

I, Kitea Tipuna, Tumu Whakarae Chief Executive, hereby give notice that Infrastructure Committee Meeting will be held on:

Date: Tuesday, 2 November 2021

Time: 1.30pm

Location: Council Chamber, Wairoa District Council,

**Coronation Square, Wairoa** 

### **AGENDA**

# Infrastructure Committee Meeting 2 November 2021

**MEMBERSHIP:** His Worship the Mayor Craig Little, Cr Chaans Tumataroa-Clarke, Cr Denise Eaglesome-Karekare, Cr Hine Flood (Deputy Mayor), Mr Chris Olsen

The agenda and associated papers are also available on our website: www.wairoadc.govt.nz

For further information please contact us 06 838 7309 or by email info@wairoadc.govt.nz

#### **Order Of Business**

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- 1 KARAKIA
- 2 APOLOGIES FOR ABSENCE
- 3 DECLARATIONS OF CONFLICT OF INTEREST
- 4 CHAIRPERSON'S ANNOUNCEMENTS
- 5 LATE ITEMS OF URGENT BUSINESS
- **6 PUBLIC PARTICIPATION**

A maximum of 30 minutes has been set aside for members of the public to speak on any item on the agenda. Up to 5 minutes per person is allowed. As per Standing Order 15.1 requests to speak must be made to the Chief Executive Officer at least one clear day before the meeting; however this requirement may be waived by the Chairperson. Requests should also outline the matters that will be addressed by the speaker(s).

#### 7 MINUTES OF THE PREVIOUS MEETING

Ordinary Meeting - 21 September 2021

## MINUTES OF WAIROA DISTRICT COUNCIL INFRASTRUCTURE COMMITTEE MEETING HELD AT THE HELD REMOTELY VIA VIDEO CONFERENCING ON TUESDAY, 21 SEPTEMBER 2021 AT 1.30PM

PRESENT: His Worship the Mayor Craig Little, Cr Chaans Tumataroa-Clarke, Cr Denise

Eaglesome-Karekare, Cr Hine Flood (Deputy Mayor), Mr Chris Olsen

IN ATTENDANCE: Kitea Tipuna (Tumu Whakarae Chief Executive), Kimberley Tuapawa

(Pouwhakarae – Pārongo/Wheako Kiritaki Group Manager Information and Customer Experience), Gary Borg (Pouwhakarae – Pūtea/Tautāwhi Rangapū Group Manager Finance and Corporate Support), Stephen Heath (Pouwhakarae – Hua Pūmau Hapori/Ratonga Group Manager Community Assets and Services), Karen Akuhata (Kaiwhakahaere Whaipainga | Utilities Manager), Mike Hardie (Kaiwhakahaere Hua Pūmau Huarahi| Transport Asset Manager), Jonny Hardie (Kaiwhakahaere Kaupapa - Whaipainga I Project Manager – Infrastructure), Richard Grimmett (Kaiurungi Rawa | Property Officer), Courtney Hayward (Kaiurungi Matua Kaupapa Here me te Mana Ārahi | Senior Policy and Governance Advisor), Gay Waikawa (Kaiurungi Arahi|Governance Officer), Alannah Marshall (Kaiurungi Mana Ārahi / Whakawhanake Ōhanga | Governance and Economic Development

Officer)

#### 1 KARAKIA

Karakia was given by Cr Chaans Tumataroa-Clarke.

2 APOLOGIES FOR ABSENCE

Nil

3 DECLARATION OF CONFLICT OF INTEREST

None

4 CHAIRPERSON'S ANNOUNCEMENTS

None

5 LATE ITEMS OF URGENT BUSINESS

None

6 PUBLIC PARTICIPATION

None.

#### 7 MINUTES OF THE PREVIOUS MEETING

#### **COMMITTEE RESOLUTION 2021/71**

Moved: His Worship the Mayor Craig Little

Seconded: Cr Hine Flood

That the minutes of the Ordinary Meeting held on 10 August 2021 be confirmed.

**CARRIED** 

His Worship the Mayor inquired if the letter to Bluebay and Opoutama residents had been sent. The Chief Executive clarified the letter had been sent.

#### **CONFIDENTIAL MINUTES – 10 AUGUST 2021**

#### **COMMITTEE RESOLUTION 2021/72**

Moved: His Worship the Mayor Craig Little

Seconded: Cr Hine Flood

That the confidential minutes of the Infrastructure Meeting held on 10 August be confirmed.

**CARRIED** 

#### 8 GENERAL ITEMS

#### 8.1 3 WATERS STIMULUS PROJECT UPDATE

#### **COMMITTEE RESOLUTION 2021/73**

Moved: Cr Denise Eaglesome-Karekare Seconded: His Worship the Mayor Craig Little

That Committee receive the report.

**CARRIED** 

Jonny Hardie, Kaiwhakahaere Kaupapa-Whaipainga | Project Manager-Infrastructure presented his report and reported on Monitoring being Opoutama Wastewater Upgrade, Toby Replacement/Smart Meter Programme, Achilles St Water Main Replacement, Wairoa Wastewater Treatment Plant Upgrade and Risks.

The risks being COVID-19 & March 2022 completion date most notably the Toby Replacement Programme and the upgrade to the Opoutama Wastewater Treatment Plant. Wairoa District Council has provided feedback to DIA via Crown Infrastructure Partners regarding the impact this most recent lockdown has had. An adjustment to the March 2022 completion date is expected.

Due to the latest COVID lockdown HBRC have been notified that work for the discharge from the Blue Bay/Opoutama Wastewater Treatment Plant is now likely to extend beyond October.

An updated report to DIA will be tabled at the next Infrastructure Committee meeting.

His Worship the Mayor commented the photos are impressive and tells a good story.

Elected members discussed:

- Potential community tours of some of the various projects involved in the Three Waters Stimulus
- Open day to the community for the Blue Bay/Opoutama Wastewater Treatment Plan Upgrade.
- Report on recent rain event (16 & 17 Sept 2021) to the next Infrastructure Committee meeting.
- Report on recent rain event (16 & 17 Sept 2021) to Matangirau Reserves Board.

#### 8.2 ALEXANDER PARK PUMP STATION REPORT

#### **COMMITTEE RESOLUTION 2021/74**

Moved: Cr Hine Flood

Seconded: Cr Chaans Tumataroa-Clarke

That Committee receive the report.

**CARRIED** 

Elected members discussed involvement of community, schools and other community groups.

Fulton Hogan has sponsored numerous branded items ie drink bottles, lunch boxes, fidget spinners and USB sticks.

A career expo will be held at the end of October great opportunity for students to be involved and for the students to engage.

#### 9 PUBLIC EXCLUDED ITEMS

#### **RESOLUTION TO EXCLUDE THE PUBLIC**

#### **COMMITTEE RESOLUTION 2021/75**

Moved: Cr Chaans Tumataroa-Clarke Seconded: Cr Denise Eaglesome-Karekare

That the public be excluded from the following parts of the proceedings of this meeting at 1.55pm.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
9.1 - Community Assets and Services Department - Update	s7(2)(b)(ii) - the withholding of the information is necessary to protect information where	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the

the making available of the meeting would be likely to result in the disclosure of information would be likely unreasonably to prejudice the information for which good commercial position of the reason for withholding would person who supplied or who is exist under section 6 or the subject of the information section 7 s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities 9.2 - Tuai PH Wastewater s7(2)(b)(ii) - the withholding of s48(1)(a)(i) - the public the information is necessary conduct of the relevant part of to protect information where the proceedings of the the making available of the meeting would be likely to result in the disclosure of information would be likely information for which good unreasonably to prejudice the reason for withholding would commercial position of the person who supplied or who is exist under section 6 or the subject of the information section 7 s7(2)(f)(ii) - the withholding of the information is necessary to maintain the effective conduct of public affairs through the protection of Council members, officers, employees, and persons from improper pressure or harassment

**CARRIED** 

#### **COMMITTEE RESOLUTION 2021/76**

Moved: Cr Hine Flood

Seconded: Cr Denise Eaglesome-Karekare

That Council moves out of Closed Council into Open Council at 2.23pm.

