

Irish Water

First Fix Leak Repair Scheme

For Domestic Water Customers

Quarterly Report

Q4 2015



1. Introduction

Leakage of water from the network is a serious problem on a national scale. Lost water is estimated nationally at approximately 49% of the water produced for supply, well above international norms.

In May 2014 the Government announced funding of €51m for a scheme to address water leakage on pipework within customer property under a “First Fix” scheme. Following a public consultation the Commission for Energy Regulation (CER) approved Irish Water’s proposed First Fix Leak Repair Scheme on 5th August 2015. Under the First Fix Leak Repair scheme, Irish Water intends to assist customers by notifying them where suspected leakage is occurring within the boundary of the property. It is intended that leaks which are identified on the external supply pipe serving a property will be offered a free leak repair. The First Fix Leak Repair scheme will not apply to leaks within a dwelling.

Utilising meter read data to identify the most significant leaks is the key to operating the First Fix Leak Repair scheme efficiently. Previously, the key barrier to addressing leakage was the identification of where leakage arose. The vast majority of leaks remain underground and, as such, they are not visible and largely go un-noticed and un-detected. Prior to the introduction of the First Fix Leak Repair scheme, leakage programmes have been primarily based around time-consuming and labour intensive sampling of areas in order to seek to detect anomalies on pipework. The Irish Water domestic metering programme provides a technology based solution to address this challenge. Data obtained from meters highlights abnormal water usage patterns and allows Irish Water to isolate the source of leaks to a particular property, thereby reducing the time required for leak investigation. Operating the First Fix Leak Repair scheme on the basis of meter read data allows Irish Water to systematically identify significant water wastage at individual properties and focus resources on locating the source of wastage within individual properties.

Given the need to prioritise water conservation, under the First Fix Leak Repair scheme Irish Water prioritises repairs by size, based on the 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 on the meter, indicating a potential leak. The largest leaks, which are wasting the most water, are fixed first.

Irish Water estimates that 34 million litres of water per day have been saved as a result of this scheme to the end of Q4 2015.

2. How to avail of the scheme

Relevant customers for whom a current constant flow alarm is recorded will be issued with a letter, indicating a potential leak on their property. This letter is triggered where a constant flow of water to the property is identified. A customer will need to have received this letter from Irish Water, and meet the eligibility requirements¹ in order to avail of the scheme. Customers with a visible leak on their property can also contact Irish Water to confirm if they are eligible to participate in the scheme.

Customers who receive a constant flow advice letter should contact Irish Water to request a free leak investigation. If the leak investigation indicates a leak on the external supply pipe serving the property, the customer will be offered a free leak repair. Irish Water will issue the customer with a First Fix Leak Repair Scheme offer, detailing the terms and conditions of providing the repair. To avail of the repair the customer will need to sign and return the offer document to Irish Water.

If you would like further information on the scheme, please see the ***First Fix Leak Repair Scheme for Domestic Water Customers*** policy document which is available on www.water.ie

3. Reporting on the scheme

In April 2015, the Commission for Energy Regulation (CER) consulted on Irish Water's proposed First Fix Leak Repair Scheme for Domestic Water Customers and received eight responses. The CER's decision on the policy, issued on 5 August 2015, was based on a review of the eight submissions received during the consultation period. Amongst its recommendations, the CER expects Irish Water to strongly promote the scheme in order to increase customer awareness of the scheme and to encourage customers to engage with Irish Water on the scheme. Irish Water has undertaken a national advertising campaign through newspaper and radio to help increase customer awareness, promote the scheme and increase customer engagement levels.

The CER 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 CER Decision CER/15/178 Irish Water is to report on a quarterly basis on the progress of the First Fix Leak Repair scheme, the following section outlines the progress of the scheme to the end of Q4 2015.

4. Quarterly Summary

Table 1 provides a detailed breakdown of the scheme deliverables up to the end of Q4 2015.

4.1. Constant Flow Advice Letters and Customer Response Rates

¹ For eligibility requirements and detailed information about the administration of the scheme, please see the ***First Fix Leak Repair Scheme for Domestic Water Customers*** policy document which is available on www.water.ie

The number of constant flow advice letters issued is ahead of forecast by 27% at the end of Q4 2015. 55,443 constant flow advice letters have been issued to the end of the quarter with a total of 20,558 responses resulting in a leak investigation survey. In addition, 27,764 first reminder and 14,612 second reminder letters have also been issued where a response has not been received.

Overall, to the end of Q4 2015, the percentage of customers that requested a leak investigation was 37% of those issued with a constant flow advice letter. It is anticipated that as more members of the public become familiar with the scheme and develop an understanding of their water consumption, the response rates will increase significantly.

