

Wednesday 7 February 2024

OIA IRO-561

Name: [REDACTED]

Email: [REDACTED]@gmail.com

Kia ora [REDACTED]

Official information request for further correspondence on water issues at 19 Curtis Street.

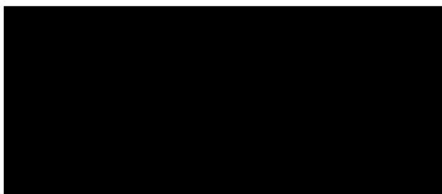
Thank you for your official information request dated Monday 18 December 2023.

The Local Government Official Information and Meetings Act 1987 (the Act) requires that we advise you of our decision on your request no later than 20 working days after the day we received it. Unfortunately, we cannot meet the timeframe and must therefore extend the time to make our decision to Monday 19 February 2024.

This extension – which is being made in accordance with [Section 14\(1\)\(b\)](#) of the Act – is necessary because consultations necessary to make a decision on your request are such that a proper response cannot reasonably be made within the original time limit].

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Ngā mihi,



Governance Coordinator

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www.wellingtonwater.co.nz

Our water, our future.

Monday 19 February 2024

OIA IRO-561

Name: [REDACTED]
Email: [REDACTED]@gmail.com

Kia ora [REDACTED]

Official information request for further correspondence on water issues at 19 Curtis Street.

Thank you for your official information request dated Monday 18 December 2023. On Wednesday 20 December 2023, we confirmed the below search criteria with you:

- **Subject Heading:** "Curtis Street Leak, OR "Curtis Street Leaks" OR "Leak Curtis Street" OR "Leaks Curtis Street"
- **Body of the email:** "Curtis Street Leak, OR "Curtis Street Leaks" OR "Leak Curtis Street" OR "Leaks Curtis Street"

We have considered your request in accordance with the Local Government Official Information and Meetings Act 1987 (the Act) and determined that we are able to grant your request in part.

The information is enclosed in our email to you.

Pursuant to [Section 7\(2\)\(a\)](#) of the Act, most names and contact details – accept for in the correspondence we have already had with you – have been redacted to protect the privacy of individuals.

We have also redacted some information due to legal professional privilege ([Section 7\(g\)](#) of the Act) and free and frank opinion ([Section 7\(2\)\(f\)\(i\)](#) of the Act). These grounds have been reference within the correspondence.

Please observe that the DMA survey's we have included in the response material is dated and that the Excel spreadsheet we are providing you with has been locked for security reasons, and the relevant addresses filtered.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Ngā mihi,

[REDACTED]

[REDACTED]

Head of Customer Experience

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www.wellingtonwater.co.nz

Our water, our future.

Capacity

**Water Leak
Detection**

Kelburn DMA

January 2011

Capacity

**Leak Detection
January 2011**

Keburn DMA

Project Overview:

The leak detection survey was programmed for a “comprehensive” leakage detection survey of all the water reticulation within the Kelburn DMA.

This high resolution method provides the greatest results and detail in reticulation information.

Methodology:

It was agreed to undertake a full comprehensive acoustic leak survey program of the reticulation.

Acoustic Ground Survey

We undertake to test **all** fittings (residential and commercial meters, PV and SV valves, hydrants, scours, etc, where practical) using acoustic leak detection instruments.

Any leak sounds recorded are noted on a field day sheet giving date, address, and type of sound (service leak, mains leak, etc).

This enables the operator to plan his revisit to the site at a time best suited for the area and acoustic monitoring, i.e. during times of low traffic flow for leaks in busy traffic areas, and times of low water usage to eliminate water draw off issues.

Leak verification is undertaken by running a sub-area ground survey combined with ground microphone testing and pin-pointing of the leak. This method eliminates false leak sounds and verifies the actual leak cause and asset it is located on.

We also determine from this if a leak is located on the residential side of the meter, this is reported in our final report.

Leak correlators: We use leak correlators (Fuji-Tecom LC2500 and LC2100, Gutermann AS-600, AS700, AS6500 and AS900) in many of our final leak confirmations. These are particularly useful where the pipe is very deep, where access to regular fittings on the mains are not available and as a further leak verification procedure.

Eliminating False Alarms

Residential Property Leakage

Where the potential leakage is identified on the property owner's side of the meter, our operators undertake the following procedures to eliminate "leakage false alarms".

The residential meter will be read a minimum of 2 times on different occasions.

If there is any further doubt they will return again and recheck it. Recordings will be made to calculate the actual flows and to compare to future readings.

The property owners will be asked if they are using water.

The stop tap will be acoustically tested to ascertain draw through.

Sprinkler systems etc will be checked for usage.

Equipment Deployed:

1. Fuji-Tecom leak noise correlator LC2500
2. Fuji-Tecom HG10AII acoustic ground microphone
3. Fuji-Tecom FSB-7D digital listening stick
4. Magnetic locator
5. Fuji-Tecom pipe and cable locator
6. Laptop PC
7. Enigma correlating loggers

In the case of wet hydrants and valves boxes, in addition to acoustically testing these, we undertake to sponge out the excess water to make a better assessment of the actual leakage. We then return within a few hours to recheck them for any reappearance of water. This method reduces unnecessary callouts for the services team for minor weeping of glands, etc.

In addition, any faults such as broken valve taps, clogged meter boxes, and the like, are noted, as are properties where access is denied by reason of locked gates, dogs, etc, or meters are unable to be found.

All information is passed on to the Contract Manager/Supervisor on a daily basis to undertake a separate acoustic test and leak detection if required.

Preliminary ground survey and leak verification are undertaken at different times and by different operators.

We separate these operations for the following reasons:

1. The two methods are very different. We keep each operator focused on their task at hand as this improves results and keeps the project on target
2. By undertaking the leak verification at a different time, and by the Contract Manager/Supervisor, it fulfills the following:
 - a. An internal quality control check is performed on the ground survey
 - b. By going back to a recorded leak noise at a different time, erroneous background noises that may have been the cause of the noise may have ceased
 - c. The effects of residential and/or commercial draw off can be avoided
3. Leak verification is a specialised task and it is in the interest of the operator and the client for the operator to stay focused on a specific task (pin-pointing leaks)

Final Leak Verification

As mentioned above, this is undertaken by a specifically trained operator (usually the Contract Manager/Supervisor)

Leak locating and marking is separated from the ground survey and is usually undertaken at a different time from when a potential leak is first identified by the ground survey team.

Leak List – Kelburn DMA



Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
01	29 Patanga Crescent	Yes			Council Toby	High	20	Toby marked.
02	28 Crieff Street	Yes			Service to Main	High	20	Road marked. Call Centre #1905788 (P2).
03	Outside 44 Central Terrace	Yes			Sluice Valve	High	20	Valve marked.
04	Intersection Curtis Street and Creswick Terrace	Yes			Sluice Valve	High	20	Valve marked.
05	Opposite 6 Rimu Road	Yes			Council Toby	High	20	Toby marked.
06	4 Bank Road	Yes			Service to Main	High	15	Road marked.

Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
07	88 Curtis Street	Yes			Service to Main	High	12	Road marked.
08	Corner Orangi Kaupapa Road and Glenmore Street	Yes			Passing Hydrant	High	10	Hydrant marked.
09	Outside 51 Northland Road	Yes			Passing Hydrant	High	10	Hydrant marked.
10	Intersection Wilton Road and Curtis Street	Yes			Passing Hydrant	High	10	Hydrant marked.
11	98 Upland Road	Yes			Council Toby	High	10	Toby marked.
12	79 Garden Road	Yes			Council Toby	Medium	6	Toby and kerb marked.
13	49 Upland Road	Yes			Council Toby	Medium	6	Toby marked.
14	12 Creswick Terrace		Yes		Internal	Medium	6	Toby and road marked. Rechecked three times.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
15	6 Orangi Kaupapa Road	Yes	Yes		Internal	Medium	6	Toby marked. Leaking service pipe on bank.
16	17 Putnam Street	Yes			Council Toby	Medium	5	Toby marked.
17	49 Creswick Terrace	Yes			Council Toby	Medium	5	Toby marked.
18	37 Farm Road	Yes			Council Toby	Medium	5	Toby and kerb marked.
19	12 West Road	Yes			Service Pipe	Medium	5	Toby located at rear of property, opposite 11 Sydenham Street up driveway – marked on driveway.
20	30A Ngaio Road	Yes			Council Toby	Medium	5	Toby marked.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
21	Intersection Rimu Road – Lower North Terrace and Lower North Road	Yes			Leaking Hydrant	Medium	5	Hydrant marked.
22	59 Glen Road	Yes			Council Toby	Medium	5	Toby marked. Rechecked three times.
23	5 Ngaio Road	Yes			Council Toby	Medium	5	Toby marked.
24	7 Fairview Crescent		Yes		Internal	Medium	5	Toby marked. Rechecked three times.
25	3 Glen Road		Yes		Internal	Medium	5	Toby marked. Rechecked three times.
26	Opposite 157 Glenmore Street	Yes			Passing Hydrant	Medium	4	Hydrant marked.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
27	Opposite 31 Mt Pleasant Road	Yes			Service Pipe	Medium	4	Road marked.
28	70 Mt Pleasant Road		Yes		Internal	Medium	4	Toby marked. Rechecked three times.
29	Opposite 64 Curtis Street	Yes			Council Toby	Low	3	Toby marked – unable to turn toby off – possibly abandoned service.
30	1 Orangi Kaupapa Road	Yes			Council Toby	Low	3	Toby marked.
31	8 Koromiko Road	Yes			Council Toby	Low	3	Toby marked.
32	12 Hadfield Terrace	Yes			Council Toby	Low	3	Toby marked.
33	84 Kelburn Parade	Yes			Council Toby	Low	3	Toby marked.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
34	186 Glenmore Road		Yes		Internal	Low	3	Toby marked. Rechecked three times.
35	133 Glenmore Street		Yes		Internal	Low	3	Toby marked. Rechecked three times.
36	31 Glen Road		Yes		Internal	Low	3	Toby marked. Rechecked three times.
37	26 Glen Road		Yes		Internal	Low	3	Toby marked. Rechecked three times.
38	1 Woburn Road	Yes			Council Toby	Low	2	Toby marked.
39	Outside 13 Sydenham Street	Yes			Passing Hydrant	Low	2	Hydrant marked.
40	43 Randwick Road	Yes			Council Toby	Low	2	Toby marked in carport.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
41	Intersection Sydenham Street and Randwick Road	Yes			Passing Hydrant	Low	2	Hydrant marked.
42	49 Albemarle Road	Yes			Council Toby	Low	2	Toby marked.
43	5 Central Terrace		Yes		Internal	Low	2	Toby marked. Rechecked three times.
44	37 Creswick Terrace	Yes			Council Toby	Low	1	Toby marked.
45	12 Highbury Road	Yes			Service Pipe	Low	1	Pipe and kerb marked.
46	98B Creswick Terrace	Yes			Council Toby	Low	1	Toby and kerb marked.
47	Outside 143 Creswick Terrace	Yes			Passing Hydrant	Low	1	Hydrant marked.
48	119A Kelburn Parade	Yes			Council Toby	Low	1	Toby marked.


Date January 2011	Leak Reference No: 01			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 29	Patanga Crescent			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 02			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 28	Crieff Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Main			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
<p>Note:</p> <p>Road marked. Call Centre #1905788 (P2).</p>				


Date January 2011	Leak Reference No: 03			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Outside 44	Central Terrace			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Sluice Valve			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
Note: Valve marked.				


Date January 2011	Leak Reference No: 04			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Intersection	Curtis Street and Creswick Terrace			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Sluice Valve			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
Note: Valve marked.				


Date January 2011	Leak Reference No: 05			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Opposite 6	Rimu Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 06			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 4	Bank Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Main			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	15			
Date Repaired				
Note: Road marked.				


Date January 2011	Leak Reference No: 07			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 88	Curtis Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Main			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	12			
Date Repaired				
Note: Road marked.				


Date January 2011	Leak Reference No: 08			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Corner	Orangi Kaupapa Road and Glenmore Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	10			
Date Repaired				
Note: Hydrant marked.				


Date January 2011	Leak Reference No: 09			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Outside 51	Northland Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	10			
Date Repaired				
Note: Hydrant marked.				


Date January 2011	Leak Reference No: 10			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Intersection	Wilton Road and Curtis Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	10			
Date Repaired				
Note: Hydrant marked.				


Date January 2011	Leak Reference No: 11			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 98	Upland Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	10			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 12			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 79	Garden Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	6			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked.</p>				


Date January 2011	Leak Reference No: 13			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 49	Upland Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	6			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 14			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 12	Creswick Terrace			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	6			
Date Repaired				
<p>Note:</p> <p>Toby and road marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 15			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 6	Orangi Kaupapa Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	6			
Date Repaired				
<p>Note:</p> <p>Toby marked. Leaking service pipe on bank.</p>				


Date January 2011	Leak Reference No: 16			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 17	Putnam Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 17			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 49	Creswick Terrace			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 18			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 37	Farm Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked.</p>				


Date January 2011	Leak Reference No: 19			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 12	West Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Service Pipe			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby located at rear of property, opposite 11 Sydenham Street up driveway – marked on driveway.</p>				


Date January 2011	Leak Reference No: 20			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 30A	Ngairo Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 21			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Intersection	Rimu Road – Lower North Terrace and Lower North Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Leaking Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Hydrant marked.</p>				


Date January 2011	Leak Reference No: 22			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 59	Glen Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 23			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 5	Ngairo Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 24			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 7	Fairview Crescent			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 25			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 3	Glen Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 26			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Opposite 157	Glenmore Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Hydrant marked.</p>				


Date January 2011	Leak Reference No: 27			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Opposite 31	Mt Pleasant Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service Pipe			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
Note: Road marked.				


Date January 2011	Leak Reference No: 28			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 70	Mt Pleasant Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 29			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Opposite 64	Curtis Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked – unable to turn toby off – possibly abandoned service.</p>				


Date January 2011	Leak Reference No: 30			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 1	Orangi Kaupapa Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 31			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 8	Koromiko Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 32			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 12	Hadfield Terrace			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 33			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 84	Kelburn Parade			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 34			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 186	Glenmore Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 35			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 133	Glenmore Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 36			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 31	Glen Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 37			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 26	Glen Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times</p>				


Date January 2011	Leak Reference No: 38			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 1	Woburn Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date January 2011	Leak Reference No: 39			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Outside 13	Sydenham Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
Note: Hydrant marked.				


Date January 2011	Leak Reference No: 40			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 43	Randwick Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
<p>Note:</p> <p>Toby marked in carport.</p>				


Date January 2011	Leak Reference No: 41			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Intersection	Sydenham Street and Randwick Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
Note: Hydrant marked.				


Date January 2011	Leak Reference No: 42			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 49	Albemarle Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
Note: Toby marked.				


Date January 2011	Leak Reference No: 43			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 5	Central Terrace			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
<p>Note:</p> <p>Toby marked. Rechecked three times.</p>				


Date January 2011	Leak Reference No: 44			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 37	Creswick Terrace			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
Note: Toby marked.				

Date January 2011	Leak Reference No: 45			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 12	Highbury Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service Pipe			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Pipe and kerb marked.</p>				


Date January 2011	Leak Reference No: 46			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 98B	Creswick Terrace			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked.</p>				


Date January 2011	Leak Reference No: 47			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Outside 143	Creswick Terrace			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
Note: Hydrant marked.				


Date January 2011	Leak Reference No: 48			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 119A	Kelburn Parade			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				

January 2011	Missing Toby Lids	
Address		
198	Glenmore Street	
39	Raroa Road	
10	Highbury Road	

January 2011	Missing Sluice Valve Covers	
Address		
Corner	Upland Road and Glasgow Street	
Intersection	Wilton Road and Curtis Street	
Outside 25	Sydenham Street	
Intersection	Curtis Street and Whitehead Road	
Intersection	Glenmore Street and Northland Road	
Opposite 161	Glenmore Street	
Intersection	The Rigi and Glenmore Street	
Intersection	Raroa Road and Moana Road	
Outside 23	Raroa Road	
Intersection	Cluny Avenue and Raroa Road	
Outside 22	Fairview Crescent	

January 2011	Missing Sluice Valve Covers	
Intersection	Raroa Road and Plunket Street	
Intersection	Harold Street and Norna Crescent	

January 2011	Unmetered Collection	
Address		
95B	Upland Road	Large flows. No BFP or meter to Fish and Chip shop – Paradise Seafoods. No-one in shop – suspect running water for fish. Marked with green dot.

January 2011	Miscellaneous Reticulation Faults	
Address		
62	Upland Road	Toby handle missing.
61	Glen Road	Unattended sprinkler system noted at 9.30am 25.01.2011. Large flows.
3	Central Terrace	Broken hydrant lid (dangerous).

Results:

In total: 48 areas of water loss were identified.

These included:

- 38 Council Leaks
- 10 Residential Leaks

Total Loss Breakdown:

Zone	Council Leaks	Residential Leaks	Total
Totals	38	10	48

Leak Type:

Asset Type	Main	Serv Conn	SV PV	Tap Bnd	Toby	Hyd	Res	Meter Conn
Number		3	2	3	22	8	10	

Overview of Results:

Council Leaks

38 areas of loss were identified on the Council side of the toby/meter and including the toby/meter.