**ARRIED** 

The Meeting closed at 2.25pm with a karakia with members present.		
The minutes of this meeting were confirmed at the Infrastructure Committee Meeting held on 2 November 2021.		
CHAIRPERSON		

#### **8 GENERAL ITEMS**

#### 8.1 3 WATERS STIMULUS PROJECT UPDATE

Author: Jonny Hardie, Kaiwhakahaere Kaupapa-Whaipainga Project Manager-

Infrastructure

Authoriser: Stephen Heath, Pouwhakarae – Hua Pūmau Hapori / Ratonga Group

**Manager Community Assets and Services** 

Appendices: 1. Appendix 1 - Project Tracking Spreadsheet 4

2. Appendix 2 - Photos 🗓

3. Appendix 3 - Opoutama wastewater educational leaflet U

#### 1. PURPOSE

1.1 This report provides information for Committee on the Three Waters Stimulus package.

1.2 No decisions are required by Committee at this stage.

#### RECOMMENDATION

The Kaiwhakahaere Kaupapa-Whaipainga Project Manager-Infrastructure RECOMMENDS that Committee receive the report.

#### 2. BACKGROUND

2.1 This report forms a summary only of projects "at a glance". Additional reports will continue to be provided where further direction is sought from Infrastructure Committee.

#### 3. DIRECTION

- 3.1 This section will outline the direction that Infrastructure Committee & Council provide CAAS. It will outline how projects align with Council's direction and how these projects are being delivered in line with relevant policies and strategies i.e. Infrastructure strategy, procurement guidelines, AMPs, LTP, Annual Plan.
- 3.2 **Delivery Plan** 8<sup>th</sup> September 2020, Council Meeting.

Resolution: That Council approve the 3 Waters Reform tranche one and delegate the Chief Executive Officer to spend the grant funds.

3.3 **Memorandum of Understanding** - 11<sup>th</sup> August 2020, Extraordinary Council Meeting.

Resolution: Agreeing to sign a Memorandum of Understanding (MoU) with the Crown, agreeing to participate in the initial stage of a central/local government three waters service delivery reform programme and authorising the Chief Executive to enter into the Funding Agreement, to accept a grant from the Crown to spend on operating and/or capital expenditure relating to three waters infrastructure and service delivery.

#### 4. MONITORING

- 4.1 This section will refer to the project dashboard at Appendix 1. Any project areas such as budget or delivery that are highlighted Amber or Red in the dashboard will be commented on here.
- 4.2 Project budgets continue to be adjusted as more information becomes available. Some scopes are increased or reduced depending on the nature and priority of each project, and to cover unforeseen variations.
- 4.3 DIA have indicated via Crown Infrastructure Partners that an extension of time for completion of the stimulus package spending will be granted. The new completion date will therefore be 30<sup>th</sup> June 2022. However, this is yet to be confirmed in writing by DIA.
- 4.4 An 'open day' has been scheduled for 16<sup>th</sup> November 2021, 8.30am to around midday. An email has been sent to all Elected Members and relevant staff. The purpose of this is to show what progress is being made with the Opoutama WWTP, and Wairoa WWTP, with commentary along the way introducing other projects of significance.
- **4.5 Opoutama Wastewater Upgrade:** The upgrade includes three parts: underground wastewater storage tanks to allow the self-contained vehicle waste station to reopen; treatment plant upgrade to improve treatment quality; expansion of the discharge field beside the plant.

The tanks have been installed with a monitoring system and are expected to open before Labour weekend. Recoating of the main plant tank is complete, ready for fit out with new bio-blocks and pipework. The discharge field expansion has been awarded to Fulton Hogan and is due to start following Labour weekend. The crew is establishing on site as at 20<sup>th</sup> October 2021. An earthworks consent has been granted by WDC for this project. A planting project is planned for the reserve adjacent to the discharge site to contribute towards beautification of the area, and further improvement of the environment. A condition of consent is for a planting plan to be developed, which we are working through.

An educational flyer has been delivered to residents and bach owners of the area in the hope it will prevent any unsuitable material being disposed of in the sewer, and to protect the new wastewater process. The flyer has been attached to this report.

- **4.6 Toby Replacement / Smart Meter Programme:** Fulton Hogan have completed approximately 1050 toby replacements in Wairoa, out of approximately 2200. FH are contractually obliged to deliver at least 1600 toby replacements by the 14<sup>th</sup> December 2021, however there is potential for Covid to delay this. This project is now scheduled to be completed by June 2022.
  - Fulton Hogan have now begun replacing more difficult tobies in concrete footpaths, driveways, etc.
- **4.7 Achilles St Water Main Replacement:** Fulton Hogan were due to start on 4<sup>th</sup> October, however, they experienced some difficulty getting pipes out of Hamilton during their recent re-entry in to Alert Level 3 lockdown. Plastic welding of the HDPE has since started on Powdrell Park grounds refer photos Appendix 2, the pipe will be installed with minimal disruption by drilling and the project is expected to be largely complete by Christmas.

4.8 **Wairoa Wastewater Treatment Plant Upgrade:** Foundation construction for the new inlet screen has been started by QRS. The new screen is expected to arrive in Wairoa in November, with commissioning expected prior to Christmas.

The electrical and telecommunication system is being upgraded to cater for new equipment over the coming years. Falcon Electrical are preparing a cost estimate for this work, which could potentially total up to \$500,000. This cost increase has been covered by stimulus funding, utilising a scope reduction of some pump station renewals, and underspend on some other projects.

There has been progress made regarding scoping of the Filtration and UV system. WDC is partnering with Lowe Environmental Impact to scope this project, and help ensure it meets conditions of the new discharge consent, which is has recently been granted. WDC have approached one supplier to price so far.

- 4.9 **Wastewater Pipe Renewals / Relining:** PipeTech recently revisited Wairoa in September to reline a further 1500m of sewer to prevent inflow and infiltration. Their last visit to Wairoa is scheduled for February 2022.
  - Progress on construction of the Scott Street sewer main has started. QRS are the contractors.
- 4.10 See below in Risks for the identified risks of the Three Waters Stimulus Projects. This is as per the latest quarterly report to DIA delivered in early October.

#### 5. RISKS

- 5.1 This section will refer to the project dashboard at Appendix 1. Any risks outlined will be summarised with mitigation actions outlined. This will focus on the high or extreme risk levels.
- 5.2 **COVID-19 & completion date:** The allocated time for completion of this stimulus project has always been tight (16 months). An adjustment to the March 2022 completion date has recently been confirmed by DIA via Crown Infrastructure Partners, however this is yet to be confirmed in writing. The new date for completion as indicated is 30<sup>th</sup> June 2022.
  - Covid-19 continues to cause delays. Recent re-coating work of the main tank at the Opoutama Wastewater Treatment Plant was delayed due to specialist crews being not being able to leave Auckland. Their essential worker permits have since been granted. The start of the Achilles St water main replacement project was delayed due to the pipes unable to be delivered from Hamilton; a result of their recent re-entry into Level 3 lockdown.
- 5.3 Cost overruns are expected on certain projects, which will be balanced out by projects where known tender prices/quotes are less than budgets, or where projects have been removed or scaled down. However, a risk that is constantly being mitigated is an overrun of the total \$11.04 million of funding, however this remains very unlikely.
- 5.4 The Wairoa Wastewater Discharge Consent has recently been granted. The delay in award of this consent has prevented two projects from starting Filtration/UV, and Irrigation to Land. We are only now able to progress these further as the requirements of the consent are known. This has introduced a risk to completion of these projects prior to June 2022.

5.5 Quarterly reporting to the Department of Internal Affairs (DIA) has identified several key risks to the project. The following table is taken from the most recent September 2021 quarterly report and identifies the status of the top 6 expected risks as identified at the beginning of the project.

