cumulative FF Scheme Total**
		Region		
		North	40	**44,203**
		North West	87	
		South East	0	
		South West	0	
		Dublin	0	
		North East	0	
		Midlands	31	
		Midwest	77	
		Grand Total	235	
	Customer repairs represent the repairs carried out by the customer after receiving a First Fix Free letter from IW. 235 customers repaired leaks in H1.			
8	Estimated Savings from Customer Repairs (Litres/day)	**Period**	H1 2021	**Cumulative FF Scheme Total**
		Region		
		North	115,609	**77.13**
		North West	417,984	
		South East	0	
		South West	0	
		Dublin	0	
		North East	0	
		Midlands	113,642	
		Midwest	228,251	
		Grand Total	875,487	
	It is estimated that 0.88 ML of water per day was saved in H1 as a result of Repairs carried out by the customer. This brings the total cumulative Water Savings to 77.13 ML from customer repairs and an overall saving of 169.02 ML per day.			
9	Known Properties Without an Operational ISV	**Period**	**H1 2021**	**Cumulative FF Scheme Total**
		Region		
		North	22	**14,018**
		North West	1	
		South East	0	
		South West	0	
		Dublin	16	
		North East	1	
		Midlands	10	
		Midwest	0	
		Grand Total	50	
	A total of 50 properties did not have an Internal Stop Valve and the Leak Investigation could not be progressed.			

10	Number of Non-Qualifying Properties Served Through a Shared or Backyard Pipe	**Total**	**H1 2021**	**Cumulative FF Scheme Total**
			76	**2,078**
	76 properties were identified as not qualifying for the scheme as they are served through a shared supply or backyard supply.			
11	Counties in Each Region	**North**	Donegal, Cavan, Monaghan, Leitrim	
		North West	Galway, Galway City, Mayo, Sligo, Roscommon	
		South East	Carlow, Waterford, Waterford City, Kilkenny, Wexford	
		South West	Cork, Cork City, Kerry	
		Dublin	Dublin City, South Dublin, Dun Laoghaire Rathdown, Fingal	
		North East	Longford, Louth, Meath, Westmeath	
		Midlands	Kildare, Offaly, Laois, Wicklow	
		Midwest	Limerick, Clare, Tipperary	

Note: All cumulative totals outlined in table 3 are for the First Fix Scheme from commencement to the end of H1 2021.

Note: Meter read data is used to confirm that a customer repair has been carried out. Number of customer repairs and estimated savings will be included in the report once two confirmed meter readings are collected after the repair date. As such, the number of customer repairs noted above for each quarter is expected to increase in the next report as more confirmed readings are collected.