Residential Leaks

10 areas of loss were identified as being after the toby/meter (residential side of the property).

N.B. Although these are identified as consumer leaks, the Council incurs the cost of loss, as the majority of properties are not metered.

Accounted for water balance total:

Council Leakage (Conservative)	Residential Leakage (Conservative)	Total Accounted for Water (Conservative)
15.42 m ³ /hr	2.4 m ³ /hr	17.82 m ³ /hr

Losses Extrapolated:

	L per sec	m ³ per hr	m ³ per 24 hrs	m ³ per month	m ³ annually
Council Leakage		15.42	370.08	11,256.6	135,079.2
Residential Leakage		2.4	57.6	1,752	21,024
Total Leakage		17.82	427.68	13,008.6	156,103.2
Cost		\$14.25	\$342.14	\$10,406.88	\$124,882.56

N.B. The bottom row showing a “cost” is based on the cost of water @ 80 ¢ per m³. This is only an estimate.

[REDACTED]

From: [REDACTED]
Sent: Tuesday, February 1, 2011 9:56 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: Kelburn Leak Detection Survey - January 2011
Attachments: KelburnDMA_Report_January11.pdf; Kelburn_January11.xls

Hi [REDACTED]

[Please enter into Confirm](#)

[Cheers](#)

[REDACTED]
Design & Investigations Engineer

From: [REDACTED] [mailto:[REDACTED]@ihug.co.nz]
Sent: Tuesday, 1 February 2011 9:02 a.m.
To: [REDACTED]
Subject: Fw:

Hi [REDACTED]

Kelburn report in PDF format
Thanks [REDACTED]
----- Original Message -----

From: [REDACTED]
To: [REDACTED]
Sent: Monday, January 31, 2011 10:59 PM

Wellington Water Water Leak Detection

Kelburn

July 2019

Wellington Water

Leak Detection July 2019

Kelburn

Project Overview:

The leak detection survey was programmed for a “comprehensive” leakage detection survey of all the water reticulation within the Kelburn Zone.

This high resolution method provides the greatest results and detail in reticulation information.

Methodology:

It was agreed to undertake a full comprehensive acoustic leak survey program of the reticulation.

Acoustic Ground Survey

We undertake to test **all** fittings (residential and commercial meters, PV and SV valves, hydrants, scours, etc, where practical) using acoustic leak detection instruments.

Any leak sounds recorded are noted on a field day sheet giving date, address, and type of sound (service leak, mains leak, etc).

This enables the operator to plan his revisit to the site at a time best suited for the area and acoustic monitoring, i.e. during times of low traffic flow for leaks in busy traffic areas, and times of low water usage to eliminate water draw off issues.

Leak verification is undertaken by running a sub-area ground survey combined with ground microphone testing and pin-pointing of the leak. This method eliminates false leak sounds and verifies the actual leak cause and asset it is located on.

We also determine from this if a leak is located on the residential side of the meter, this is reported in our final report.

Leak correlators: We use leak correlators (Fuji-Tecom LC2500 and LC2100, Gutermann AS-600, AS700, AS6500 and AS900) in many of our final leak confirmations. These are particularly useful where the pipe is very deep, where access to regular fittings on the mains are not available and as a further leak verification procedure.

Eliminating False Alarms

Residential Property Leakage

Where the potential leakage is identified on the property owner's side of the meter, our operators undertake the following procedures to eliminate "leakage false alarms".

The residential meter will be read a minimum of 2 times on different occasions.

If there is any further doubt they will return again and recheck it. Recordings will be made to calculate the actual flows and to compare to future readings.

The property owners will be asked if they are using water.

The stop tap will be acoustically tested to ascertain draw through.

Sprinkler systems etc will be checked for usage.

Equipment Deployed:

1. Fuji-Tecom leak noise correlator LC2500
2. Fuji-Tecom HG10AII acoustic ground microphone
3. Fuji-Tecom FSB-7D digital listening stick
4. Magnetic locator
5. Fuji-Tecom pipe and cable locator
6. Laptop PC
7. Enigma correlating loggers

In the case of wet hydrants and valves boxes, in addition to acoustically testing these, we undertake to sponge out the excess water to make a better assessment of the actual leakage. We then return within a few hours to recheck them for any reappearance of water. This method reduces unnecessary callouts for the services team for minor weeping of glands, etc.

In addition, any faults such as broken valve taps, clogged meter boxes, and the like, are noted, as are properties where access is denied by reason of locked gates, dogs, etc, or meters are unable to be found.

All information is passed on to the Contract Manager/Supervisor on a daily basis to undertake a separate acoustic test and leak detection if required.

Preliminary ground survey and leak verification are undertaken at different times and by different operators.

We separate these operations for the following reasons:

1. The two methods are very different. We keep each operator focused on their task at hand as this improves results and keeps the project on target
2. By undertaking the leak verification at a different time, and by the Contract Manager/Supervisor, it fulfills the following:
 - a. An internal quality control check is performed on the ground survey
 - b. By going back to a recorded leak noise at a different time, erroneous background noises that may have been the cause of the noise may have ceased
 - c. The effects of residential and/or commercial draw off can be avoided
3. Leak verification is a specialised task and it is in the interest of the operator and the client for the operator to stay focused on a specific task (pin-pointing leaks)

Final Leak Verification

As mentioned above, this is undertaken by a specifically trained operator (usually the Contract Manager/Supervisor)

Leak locating and marking is separated from the ground survey and is usually undertaken at a different time from when a potential leak is first identified by the ground survey team.

Leak List – Kelburn



Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
01	50A Randwick Road	Yes			Service to Mains	High	30	Marked on road. Photograph taken. Too wet for paint to stick.
02	27 Garden Road	Yes			Council Toby	High	20	Toby and kerb marked. Leaking on property owner's side of toby. Possibly damaged by parked vehicle.
03	28 Central Terrace	Yes			Council Toby	High	20	Footpath marked.
04	Corner Albemarle Road and Curtis Street	Yes			Passing Hydrant	High	15	Hydrant marked on road.

Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
05	2-8 Crieff Street	Yes			Service to Mains	High	15	Marked on road.
06	41 Ngaio Road	Yes			Mains	High	15	Main leak repaired overnight.
07	68 Curtis Street		Yes		Internal	High	15	Toby and road marked. Rechecked three times.
08	15, 15A Governor Road	Yes			Council Toby	High	10	Toby and kerb marked. Toby up path by cabbage tree. Cabbage tree marked.
09	12 Governor Road	Yes			Council Toby	High	10	Toby and kerb marked.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
10	90/88 Upland Road	Yes	Yes		Internal	High	8	Toby and kerb marked. Rechecked three times. Metered connection. Businesses – Brezel German Bakery and Liv Hair.
11	10 Raroa Road	Yes			Service to Main	High	7	Road marked. Car parked over area. Dig in previous repair.
12	9 Orangi Kaupapa Road also known as 92 Glenmore Street	Yes			Possible Service to Mains	High	7	Toby in Glenmore Street. Recommend replacing lateral. Marked on footpath. Toby faulty, does not fully shut off supply.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
13	Flats 1-3, 136 Glenmore Street	Yes	Yes		Internal	High	7	Toby and kerb marked. Rechecked three times. Second toby up path in Crieff Street.
14	1 Grove Road	Yes			Service to Main	Medium	5	Marked on road.
15	56 Kelburn Parade	Yes			Council Toby	Medium	5	Footpath marked.
16	16 Mount Pleasant Road	Yes			Service to Main	Medium	4	Road marked. Previously reported.
17	66 Norway Street	Yes			Council Toby	Medium	4	Toby marked.
18	150 Raroa Road	Yes			Council Toby	Medium	4	Toby marked on raised footpath. Previously reported.
19	14 North Terrace	Yes			Council Toby	Medium	4	Marked on road.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
20	4 Norna Crescent		Yes		Internal	Medium	4	Toby and kerb marked. Rechecked three times.
21	Units 1-4, 12 Norna Crescent		Yes		Internal	Medium	4	Toby and kerb marked. Rechecked three times.
22	31 Orangi Kaupapa Road	Yes			Council Toby	Low	3	Toby and kerb marked.
23	Corner Crieff Street and Glenmore Street	Yes			Passing Hydrant	Low	3	Marked on road.
24	60 Kelburn Parade	Yes			Council Toby	Low	3	Road marked.
25	7 Glasgow Street	Yes			Internal	Low	3	Toby and footpath marked. Toby is down walkway from 49 Rawhiti Terrace.
26	141 Kelburn Parade		Yes		Internal	Low	3	Toby and kerb marked. Rechecked three times.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
27	7 Glasgow Street		Yes		Internal	Low	3	Toby marked next to 49 Rawhiti Terrace down footpath. Toby will not shut.
28	57 Garden Road		Yes		Internal	Low	3	Toby and kerb marked. Rechecked three times.
29	50 Glen Road	Yes			Council Toby	Low	2	Footpath and kerb marked.
30	119 Glenmore Street	Yes			Council Toby	Low	2	Toby and kerb marked. Leaking on connection on property owner's side of toby.
31	Corner Curtis Street and Chaytor Street	Yes			Passing Hydrant	Low	2	Hydrant marked on road.
32	11 Rimu Road	Yes			Council Toby	Low	2	Footpath marked.


