From: Richard Williams
To: James Luty

Cc: James Snowdon; Rubie McLintock; Paul Gardiner

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Date: Thursday, 23 September 2021 5:05:13 pm

Attachments: <u>image002.pnq</u>

Paramata Water Quality Monitoring - To GWRC.xlsx

Emergency Works - Paremata Wastewater Pipe - 17 July 2021 - Final to GWRC.pdf Paremata Wastewater Riser Break - emergency works notification (s.330A(1)).msq

Tēnā koe James

Please find attached the Emergency Works Report in relation to the Paremata wastewater pipe event on 17 July 2021.

Thanks again for your patience on receiving this report.

Please get in touch with us if we can clarify any of the attached information.

Ngā mihi

Richard Williams Senior Advisor (RMA, Consents and Environment)



Mobile 021 582 968

From: Richard Williams

Sent: 22 September 2021 5:01 PM **To:** James Luty <xxxxx.xxxx@xx.xxxx.xxx

Cc: James Snowdon <xxxxx.xxxxxx@xx.xxxx.xx>; Rubie McLintock

<xxxxx.xxxxxxxx@xx.xxxx; Paul Gardiner < Paul.Gardiner@wellingtonwater.co.nz>

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Tēnā koe James

We have just received a comprehensive internal review and respectfully request until the end of tomorrow to update the document.

Again, we apologise for the delay and will use this situation as a learning opportunity with our teams.

Ngā mihi

Richard Williams Senior Advisor (RMA, Consents and Environment)



Mobile 021 582 968

From: James Luty < xxxx.xxxx.xx>

Sent: 17 September 2021 1:35 PM

Cc: James Snowdon <<u>xxxxx.xxxxxx@xx.xxxx.xx</u>>; Rubie McLintock

<<u>xxxxx.xxxxxxx@xx.xxxx.xx</u>>; Paul Gardiner <<u>xxxx.xxxxxxx@xxxxxxxxxxxxxxxxxxx</u>>

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Thanks for the update Richard.

I look forward to receiving your document by 5pm on Wednesday 22 September 2021.

Ngā mihi,



James Luty [he/him]

Kaiāpiha Taiao | Senior Environmental Protection Officer

Greater Wellington | Te Pane Matua Taiao

M: 027 254 2230

Sent: Friday, 17 September, 2021 1:28 PM

To: James Luty <<u>xxxxx.xxxx@xx.xxxx.xx</u>>; Paul Gardiner

<xxxxx.xxxxxxx@xx.xxxx.xx >

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Tēnā koe James

Unfortunately we have been unable to finalise the emergency works document for your review.

Please accept our apologies for the delay.

We will endeavour to send it to you early next week.

Ngā mihi

Richard Williams Senior Advisor (RMA, Consents and Environment)



Mobile 021 582 968

From: James Luty < xxxxx.xxxx@xx.xxxxxxxxx >

Sent: 09 September 2021 9:33 AM

<xxxx.xxxxxx@xxxxxxxxxxxxxxxxx.xx.xx >

Cc: James Snowdon <<u>xxxxx.xxxxxxx@xx.xxxxxxx</u>>; Rubie McLintock

<xxxxx.xxxxxxx@xx.xxxx.xx >

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Thanks Richard.

I look forward to hearing from you by next Friday.

Ngā mihi,



James Luty [he/him]

Kaiāpiha Taiao | Senior Environmental Protection Officer

Greater Wellington | Te Pane Matua Taiao

M: 027 254 2230

Sent: Thursday, 9 September, 2021 9:31 AM

To: James Luty <<u>xxxxx.xxxx@xx.xxxx.xx</u>>; Paul Gardiner

Cc: James Snowdon < xxxxx.xxxxxxx@xx.xxxxxxxxxxxx >; Rubie McLintock

<xxxxx.xxxxxxxx@xx.xxxx.xx >

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Tēnā koe James

Thanks for the follow up request.

