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ORDINARY MEETING OF COUNCIL

Open Minutes Attachments

Meeting Date:	Wednesday 22 June 2022
Time:	9.00am - 10.50am
	Trade Waste & Wastewater Bylaw Review and Water Supply Bylaw Review
Venue:	Ocean Suite East Pier 50 Nelson Quay Napier

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NCC Tradewaste Bylaw Submission

Key points

- HBDHB <u>supports</u> the introduction of an integrated Trade Waste and Wastewater Bylaw and the draft Administration Manual.
- DHB supports the intention to extend trade waste requirements to smaller premises generating fats and other contaminants that create downstream health and network management issues.
- Supportive of Clause A.13 "Protecting the Public Wastewater System" which aims to prevent any Stormwater, groundwater or Trade Waste entering the Public Wastewater System through Infiltration or Inflow, surface water run-off or overland flow.

We recommend

- We recommend that following the adoption of this bylaw that Council allocates funding to undertake a program of works that includes physical surveys of residential and commercial properties stormwater infrastructure in order to determine and address stormwater connections to wastewater networks.
- We note that Wairoa District Council has implemented such a program in recent years whereby Council officers visit home by home to review stormwater drainage and ensure connections to wastewater infrastructure networks aren't occurring. This program of works has had significant success in identify multiple illegal connections that were contributing significant volumes of stormwater to the wastewater network. The positive effect of this work program has been to significantly reduce the occurrence of wet weather discharges of raw sewage to the Wairoa River as the wastewater network is now managing much lower flow rates enabling wastewater flow to the treatment plants to be maintained.

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COMMUNITY OUTCOMES

Excellence in infrastructure and public services for now and in the future.



SIGNIFICANT INITIATIVES FOR 2020/21

Stormwater studies and planning/design

- Undertake a comprehensive stormwater study before any further exploration or implementation of other stormwater-related projects in Ahuriri Estuary and Coastal areas. This will help us to understand the feasibility of projects and consider options for better managing the quality of our stormwater. This will include investigation of artificial wetlands on lagoon farm as part of the Regional Park initiative.
- Complete modelling and masterplanning of Napier's stormwater system.
- Undertake investigations to determine design to improve the pipes and drainage in the area of the Thames and Tyne waterways.

Stormwater improvements

 Make improvements to the stormwater quality entering the estuary from Bay View, the Lagoon Farm and Hawke's Bay Airport, as well as run off from rural residential areas of the western hills.

Te Awa

 Design and construct stormwater infrastructure to enable development in Te Awa.

Bylaw

Implement Stormwater Rylaw

PROJECT NAME	2020/2 \$00
STORMWATER	
Ahuriri Master Plan stormwater study	10
Ahuriri Master Plan Project 11 - Pandora catchment improvements	20
Ahuriri Master Plan Project 3 - improve direct outfalls	2
CBD Stormwater Upgrade	1
Minor drain Improvements	:
New pump station and pumping main for Marewa Catchment	1
New pump station in Bay View	2
Outfalls Marine Parade S852	
Pump station minor replacements (mechanical)	
SCADA minor replacements	
Stormwater pump replacements	
Stormwater pump station electrical replacements	
Te Awa Structure Plan	1,0
Tennyson St outfall improvements	
Thames/Tynes pipe and drain upgrades	1
Upgrade existing Onehunga Pump Station S846	
Upgrading Dalton St pump station	3
Total Stormwater	2.7