Leak Ref. No.	Address	Council Leak	House Leak	Metered	Asset Type	Priority	Estimated Leak Size (L/min)	Comments
33	31 Koromiko Road	Yes			Council Toby	Low	1	Toby marked.
34	6 Zetland Street	Yes			Council Toby	Low	1	Road and toby marked. Previously reported.
35	21 Rimu Road	Yes			Council Toby	Low	1	Footpath marked.
36	42 Garden Road	Yes			Council Toby	Low	1	Toby and kerb marked.
37	100 Kelburn Parade	Yes			Passing Hydrant	Low	1	Road marked.
38	81 Glen Road	Yes			Council Toby	Low	1	Footpath and kerb marked. Previously reported.


Date July 2019	Leak Reference No: 01			 PROVIDING SUB-SURFACE INFORMATION
Address 50A	Randwick Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Mains			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	30			
Date Repaired				
<p>Note:</p> <p>Marked on road. Photograph taken. Too wet for paint to stick.</p>				


Date July 2019	Leak Reference No: 02			 PROVIDING SUB-SURFACE INFORMATION
Address 27	Garden Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Leaking on property owner's side of toby. Possibly damaged by parked vehicle.</p>				


Date July 2019	Leak Reference No: 03			 PROVIDING SUB-SURFACE INFORMATION
Address 28	Central Terrace			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	20			
Date Repaired				
Note: Footpath marked.				


Date July 2019	Leak Reference No: 04			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address Corner	Albemarle Road and Curtis Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	15			
Date Repaired				
<p>Note:</p> <p>Hydrant marked on road.</p>				


Date July 2019	Leak Reference No: 05			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 2-8	Crieff Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Mains			
Main Information	Material	Diameter		
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	15			
Date Repaired				
<p>Note:</p> <p>Marked on road.</p>				


Date July 2019	Leak Reference No: 06			 PROVIDING SUB-SURFACE INFORMATION
Address 41	Ngaio Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Mains			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	15			
Date Repaired				
<p>Note:</p> <p>Mains leak repaired overnight.</p>				


Date July 2019	Leak Reference No: 07			 PROVIDING SUB-SURFACE INFORMATION
Address 68	Curtis Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	15			
Date Repaired				
<p>Note:</p> <p>Toby and road marked. Rechecked three times.</p>				


Date July 2019	Leak Reference No: 08			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 15, 15A	Governor Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	10			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Toby up path by cabbage tree. Cabbage tree marked.</p>				


Date July 2019	Leak Reference No: 09			 PROVIDING SUB-SURFACE INFORMATION
Address 12	Governor Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	10			
Date Repaired				
Note: Toby and kerb marked.				


Date July 2019	Leak Reference No: 10			 PROVIDING SUB-SURFACE INFORMATION
Address 90/88	Upland Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	8			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Rechecked three times. Metered connection. Businesses – Brezel German Bakery and Liv Hair.</p>				


Date July 2019	Leak Reference No: 11			 PROVIDING SUB-SURFACE INFORMATION
Address 10	Raroa Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Main			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	7			
Date Repaired				
<p>Note:</p> <p>Road marked. Car parked over area. Dig in previous repair.</p>				


Date July 2019	Leak Reference No: 12			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 9	Orangi Kaupapa Road also known as 92 Glenmore Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Possible Service to Mains			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	7			
Date Repaired				
<p>Note:</p> <p>Toby in Glenmore Street. Recommend replacing lateral. Marked on footpath. Toby faulty, does not fully shut off supply.</p>				


Date July 2019	Leak Reference No: 13			 PROVIDING SUB-SURFACE INFORMATION
Address Flats 1-3, 136	Glenmore Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input checked="" type="checkbox"/>	Medium <input type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	7			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Rechecked three times. Second toby up path in Crieff Street.</p>				


Date July 2019	Leak Reference No: 14			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 1	Grove Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Main			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
<p>Note:</p> <p>Marked on road.</p>				


Date July 2019	Leak Reference No: 15			 PROVIDING SUB-SURFACE INFORMATION
Address 56	Kelburn Parade			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	5			
Date Repaired				
Note: Footpath marked.				


Date July 2019	Leak Reference No: 16			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 16	Mount Pleasant Road			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Service to Main			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Road marked. Previously reported.</p>				


Date July 2019	Leak Reference No: 17			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 66	Norway Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date July 2019	Leak Reference No: 18			 PROVIDING SUB-SURFACE INFORMATION
Address 150	Raroa Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Toby marked on raised footpath. Previously reported.</p>				


Date July 2019	Leak Reference No: 19			 PROVIDING SUB-SURFACE INFORMATION
Address 14	North Terrace			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
Note: Marked on road.				


Date July 2019	Leak Reference No: 20			 PROVIDING SUB-SURFACE INFORMATION
Address 4	Norna Crescent			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Rechecked three times.</p>				


Date July 2019	Leak Reference No: 21			 PROVIDING SUB-SURFACE INFORMATION
Address Units 1-4, 12	Norna Crescent			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input checked="" type="checkbox"/>	Low <input type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	4			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Rechecked three times.</p>				


Date July 2019	Leak Reference No: 22			 PROVIDING SUB-SURFACE INFORMATION
Address 31	Orangi Kaupapa Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input checked="" type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
Note: Toby and kerb marked.				


Date July 2019	Leak Reference No: 23			 PROVIDING SUB-SURFACE INFORMATION
Address Corner	Crieff Street and Glenmore Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
Note: Marked on road.				


Date July 2019	Leak Reference No: 24			 PROVIDING SUB-SURFACE INFORMATION
Address 60	Kelburn Parade			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
Note: Road marked.				


Date July 2019	Leak Reference No: 25			 PROVIDING SUB-SURFACE INFORMATION
Address 7	Glasgow Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby and footpath marked. Toby is down walkway from 49 Rawhiti Terrace.</p>				


Date July 2019	Leak Reference No: 26			 PROVIDING SUB-SURFACE INFORMATION
Address 141	Kelburn Parade			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Rechecked three times.</p>				


Date July 2019	Leak Reference No: 27			 PROVIDING SUB-SURFACE INFORMATION
Address 7	Glasgow Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby marked next to 49 Rawhiti Terrace down footpath. Toby will not shut.</p>				


Date July 2019	Leak Reference No: 28			 PROVIDING SUB-SURFACE INFORMATION
Address 57	Garden Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input checked="" type="checkbox"/>
Leak Type	Internal			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	3			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Rechecked three times.</p>				


Date July 2019	Leak Reference No: 29			 PROVIDING SUB-SURFACE INFORMATION
Address 50	Glen Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
<p>Note:</p> <p>Footpath and kerb marked.</p>				


Date July 2019	Leak Reference No: 30			 PROVIDING SUB-SURFACE INFORMATION
Address 119	Glenmore Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked. Leaking on connection on property owner's side of toby.</p>				


Date July 2019	Leak Reference No: 31			 PROVIDING SUB-SURFACE INFORMATION
Address Corner	Curtis Street and Chaytor Street			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
<p>Note:</p> <p>Hydrant marked on road.</p>				


Date July 2019	Leak Reference No: 32			 PROVIDING SUB-SURFACE INFORMATION
Address 11	Rimu Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	2			
Date Repaired				
Note: Footpath marked.				


Date July 2019	Leak Reference No: 33			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 31	Koromiko Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Toby marked.</p>				


Date July 2019	Leak Reference No: 34			 PROVIDING SUB-SURFACE INFORMATION
Address 6	Zetland Street			
Leak Location	Road <input type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input checked="" type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Road and toby marked. Previously reported.</p>				

Date July 2019	Leak Reference No: 35			 PROVIDING SUB-SURFACE INFORMATION
Address 21	Rimu Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
Note: Footpath marked.				


Date July 2019	Leak Reference No: 36			 PROVIDING SUB-SURFACE INFORMATION
Address 42	Garden Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Toby and kerb marked.</p>				


Date July 2019	Leak Reference No: 37			 <small>PROVIDING SUB-SURFACE INFORMATION</small>
Address 100	Kelburn Parade			
Leak Location	Road <input checked="" type="checkbox"/>	Footpath <input type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Passing Hydrant			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unsure <input checked="" type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
Note: Road marked.				