I have prepared the draft notification summary, however, we were awaiting some information from our operations team to complete the report.

I'll finalise the report and provide for your review a.s.a.p.

Thanks again

Ngā mihi

Richard Williams Senior Advisor (RMA, Consents and Environment)

Mobile 021 582 968

From: James Luty < xxxx.xxx.xx>

Sent: 09 September 2021 9:24 AM

Cc: James Snowdon <<u>xxxxx.xxxxxxx@xx.xxxx.xx</u>>; Rubie McLintock

Subject: RE: BURST WASTEWATER RISING MAIN - SH1 Paremata

Hello Paul and Richard,

It has been six weeks since the first agreed deadline for the provision of this material. I accept that the initial response to this event took priority and that Covid has been a difficult time. However we need this material to progress our investigation. As you know, this matter is of public interest.

I am now officially requesting this information. The new deadline for the provision of this information is 17 September 2021. If we do not receive this information by this new deadline then we will have to consider how best to engage over this.

Please feel free to email me if you have any concerns of questions.

Ngā mihi,



James Luty [he/him]

Kaiāpiha Taiao | Senior Environmental Protection Officer

Greater Wellington | Te Pane Matua Taiao

M: 027 254 2230

From: James Luty

<<u>xxxxx.xxxxxxxxx</u> >

Subject: BURST WASTEWATER RISING MAIN - SH1 Paremata

Hello Paul,

Thank you for your time on the phone just now. I have attached the email chain from the incident. As far as I know, this is the extent of the information that GWRC has been provided to date (please let me know if I have missed anything).

I understand that the discharge has ceased and that you are currently reviewing the response and going through "lessons learnt" process to inform the next steps for WWL. You stated that you are hoping to have some information relating to the incident available by the end of this week and that you are happy to share this with GWRC. Thank you very much, I look forward to receiving it.

If possible, it would be helpful if this information pack included the following:

- A timeline outlining the incident, the cause, the response and the decision making which informed the response
- Any monitoring or sampling relating to the incident (include reports, sample data, photos etc.)
- Any assessment of the actual or potential effects
- The steps taken to mitigate or remedy any actual or potential adverse effects on the environment

As a guideline, the documentation we have received following the Jervois Quay stormwater

pipeline collapse has been excellent. If you have the time, I would suggest reaching out to GHD and the contractor involved in these works as they have been excellent at providing us the data to inform out investigations for this project.

I am happy to meet to discuss the information that you provide this week. In the event that there are any gaps we can talk these through face to face.

I have cc'd in Rubie McLintock who will be assisting me with this investigation. Please keep her and Mr Snowdon in cc if you can.

Let me know if you have any questions or concerns.

Ngā mihi,



James Luty [he/him]

Kaiāpiha Taiao | Senior Environmental Protection Officer

Greater Wellington | Te Pane Matua Taiao M: 027 254 2230

100 Cuba Street, Te Aro PO Box 11646, Wellington 6011

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						Aotea	pipe break/Pa	aramata over
	18/07/2021	19/07/2021	20/07/2021	21/07/2021	22/07/2021	23/07/2021	24/07/2021	25/07/2021
	Final	Final						
Wi Neera Drive boat ramp	3100	770	180	2100	4500	220	65	76
Pauatahanui Inlet Paremata Bridge	1300	980	320	130	44	560	48	16
Pauatahanui Inlet Water Ski Club	1200	1100	530	60	96	690	20	8
Plimmerton South Beach	1500	1100	400	120	1100	450	36	56
Karehana Bay Cluny Road (control site)	610	940	160	20	110	190	12	4
Plimmerton Beach @ Bath St						450	92	58
Takapuwahia Stream Outlet @ Te Hiko St						140	190	230
Porirua Harbour at Rowing Club						630	24	12

Weather Overcast Overcast Rain Clear Clear Clear

flow Enteroccoci monitoring (cfu/100mL)

