

**To:** Te Awarua o Porirua Whaitua Committee

**From:** Kara Dentice, Senior Advisor Whaitua Relationships, Wellington Water and Steve Hutchison, Chief Advisor Wastewater, Wellington Water

**Date:** 21 March 2018

## **Wastewater Network Activities in Kenepuru Stream Catchment**

### **Purpose**

The purpose of this paper is to provide an update to the Te Awarua o Porirua Whaitua Committee (the Committee) about the wastewater network activities Wellington Water Limited (WWL) is currently moving forward in the Kenepuru Stream Catchment.

### **Background**

This paper comes as a response to the Committee's Bothamley Park field trip on 14 December 2017 where Committee and Te Awarua o Porirua Whaitua Project Team members noted significant sewage odour from the Kenepuru Stream catchment. In response and with Greater Wellington Regional Councils' support, WWL undertook visual and odour inspections as well as sampling at seven (7) sites within the Kenepuru Stream catchment – the sampling results are provided at Appendix A.

### **Works in the Kenepuru Stream Catchment**

Wellington Water (WWL) has identified Kenepuru Stream as a *high priority* catchment in its Porirua Wastewater Network Improvement Programme. For this reason, WWL are currently moving forward a number of capital and operational projects in the Kenepuru Stream Catchment which include:

#### **CAPITAL PROJECTS**

##### **Repairs**

- Twelve (12) high priority renewals in the Kenepuru Stream have been identified. Four (4) were completed 2016/17 at the cost of \$670k and the remaining balance of eight (8) will be completed in 2017/18 (this financial year) at the cost of \$1.2m. These are all in the Kenepuru Stream crossing areas.

##### **Renewals**

- Wastewater pipe relining is currently underway (2017/18 financial year) in Thompson Gully and will cost \$500k;
- Wastewater pipe renewal for Thompson Grove is programmed for the 2018/19 financial year and will cost approximately \$750K; and,
- Over the next 5 years there is \$2m of tentative funding allocated for further wastewater renewals in Kenepuru Stream catchment, subject to the outcome of the investigations (noted below).

##### **Investigations**

- A feasibility study for the upgrade and or renewal of wastewater pipes in the Kenepuru Stream catchment is currently underway; and,

- Through our investigations we found a wastewater leak from one of the wastewater mains in Kenepuru Stream catchment. This main has been temporarily decommissioned until we have the funding to initiate a repair.

## **OPERATIONAL PROJECTS**

### **CCTV**

- A CCTV programme for the wastewater pipes alongside Kenepuru Stream has been completed. We have made some repairs and are investigating renewals.
- A CCTV programme in the upper catchment is currently under way.

### **Repair, Maintenance and Investigations**

- A number of wastewater manholes have been repaired to reduce infiltration and odour
- A large scale flushing programme to remove gravel from wastewater pipes to stop overflowing manholes has been completed;
- A large scale (1000 properties per year) inflow and infiltration investigation programme is currently underway within the Kenepuru Stream Catchment, which includes house to house inspections – followed by a repair programme

### **Monitoring programme**

- There is currently a water quality monitoring programme within the Kenepuru Stream catchment
- A number of flow monitors to understand system performance have been installed
- A number of manhole monitors to identify overflows are programmed to be installed in the 2018/19 financial year

### **Communication**

- Regular communications on pollution matters is maintained between the Porirua City Council Parks and Reserve staff and our Operations Team.

### **Next Steps**

Wastewater network issues within the Kenepuru Stream catchment and the TAoPW catchment at large are significant. The network will require substantial investment to address not only wet weather overflows but also dry weather pollution of stormwater network and stream catchments. WWL in collaboration with GWRC, Ngāti Toa, Regional Public Health, Wellington City Council and Porirua City Council are currently in the process of exploring options to improve the wastewater network and treatment plant. The result of this process will see in the development and lodgement of resource consent applications by 2020 that enable the improvement of the Porirua wastewater network and treatment plant.

# APPENDIX A

## WATER SAMPLES IN KENEPURU CATCHMENT, 31/01/2018





Wellington Water Ltd - WCC  
 SPE  
 Wellington City Council  
 c/- Wellington Water  
 Private Bag 39-804  
 WELLINGTON MAIL CENTRE  
 5045  
 Attention: Chris Covich

## Analytical Report

Report Number: 18/5048

Issue: 1  
 02 February 2018

Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-01	Streamwater Sample		31/01/2018 09:50	31/01/2018 11:15	P1009213
Notes: Kenepuru - 1					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0104	E. coli	130	cfu/100mL	Sunita Raju KTP	
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-02	Streamwater Sample		31/01/2018 09:55	31/01/2018 11:15	P1009213
Notes: Kenepuru - 2					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0104	E. coli	96	cfu/100mL	Sunita Raju KTP	
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-03	Streamwater Sample		31/01/2018 10:10	31/01/2018 11:15	P1009213
Notes: Kenepuru - 3					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0104	E. coli	220	cfu/100mL	Sunita Raju KTP	
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-04	Seawater Sample		31/01/2018 08:45	31/01/2018 11:15	P1009213
Notes: Wi Neera- Boat Dock					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0107	Enterococci	170	cfu/100mL	Maria Norris KTP	
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-05	Stormwater Sample		31/01/2018 08:50	31/01/2018 11:15	P1009213
Notes: Wi Neera- D100102					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0102	Faecal Coliforms	250	cfu/100ml	Maria Norris KTP	
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-06	Stormwater Sample		31/01/2018 09:20	31/01/2018 11:15	P1009213
Notes: Wi Neera- D100105					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0102	Faecal Coliforms	2,100	cfu/100ml	Maria Norris KTP	
Sample	Site	Map Ref.	Date Sampled	Date Received	Order No.
18/5048-07	Stormwater Sample		31/01/2018 09:30	31/01/2018 11:15	P1009213
Notes: Wi Neera- D100404					
	<b>Test</b>	<b>Result</b>	<b>Units</b>	<b>Signatory</b>	
M0102	Faecal Coliforms	340	cfu/100ml	Maria Norris KTP	

**Comments:**

Sampled by customer using ELS approved containers.

**Test Methodology:**

Test	Methodology	Detection Limit
Faecal Coliforms	APHA 22nd Edition Method 9222D:2012	1 cfu/100ml
E. coli	APHA 22nd Edition 9222 G:2012	1 cfu/100mL
Enterococci	USEPA 1600: December 2009	1 cfu/100mL

"<" means that no analyte was found in the sample at the level of detection shown. Detection limits are based on a clean matrix and may vary according to individual sample.

g/m3 is the equivalent to mg/L and ppm.

Samples will be retained for a period of time, in suitable conditions appropriate to the analyses requested.

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Report Released By  
Rob Deacon



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