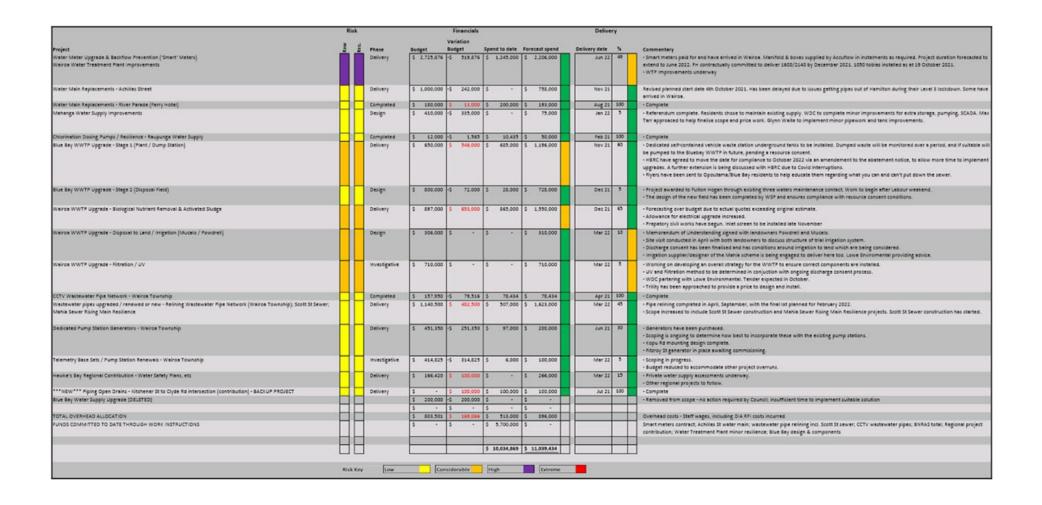
Top 5 Risks and Contractor Claims			
Risk Name	Risk Level	Commentary	
Completion of programme by 30 June 2022	Medium	Covid-19 continues to cause supply chain issues. The recent August-September 2021 lockdown resulted in 3-4 weeks of stop work, excluding remobilisation time. With a time extension to June 2022, the risk level of noncompletion has been reduced, however this will be reassessed continuously as we go forward.	
Under expenditure - \$11.04M programme is significant compared to prior years' expenditure.	Low	\$11.04m of expenditure is well over business as usual LTP spending. Council made appointments of three internal staff specifically to deliver this stimulus funding, which is proving to be successful. Both local and external resources are being utilised to deliver physical works.	
Minor variation to existing consent and landowner approval required for the Opoutama/Blue Bay WWTP effluent disposal field.	Low	The amendment has been granted. These upgrades are underway and due for completion in December 2021.	
Smart metering (\$2.98M) is new to the Wairoa DC.	Medium	Fulton Hogan are making reasonable progress and have completed 1000/2300 (43%) toby replacements as at the first week of October 2021. This is despite a delayed start and also the recent nationwide lockdown where work stopped for almost a month during Alert Level 3&4. Rollout of the Sensus electronic (smart) meters will start early in the new year. A standalone programme of work is being developed to complete difficult water tobies i.e. the main street in town, and other areas that require more thorough planning. This work is expected to take place next year.	
Covid related delays for overseas equipment orders	High	This still remains a significant risk to our delivery programme. We have seen even recently how disruptive Covid-19 remains to be. The Achilles St water pipe transport from Hamilton was held up following Level 3 in that region, causing a two week delay to the start of the project.	
Lack of suppliers available to deliver accelerated works programme in such a tight timeframe	Medium	Our suppliers to date have been very accommodating, however, this challenge remains ongoing. As mentioned last month, the consent for Wairoa's wastewater discharge is being finalised at the moment, which has allowed us to begin procurement for the filtration and UV system project.  A small number of suppliers and tight timeframes has resulted in a lot of projects being appointed directly to suppliers via. negotiation, in lieu of a competitive tender process.	

#### 6. RESOURCES

- 6.1 This section will discuss levels of resourcing such as budget, equipment, contractors or staffing.
- 6.2 Three full time Council staff have been employed through this stimulus package.
- 6.3 50% of the agreed funding was provided up front \$5,520,000. A further instalment of \$840,000 was paid in 1<sup>st</sup> September 2021. A third instalment of \$2,300,000 has been requested based on forecast expenditure, and is expected to be paid in late November or early December 2021, this is helping to ensure WDC do not have any cash flow issues for 3 waters stimulus project costs.
- 6.4 Programme completion date is now forecast to June 2022, however majority of projects will be complete by March 2022. There are likely to be some ongoing project adjustments as some projects yet to be scoped, and variations are likely. Department of Internal Affairs understand this and are comfortable with unders and overs, i.e., some projects costing more and some projects costing less, resulting in the total funding not being exceeded. As scoping progresses, there will be more clarity on how final budgets will sit for each project.
- 6.5 Several work packages are being delivered through our existing three waters contractor Fulton Hogan. Their size and presence allow access to further resource if required, which will help mitigate any project delays. QRS has been involved in several projects, utilising their skilled local workforce.

#### **Signatories**

0.8	
Alda	SAM
Author	Approved by
Jonny Hardie	Stephen Heath





17. WW Pump Station Upgrades - generator pad North Clyde



18. WW Pump Station Upgrades - generator pad North Clyde



19. WW Pump Station Upgrades - gantry fabrication



20. WW Pump Station Upgrades - gantry fabrication



44. Wairoa WWTP - excavation for inlet screen foundation



45. Wairoa WWTP - excavation for inlet screen foundation



46. Wairoa WWTP - excavation for inlet screen foundation



47. Wairoa WWTP - excavation for inlet screen foundation



48. Wairoa WWTP - Southwater desludging aeration pond



49. Wairoa WWTP - geobag full of sludge for dewatering



50. Wairoa WWTP - Gate installation



54. Achilles St water main - pipe welding





56. Achilles St water main - pipe welding





58. Achilles St water main - pipe welding



59. Achilles St water main - pipe welding



60. Achilles St water main - pipes



80. Opoutama WWTP - main tank empty



81. Opoutama WWTP - main tank lids removed



82. Opoutama WWTP - lifting main tank lids



83. Opoutama - Self contained vehicle waste station tanks - digging hole



84. Opoutama - Self contained vehicle waste station tanks prior to install



85. Opoutama temp WWTP at 3weeks aerators on



86. Opoutama temporary plant at 3weeks



87. Opoutama temporary plant at commissioning



88. Opoutama temporary plant pipe work



89. Opoutama temporary plant aerators



95. River Parade watermain replacement



96. River Parade watermain replacement



97. River Parade watermain replacement



98. River Parade watermain replacement



99. River Parade watermain replacement



100. River Parade watermain replacement



1701. PipeTech 2



1900. Toby replacements 1



1902. Toby replacements 2



1903. Toby replacements 3

# WHAT YOU CAN FLUSH

The treatment of your wastewater relies on living microorganisms to breakdown harmful components. Putting the wrong things into the sewer can kill these microorganisms or cause blockages and harm the environment.

# YOU CAN FLUSH



Pee Poo Paper

# YOU CAN NOT FLUSH



Campervan waste | wipes | paint | thinners Fuels | oils | battery acids | antifreeze Glue | pastes | herbicides | pesticides Leftover sprays | pool chemicals | sand Cat litter | coffee grounds | cigarette filters Powders | food | cooking oils

Textile fabrics (cloths, stockings, sanitary items, nappies etc.)
Chemicals (except biologically degradable cleaners)

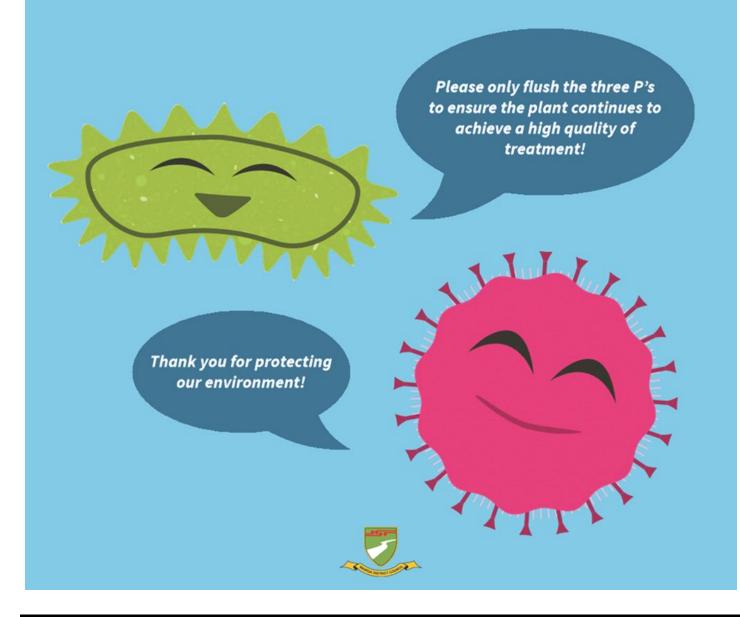
# Remember to only flush the three P's!

#### Dispose of these items accordingly



# OPOUTAMA WASTEWATER TREATMENT PLANT

The Opoutama treatment plant is currently undergoing upgrades to dramatically improve the quality of treated wastewater that is being released back into the environment. The upgraded plant utilizes a submerged and aerated Fixed Bed technology that relies on living microorganisms to decompose the contaminants and nutrients in the wastewater.



#### 8.2 RAIN EVENT - (SEPT 16-19) - LESSONS LEARNT

Author: Stephen Heath, Pouwhakarae – Hua Pūmau Hapori / Ratonga Group

**Manager Community Assets and Services** 

Authoriser: Kitea Tipuna, Tumu Whakarae Chief Executive

Appendices: 1. WDC Utilities Manager's Report to HBRC – September Rainfall Event 4.