Date July 2019	Leak Reference No: 38			 PROVIDING SUB-SURFACE INFORMATION
Address 81	Glen Road			
Leak Location	Road <input type="checkbox"/>	Footpath <input checked="" type="checkbox"/>	Berm <input type="checkbox"/>	Private Property <input type="checkbox"/>
Leak Type	Council Toby			
Main Information	Material		Diameter	
Leak Visibility	Visible Above Ground <input type="checkbox"/>		Underground <input checked="" type="checkbox"/>	
Leak Priority	High <input type="checkbox"/>	Medium <input type="checkbox"/>	Low <input checked="" type="checkbox"/>	
Traffic Control Required	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Unsure <input type="checkbox"/>	
Estimated Size of Leak (Litres/min)	1			
Date Repaired				
<p>Note:</p> <p>Footpath and kerb marked. Previously reported.</p>				

July 2019	Missing Toby Lids	
Address		
88	Curtis Street	

July 2019	Missing Sluice Valve Lids	
Address		
Intersection	Glasgow Street and Kelburn Parade	
43	Ngaio Street	
Corner	Kaihuia Street and Northland Road	
Corner	Bank Road and Garden Road	
Corner	The Rigi and Glenmore Street	

July 2019	Miscellaneous Reticulation Faults	
Address		
Outside 32	Crieff Street	No hydrant mark.
Outside 29	Orangi Kaupapa Road	Broken hydrant lid.
Outside 74	Northland Road	Broken hydrant lid.
19	Grove Road	Broken hydrant lid.

July 2019	Miscellaneous Reticulation Faults	
1	Ninian Street	Unable to shut toby to confirm leak. Toby marked on driveway. Previously reported – internal.

Results:

In total: 38 areas of water loss were identified.

These included:

- 29 Council Leaks
- 9 Residential Leaks

Total Loss Breakdown:

Zone	Council Leaks	Residential Leaks	Total
Totals	29	9	38

Leak Type:

Asset Type	Main	Serv Conn	SV PV	Tap Bnd	Toby	Hyd	Res	Meter Conn
Number	1			6	18	4	9	

Overview of Results:

Council Leaks

29 areas of loss were identified on the Council side of the toby/meter and including the toby/meter.

Residential Leaks

9 areas of loss were identified as being after the toby/meter (residential side of the property).

N.B. Although these are identified as consumer leaks, the Council incurs the cost of loss, as the majority of properties are not metered.

Accounted for water balance total:

Council Leakage (Conservative)	Residential Leakage (Conservative)	Total Accounted for Water (Conservative)
11.88 m ³ /hr	2.82 m ³ /hr	14.7 m ³ /hr

Losses Extrapolated:

	L per sec	m ³ per hr	m ³ per 24 hrs	m ³ per month	m ³ annually
Council Leakage		11.88	285.12	8,672.4	104,068.8
Residential Leakage		2.82	67.68	2,058.6	24,703.2
Total Leakage		14.7	352.8	10,731	128,772
Cost		\$31.60	\$758.52	\$23,071.65	\$276,859.80

N.B. The bottom row showing a “cost” is based on the cost of water @ \$2.15 per m³. This is only an estimate.

[REDACTED]

From: [REDACTED]@outlook.com>
Sent: Thursday, July 18, 2019 6:26 AM
To: [REDACTED]
Subject: Fw:
Attachments: Kelburn_Report_July19.pdf

From: [REDACTED]
Sent: Wednesday, July 17, 2019 7:46 PM
To: [REDACTED]

From: Info at WCC <info.atWCC@wcc.govt.nz>
Sent: Thursday, July 29, 2021 11:48 PM
To: wcc Customer
Subject: WCC Report a leak, NA - [#SR-209191]

Kia ora Wellington Water,

You have been assigned a new priority 3 ticket.

Request details

Item Name	: Water and drainage
Category	: External Customer Services
Service	: Report a leak
Which water type is this regarding?	: Drinking water or tap water
How much water is leaking?	: Trickle
Description	: On Chaytor Street just up from Curtis Street. Leak coming from a crack in the kerb.
Incident address	: NA
Location	: NA

CHAYTOR STREET, Karori

Customer details

██████████@yahoo.co.nz

Ngā mihi,

Customer Services, Wellington City Council

[REDACTED]

From: Wellington City Council Support <customerservice@wellingtoncitycouncil.freshservice.com>
Sent: Monday, March 28, 2022 3:53 PM
To: wcc Customer
Subject: WCC Report a leak, CURTIS STREET, Karori-Northland - [#SR-353970]

Kia ora Wellington Water,

You have been assigned a new priority 2 ticket.

Request details

Item Name : Water and drainage
Category : External Customer Services
Service : Report a leak
Which water type is this regarding? : Drinking water or tap water
How much water is leaking? : Steady flow
Description : Caller has advised that there is a leak coming from just under the sign is a white background with black writing saying (curtis traffic may enter bus lane from this point) please access
Incident address : CURTIS STREET, Karori-Northland
Location : -41.27972995223466,174.7544801024508

Customer details

[REDACTED]
[REDACTED]@wcc.govt.nz

Ngā mihi,

Customer Services, Wellington City Council

From: [REDACTED]
To: [REDACTED]
Subject: RE: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori
Date: Monday, 24 April 2023 2:05:58 pm
Attachments: [image001.png](#)

Awesome work, thank you [REDACTED]

From: [REDACTED]@wellingtonwater.co.nz>
Sent: Monday, 24 April 2023 1:49 pm
To: [REDACTED]@wellingtonwater.co.nz>
Subject: RE: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Hi [REDACTED]

I have actioned it, just waiting on a response. I will let you know what they come back with.

Thanks,

[REDACTED]

From: [REDACTED]@wellingtonwater.co.nz>
Sent: Monday, 24 April 2023 1:43 pm
To: [REDACTED]@wellingtonwater.co.nz>
Subject: FW: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Hi [REDACTED]

Did you managed to action [REDACTED] recommendations?

Kind regards

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 19 April 2023 7:09 am
To: [REDACTED]@wellingtonwater.co.nz>; [REDACTED]
[REDACTED]@wellingtonwater.co.nz>
Subject: RE: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Thank you [REDACTED]

[REDACTED] would you mind actioning the below please.

Kind regards

[REDACTED]

From: [REDACTED]@wellingtonwater.co.nz>

Sent: Tuesday, 18 April 2023 4:24 pm

To: [REDACTED]@wellingtonwater.co.nz>

Cc: [REDACTED]@wellingtonwater.co.nz>

Subject: RE: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Kia ora [REDACTED]

Sorry for delay.

As discussed, suggest that we check in with Zealandia if they have undertaken any works in the upper catchment that may have changed the groundwater flow over last few years.

Also be good to check in with WCC Parks to see if they have noticed any ground water issues at Appleton Park or surrounds.

That should give us an indication if there is a groundwater issue (i.e. it has changed course etc).

Nga mihi,

[REDACTED]

[REDACTED] Head of Network Operations and Engineering



Tel 04 912 4400 Mob [REDACTED]

Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From: [REDACTED]@wellingtonwater.co.nz>

Sent: Tuesday, 18 April 2023 1:31 pm

To: [REDACTED]@wellingtonwater.co.nz>

Subject: FW: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Hi,

Have you had a chance to cast an eye over this?

Kind regards

[REDACTED]

From: [REDACTED]@wellingtonwater.co.nz>

Sent: Saturday, 8 April 2023 6:58 am

To: [REDACTED] <[REDACTED]@wellingtonwater.co.nz>

Cc: [REDACTED] <[REDACTED]@wellingtonwater.co.nz>

Subject: FW: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Kia ora [REDACTED] – can you consider this while I'm away please. I guess the question to consider is has the slope always been susceptible to being wet and boggy or if this has occurred over the previous year, why the change? You would not think groundwater would change significantly unless the climatic conditions shifted dramatically?

Ngā mihi

[REDACTED]

From: [REDACTED] <[REDACTED]@wellingtonwater.co.nz>

Sent: Wednesday, April 5, 2023 7:21 PM

To: [REDACTED] <[REDACTED]@wellingtonwater.co.nz>

Subject: Fwd: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Hi [REDACTED]

Here is background for the issue I spoke to you about this afternoon. I have spoken with Thomas on several occasions and [REDACTED] has been case managing the work. He was not initially pleased with the finding, (refer the letter sent last week) but I reiterated the actions taken were to look at all possible leak sources from our network.