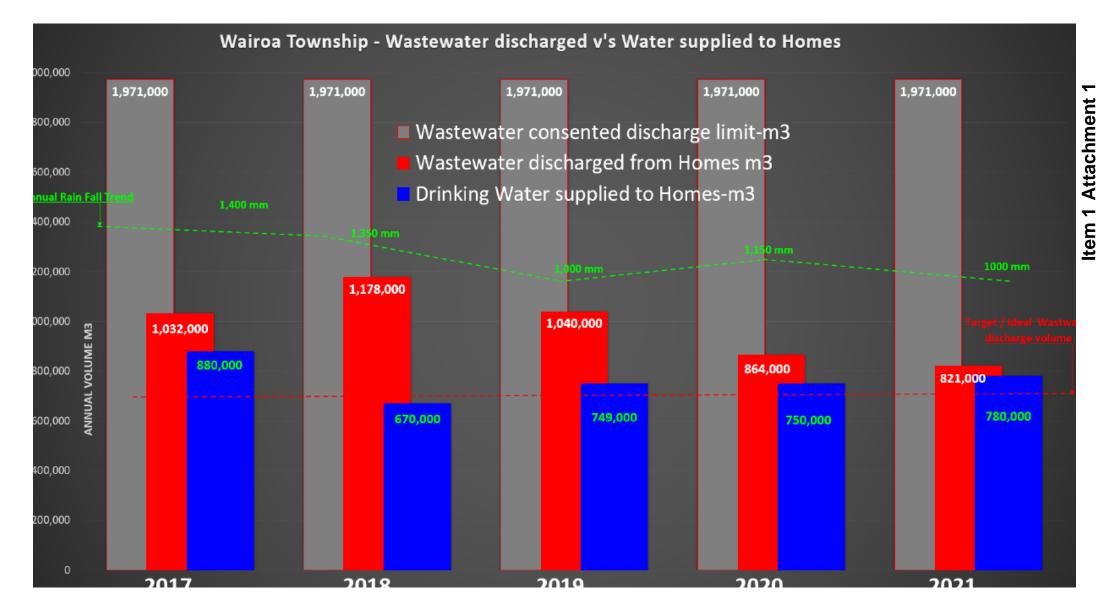
Wairoa – Ingress and Infiltration case study

- Rain events resulted in all pump stations regularly overflowing to the river
- Sewer network took a long time to recover, up to 2 3 weeks after a rain event.
- In 2017 an annual total of 150 million litres more wastewater was discharged than water that was supplied to homes, or 17% more wastewater
- In 2018 pump stations were upgraded annual total of 509 million litres (equates to 236,000 Litres per property) more wastewater was discharged than water supplied to homes or 76% more wastewater

- 2019: Smoke testing at all private properties, including schools, and businesses was undertaken, resulting in 400 illegal storm water connections to the sewer network being identified such as, down pipes into gulley traps, broken gulley traps, gulley traps at ground level, and sumps to drain flooding in lawns.
- WDC started removing them from the sewer network
- In 2019 an annual total of 291 million litres more wastewater was discharged than water supplied to homes, or 39% more wastewater – refer graph below.

Item 1 Attachment

- 2020: All properties including 130 private properties who had direct illegal storm water connections were removed from the sewer network.
- In 2020 an annual total of 114 million litres more wastewater was discharged than water supplied to homes, or 15% more wastewater
- 2021: More monitoring of Infiltration and inflow. On-going rechecking (policing) to see if any properties have illegally reconnected to the sewer.
- In 2021 an annual total of 41 million litres (equates to 18,000 Litres per property) more wastewater was discharged than water supplied to homes, or 5% more wastewater



Why wastewater discharges matter?

Marina linked to cases of paratyphoid fever

Laura Dooney . 12:45, Sep 25 2017

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MARION VAN DUK/STUFF

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rainfall leads to swimming, fishing warning

8 Feb, 2022 10:16 AM

③ 2 minutes to read



Ten paratyphoid cases confirmed in Hawke's Bay

Damian George . 18:48, Oct 02 2017



MARION VAN DIJK/STUFF

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Ten people have been confirmed to have suffered from an outbreak paratyphoid in Hawke's Bay. The

DHB submission key points

- The Hawke's Bay District Health Board (HBDHB) has a responsibility under the New Zealand Public Health and Disability Act 2000 to advocate for environmental conditions that contribute to the health of the community.
- HBDHB <u>supports</u> the Water Supply 2022 Bylaw.
- We recommend that Napier City Council considers extending water metering for all buildings connected to the water supply.
- The protection and preservation of our freshwater resources and aquifers is going to be a significant challenge now and into the future particularly as the effects of climate change take hold.
- Future proofing a water reticulation system that prioritises efficiency of water use and minimises water wastage and leakage are critical steps that Council should take. Even if metering is not used to determine water charges universal metering would provide invaluable data for managing the network more effectively.
- In the first instance the requirement <u>should</u> be applied to all new buildings connecting to the water supply.