#### 1. PURPOSE

1.1 This report provides information for Committee on Community Assets and Services (CAAS) department Infrastructure performance during a recent weather event.

1.2 No decisions are required by Committee at this stage.

#### RECOMMENDATION

The Pouwhakarae – Hua Pūmau Hapori / Ratonga Group Manager Community Assets and Services RECOMMENDS that Committee receive the report.

#### 2. BACKGROUND

2.1 This report forms a summary only of issues identified in a recent weather event and opportunities to reduce risk in future weather events.

#### 3. MONITORING

3.1 3 main areas: Land Transport, 3 Waters, Property.

#### 4. RISKS

- 4.1 Loss of Drinking Water, loss of Lifelines such as Napier, Gisborne, Loss of Sewer network.
- 5. **CAAS TEAM DE BREIFING.** —(IN ATTENDANCE THE WDC UTILITIES MANAGER, 3 WATERS ENVIRONMENTAL ENGINEER, PROJECT MANAGER, PROJECT ENGINEER, INFRASTRUCTURE OPERATIONS ENGINEER, AND THE GROUP MANAGER CAAS)

#### **DISCUSION POINTS:**

- The land fill leachate aid tank had a SCADA upgrade last year to enable monitoring, however in this rain event SCADA coms failed, requires further investigation.
- Land fill leachate possible overflow issues, requires further investigation.
- Kopu sewer catchment highlighted some I&I issues requiring further investigation.
- Alexander, North Clyde catchment performed well.
- Kopu Road river burst its banks and came within meters of the pump station, and swamped associated manholes.
- KOPU sewer catchment 130 Properties will be re investigated to ensure compliance. IE: to ensure the property owners have not reconnected down pipes into the gulley traps.
- Oxidation Ponds new Geo bag desludging area acted as a catchment and added water to the ponds, this was an unintended consequence.
- 100 mm of rain on the Oxidation ponds is approx. 1,3 million litres, or the equivalent of 24 hours normal dry weather sewer network flow.
- All pumps in all pump stations did not block or fault, some were slightly down on capacity.

- Sewer network recovered within 2 3 days after rain event.
- Oxidation ponds recovered longer approx. 4 6 days after rain event.
- Fulton Hogan supported well with regular coms and reporting, also had 24 portaloo's on standby in Gisborne for Wairoa.
- S330 actioned to better manage wastewater discharge and mitigate the riverbank overflow at Fitzroy / Kopu road, also the discharge valve opening was set was between 19 – 25%, resulting in the discharge spread over 4 days, while the river was fast flowing with the river mouth OPEN.
- Information was slow reaching to Elected members and council website.

#### 6. CAAS 3 team debrief meeting Action Points – see table below.

Action	Responsible person
Look at options for incorporating a valve on the geobag outlet into the	Infrastructure
oxidation ponds	Engineer / Project
	Manager
Check condition and function of all manholes in town (most	Utilities Manager /
importantly in backyards)	Project Engineer
Check LiDAR data	Utilities Manager
Pump performance check at Fitzroy – inspecting impellers regularly.	Utilities Manager /
Ensure reliability & performance	Infrastructure
	Engineer / Futon
	Hogan
Check how many complaints WDC received during this particular	Environmental
weather event relating to wastewater issues i.e. blocked toilets	Engineer
Fix SCADA at Landfill and re assign alarms.	Property Team
Check bunding and landfill cover	/Project Engineer

#### 7. KEY OUTCOMES.

#### Wastewater discharge.

- 7.1.1. As highlighted to the Infrastructure Committee reports on 10th August 2021, and 21 Sept; WDC and HBRC have corresponded with options for preventing discharges of treated wastewater outside the consented volume and timing limits. The discussions have been positive, both HBRC and WDC have also agreed to use section S330 in the RMA as an acceptable authorisation for these events.
- 7.1.2. In this recent rain event (Sept 16-19) WDC considered the new discharge management plan and planned accordingly, but did not anticipate the rain event would be so big. During the rain event in discussions with HBRC and MoH it was agreed WDC would action S330 as an acceptable authorisation to better manage discharge and limit flows, more importantly avoid any river bank overflow at Fitzroy / kopu road.
- 7.1.3. This is the very first time WDC have taken this approach. Under S330 the wastewater discharge was limited and the valve was opened between 19-25% resulting in no riverbank overflow at Fitzroy / Kopu road. Additional waste water monitoring and testing was also done during this period, which did not show up anything untoward.-(unexpected and inappropriate)

#### Communications.

7.1.4. Wairoa wastewater emergency overflow comms Plan has been developed and updated to ensure templates for quicker messaging and earlier notification to elected members. Refer appendices 1, Page 12

#### Storm water.

- 7.1.5. Whilst recent CCTV has highlighted infiltration issues in Kopu catchment and five years' worth of Pipe relining is currently planned for this year and next year, which is funded from the \$11 million stimulus and will include some in Kopu Catchment; There have been some key learnings and focus areas for more improvement. Kopu catchment Inflow and & Infiltration further investigations are required, this also includes 130 private properties who had illegal storm water connections removed in 2019-2020 from the sewer network, will be checked to see if any properties have illegally reconnected. All Manholes in town will also be checked for Inflow.
- 7.1.6. Fulton Hogan to implement a Safe Operating Procedure (SOP) for rain events, refer to heavy rain warning protocol appendices 1, page 22
- 7.1.7. With the rain event, both the Nuhaka River and Lake Whakakī were opened by HBRC to lower their levels.
- 7.1.8. Photos of this event caused some manholes to pop, and riverbanks to breach, refer appendices 1, pages 3, 4, 18, 19, 20, 21

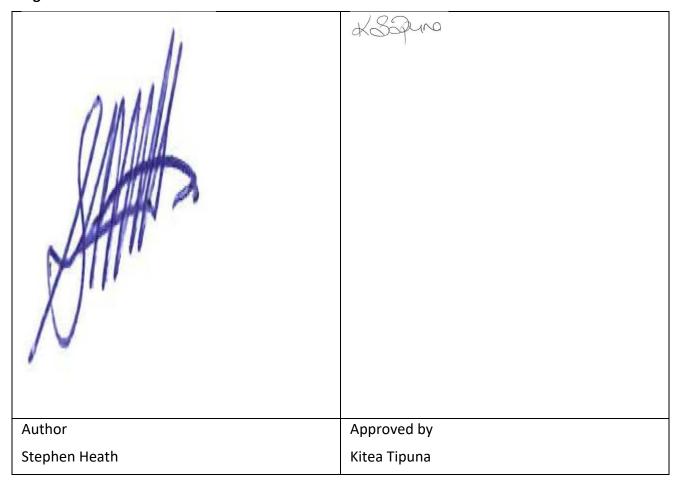
#### **CONCLUDING SUMMARY:**

Council has made a significant investment particularly in the last 4 years to mitigate the effects of rain / storm water entering the waste water network with work such as CCTV in over 40% of the underground pipes, with approx. 10% having to be relined, Pump Station upgrades /chopper pumps and Backup generators for each pump station, SCADA control system upgrades, over 400 private property illegal storm water connections removed; While this work has seen significant improvements there is still more to be done.

Further to this the \$11 million stimulus work comes to an end in mid-2022, which has allowed Council to pull forward 5 years' worth of pipe relining to be completed in just 18months; Council will continue to monitor and look for improvement opportunities and in particular the new resource consent, condition 48 requires WDC to submit to HBRC a Network Management Plan (NMP) that, amongst other things, will provide calculations of predicted reductions in wastewater flows received at the wastewater treatment plant as a result of work planned over the next 5 years to further reduce inflow and infiltration into the reticulated wastewater network. The NMP will also set out how flows to the treatment plant will be monitored and recorded, and how pump station overflows will be monitored and responded to. Condition 63 requires commentary on and analysis of how works undertaken to reduce inflow and infiltration have reduced the frequency of overflow discharges.

WDC's recent approach to utilise the RMA section S330, as an acceptable authorisation to better manage treated wastewater discharge outside the consented volume and timing limits during a recent heavy rain event, required WDC to inform all key stakeholders; This approach is helping to align Council to best practice. Under the new wastewater discharge resource consent there will be further requirements to monitor, measure and report on more areas as described in the above paragraph; All of this is helping to develop a more measurable and transparent reporting platform.