He has accepted our findings and I have advised him to make contact with me if anything changes at his property that may cause us to review the water source again. 7(g) [REDACTED]

[REDACTED] His property is in a gully and water is running down the hill.

We have had technical support throughout this process.

Happy to discuss in more detail tomorrow if needed.

Kind regards

[REDACTED]

Begin forwarded message:

From: [REDACTED] <[REDACTED]@wellingtonwater.co.nz>

Date: 5 April 2023 at 6:43:58 PM NZST

To: [REDACTED] <[REDACTED]@wellingtonwater.co.nz>

Subject: RE: [LEGALLY PRIVILEGED] RE: 19 Curtis Street, Karori

Hi [REDACTED]

Please find attached a background doc on 19 Curtis Street, Karori investigations.

The investigation was supported by [REDACTED] [REDACTED] (Water TA), [REDACTED] (Engineer), [REDACTED] [REDACTED] (Rongotai team leader) and myself.

In summary, we investigated;

1. Stormwater mains via CCTV and dye testing and found to be clear
2. Potable water mains via leak detection. We were unable to find any further leaks to be repaired.
3. Unable to undertake leak detection of bulk water mains due to no listening points along the pipes.
4. Sample was taken to confirm make up – it suggested groundwater (results attached)
5. Wastewater was not investigated as there were no assets upstream and the seepage sample confirmed no wastewater detected.
6. The property is in a gully with two streams on either side of the house indicating there is a likelihood the area is prone to natural water run off and overland flow path.
7. With all evidence followed and the water sample, we determined that it is likely groundwater. An outcome was provided outlining above and that we would investigate once new and significant information comes to light (attached).

Happy to discuss.

Cheers,

[REDACTED]

Section 7(g)

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

Section 7(g)

[Redacted text block]

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Section 7(g)

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Section 7(g)

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[Redacted text block]

Section 7(g)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>
Sent: Wednesday, 29 March 2023 2:13 pm
To: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>
Cc: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>
Subject: RE: 19 Curtis Street, Karori

Hi [REDACTED]

Yes [REDACTED] has reviewed it and he is happy for us to send it.

It is a frustrating situation, but we have taken all reasonable steps to repair and find leaks and we have exhausted all lines of investigation (short of physically digging up the roads or banks).

Unless new and significant information comes to light, the evidence is suggesting ground water.

Kind regards,

[REDACTED]

From: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>
Sent: Wednesday, 29 March 2023 2:00 pm
To: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>; [REDACTED]
[REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>
Subject: RE: 19 Curtis Street, Karori

Hi [REDACTED]

Has this letter been reviewed by [REDACTED] to ensure it lines up with the conversation?

Section 7(g)

Kind regards

█

From: █@wellingtonwater.co.nz>
Sent: Wednesday, 29 March 2023 12:08 pm
To: █@wellingtonwater.co.nz>
Subject: FW: 19 Curtis Street, Karori

Hi █

Please find █ commentary below and attached is the draft outcome letter for Thomas.

Thanks,

█

From: █@wellingtonwater.co.nz>
Sent: Wednesday, 29 March 2023 11:58 am
To: █@wellingtonwater.co.nz>
Subject: RE: 19 Curtis Street, Karori

Kia ora █

I phoned Thomas and explained we have undertaken our investigations, found a number of issues that we have fixed, and our infrastructure is now in working order. Our investigations indicate the problem is likely groundwater. I've told him we will send him a letter and we'll provide him with the disputes process details if he wants to pursue it further.

Thomas is unhappy and told me we are wrong, it's not ground water, and our infrastructure isn't working correctly, and there are leaks on the opposite side of the road.

Please send him the letter. He may wish to pursue it further, however, that is his call.

Nga mihi

█

From: █@wellingtonwater.co.nz>
Sent: Wednesday, 29 March 2023 10:33 am
To: █@wellingtonwater.co.nz>
Subject: FW: 19 Curtis Street, Karori

Hi █

Thanks for agreeing to discuss the findings with the customer.

If you could let me know when you are free to meet with the customer, I can send a response

back to the customer.

Cheers,

█

From: █
Sent: Tuesday, 28 March 2023 4:08 pm
To: █@wellingtonwater.co.nz>
Subject: FW: 19 Curtis Street, Karori

Hi █

We are looking to close out the seepage investigation at 19 Curtis Street, Karori as ground water.

We anticipate some push back from the customer and they typically respond best to the higher-ups of the respective areas i.e. █ instead of me, Engineer instead of crew.

█ and I were wondering if you would be willing to talk the customer through what we have done and why we have come to this conclusion? We do not want him re-escalating. We would then supply him with the attached draft letter.

I have included a background doc of all the work we have done and the sample results.

Let me know what you think.

Kind Regards,

█ – **Customer Resolution Officer**
Customer Experience Team

Tel 04 912 4400 Mob █
Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria Street, Petone, Lower Hutt
www.wellingtonwater.co.nz

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Curtis Street/Chaytor St, Karori
Date: Monday, 29 May 2023 1:39:00 pm
Attachments: [image001.png](#)
[image004.png](#)
[image006.png](#)

Thanks for letting me know. We just wanted to cross reference before closing out at our end internally.

Kind regards,

[REDACTED]

From: [REDACTED]@wcc.govt.nz>
Sent: Monday, 29 May 2023 1:38 pm
To: [REDACTED]@wcc.govt.nz>; [REDACTED]
[REDACTED]@wellingtonwater.co.nz>; [REDACTED]@wcc.govt.nz>
Cc: [REDACTED]@wcc.govt.nz>
Subject: RE: Curtis Street/Chaytor St, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

I agree with [REDACTED] and looking at onemap 19 Curtis St is some distance to this address. The only public space near it the road corridor.

Regards

[REDACTED]

Project Manager Open Space | Parks, Sport & Recreation | Wellington City Council
P [REDACTED] | M [REDACTED] | F [REDACTED]
E david.halliday@wcc.govt.nz | W Wellington.govt.nz |

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Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke

From: [REDACTED]@wcc.govt.nz>
Sent: Monday, 29 May 2023 12:17 pm
To: [REDACTED]@wellingtonwater.co.nz>; [REDACTED]
[REDACTED]@wcc.govt.nz>
Cc: [REDACTED]@wcc.govt.nz>; [REDACTED]@wcc.govt.nz>
Subject: RE: Curtis Street/Chaytor St, Karori

Nothing I am aware of from a PSR perspective

[REDACTED]
Assets And Projects Manager | Parks, Sport and Recreation | Wellington City Council

M [REDACTED]
E [REDACTED]@wcc.govt.nz | W Wellington.govt.nz |

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From: [REDACTED]@wellingtonwater.co.nz>
Sent: Monday, 29 May 2023 11:47 am
To: [REDACTED]@wcc.govt.nz; [REDACTED]
[REDACTED]@wcc.govt.nz>
Cc: [REDACTED]@wcc.govt.nz; [REDACTED]@wcc.govt.nz>
Subject: RE: Curtis Street/Chaytor St, Karori

Hi [REDACTED]

The property is 19 Curtis Street. Our water sample suggested it was ground water. As the water flow has not always been there according to the customer, we thought we would check if there were any changes in the nearby areas that could have affected groundwater flows.

Kind regards,
[REDACTED]

From: [REDACTED]@wcc.govt.nz>
Sent: Monday, 29 May 2023 11:39 am
To: [REDACTED]@wellingtonwater.co.nz; [REDACTED]
[REDACTED]@wcc.govt.nz>
Cc: [REDACTED]@wcc.govt.nz; [REDACTED]@wcc.govt.nz>
Subject: RE: Curtis Street/Chaytor St, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hi [REDACTED] can you please be more specific with the location of where you are referring to.

The only reserve/open space land PSR manage in this area are Appleton Park and Ian Galloway Park – which are located on the opposite side of any residential properties

[REDACTED]
Assets And Projects Manager | Parks, Sport and Recreation | Wellington City Council

M [REDACTED]
E [REDACTED] [@wcc.govt.nz](mailto:[REDACTED]@wcc.govt.nz) | W Wellington.govt.nz |

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If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

From: [REDACTED] [@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>

Sent: Monday, 29 May 2023 11:26 am

To: [REDACTED] [@wcc.govt.nz](mailto:[REDACTED]@wcc.govt.nz); [REDACTED]
[REDACTED] [@wcc.govt.nz](mailto:[REDACTED]@wcc.govt.nz)>

Subject: Curtis Street/Chaytor St, Karori

Hi [REDACTED] and [REDACTED]

We have been investigating a seepage issue at a property in Curtis Street.

Are you aware of any works or issues in or around Curtis Street and Chaytor Street that may have affected the natural flow path for ground water?

I have been advised of the slip from the roading team.