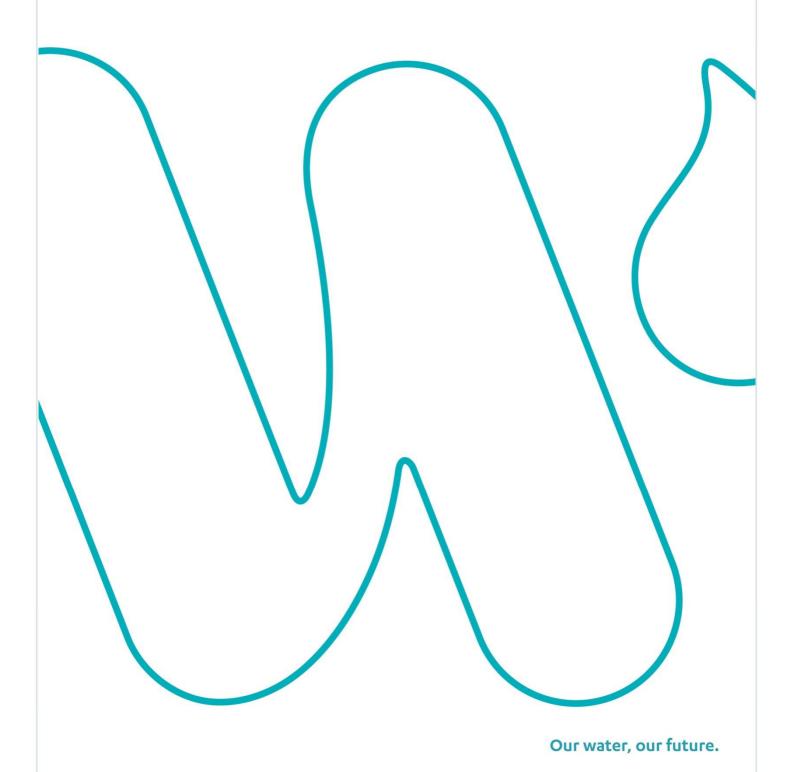
26/07/2021	27/07/2021	28/07/2021	29/07/2021	30/07/2021	31/07/2021	1/08/2021	2/08/2021	3/08/2021	4/08/2021	5/08/2021	6/08/2021
Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final	Final
410	640	120	48	84	4	8	20	12	20	560	69
68	150	73	12	8	8	4	8	40	4	48	4
48	190	38	8	4	19	8	4	56	65	4	200
46	76	16	350	8	84	180	20	50	600	12	160
20	100	4	4	4	4	4	4	12	4	4	100
23	410	12	28	24	16	16	92	150	12	8	8
430	3400	110	38	40	220	12	12	3000	54	510	210
54	190	24	20	4	20	4	4	110	4	8	100

Rain Rain Clear Clear Clear Partly cloudy Clear Rain Overcast Overcast Overcast	Rain	Rain	Clear	Clear	Clear	Clear	Partly cloudy	Clear	Rain	Overcast	Overcast	Overd
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Emergency Works

(RMA s330 and s330A)



RMA s330 and s330A Emergency Works Report

1. Report Background

- This report provides information related to a ruptured pressure wastewater pipeline in Porirua.
- The report describes the work completed in the context of s330 and s330A of the Resource Management Act.
- The report is prepared for Greater Wellington Regional Council.

2. Background information

- A 0.525m diameter trunk pipeline conveys wastewater from the communities of Paremata, Camborne, Hongoeka, Plimmerton, Pukerua Bay and Whitby to be treated at the Porirua Wastewater Treatment Plant.
- The Paremata pump stations (including Station Road Pump Station) collect the wastewater from these communities and pump the wastewater through the pipeline. Accordingly the wastewater is conveyed along the main trunk pipeline under pressure and also flows by gravity in sections between the pump stations and Porirua Wastewater Treatment Plant.
- The Wellington Region was experiencing a high intensity rainfall event at the time (See Attachment D)
- The pipeline unexpectantly ruptured around 8.00 a.m. on Saturday 17 July 2021.