# **Signatories**



# September Rainfall Event

A heavy mid-September rainfall event that was forecast for Wairoa from 14/09/21 until 17/09/21 resulted in over 130mm of rain within the Wairoa District and township. Eventually, rainfall warnings were issued for the  $16^{th}$  and  $17^{th}$ 

On Tuesday 14<sup>th,</sup> discussion began around the rain forecast to better understand the impact on pond levels, taking into account predicted rainfall and upcoming discharge windows. At this point, we didn't perceive any issues.

Throughout Thursday 16<sup>th,</sup> pond levels rapidly increased and "don't rush to flush" notices were posted on social media that evening.

The following morning of the 17<sup>th</sup>, in an effort to manage and control pond levels proactively with minimal effects, notification was given to HBRC of our intent to discharge under the RMA, Section 330 – "Emergency works and power to take preventive or remedial action." Emergency comms protocols were activated with the Emergency Operations Centre (EOC) Public Information Management Systems (PIMS) team; however, some information was slow reaching social media and other parties; we have since tweaked the comms standard operating procedures to allow for quicker communications. At this time, the Wairoa River had also breached and was in flood conditions.

Discharge continued throughout the 18<sup>th</sup>, with the discharge valve automatically closing on the 19<sup>th</sup> at 6am. By 6pm, pond levels rose again, causing a valve opening of 100% but within consented discharge times and tidal conditions.

On Monday 20<sup>th,</sup> there was a short discharge window, and the level of the pond was at 1073; Fitzroy pump station was still pumping high volumes of water, and river conditions were still high; the valve was reopened at 20%. HBRC was provided with an update, and a request was made for a grab sample of the discharge, results of which is attached in the appendices of this report. At 6pm the discharge valve was opened to 25% and continued through to 6am Tuesday morning. Ongoing monitoring continued, and it was decided to leave the plant on automatic operation.

A more detailed summary of discharges is provided further in this report.

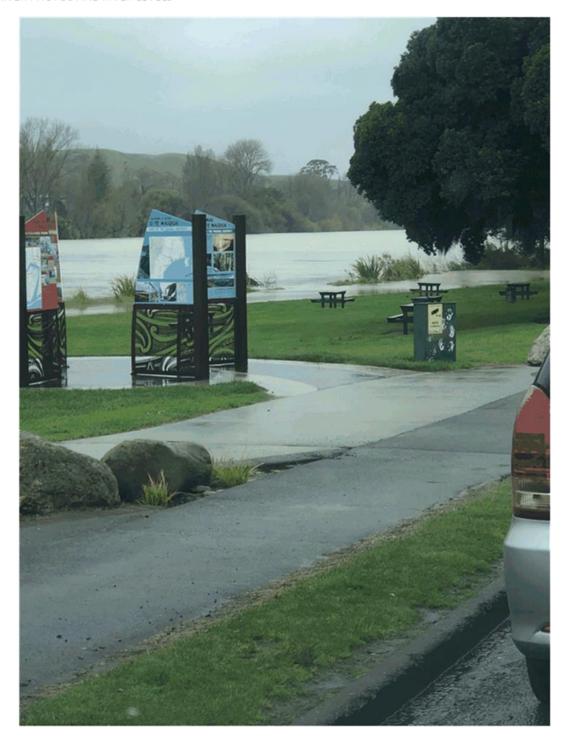
Council has made a significant investment to mitigate the effects of heavy rainfall. I&I work such as relining and removing illegal stormwater connections has lessened the impact of heavy rain; however, other issues such as poor laterals, low lying manholes, and the potential reconnection stormwater pipes into the sewer network have caused problems. Some of these items are identified in the improvement plan, but the council has no jurisdiction over private laterals, and these will continue to cause problems.

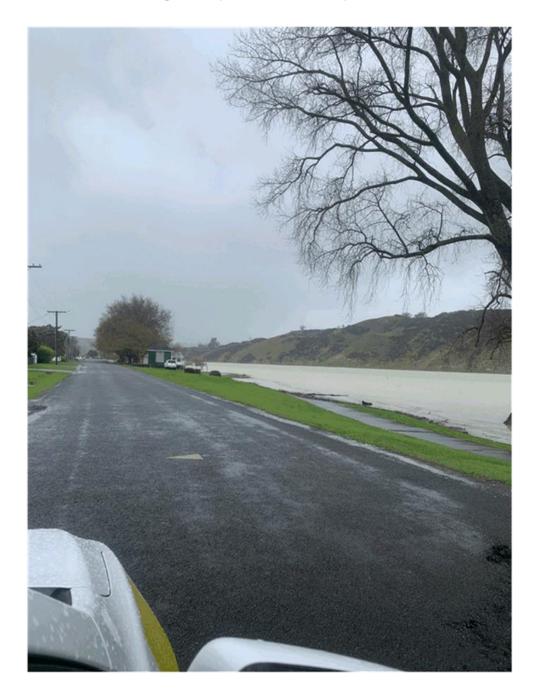
CAaS staff, Fulton Hogan and the EOC maintained good communications during this event, monitoring rainfall, river levels, and SCADA. Council contractors Fulton Hogan were active in the community, deploying port-a-loos, sandbagging where needed, and physical inspections. CAaS staff were also carrying out physical checks and noted that some manholes were swamped with water resulting in further ingress into the wastewater system.

From this event, CAaS staff have identified improvement actions. Previous works will be revisited, e.g. ensuring that illegal Stormwater connections have not been reinstated and pre-emptive measures have also been identified to mitigate potential impacts for future events; these are summarised further in the report.

It is understood that the council met the seven day notification period under section 330 (a1) of the RMA and that the activity's adverse effects are not continuing, so there is no requirement to apply for a resource consent for this event.

RIVER PHOTOS AND RIVER LEVELS





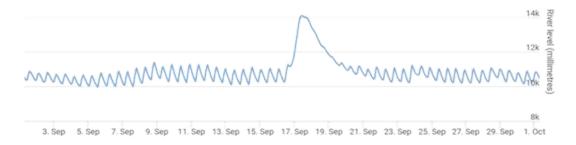


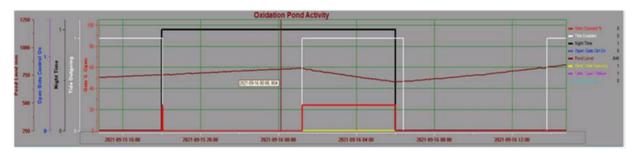
Figure 1 River Levels source https://www.hbrc.govt.nz/environment/river-levels/

#### VOLUME OF EFFLUENT DISCHARGED FROM THE PONDS:

Table 1 Effluent volumes discharged and rainfall

Date	Volume Discharged (m3)	Rainfall (mm)
14/09/21	2248	14
15/09/21	2256	2
16/09/21	2128	49
17/09/21	4139	72.5
18/09/21	8591	2
19/09/21	3263	0
20/09/21	3695	0

The effluent volume discharged for the first three days of the weather event was representative of 'typical' discharges during September, averaging from 2000m<sup>3</sup>- 3000m<sup>3</sup>. The pond level was also representative of what is expected during dry weather conditions, averaging around 800mm before discharging and approximately 650mm after discharge.



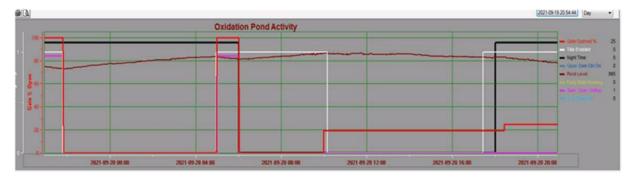
During the afternoon/ night of the 16<sup>th</sup>, the pond level increased rapidly due to a large influx of rainwater, causing the pond level to rise enough to trigger an early discharge with 100% valve opening outside of consented discharge times. This is the ponds way of getting rid of extra volume during nighttime only, even out of the outgoing tide times.

Due to the rapid pond level increase throughout the early morning of the 17<sup>th</sup> notification was given to HBRC that due to extreme weather conditions, the council intended to discharge with a 25% valve opening manually



The discharge valve remained open at 25% throughout the day and night of the 18<sup>th</sup> and was closed at 6am that morning (18/09/21). The 6am closure is a safeguard implemented if there is a mechanical or electrical failure where the discharge valve will automatically close at 6am. Over the day of the 19<sup>th</sup>, the pond level increased, triggering a discharge on the early ebb tide at 6pm, with the valve open at 100%.

The morning of 20/09/21, the valve closed automatically at 6am after a 100% discharge. To manage the increasing pond levels, the decision was made to open the valve at 10am at 19%.



At 6:65pm, the valve was opened to 25% throughout the night and again automatically closed at 6am the following morning and has remained on automatic operations since.