Kind Regards,

[REDACTED] – Customer Resolution Officer
Customer Experience Team



Tel 04 912 4400 Mob [REDACTED]

Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria Street, Petone, Lower Hutt
www.wellingtonwater.co.nz

From: [REDACTED]
To: [REDACTED]
Subject: RE: 19 Curtis Street, Karori
Date: Monday, 29 May 2023 2:13:37 pm

Yes, I think we can close this one out. We may have an opportunity to say to Thomas that in the background we did a couple of other check as a matter of customer care?

From: [REDACTED]@wellingtonwater.co.nz>
Sent: Monday, 29 May 2023 1:31 pm
To: [REDACTED]@wellingtonwater.co.nz>
Subject: 19 Curtis Street, Karori

Hi [REDACTED]

I have checked in with Roding and Parks at WCC to confirm if they have made any changes to that may affect the ground water paths. They advised of a slip nearby however that was after May 2022, which is when the customer said the issue started.

Are you happy for me to close this out at in the complaints register?

Kind regards,

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Subject: 19 Curtis Street, Karori WO# 363853
Date: Wednesday, 20 September 2023 3:37:00 pm

Hi [REDACTED]

As per our call, could you please look at getting the leak sorted at 19 Curtis St, Karori WO# 363853?

It has been rovered and plans attached.

Cheers,

[REDACTED]

From: [REDACTED]
To: [REDACTED]
Subject: RE: 19 Curtis St, Karori
Date: Friday, 27 October 2023 7:15:04 am

Hi [REDACTED]

We did an onsite chlorine test when we were there and it came back negative. I don't believe that the leak in Putnam St is the cause of the water on Curtis St, I believe it is GW as proven previously.

Cheers,

[REDACTED]

From: [REDACTED]@wellingtonwater.co.nz>
Sent: Thursday, 26 October 2023 1:52 pm
To: [REDACTED]@wellingtonwater.co.nz>
Subject: 19 Curtis St, Karori

Hi [REDACTED]

I have been trying to close out the customer over the seepage opposite 19 Curtis St. He has come back questioning our findings a little. I was wondering given the leak up at 2 Putnam St, should we take a sample to give him assurity?

Section 7(2)(f)(i) [REDACTED]

Kind regards,

[REDACTED]

From: [Resolution Team](#)
To: [REDACTED]
Subject: RE: Update - 19 Curtis Street, Karori
Date: Thursday, 2 November 2023 11:28:00 am
Attachments: [RE 19 Curtis St Karori.msg](#)
[Northland leaks.msg](#)

Hi [REDACTED]

First of all the seepage across the road is not affecting him. It gets collected by the kerb and channel and flows away from his property.

Second of all the seepage does ebb and flow in that specific spot. I advised the customer leak detection has already been done. I also asked for the leaks on the road to be fixed, this was not organised and investigation was commenced instead.

Last [REDACTED] isn't going to take a sample. **Section 7(2)(f)(i)** [REDACTED]
[REDACTED]

Kind regards,
[REDACTED]

From: [REDACTED]@wellingtonwater.co.nz>
Sent: Thursday, 2 November 2023 11:10 am
To: [REDACTED]@gmail.com>; Resolution Team
<ResolutionTeam@wellingtonwater.co.nz>
Subject: RE: Update - 19 Curtis Street, Karori

Hi [REDACTED]

Have we taken a sample and tested the seepage. If we haven't done this, can you please arrange. That will provide clarity/evidence as to nature of the water seepage.

Thanks
[REDACTED]

From: [REDACTED]@gmail.com>
Sent: Thursday, 2 November 2023 11:02 am
To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>
Cc: [REDACTED]@wellingtonwater.co.nz>
Subject: Re: Update - 19 Curtis Street, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hi [REDACTED]

Did you want to weigh in on this?

I'm almost positive that it isn't a groundwater situation. I've had a chat with a hydrologist about it who finds Wellington Waters conclusion bizarre (and convenient).

Groundwater is ephemeral in nature. This is a constant flow. The volume of flow never changes regardless of how much rainfall there has been in the recent weeks.

I would recommend listening in to the local water supplies for leaks.

There is not a lot that we can do here as private individuals.

We can hire our own experts but they won't have the same powers of investigation.

This leak had seriously affected the enjoyment of our property.

Cheers,

■

On Thu, Nov 2, 2023, 10:55 AM Resolution Team <ResolutionTeam@wellingtonwater.co.nz> wrote:

Hi ■

Apologies for the delay in getting back to you. It's been one of those weeks.

I want to clarify that seepage has been confirmed as natural. The Technical Advisor has confirmed that he does not believe the leaks on the road above are contributing, as I had originally assumed when I first looked into the matter.

I hope that clears up any confusion.

Kind regards,

■

From: ■ <■@gmail.com>

Sent: Thursday, 26 October 2023 9:42 am

To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>

Cc: ■ <■@wellingtonwater.co.nz>

Subject: Re: Update - 19 Curtis Street, Karori

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Thanks ■

Though I don't quite follow.

You seem to suggest that there are leaks coming from the higher road.

From: [REDACTED]
To: [REDACTED]
Subject: RE: Update - 19 Curtis Street, Karori
Date: Friday, 3 November 2023 7:01:44 am
Attachments: [image001.png](#)

Hi [REDACTED]

When we were locating the toby for 22 Curtis St, one of the crew spoke to the homeowner of #22. He said at least 10 years ago, maybe even 15, he noticed water running through his property and went through this same process with WCC who did all the same test we have conducted for #19. The outcome was the same which we have come to this time last year for #19, groundwater.

I see below that Tom has mentioned below that he has spoken to a hydrologist. If there is a report that the hydrologist has written up that contradicts our findings, I would be more than happy to read it.

I am certain that this is groundwater. We have done plenty of tests to prove this in 2022 to prove that this is the case.

My recommendation to Tom would be to engage a plumber or drainlayer to help alleviate the ground water on his property.

From my point of view, this matter has been resolved and our investigations complete. We have done sound testing on the assets in the area previously and there was no leaks of significance found, pairing these results with the water sampling done reinforces this as a groundwater issue.

Regards,

[REDACTED] – Technical Advisor, Potable Water
Customer Operations Group – Rongotai Planning Team
Tel 04 912 4400



Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria St, Petone, Lower Hutt

www.wellingtonwater.co.nz

From: [REDACTED]@wellingtonwater.co.nz>
Sent: Thursday, 2 November 2023 11:43 am
To: [REDACTED]@wellingtonwater.co.nz>
Subject: FW: Update - 19 Curtis Street, Karori

From: [REDACTED]@gmail.com>

Sent: Thursday, 2 November 2023 11:02 am
To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>
Cc: [REDACTED]@wellingtonwater.co.nz
Subject: Re: Update - 19 Curtis Street, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hi [REDACTED]

Did you want to weigh in on this?

I'm almost positive that it isn't a groundwater situation. I've had a chat with a hydrologist about it who finds Wellington Waters conclusion bizarre (and convenient).

Groundwater is ephemeral in nature. This is a constant flow. The volume of flow never changes regardless of how much rainfall there has been in the recent weeks.

I would recommend listening in to the local water supplies for leaks.

There is not a lot that we can do here as private individuals.

We can hire our own experts but they won't have the same powers of investigation.

This leak had seriously affected the enjoyment of our property.

Cheers,

[REDACTED]

On Thu, Nov 2, 2023, 10:55 AM Resolution Team <ResolutionTeam@wellingtonwater.co.nz> wrote:

Hi [REDACTED]

Apologies for the delay in getting back to you. It's been one of those weeks.

I want to clarify that seepage has been confirmed as natural. The Technical Advisor has confirmed that he does not believe the leaks on the road above are contributing, as I had originally assumed when I first looked into the matter.

I hope that clears up any confusion.

Kind regards,

[REDACTED]

From: [REDACTED]@gmail.com
Sent: Thursday, 26 October 2023 9:42 am
To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>
Cc: [REDACTED]@wellingtonwater.co.nz

Subject: Re: Update - 19 Curtis Street, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Thanks [REDACTED]

Though I don't quite follow.

You seem to suggest that there are leaks coming from the higher road.

But then go on to state that this is a natural stream (that seems to behave in an extremely unusual way for a natural spring - springs tending to find lower points in an area to emerge - and I also understand that Chlorine can be filtered out by soil).

On Thu, Oct 26, 2023, 9:27 AM Resolution Team <ResolutionTeam@wellingtonwater.co.nz> wrote:

Hi [REDACTED]

Yes the leaks are located in the road above. Due to the high number of reported water leaks in our system, our service delivery teams and subcontractors are working at capacity. To make sure we reduce as much water loss as possible, we dispatch our teams to the zones within Wellington that are experiencing high amounts of water loss - the jobs within these zones are then prioritised based on the size of the leak. Therefore the Team Leader suggested we send a crew out to assess the seepage first as the leaks may not have been contributing.