3. Site and Event Description

- The pressure wastewater pipeline connects the Paremata Pump Stations and Porirua Central Pump Station. The pipeline is firstly located under Paremata Crescent, and Papakowhai Road, and then transverses underneath State Highway 1 approximately 650m northeast of the Whitford Brown Avenue (Aotea/Papakowhai) intersection. The pipe continues across and then parallel to State Highway 1 until the Porirua City Centre Pump Station near the Porirua railway station.
- The pipeline failed (ruptured) between the carriageways on State Highway 1, approximately 600m north of Whitford Brown interchange. (See Figures 1 and 2 in Attachment A)
- Wastewater from the break (rupture point) travelled southwest along the State Highway 1
 median and entered a stormwater culvert approximately 400m from the pipe failure. The
 wastewater then discharged to Te Awarua-o-Porirua Harbour (See Attachment B, Figure 3).
- The wastewater also flowed onto the two north bound State Highway 1 lanes.
- In order to avoid damage to property, avoid creating a traffic and health hazard, and to facilitate the repair work of the ruptured pipeline in a safe manner, the Pumping Stations in Paremata were turned off. These pump stations are directly 'upstream' of the rupture, and intercepts all the wastewater from the surrounding communities that flows through the main trunk pipeline towards the city centre. The wastewater then backed up within the wastewater system and overflowed at Station Road and Paremata Crescent into the stormwater system which then flowed into Te Awarua-o-Porirua Harbour at Paremata (See Attachment B, Figure 4).

- In addition, due to the capacity of the stormwater system, some wastewater ponded onto Paremata School until additional mobile pumps could be deployed. These pumps transferred the overflowing wastewater to the stormwater network, which then flowed into Te Awarua-o-Porirua Harbour at Paremata (See Attachment C, Figure 7).
- To protect property and avoid creating a health hazard, the cross harbour pipeline between Paremata and Whitireia Park Reserve was utilised to convey wastewater (See Attachment C, Figure 8). This pressure pipeline had previously been inspected through creating small openings at Onepoto and Whitireia Park Reserve, and unbeknown to Wellington Water, these inspection points remained open when the pipeline began to convey wastewater under pressure. These openings resulted in discharges of wastewater to Te Awarua-o-Porirua Harbour at Onepoto and Whitireia Park Reserve.

Attachment A: Site Location Map

Clause	Assessment
(1)	<u> </u>
Where—	
(a) any public work for which any person has financial responsibility; or	The financial responsibility is borne by Porirua City Council (PCC) as the pipeline asset owner, however Wellington Water manages the network on behalf of PCC and therefore could be considered an agent of PCC and this subsection may be applied.
(b) any natural and physical resource or area for which a local authority or consent authority has jurisdiction under this Act; or	Not applicable – Wellington Water is not a local authority or consent authority.
(c) any project or work or network utility operation for which any network utility operator is approved as a requiring authority under section 167; or	Not applicable – Wellington Water is not a requiring authority.
(ca) any service or system that any lifeline utility operates or provides—	As stated in section 330 (5) RMA, a lifeline utility is defined in section 4 of the Civil Defence Emergency Management Act 2002. As stated in Section 4, Interpretation, of the Civil Defence Emergency Management Act 2002, a lifeline utility is described in Part B of Schedule 1. Part B (4) states "An entity that provides a waste water or sewerage network or that disposes of sewage or storm water". Wellington Water operates the wastewater network in Porirua. Wellington Water is therefore considered a lifeline utility. The emergency works relates to the operation of