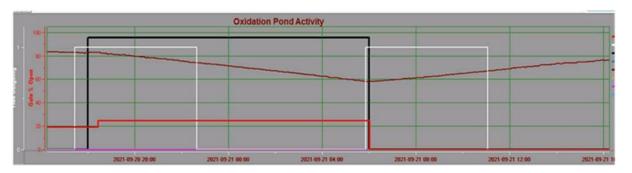


Table 2 Volumes discharged and how much out of consent times

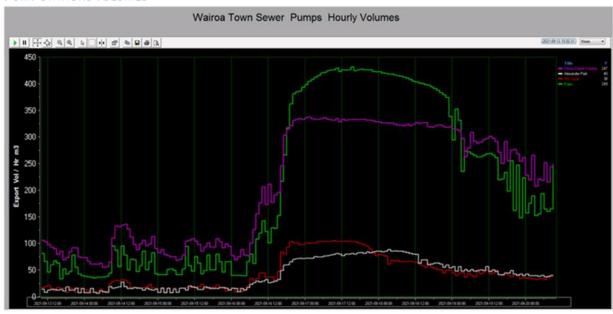
Date	1st High Tide	2nd High Tide	Volume Discharge d (m3)	Exceed Daily Limit (5400 m3)	Discharge % of consented limit	Discharge outside ebb tide (minutes)	Discharge outside 6pm - 6am (minutes)	Discharge out of consent times
14/09/2021	14/09/2021 11:19	14/09/2021 23:47	2248	No	42%	0	0	No
15/09/2021	15/09/2021 12:17		2256	No	42%	0	0	No
16/09/2021	16/09/2021 0:44	16/09/2021 13:16	2128	No	39%	42	0	Yes
17/09/2021	17/09/2021 1:42	17/09/2021 14:16	4139	No	77%	577	443	Yes
18/09/2021	18/09/2021 2:41	18/09/2021 15:14	8591	Yes	159%	735	656	Yes
19/09/2021	19/09/2021 3:39	19/09/2021 16:09	3263	No	60%	240	0	Yes
20/09/2021	20/09/2021 4:35	20/09/2021 17:02	3695	No	68%	438	0	Yes

Table 2 above shows that from the  $16^{th}$  to the  $19^{th}$ , effluent was discharged outside of ebb times, and the  $17^{th}$  and  $18^{th}$  discharged during the day (out of the 6pm-6am consent conditions).

DISCHARGE TIMES SUMMARY- AUTOMATIC + MANUAL VALVE OPENINGS (14TH - 20TH)

- 14/09/21-15/09/21 discharged valve opened at standard discharge times with the valve 25% open
- 16/09/21 at 23:18 valve opened at 100% out of ebb tie due to pond level reaching over 1050mm
- 17/09/21 discharge valve closed at 6am
- 17/09/21 discharged valve manually opened at 10:33am to 25% to minimise the risk of overflowing and keeping the discharge flow within the middle of the already flooded river
- 18/09/21 valve automatically closed at 6am and was manually reopened at 7am at 25% due to the pond level still being high
- 19/09/21 valve closed at 6am and was reopened again to 25% automatically during an ebb time. This was then closed when the tide turned at 21:51
- 20/09/21 at 4:45am-6am; the valve reopened within ebb times at 100%
- 20/09/21 valve reopened to 19% manually at 9:58am due to pond level increase and increased to 25% open at 6:25pm.
- 21/09/21 at 6am, the discharge valve was reset back to automatic and has remained like this.

#### PUMP STATIONS VOLUMES



Date	M030001 Kopu Accum Volume (m3)	M030002 NthClyd Accum Volume (m3)	M030003 Alx Park Accum Volume (m3)	M030000 Fitzroy Accum Volume (m3)
1/09/2021	1658	434	396	2668
2/09/2021	1618	393	384	2538
3/09/2021	1559	359	366	2403
4/09/2021	1516	327	356	2308
5/09/2021	1428	320	338	2199
6/09/2021	1408	329	348	2183
7/09/2021	1310	305	336	2087
8/09/2021	1326	313	365	2141
9/09/2021	1272	331	358	2079
10/09/2021	1236	286	338	1960
11/09/2021	1212	274	316	1898
12/09/2021	1246	254	308	1866
13/09/2021	1173	273	319	1855
14/09/2021	1370	334	429	2241
15/09/2021	1338	348	374	2169
16/09/2021	4471	937	1298	4946
17/09/2021	10137	1897	2370	7972
18/09/2021	9494	1733	1441	7739
19/09/2021	5913	1118	996	6752
20/09/2021	3953	852	815	5612
21/09/2021	3083	701	690	4688

Cells highlighted in grey are this reports values of interest. Dates before this give an idea of what the pump stations were pumping before the rain event.

#### SEWER RELATED COMPLAINTS RECEIVED DURING HEAVY RAIN EVENT:

Based on CSR (8 total)

Date	Address	Issue & Task Completed
17/09/2021	23 Kabul St	Toilet is overflowing cant use the toilet at all - Portaloo dropped off
		(Kea Hire), 20/9 Return portaloo's back to Kea Hire
17/09/2021	25 Kabul St	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire
17/09/2021	18 Clyde Rd	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire
17/09/2021	119 Black St	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire
17/09/2021	17 Clyde Road	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire
17/09/2021	22 Clyde Road	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire
17/09/2021	11 Corkill Ave	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire
17/09/2021	24 Clyde Rd	Toilets blocked Portaloo dropped off (Kea Hire), 20/9 Return
		portaloo's back to Kea Hire

#### IMPROVEMENT ITEMS

Improvement items carried out since event:

- 1. Updated emergency comms plan
  - a. Trigger points updated to allow for quicker communications to elected members
  - b. Messaging templates have been established, so comms are activated more quickly.
- Council contractors have established a severe weather protocol; this identifies works to be carried out when weather warnings are issued, during an event and post-event.
- Automatic valve opening levels changed from 1050 to 1100, and valve closing levels adjusted to 480.

#### Improvement items to be undertaken:

- 1. Check condition and function of all manholes in town most notably in backyards
- 2. Options for incorporating a valve on the geobag outlet into the oxidation ponds
- 3. Check LIDAR data to check for low lying spots that may swamp manholes
- Pump performance checks at Fitzroy inspecting impellers regularly to ensure reliability & performance
- 5. Recheck properties to ensure illegal connections haven't been reinstated
- Survey residents who reported issues in the initial survey to see if there has been an improvement

# **APPENDICES**

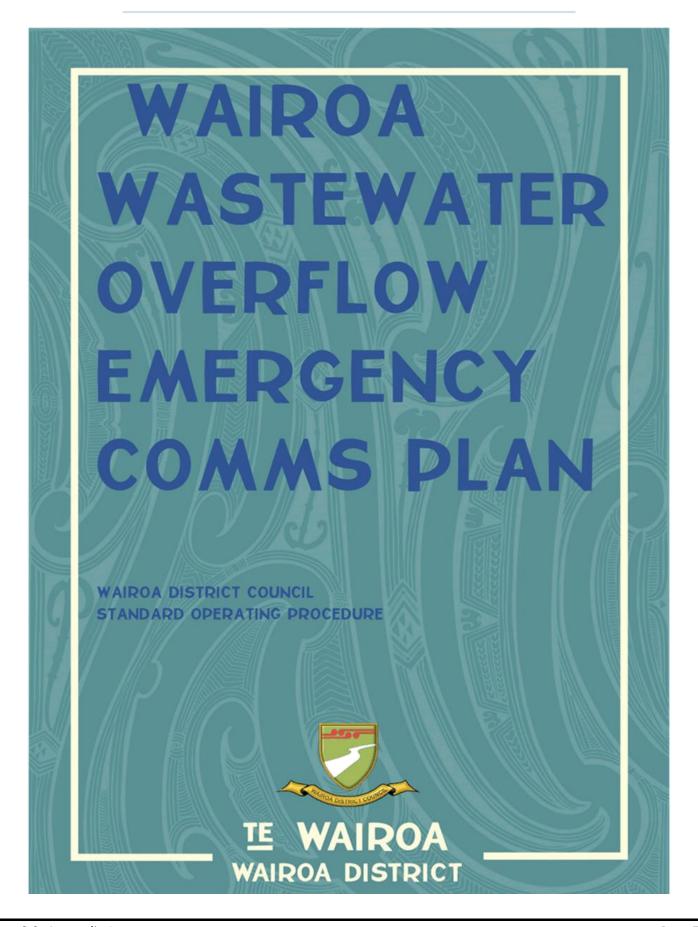
- 1 Sampling results
- 2 Emergency comms plan
- 3 Fulton Hogan emergency works report
- 4 Fulton Hogan SOP for rain events