Irish Water continued to promote the scheme through Q4 2015, running a national advertising campaign through newspaper and radio to help increase customer awareness and customer engagement levels. The campaign ran for a number of weeks over October and November 2015.

The issuance of third (and final) reminder letters will commence in Q1 2016 where a response has not yet been received. Irish Water will also carry out an outbound calling and SMS campaign to remind customers about their constant flow advice letter and to encourage them to respond. This will also take place during Q1 2016.

4.2. Leak Investigations

A total of 20,558 customers contacted Irish Water to avail of the free leak investigation under the scheme. A total of 22,006 investigations were requested, which include repeat visits where customers installed an Internal Stop Valve (ISV) after an initial leak investigation visit.

Irish Water 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 18,090 leak investigations had been undertaken by the end of December 2015. For the remaining 3,916 customers that had requested a leak investigation to the end of Q4 2015, they either had appointments scheduled with the contractor or were in the process of having appointments scheduled.

From the 18,090 completed leak investigations 4,516 leaks on external supply pipes were identified. Irish Water has offered these customers with leaks on their external supply pipe a free leak repair under the scheme. The other 13,574 leak investigations identified non-qualifying leaks.

There were three main reasons why these leaks were non-qualifying:

- 1) A total of 4,015 properties surveyed did not have an operational Internal Stop Valve (ISV) and the survey could not be progressed². In many cases, the ISV was present but not operational.

- 2) In addition, a total of 252 properties have been identified through the First Fix process where the property does not qualify as it is served through a shared or backyard service.
- 3) The remaining leak investigations identified internal plumbing and other issues. As with all internal repair and maintenance in a customer's home, if a leak is confirmed internal to the house the customer should have this repaired. A lot of household leaks e.g. dripping taps, running cisterns can be repaired cheaply and easily.

4.3. Leak Repairs

Customers are asked to review the terms and conditions of the leak repair offer and sign the offer documentation after which Irish Water will contact the customer to schedule the leak repair at a suitable time. On receipt of the documentation Irish Water contacts customers within 10 working days to arrange a convenient time for an appointment to carry out the free leak repair at a property. At the end of September Irish Water had completed 2,727 free leak repairs under the First Fix Leak Repair scheme. Of the remaining 1,789 customers to whom Irish Water offered a free leak repair, 887 repairs were scheduled or were in the process of being scheduled, while 902 customers had yet to accept the leak repair offer.

4.4. Customer Repairs

From the data collected by the meter reading we know that 5,647 customers have repaired leaks on their property.

4.5. Water Savings

The issuance of constant flow advice letters was initially targeted at the largest leaks first and the result of this can be seen from the estimated savings of 34 million litres of water per day achieved to the end of Q4 2015. A cumulative estimated total of 20.67 million litres per day has been saved through First Fix repairs and a further estimated 13.36 million litres 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 two read periods.

4.6. Project Expenditure

The project expenditure is reported quarterly in arrears. The cumulative total expenditure up to the end of Q4 2015 (end of December 2015) is €7,677,459 consisting of €4,174,760 for leak investigations, €2,379,426 for repairs and €1,123,273 for additional costs.

5. Next Steps

Irish Water will continue to implement the First Fix Leak Repair scheme and will issue the next quarterly report, for Q1 2016, to the CER in Q3 2016.