is, in the opinion of the person, authority, networ	the wastewater network which is a lifeline utility, and therefore, it is considered that this section applies. k utility operator, or lifeline utility, affected by or
likely to be affected by—	a come, operator, or memore come, a recessed of er
(d) an adverse effect on the environment which requires immediate preventive measures; or	In a broad sense, the rupture of the wastewater pipeline created an adverse effect on the environment which required the preventative measures to repair the pipeline and avoid ongoing wastewater discharge.
(e) an adverse effect on the environment which requires immediate remedial measures; or	In a broad sense, the rupture of the wastewater pipeline created an adverse effect on the environment that required immediate remedial measures to repair the pipeline and avoid ongoing wastewater discharge.
(f) any sudden event causing or likely to cause loss of life, injury, or serious damage to property—	The wastewater network (lifeline utility service) was affected by a sudden event (the rupture of the wastewater pressure pipeline), that was likely to cause injury (the illness of personnel working towards repairing the pipe) and caused or was likely to cause serious damage to property (wastewater inundating Paremata School and private property).
The provisions of sections 9, 12, 13, 14, and 15 shall not apply to any activity undertaken by or on behalf of that person, authority, network utility operator, or lifeline utility to remove the cause of, or mitigate any actual or likely adverse effect of, the emergency	In order to mitigate the effect and remove the cause of potential injury to those personnel repairing the pipe and damage to the school and private property, Wellington Water as the lifeline utility operator undertook a number activities in order to enable repair and mitigate the effects of the rupture.
	For the purposes of section 330 these activities include a number of discharges (without resource consent) resulting from the repair work (either directly or indirectly). In each case the discharge is considered necessary to facilitate repairs or an unavoidable consequence of actions taken to remove the cause of, or mitigate any actual or likely adverse effect of, the emergency.
	Wastewater (contaminant) discharge approximately 8.00 am to 10.30 am on 17

- July 2021 and approximately 4.00 pm to 5.00 pm on 22 July 2021 at Aotea (See Attachment B, Figure 3). These discharges are a result of the initial and subsequent pipeline ruptures. These ruptures and associated discharges are a result of an unanticipated failure of the pipeline that could not have reasonably been provided against. Wellington Water acted immediately to mitigate the effects of the discharge by deploying vacuum (sucker) trucks and making requests to the public to minimise water use in order to reduce the volume of wastewater being discharged. Wellington Water also sought to minimise the effect of the discharge by shutting pump stations to move the discharge point closer to open water to increase dispersion of potential contaminants. Repairs were completed and normal operation resumed as soon as was reasonably practical.
- 2. Wastewater (contaminant) discharge approximately 10.30 am on 17 July 2021 to 10.00 pm on 18 July 2021 at Paremata via overflow through the stormwater system (See Attachment B, Figure 4). Approximate volume of discharge – 7,740m3. This wastewater discharge is associated to the decision to restrict wastewater flowing through the pipeline by redirecting the wastewater to the Paremata stormwater network which overflowed and was in some cases pumped into the Te Awarua-o-Porirua Harbour at Paremata. The decision to stop the pumps at Station Road and Paremata Pumping Stations backed up the wastewater network until it flowed into the stormwater network. In addition, mobile pumps were deployed to pump the overflowing wastewater into the stormwater network. This decision ensured that wastewater did not pond on State Highway 1, Station Road and Paremata School which would cause a traffic and health hazard, property damage and ensured the safety of our response crews working to repair the pipeline at Aotea. Vacuum sucker trucks were also