Examples

Item 1 - Attachment 2

National Policy Statement for Freshwater Management

- Requirement to embody **Te Mana o te Wai** 3 of 6 principles
- Kaitiakitanga: the obligation of tangata whenua to preserve, restore, enhance, and <u>sustainably use freshwater</u> for the benefit of present and <u>future generations</u>
- Governance: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of <u>freshwater</u>
- Stewardship: the obligation of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations <u>now and into the future</u>

The why!

Reasons for implementing water metering

- Reducing water use (generally discretionary use) by improving customers' approach to water efficiency;
- Provides a fair and equitable charging regime;
- Identifies water losses and the development of an improved understanding of the overall network water balance;
- Water metering can help to reduce peak demand during summer months when water resources are most stretched.

Water metering case studies (Source: BECA)

- Auckland
 - Introduced water metering in 1970
 - Water demand has increased with population growth
 - Water metering moderates demand
 - Overall demand for water per capita has reduced and is now considered as the lowest in New Zealand

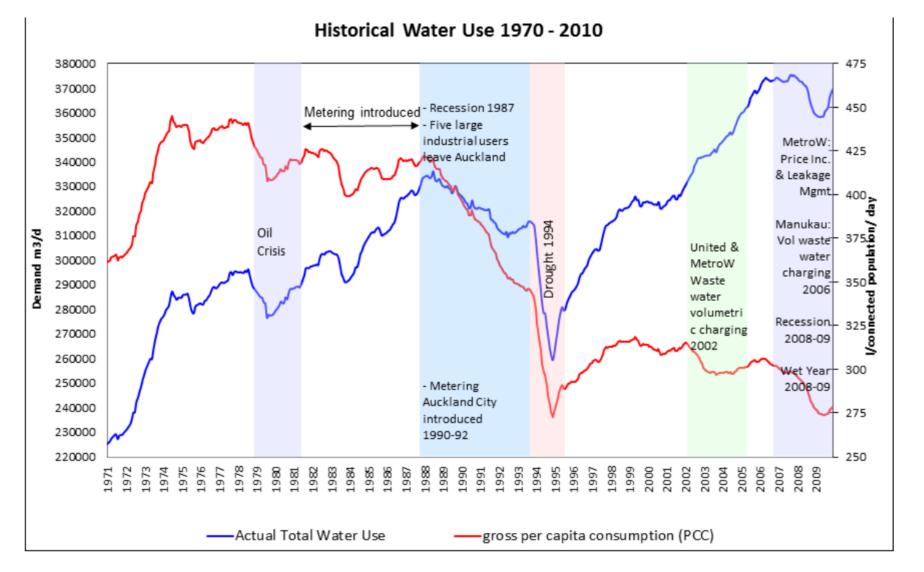


Figure 1 Historical contactor in Acceleton J Community 2010

Water metering case studies (Source: BECA)

- Nelson
 - Introduced metering in 1996-99
 - Introduction of universal metering has reduced peak water demand by 37% and their water usage is now quoted as being amongst the lowest in the country at 160L/person/day
 - Napier's is >300L/person/day
- Whangarei
 - Meters were introduced in the rural parts of Whangarei in the 1960s and in urban areas in the 1980s.
 - The average residential water use is usually around 168 to 175 L/person/day.
 - WDC has only employed water restrictions once in the last 17 years (as of 2016 report).

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Plan to tackle Napier's water usage was supposed to be in place seven years ago

MARTY SHARPE • 14:07, Dec 15 2017



Since December 18, Nelson urban areas have been able to use sprinklers every second day only.