The Service Delivery Team went to site to assess if there were any leaks on the assets in the pathway – none were found. Further investigation uncovered that the running water has been there for several years and has been previously investigated by Council as other members of the community reported it. It was determined that the water source is a natural stream. This is supported by a chlorine test of the seepage which the Technical Advisor took onsite and by nature of the seepage which ebbs and flows throughout the year.

Kind Regards,

[REDACTED] – Customer Resolution Officer
Customer Experience Team

Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria Street, Petone, Lower Hutt
www.wellingtonwater.co.nz

From: [REDACTED] <[REDACTED]@gmail.com>

Sent: Friday, 20 October 2023 8:21 am

To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>

Subject: Re: Update - 19 Curtis Street, Karori

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Thanks [REDACTED] this is the leaks across the road from us?

As in the ones that come from the side of the hill?

I suspect they might be private property leaks. Or from the road above.

It's a lot of water and has been going for what feels like a couple of years now.

On Fri, Oct 20, 2023, 8:05 AM Resolution Team <ResolutionTeam@wellingtonwater.co.nz> wrote:

Hi [REDACTED]

Yesterday, I got confirmation from the team about when leak detection was last undertaken in the area. This was March 2023.

We identified two leaks upstream of the issue you raised which may be contributing. I will speak to the Service Delivery Team Leader to confirm when we can schedule these leaks in for repair.

Regards,

[REDACTED]

From: Resolution Team

Sent: Tuesday, 17 October 2023 12:33 pm

To: [REDACTED] <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>

Cc: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>

Subject: RE: Update - 19 Curtis Street, Karori

Hi [REDACTED]

Thank you for your email.

I will contact our water loss team to confirm when leak detection has or will be conducted in this area.

I will let you know how I come along.

Regards,

[REDACTED]

From: [REDACTED]@gmail.com>
Sent: Thursday, 12 October 2023 5:05 pm
To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>
Cc: [REDACTED]@wellingtonwater.co.nz>
Subject: Re: Update - 19 Curtis Street, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Kia ora [REDACTED]

Now that summer is here the stench from the leaks have come back.

The leaks are very clearly on the side of the road at Curtis Street outside properties 22 and 28. I humbly request that you investigate the source of these leaks.

They are flowing constantly. I suspect from these properties or properties further above. Perhaps notices could be provided to these properties? Or some investigation done into those leaks. If you send an engineer on a drive by they will immediately see the scale of the problem.

We do not accept the groundwater hypothesis. But we have limited ability to do our own investigations due to the leaks likely existing on private property elsewhere. The amount of water being lost from the network here is also in the extreme.

Looking forward to hearing from you,
[REDACTED]

On Thu, Mar 30, 2023 at 3:48 PM Resolution Team
<ResolutionTeam@wellingtonwater.co.nz> wrote:

Kia ora [REDACTED]

Thank you for your time as our Engineer talked you through our findings.

Please find attached a letter outlining the details of our seepage investigation.

Unless new and significant information comes to light, the evidence is suggesting ground water.

Kind Regards,

[REDACTED] – Customer Resolution Officer
Customer Experience Team

Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria Street, Petone, Lower Hutt
www.wellingtonwater.co.nz

From: [REDACTED]@gmail.com>
Sent: Saturday, 25 March 2023 10:00 am
To: [REDACTED]@wellingtonwater.co.nz>
Subject: Re: Update - 19 Curtis Street, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hi [REDACTED]

Do you have any updates for us?

Another leak has started on the road at our toby. I've attached a photo.

The water has continued unabated. The garden is officially a swamp. And I'm almost certain that groundwater does not behave like this.

On Wed, Mar 1, 2023, 1:04 PM [REDACTED]@gmail.com> wrote:

Thanks [REDACTED]

Given the topography, it certainly seems like a strange place for a spring - as well as strange behaviour for a spring. Hopefully we can have the stormwater investigation done soon.

Cheers,
[REDACTED]

On Tue, Feb 28, 2023 at 2:33 PM Resolution Team
<ResolutionTeam@wellingtonwater.co.nz> wrote:

Hi [REDACTED]

We have gotten the water sample results back. It is indicating that the source is ground water.

However, we are still waiting for the stormwater CCTV investigation to be done.

Once we have completed our investigation we will review and make a determination of next steps.

Kind regards,
[REDACTED]

From: [REDACTED]@gmail.com>
Sent: Friday, 17 February 2023 4:38 pm
To: Resolution Team <ResolutionTeam@wellingtonwater.co.nz>

Cc: [REDACTED]@wellingtonwater.co.nz>

Subject: Re: Update - 19 Curtis Street, Karori

Caution: This is an external email. Please take care when clicking links or opening attachments.

Thanks for the update, [REDACTED]

On Fri, Feb 17, 2023 at 2:35 PM Resolution Team
<ResolutionTeam@wellingtonwater.co.nz> wrote:

Kia ora [REDACTED]

Thank you for the update and the videos.

On your behalf, I have logged a job with Council to have the drain cleared.

The recent large water movement as a result of the cyclone has resulted in a natural increase in flow of both overland and secondary flow paths. Unfortunately this will include the stream on your property.

The dye testing work to the stormwater main has been assigned out to the Service Delivery Crew. I anticipate this work commencing next week.

I have been advised the water results have not come through yet. I will follow up again next week if they do not come through in the next few working days. I can confirm the lab did receive the samples.

Kind Regards,

[REDACTED] – Customer Resolution Officer
Customer Experience Team

Tel 04 912 4400

Private Bag 39804, Wellington Mail Centre 5045
Level 4, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

From: [REDACTED]@gmail.com>

Sent: Thursday, 16 February 2023 12:58 pm

To: [REDACTED]@wellingtonwater.co.nz>

Subject: Re: Update 22/12/22

Caution: This is an external email. Please take care when clicking links or opening attachments.

Thanks [REDACTED]

The blocked stormwater drain is opposite where Curtis Street meets Chaytor Street. I included that information for completeness in case it is related.

Cheers,

On Thu, Feb 16, 2023 at 12:56 PM [REDACTED]

[REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)> wrote:

Thank you, [REDACTED] I have spoken with [REDACTED] and she is checking on the water sample results. I will pass this onto her to include in her investigation and also look into the blocked stormwater drain. Is this at the start of Curtis Street or at the top of your property?

From: [REDACTED] <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>

Sent: Thursday, 16 February 2023 12:51 pm

To: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>; elspethdick <elspethdick@gmail.com>

Subject: Re: Update 22/12/22

Caution: This is an external email. Please take care when clicking links or opening attachments.

[PXL_20230215_211901325.mp4](#)

[PXL_20230215_230532126.mp4](#)

Hi [REDACTED].

-
As discussed over the phone, I attach two videos showing the scale of the water coming through the leaks right now. I believe that these are probably connected through to the stormwater system.

-
I also note that the gutters on the road above the property have almost no water flowing through them. The fact that the leak is ever-present and will continue even after weeks of no rain, tells me that may be drinking water leaking into the stormwater system which then ends up on our property.

-
I've never seen it this bad. I also note that there is a blocked stormwater drain up at the top of Curtis Street right now.

-
Cheers,

----- Forwarded message -----

From: [REDACTED] <[\[REDACTED\]@wellingtonwater.co.nz](mailto:[REDACTED]@wellingtonwater.co.nz)>

Date: Thu, Dec 22, 2022 at 12:37 PM

Subject: Update 22/12/22

To: [REDACTED] <[\[REDACTED\]@gmail.com](mailto:[REDACTED]@gmail.com)>

-

Kia ora [REDACTED]

-
The Planning Engineer, Water Technical Advisor and Customer Resolution Officer attended your property as previous advised. Thank you for allowing us to look around the property when you were not on site.

-
They found the running water you described and looked for causes of the water seepage and identified some exposed private water pipes and some black pipes within your garden. These findings have created additional lines of investigation.

-
We will also take a water sample (looking at flouride levels) to confirm the type of water that is seeping through. As the Christmas shutdown period is approaching we will not receive the sample results until the New Year.

-
As we have resolved two water leaks in Curtis Street this week, it would be good to know if the water seepage you are experiencing changes over the holidays.

-
Ngā mihi,

[REDACTED]

-

-

[REDACTED]
[Head of Customer Experience](#)

[Mob](#) [REDACTED]

[Private Bag 39804, Wellington Mail Centre 5045](#)
[Level 4, 25 Victoria Street, Petone, Lower Hutt](#)

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