- onsite to transport wastewater around the site to Porirua City Centre Pump Stations. A media notice was further issued that requested the community limit their water use.
- 3. Wastewater (contaminant) discharge approximately mid-day on 20 July 2021 to 2.00 pm on 20 July 2021 at Whitireia Park Reserve (See Attachment B, Figure 5). The wastewater discharged from an inspection opening within the pipeline that remained open unbeknown to Wellington Water. The decision to activate the cross harbour pipeline was made to reduce the pressure on the vulnerable pipe repair to reduce the likelihood of further damage to the pipe (property). The decision to utilise the cross harbour pipe was determined to be prudent decision based upon the information Wellington Water held on the suitability of the pipeline to convey wastewater.
- 4. Accidental wastewater (contaminant) discharge approximately 5.00 pm on 22 July 2021 to 8.00 am on 23 July 2021 at Onepoto (See Attachment B, Figure 6). The wastewater discharged from an inspection opening within the pipeline that remained open unbeknown to Wellington Water. The decision to activate the cross harbour pipeline was made to reduce the pressure on the vulnerable pipe repair to reduce the likelihood of further damage to the pipe (property). The decision to utalise the cross harbour pipe was determined to be prudent decision based upon the information Wellington Water held on the suitability of the pipeline to convey wastewater.
- 5. Wastewater (contaminant) discharge approximately 8.00 am on 23 July 2021 to 7.00 pm on 23 July 2021 at Paremata (See Attachment B, Figure 4). Approximate volume of discharge 1,302 m3. This wastewater discharge is associated with the decision to restrict wastewater flowing through the pipeline by redirecting the wastewater to the Paremata stormwater network, which overflowed into the Te

- Awarua-o-Porirua Harbour at Paremata. The decision to stop the pumps at Station Road and Paremata Pumping Stations backed up the wastewater network until it flowed into the stormwater network. In addition, mobile pumps were deployed to pump the overflowing wastewater into the stormwater network. This decision ensured that wastewater did not pond on State Highway 1, Station Road and Paremata School which would cause a traffic and health hazard, property damage and ensured the safety of our response crews working to repair the pipeline at Aotea. Vacuum sucker trucks were also onsite to transport wastewater around the site to Porirua City Centre Pump Stations.
- 6. Wastewater (contaminant) discharge approximately 7.30 am on 25 July 2021 to 7.00 pm on 25 July 2021 at Paremata (See Attachment B, Figure 4). Approximate volume of discharge - 3,380m3. This wastewater discharge is associated with the decision to restrict wastewater flowing through the pipeline by redirecting the wastewater to the Paremata stormwater network which overflowed into the Te Awarua-o-Porirua Harbour at Paremata. The decision to stop the pumps at Station Road and Paremata Pumping Stations backed up the wastewater network until it flowed into the stormwater network. In addition, mobile pumps were deployed to pump the overflowing wastewater into the stormwater network. This decision ensured that wastewater did not pond on State Highway 1, Station Road and Paremata School which would cause a traffic and health hazard, property damage and ensured the safety of our response crews working to repair the pipeline at Aotea. Vacuum sucker trucks were also onsite to transport wastewater around the site to Porirua City Centre Pump Stations.

RMA 330A Resource consents for emergency works

(1) Where an activity is undertaken under section 330, the person (other than the occupier), authority, network utility operator, or lifeline utility who or which undertook the activity shall advise the appropriate consent authority, within 7 days, that the activity has been undertaken.

Notification was given to the consent authority (GWRC) throughout the event and specifically via email after the event (attached)

(2) Where such an activity, but for section 330, contravenes any of sections 9, 12, 13, 14, and 15 and the adverse effects of the activity continue, then the person (other than the occupier), authority, network utility operator, or lifeline utility who or which undertook the activity shall apply in writing to the appropriate consent authority for any necessary resource consents required in respect of the activity within 20 working days of the notification under subsection (1)

The unauthorised discharge of contaminants was wastewater diluted by stormwater. The primary receiving environment of these discharges was Te Awarua o Porirua (Porirua Harbour). The potential adverse effects on the environment resulting from these discharges include; possible effects on public health as a result of microbiological contamination, ecological health of the harbour, and cultural impact on the values of Mana Whenua. The impact of those discharges were significant at the time of discharge, with gradual reduction of effect within 48 hours (two tide cycles) of the discharges ceasing, as a result of tidal flushing, dilution with coastal water and UV exposure (natural die-off) (see water quality sampling results (attached*)). Outside of this timeframe Wellington Water would not expect any additional public health risk or ecological effect specifically arising from the discharges related to the emergency event. Wellington Water recognises that the cultural impact of these discharges continued beyond the 48 hour time line as evidenced by the placement of the rāhui from 9am Saturday 24th July to 7am on Saturday 7 August 2021. Following the lifting of the rāhui it is considered that the adverse cultural impact of the emergency discharges had ceased.