Table 1: Project Summary

1	Number of Continuous Flow Alarms Detected	Total	Q2 2015			Q3 2015			Q4 2015		
			36,424			50,801			52,292		
2	Number of Customer Notifications Issued (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	2,499	4,349	7,354	11,294	15,369	17,764	22,005	24,529	25,533
		North and West	458	816	1,308	2,514	3,603	5,288	6,256	7,920	8,445
		Southern	828	2,298	4,173	7,874	9,717	11,786	15,282	19,317	21,465
		Grand Total	3,785	7,463	12,835	21,682	28,689	34,838	43,543	51,766	55,443
		The number of customer notifications (constant flow advice letters) issued was increased from July 2015 to encourage participation in the scheme. This contributed to an overall total of 55,443 constant flow advice letters issued to the end of Q4.									
3	Customer Responses requesting a Free Leak Investigation (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	844	1,475	2,259	3,178	4,817	6,538	7,892	9,060	10,332
		North and West	60	126	255	664	886	1,546	1,863	2,351	2,845
		Southern	145	420	1,015	1,881	2,770	4,148	4,970	6,129	7,381
		Grand Total	1,049	2,021	3,529	5,723	8,473	12,232	14,725	17,540	20,558
		20,558 customers contacted Irish Water to request a free leak investigation. A total of 22,006 leak investigations have been raised to the end of Q4 2015 (second leak investigation where a customer installs an ISV after advice from first leak investigation survey).									
4	Leak Investigations Completed (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	559	901	1,270	1,820	2,495	3,829	5,868	7,851	9,016
		North and West	-	68	106	175	425	747	1,492	2,025	2,476
		Southern	1	224	466	802	1,269	2,294	3,824	5,615	6,598
		Grand Total	560	1,193	1,842	2,797	4,189	6,870	11,184	15,491	18,090
		18,090 leak investigations were carried out to the end of Q4. The remaining 3,916 customers that requested a leak investigation had appointments scheduled or were in the process of having appointments scheduled.									
5	Leak Repairs Completed (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	159	172	317	450	638	829	1,035	1,332	1,578
		North and West	-	1	3	6	34	89	162	240	305
		Southern	-	-	30	120	232	393	531	691	844
		Grand Total	159	173	350	576	904	1,311	1,728	2,263	2,727
		Of the 18,090 completed leak investigations carried out in Q4, 4,516 were found to be on the external supply pipe. In respect of these qualifying leaks, 2,727 free leak repairs were carried out. For the remaining 1,789 leaks, 902 were awaiting acceptance of the leak repair offer by the customer, with the remaining scheduled or in the process of being scheduled.									
6	Estimated Water Savings from First Fix Repairs (ML/day - Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	0.95	1.08	2.66	3.98	5.68	7.24	8.44	9.97	11.32
		North and West	-	0.02	0.07	0.14	0.46	0.83	1.45	1.92	2.54
		Southern	0.00	0.00	0.31	1.35	2.44	3.77	4.96	5.97	6.81
		Grand Total	0.95	1.10	3.05	5.48	8.58	11.84	14.84	17.86	20.67
		A cumulative estimated total of 20.67 million litres per day has been saved through First Fix Scheme repairs. Savings are calculated from a comparison of meter data collected prior to and after the repair work being undertaken.									

7	Customer Repairs Completed (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	326	752	1,335	2,008	2,483	2,746	3,002	3,194	3,199
		North and West	82	214	339	460	575	620	672	689	696
		Southern	140	457	711	1,080	1,415	1,567	1,713	1,743	1,752
Grand Total		548	1,423	2,385	3,548	4,473	4,933	5,387	5,626	5,647	
		Customer repairs are those repairs arranged by the customer for leaks occurring within their property. The customer repair is counted only when two confirmed meter readings are collected after the repair.									
8	Estimated Savings from Customer Repairs (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	1.26	2.78	4.06	5.39	6.25	6.63	6.97	7.27	7.29
		North and West	0.40	0.81	1.12	1.45	1.65	1.74	1.78	1.79	1.79
		Southern	0.43	1.59	2.34	3.02	3.68	4.06	4.24	4.27	4.28
Grand Total		2.09	5.18	7.53	9.86	11.58	12.43	12.99	13.33	13.36	
		An estimated 13.36 million litres of water per day has been saved from customer repairs. Savings are calculated from a comparison of meter data collected prior to and after the repair work being undertaken. The completion of a repair is indicated when the leak alarm is no longer active, with a supporting drop in water usage. The estimated savings from customer repairs are confirmed once two meter readings are collected after the repair.									
9	Known Properties Without an Operational ISV (Cumulative)	Period	Q2 2015			Q3 2015			Q4 2015		
		Region	2015-04	2015-05	2015-06	2015-07	2015-08	2015-09	2015-10	2015-11	2015-12
		East and Midlands	30	100	135	202	299	588	992	1,460	1,714
		North and West	-	1	8	10	64	161	362	525	649
		Southern	-	22	42	69	107	407	811	1,326	1,652
Grand Total		30	123	185	281	470	1,156	2,165	3,311	4,015	
		A total of 4,015 properties did not have an operational Internal Stop Valve (ISV) and the leak investigation could not be progressed. In many cases the ISV was present but not operational.									
10	Number of Non-Qualifying Properties Served Through a Shared or Backyard Pipe (Cumulative)	Total	Q2 2015			Q3 2015			Q4 2015		
			16			103			252		
		252 properties were identified as not qualifying for the scheme as they are served through a shared or backyard pipe and cannot have their supply isolated.									
11	Counties in Each Region	East and Midlands	Dublin City, County Dublin, Kildare, Laois, Longford, Louth, Meath, Offaly, Westmeath								
		North and West	Cavan, Donegal, Galway, Leitrim, Mayo, Monaghan, Roscommon, Sligo								
		Southern	Carlow, Clare, Cork, Kerry, Kilkenny, Limerick, Tipperary, Waterford, Wexford								

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 month is expected to increase in the next report as more confirmed readings are collected.