To summarise

- the benefits of charging for water volumetrically can significantly delay the high capital costs associated with consenting new water sources and building new infrastructure;
- It can also remove or reduce the need to employ seasonal water restrictions

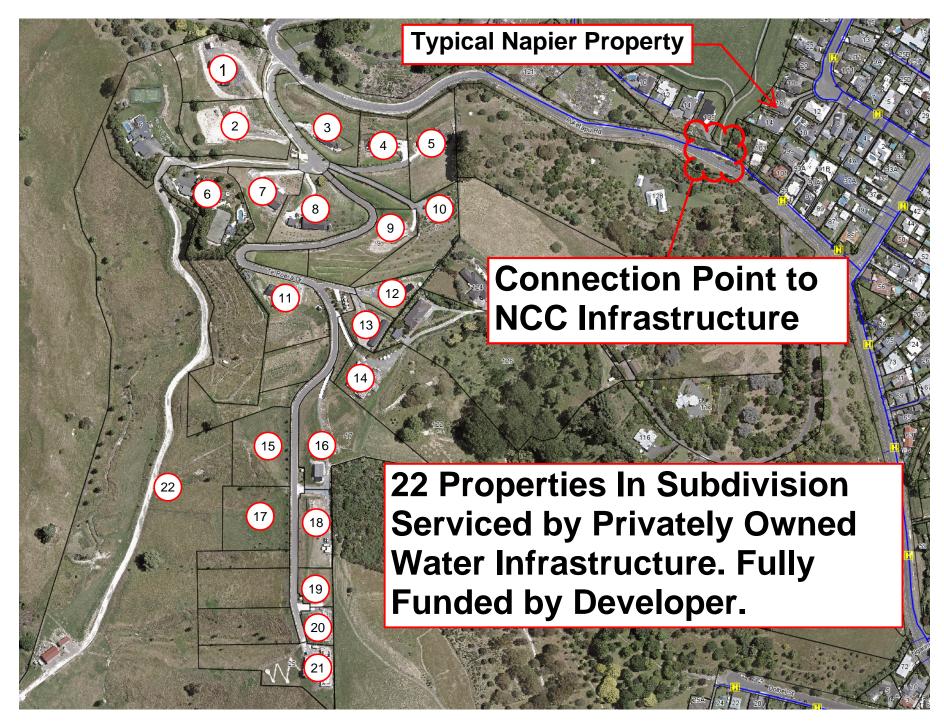
Te Roera Hills Subdivision Unjust Water Charges

Te Roera Drive, Taradale

Presented by Silver Lake Trust

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Item 1 - Attachment 3

Typical Napier Property

On demand, ordinary use connection

Pay NCC \$0.81/m3 for first 300 cubic meters (\$244 yearly rate divided by 300m3 allowance)

Pays \$0.00 for additional water over 300m3 (Water Becomes Free)

Infrastructure/Reticulation Maintained and Insured By NCC (Included in \$0.81 rate)

NCC Bill Properties Individually (Included in \$0.81 rate)

Infrastructure/Reticulation Not Maintained and Insured by NCC (Not Included in \$1.12 rate)

NCC Bills One Residents Society, **Residents Society Reads Water Meters and Bills Properties Individually** (Not Included in \$1.12 rate)

Pays \$1.12 for additional water over 300m3 (Infinitely more)

On demand, extraordinary use connection

Pay NCC \$1.12/m3 for first 300 cubic meters

(38% more)

Te Roera Hills Property

The physical resource of water in New Zealand is <u>FREE</u>. Council can only charge rates to cover the cost of maintaining water infrastructure to deliver water.

Council paid \$0 towards any additional infrastructure to service Te Roera Hills, pays no money to maintain the infrastructure and reticulation that services the development, and simply bills one residents society.

NCC has stated that they want a more fair and equitable rating system.

How is it equitable that Te Roera Hills residents pay substantially more in water rates than the properties they border, yet receive less in return from NCC?

Simple Equitable Solution

NCC continues to bill the Te Roera Hills resident society.

An allowance of 300m3 per property per year at the standard Napier property water rate of \$0.81/m3 is given.

22 properties x 300m3 = 6,600m3/yr @ \$0.81

Any additional water usage over 6,600m3/yr is then charged at the \$1.12/m3 rate.

NCC calculates the fair discount to the \$0.81 & \$1.12 rates for not having to maintain the subdivisions infrastructure/reticulation, read water meters, bill users individually, and chase up debts.

We would estimate this to calculate to approximately a 33% reduction in rates, reducing the charges to somewhere around \$0.53 for the first 6,600m3, and \$0.74 for every cubic meter used thereafter.