(3) If the application is made within the time stated in subsection (2), the activity may continue until the application for a resource

No activity continuing.

consent and any appeals have been finally	
determined	

4. <u>Emergency Action</u>

- Wellington Water Limited took immediate action to eliminate the risk of injury to people.
- Wellington Water attended the site on Saturday 17 July 2021 to access the failure.
- Wellington Water organised vacuum trucks to reduce the volume of wastewater on the carriageway and entering the harbour.
- The Incident Response Team deployed a team to commence repairs including excavating the pipe at 10.00 a.m.
- Traffic management was established on State Highway 1 to provide a safe worksite.
- The Wellington Water Emergency Management Team was activated at 10.30 a.m.
- A media announcement to the Porirua Community was issued at 11.30 a.m. It encouraged communities to limit their water use and recommended avoiding swimming in Te Awarua-o-Porirua Harbour.
- Wellington Water organised vacuum trucks to Paremata School and Station Road pump station to reduce wastewater entering the pipeline and property.
- To repair the failed pipe adjacent to State Highway 1, the wastewater was diverted to the cross harbour pipeline that directly connects Paremata to Onepoto. (Note: cross harbour pipeline did not convey wastewater as drain valve in pipeline was inadvertently opened).
- The temporary repair of main trunk pipeline commenced Saturday night.
- The temporary repair was not successful as the pipe was too fragile to support the new connector.
- Four sucker trucks were onsite throughout Saturday night to reduce wastewater pressure on nine
- Excavation of main trunk pipeline commenced on Sunday (18 July 2021). To replace the pipe, and for the safety of the repair crew, all wastewater conveyed through the pipe must be intercepted. Wastewater was firstly diverted through the cross harbour pipeline (Note: cross harbour pipeline did not convey wastewater as a drain valve in pipeline was inadvertently open). Secondly, four pumps directed wastewater from the Station Road Pump Station to the stormwater overflow in Paremata. Lastly, twelve sucker trucks on-site continuously removed wastewater from the site and transferred the wastewater to downstream pump stations.
- The new section of pipe was installed at 4.00pm.
- During installation, adjacent sections of pipe are shown to be corroded and reinstating the pressure wastewater pipeline is not commenced as there is a high risk of joint failure.
- Further rainfall Sunday night, and the sucker trucks on-site and gravity overflow were overwhelmed. Temporary pumps at Station Road Pump Station in Paremata were turned on to discharge to the stormwater network and harbour at Paremata. This avoided wastewater ponding around Station Road and the school and enabled more mixing to occur in the harbour.
- Pressure Pipe returned to service.
- The inspection on Monday (19 July 2021) morning showed that the main pipeline had visible leaks beyond the repaired section. Stainless steel wrap on leaking area of pipe installed as a temporary solution.

- On Tuesday (20 July 2021), wastewater diverted through cross harbour pipeline. On site
 observation notes a leak in the pipe and wastewater entering Porirua Harbour. Commenced
 dye testing to confirm location. Wastewater leak detected in Onepoto Road. Cross harbour
 pipeline repaired and pressure tested with drinking water.
- On Thursday (22 July 2021) afternoon, the wastewater pipe on State Highway 1 ruptured beyond the joints of the new section of pipe. Wastewater entered the harbour through the culvert and some ponding on State Highway 1 carriageway. Sucker trucks on-site and wastewater directed to the cross harbour pipeline.
- Cross harbour pipeline observed to be leaking. Sucker trucks on-site and pumps at Station Road pumping wastewater to the stormwater overflow in Paremata to limit wastewater ponding on State Highway 1.
- On Friday (23 July 2021) morning, 15 sucker trucks on-site to enable repair of pipe. One break repaired with clamps, however, unable to seal as the pipe is being crushed by the connector.
- On Friday night, a swale was excavated to contain the leaking wastewater and sucker trucks on-site overnight.
- On Saturday (24 July 2021) morning, additional pipe procured, and internal pressure patched to be flown down from Auckland. Patches not picked up at Auckland Airport, and now transported on truck and Wellington Water crew to meet in Taupo.
- On Sunday (25 July 2021) afternoon, pressure patches installed to enable connecting clamps and new section of pipe. Wastewater pipeline pressurised and returned to function at near full capacity.