WDC Utilities Manager's Report to HBRC – September Rainfall Event

#### Sampling Results

ANALYSIS	UNIT	CONSENT LIMITS	20/09/2021
			Grab Sample
Dissolved Oxygen	g/m3		13.3
рН	pН		7.4
Conductivity	μS/cm		434
Salinity	ppt		0.1
Turbidity	NTU		11
COD	g/m3	220	60
Suspended Solids	g/m3	87	27
Absorbance at 254nm	AU		0.310
Transmittance at 254nm	%T		49.0
Ammonia	g/m3	36	8.59
cBOD	g.02/m3		7.85
ANALYSIS	UNIT	CONSENT LIMITS	20/09/2021
E.coli	cfu/100mL		7.0x10^3
Enterococci	cfu/100mL		2.2x10^3

**Emergency Comms Plan** 



# INTRODUCTION

This Wairoa District Council standard operating procedure outlines key steps to be undertaken in the event of a wastewater overflow emergency within the Wairoa district. This procedure is also designed to ensure that key Council staff members - involved in mitigating the risk from such an event - undertake the correct steps to ensure that the health and safety of the Wairoa community is maintained to the highest of standards. As employees of a local government authority, we also aim to ensure that residents, ratepayers and other affected stakeholders are fully informed of any risks to their health and safety, and to reinforce key safety messages.

# **OBJECTIVE**

The key objective is to publicise the essential and necessary information required for the purpose of keeping locals in the Wairoa District FULLY INFORMED during such an event. This is to ensure we have as many members of the community as possible up to date with all the information they need to know.

## WHO'S INVOLVED IN THIS PLAN

- Kitea Tipuna –Chief Executive
- Karen Akuhata Community Assets and Services, Utilities Manager
- Juanita Savage Incident Controller Wairoa Civil Defence Emergency Operations Centre
- · Kate Standring Strategic Communications Consultant to Wairoa District Council
- Wairoa District Council PIM Managers (in the event of an emergency)
- Stephen Heath Group Manager Community Assets and Services
- Other Council employees

#### **AUDIENCE**

Our audience includes:

- · Wairoa residents and ratepayers
- Wairoa Businesses
- · Whanau, Hapu, Iwi and PSGEs
- · The Wairoa community
- Others

#### **METHODS**

This aim requires a consistent approach of delivering clear, key messages in all communications regarding a Wairoa wastewater overflow emergency. Communicating professionally and effectively is the responsibility of all staff involved. We will communicate clearly and to professional standards, using methods appropriate for our different audiences.

Our recommendation is that that the Incident Controller, the CE, CAS staff, Council communications staff and PIM function managers for the Wairoa Civil Defence EOC response team work together to deliver all key and necessary information regarding any such wastewater overflow emergency to the Wairoa District community, until further notice.

# During any such emergency, our aim will be to action the following:

- CAS staff/group manager is to FULLY BRIEF the Chief Executive and the Incident Controller of any wastewater overflow emergency
- · Chief Executive to FULLY BRIEF His Worship the Mayor about any such event
- The Incident Controller, CAS staff/group manager and/or the CE will determine the level of risk such an emergency poses to public health and decide "the next steps to take"
- The Incident Controller, CAS staff/group manager and/or the CE will determine measures and actions required to mitigate any risks to public health and safety (MAY NOT BE RELEVANT FOR THIS PLAN AS THIS IS A SEPARATE ACTION TO COMMUNICATIONS)
- Communications staff will work with the CE/Incident Controller and CAS staff to determine
  the appropriate messaging to push out to the public. They also need to be FULLY BRIEFED
  about the emergency
- Communications staff/PIM will then roll out all public information required

# During any such emergency, the communications team will strive to produce the following <u>IF REQUIRED</u>:

- At least one video update from the relevant Council spokesperson for social media
- At least four Facebook updates to the Wairoa District Council page informing the Wairoa community of essential information
- Radio advertisements that are approved by the Incident Controller and Chief Executive; and produced where necessary
- At least one full-page Wairoa Star article
- Media releases for the Wairoa District Council website and other media stakeholders
- Manage community conversations on Facebook, particularly on Wairoa community Facebook pages
- Manage incoming public information from Facebook and Messenger

#### Communication Tools include:

- Media releases targeting newspaper, radio advertising, online media and social media
- Video for online
- The Wairoa District Council website
- The Wairoa Star
- Email databases
- Advertising (through local media)
- Facebook
- Posters/flyers/collateral where necessary

# COMMUNICATIONS ACTION PLAN

Action	Detail	Responsible	Action notes	Date Due
PREPARATION OF PUBLIC INFORMATION MATERIAL AND ROLL OUT				
	When the wastewater system begins to be overwhelmed  Media release or public message from the Chief Executive and/or His Worship the Mayor Craig Little.  VIA FACEBOOK,		Don't rush to flush notices on Facebook. Notify elected members as a heads up, this could escalate etc  The relevant person (i.e. Incident Controller, CE or CAS staff) is to advise strategic comms what messaging is to be publicised. Strategic comms will need to have the final draft	asap  Within 6 hours of the incident occurring
RELEASES ARE EITHER UPLOADED TO WAIROA DISTRICT COUNCIL'S WEBSITE OR WAIROA DISTRICT COUNCIL'S FACEBOOK PAGE  N.B. THIS ACTION PLAN IS A WORK IN PROGRESS AND CAN BE AMENDED WHERE REQUIRED	LOCAL/REGIONAL MEDIA AND WEBSITE Graphics and roll out of approved media release. VIA FACEBOOK AND WDC WEBSITE	EOC PIMS	approved by the relevant person (mentioned above)  The relevant person mentioned in the previous tab above is to relay what information they'd like to be visually demonstrated - to either Katharina or Marrit. The graphic is to be approved by the relevant person and pushed through Wairoa District Council's website and Facebook page.  The media release is to be uploaded to council's website by either Katharina, Marrit or Austin.  Communications staff	Within 6 hours of the incident occurring
	Facebook dialogue		to manage any online social media chatter (that may be occurring on Facebook)	hours of the incident occurring

# Messaging to use

- Don't rush to flush the Wairoa wastewater system is becoming overwhelmed with rain. We need your help, please keep your household wastewater to a minimum (showers, Baths, toilets etc) DON'T RUSH TO FLUSH.
- 2 HBDHB public health risk messaging to <u>be used</u> when manholes start overflowing, mixing with floodwater

Wairoa District Council is working closely with the Hawke's Bay District Health Board in relation to the heavy rain and flooding events.

Hawke's Bay District Health Board medical officer of health Dr Nick Jones said there are instances in the Wairoa township where due to the heavy rainfall and surface flooding wastewater has been discharged through manholes, which poses a health risk if people come into contact with it.

"We don't know what exactly is in flood water at any given time so it is important people stay away. All flood water, including puddles and rivers, should be treated as contaminated. Sewage may be mixed with flood waters and can cause serious illness," he said. "Wash your hands thoroughly if you have been in contact with floodwaters and if it enters your home, you may need to evacuate.

"People should also stay away from the river until further notice, which may also be contaminated by wastewater overflow."

Both authorities are continuing to monitor the situation, particularly as the heavy rain continues.

Should you require further information, please email wastewater@wairoadc.govt.nz.

Designation	Name	Contact
Mana Whenua – Ngati	Wiki Hauraki	022 315 0343
Moewhare		
Mana Whenua – Ngati	Cas Manual/Hine Kohn	027 332 1455
Kuripakiaka		
Tatou Tatou	Lewis Ratapu	022 010 3350
Taiwhenua	Nigel How	theflaxfairy@hotmail.com
HBRC	Jack Blunden	Jack.blunden@hbrc.govt.nz
HBRC	Pollution Hotline	0800 108 838
ЕНО	Simon Mutonhori	simon@wairoadc.govt.nz
Public Health Unit	Dr Nick Jones	Nicholas.Jones@hbdhb.govt.nz
Recreational Users – Ski Club	Roz Thomas	TBC
Recreational Users – Adventure	Sonya Smith, Christina	adventurewairoainc@gmail.com
Wairoa	Stockman etc	
Recreational Users – Yacht Club	Adrian Mayhead	amayhead@xtra.co.nz
WDC	Stephen, Kitea, Duane,	
	EOC, COMMS, elected	
	members	

# WDC Utilities Manager's Report to HBRC – September Rainfall Event

Fulton Hogan emergency works report

Wairoa District Council		Fulton Hogan	
3 Waters Contract			
Weather Event Friday 17 <sup>th</sup> Sept 2021			
the storm water system  Manholes have been	er has contributed to issues within the Waste Water system as well as em.  popping along the lines with wastewater seeping over ground level ely high and has in places breached its banks.		
56 Kopu Rd		Overflow from Wastewater Manhole on Kopu line. Line overwhelmed and unusual volume travelling through system	Sandbags and disinfected area.