5. Monitoring

- Monitoring of the discharged water was sampled throughout the emergency event.
- The environmental monitoring is provided in an Excel Spreadsheet. It is noted that there were widespread wet weather overflows of wastewater throughout Porirua during the 17 July storm event and these would be captured in the environmental monitoring.

6. Contact Details

Name: Steve Hutchison

Position: Chief Advisor - Wastewater

Phone: 021 306 534

Email: Steve.hutchison@wellingtonwater.co.nz

Name: Richard Williams

Position: Senior Advisor (RMA, Consents and Environment)

Phone: 021 582 968

Email: Richard.williams@wellingtonwater.co.nz

Attachment A – Site Location



Figure 1: Pipeline Failure (shown in orange)

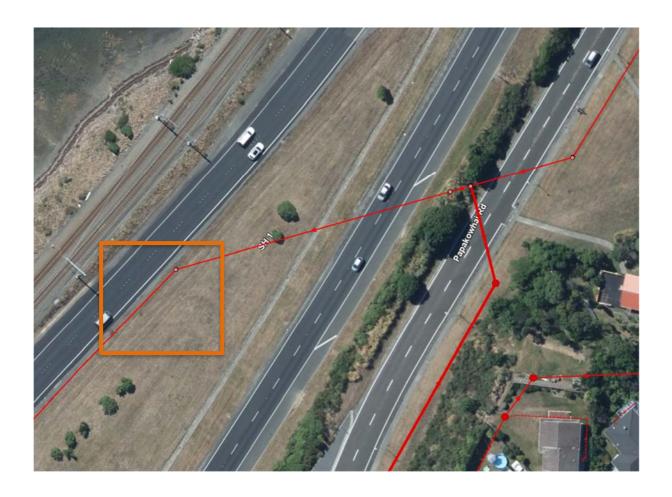


Figure 2: Pipeline Failure (shown in orange)

Attachment B – Discharge Location



Figure 3: Aotea Discharge Location (shown in orange)



Figure 4: Paremata Discharge Location (shown in orange)

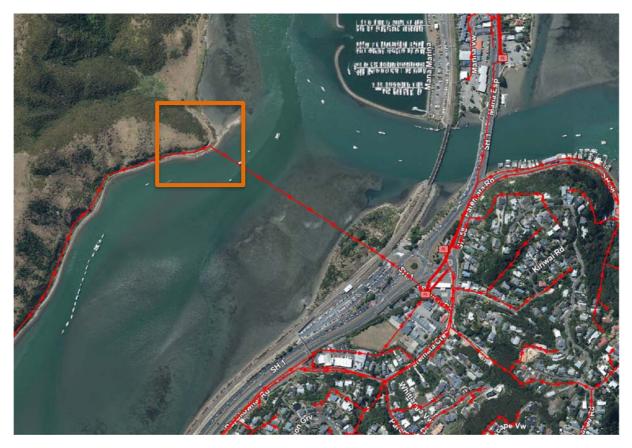


Figure 5: Whitireia Park Reserve Discharge Location (shown in orange- approximate)



Figure 6: Onepoto Discharge Location (shown in orange - approximate)

Attachment C – Pumping Station and Cross Harbour Pipeline



Figure 7: Station Road Pump Station (shown in orange)



Figure 8 Cross Harbour Pipeline (shown in orange)— Paremata to Whitireia Park Reserve

Attachment D - Rainfall Data