# WDC Utilities Manager's Report to HBRC – September Rainfall Event

Kopu Rd/Spooners Pt	Extreme volume of water travelling through network. River level extremely high	
Kopu Rd Pump Station	Extreme volume of water travelling through network. River level extremely high	
Kopu Road Rivers Edge	Extreme volume of water travelling through network. River level extremely high and has breached its banks.	

# WDC Utilities Manager's Report to HBRC – September Rainfall Event

Wairoa Yacht Club – Kopu Rd	Extreme volume of water travelling through network. River level extremely high and has breached its banks.	
Kopu Rd Pump Station	Extreme volume of water travelling through network. River level extremely high and has breached its banks.	
Kopu/Sturdee St	Extreme volume of water travelling through network.  Have checked storm water grates and all clear. Pure volume of water combined with height of river	Checked/Cleared storm water grates, Manholes

# WDC Utilities Manager's Report to HBRC – September Rainfall Event

		Sheer volume of water has contributed	-
Freyberg St	ALE THE BEING THE -	to the flooding of this area as well.	get flow moving. Still needs attention
	The same of the sa	Stream behind premises is at	
		capacity.	
	The state of the s		

Fulton Hogan SOP for rain events

#### **HEAVY RAIN WARNING PROTOCOL**

#### **PRE-EVENT**

When heavy rainfall has been forecast, carry out the following:

Notify the council of your intention to carry out this protocol

Spotcheck of Gully Traps (Compile a list of known "offenders")

Revisit hot Spots (repetitive trouble areas) and address any issues

Have portaloos on standby

#### **DURING EVENT**

Responding to CSRs

Spotting manholes that are overflowing and sandbagging – checking usual hotspots. If wastewater is overflowing from manholes advise the council immediately so appropriate comms can be dispatched.

Drive the streets looking for overflowing manholes and clearing grates, checking culverts

Constantly checking the network is free from obstruction

Monitoring of SCADA

Provide daily emergency works reports

#### POST-EVENT

Check the network for damage and blockages, e.g. Duck Bills and Outlets

Generator checks if there have been power cuts

Check pumps to ensure no damage to impellors and so forth

# **ONGOING PREVENTATIVE MAINTENANCE:**

**ILLEGAL CONNECTIONS** 

ongoing inspections of downpipes that have illegally connected to the sewer network.

MANHOLE CHECKS and REPAIRS

Ensure every manhole is inspected once every 2 years (yr1 50%, yr2 50%) and develop a program of improvement works required and deliver to councils' Infrastructure Operations Engineer

#### 8.3 STORMWATER LITTATRAPS

Author: Teri Wathen-Smith, Mataaro Taiao Environmental Engineer

Authoriser: Stephen Heath, Pouwhakarae – Hua Pūmau Hapori / Ratonga Group

**Manager Community Assets and Services** 

Appendices: 1. LittaTrap Photos <u>U</u>

# 1. PURPOSE

1.1 The purpose of this report is to provide information for Committee on the two Stormwater Litta Traps that have been installed within the Wairoa stormwater network.

1.2 No decisions are required by Committee at this stage.

#### RECOMMENDATION

The Mataaro Taiao Environmental Engineer RECOMMENDS that Committee receive the report.

#### 2. BACKGROUND

2.1 Community Assets and Services (CAAS) are in the process of developing a stormwater consent for the township and this is part of initial stages for better management of the catchment. CAAS are conducting a Litta Trap trial being conducted at two busy sites inside a stormwater grate. The trial project is aimed at better understanding the volume of rubbish that is getting into Wairoa's waterways from our stormwater runoff.

# 3. STORMWATER

- 3.1 Rain that does not soak into the ground becomes stormwater runoff. This is major contributor to the pollution of our river and streams as all stormwater is directed off the impervious surfaces and to the nearest waterway.
- 3.2 Out of the Three Waters stormwater is the only one that is not treated before being discharged from the network. As stormwater moves across developed areas it picks up litter, automotive fluids, sediment, debris, chemicals, fertilisers, leaves and pollutants from parking lots, yards, and roads. The chemicals found in one cigarette butt can leach out and contaminate approximately 7.5 litres of water within one hour. This contaminated water is lethal to small crustaceans and other aquatic life.
- 3.3 These pollutants run into waterways damaging habitats and killing wildlife. A lot of the rubbish that we see built up in drains and ditches has originated from people throwing rubbish out of the window of their car or dropping litter in the streets and it being washed into drains.
- 3.4 In New Zealand approximately eight million tonnes of rubbish and plastic waste ends up in the ocean every year.
- 3.5 This Litta Trap trial is aiming to reduce the amount of rubbish that Wairoa is contributing to the stormwater network and eventually into and the river.

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#### 4. LITTATRAP TRIAL

- 4.1 LittaTraps are a simple, cost-effective net that fits inside a stormwater grate, trapping plastic and other litter that would otherwise be carried by stormwater straight into the river and out to sea. Photos of the devices are found in Appendix 1.
- 4.2 Wairoa District Council (WDC) installed two Litta Traps on the 28/09/21, one on Marine Parade outside Osler's Bakery, and the other on Lucknow Street outside the College.
- 4.3 The traps are designed by the company 'Enviropod' who are world leaders in the development of stormwater treatment solutions and the prevention of marine plastic pollution.
- 4.4 Stormwater that runs across the pavement can pick up all sorts of pollutants and rubbish which then flows into the nearest stormwater drain. Rubbish is responsible for the degradation of our beaches and waterways and stormwater runoff from existing piping infrastructure in our town flows untreated into our marine environment and can have negative effects on water quality and marine life.
- 4.5 These litta traps are installed to sit within the curb side stormwater drains, these are the pits in the curb with the metal grates over the top. Water that runs across the pavement as stormwater can pick up all sorts of pollutants and rubbish which then flows into the nearest stormwater drain. This rubbish would then make its way into the river but through the help of these devices the rubbish, leaves and other gross pollutants are captured at source, preventing them from entering and accumulation in our river and ocean.
- 4.6 As stormwater enters a storm grate or catchpit, it passes through the screening bag. Litter, debris, and other pollutants are captured and retained preventing them from entering the water ways. When the screening bag is full or there is heavy rain the extra water can overflow and is released through the overflow bypass at the top of the filter bag to prevent the drains from blocking.
- 4.7 Maintenance is simple. As the Litta Traps are hand maintainable, it can easily be cleaned out without the need for expensive tools or equipment. Using the simple Lift, Tip and Reuse method the Litta Traps can be easily cleaned out, the rubbish disposed of appropriately and the screening bag put back into place to continue collecting pollutants which flow off the street.

#### 5. RESULTS SO FAR

- 5.1 Frequent monitoring of the traps has shown that they are effective at catching rubbish from the streets. Photos in Appendix 1 show the Litta Trap on Marine Parade and the amount of rubbish collected from the date of installation (28/09/21) until the 19/07/21 when they were last checked.
- 5.2 Many leaves and other types of debris have been collected in the Litta Traps so far, as well as many cigarette butts which otherwise would have ended up flowing into the river
- 5.3 Ongoing monitoring of these Traps will be carried out and when the nets are looking full the rubbish will be removed.

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#### 6. LOOKING TO THE FUTURE

- 6.1 WDC and contractors will continue to monitor the LittaTraps over the next few months and will empty as needed.
- 6.2 A study of the volumes of rubbish caught and what are the main types of pollutants that the community are discarding will also be conducted. This will help us to build a better understanding of areas where the Wairoa Community could improve, as well as help to educate and reduce pollutants getting into the waterways.

## **Further Information**

Northland Regional Council are also using Litta Traps in their stormwater network and they have captured over 4,000 items of rubbish in only three months of having them installed.

Article on their story can be found using the following link:

https://www.nrc.govt.nz/news/2021/may/littatraps-help-stop-rubbish-s-journey-to-sea/

# **Confirmation of statutory compliance**

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

- a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,
- is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

# **Signatories**

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# 9 PUBLIC EXCLUDED ITEMS

#### **RESOLUTION TO EXCLUDE THE PUBLIC**

#### **RECOMMENDATION**

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
9.1 - Community Assets and Services Department - Update	s7(2)(b)(ii) - the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7