



Hanga Ngātahi • Building Together

## QUARTERLY 3 WATERS INFRASTRUCTURE FUNDING UPDATE

Q1: to 31 MARCH 2022



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# 3 WATERS INFRASTRUCTURE INVESTMENT OVERVIEW

THE 3 WATERS STIMULUS INVESTMENT IS AN INITIATIVE BY THE GOVERNMENT TO STIMULATE RECOVERY AND HELP REFORM UNDER PRESSURE WATER SERVICES TO A MORE SUSTAINABLE FOOTING.

The Government is funding \$523.1 million to 67 local authorities to invest in the improvement of drinking water, wastewater treatment network renewals, and storm water networks. A number of local authorities have contributed additional funding totalling \$161 million. The Government's funding priorities are for investment into drinking water and wastewater infrastructure first, and then storm water.

Each local authority has selected the 3 Waters infrastructure investment most needed in their areas and is managing the delivery of the programme.

Nationally 45% is to be spent on water supply, 35% on

wastewater, 4% on stormwater and 16% on projects common to all three such as management systems.

The programme is made up of 468 discrete projects or programmes of work from the Far North to the deep South and west as far as the Chatham Islands.

The Department of Internal Affairs (DIA) has appointed Crown Infrastructure Partners (CIP) to monitor the delivery of the infrastructure investment, identify any opportunities for economies of scale, monitor potential regional or national shortages and assist where issues arise. CIP provides quarterly reports to DIA and recommends funding claims by local authorities to DIA.

#### **TOTAL COMBINED SPEND BY INFRASTRUCTURE TYPE**

44%	35%	4%	16%
WATER SUPPLY	WASTEWATER	STORM WATER	TECH & DESIGN WORK

#### NATIONAL MAJOR INFRASTRUCTURE PROJECTED



288km
DRINKING WATER PIPE
UPGRADES



**154km** 

WASTE WATER PIPE UPGRADES



**110** 

DRINKING WATER
TREATMENT PLANT
(WTP) UPGRADES



**125** 

WASTE WATER TREATMENT PLANT (WWTP) UPGRADES

#### **OVERALL FUNDING 3 WATER INFRASTRUCTURE**



**GOVERNMENT FUNDING** 

\$523m



**CO-FUNDING** 

\$160m



**TOTAL FUNDING** 

\$683m

# Q1 HIGHLIGHTS 2022

#### **MAJOR INFRASTRUCTURE TYPES**









**36km** drinking water pipes

**33km** wastewater pipes

28 WTP upgrades

WWTP upgrades

#### **FUNDING**



\$95.0m
Government spend



\$26.0m Co-funded spend



**\$121.0m**Total spend

#### **WORKERS (Full Time Equivalent)**



PROGRESS TO PROJECTED: 98



**GROWTH THIS QUARTER: 6%** 



FTE THIS QUARTER: 1,254

#### **ASSET TOTAL FUNDED**<sup>1</sup>



\$47.6m Drinking water 16% of projected



\$47.0m Waste water 20% of projected



\$5.7m Stormwater 19% of projected



**\$20.6m** Tech and Design Work 18% of projected

# **PROGRESS TO DATE**

#### **MAJOR INFRASTRUCTURE TYPES**



**266km** drinking water pipes 92% of projected



wastewater pipes 86% of projected



WTP upgrades 72% of projected



WWTP upgrades 63% of projected

#### **FUNDING**



Government spend





Total spend 76% of projected

83% of projected

#### Co-funded spend 55% of projected

#### **WORKERS (Full Time Equivalent)**



**PROGRESS TO** PROJECTED: 1.753



**PROJECTED:** 1.925



**PROGRESS ACHEIVED OF PROJECTED: 91%** 

#### **ASSET TOTAL FUNDED**<sup>1</sup>



\$224.9m

Drinking water 75% of projected



Waste water 75% of projected



Stormwater 63% of projected



Tech and Design Work 86% of projected



#### **HOROWHENUA DISTRICT COUNCIL CASE STUDY:**

# 3 WATERS UPGRADE FOR 13 MARAE ACROSS HOROWHENUA

THIS IS A FIRST OF ITS KIND PROJECT IN AOTEAROA TO UPGRADE 3 WATERS INFRASTRUCTURE FOR ALL 13 MARAE ACROSS THE HOROWHENUA DISTRICT AS PART OF 3 WATERS INFRASTRUCTURE INVESTMENT.

Horowhenua District Council allocated \$520,000 of this funding to improve water, stormwater and wastewater infrastructure at marae across the district. This project is a catalyst for working with mana whenua to enhance 3 Waters Infrastructure at local marae and has been rewarding on many levels - not least the relationship Council staff have developed with marae leaders. This project has ensured that marae community has safe drinking water and improved wastewater and stormwater.

Council initially carried out a 3 Waters condition assessment at each marae in collaboration with each marae representative. It was important that we ensured the specific needs of each marae was assessed and incorporated.

All 13 Horowhenua marae have received upgrades to their wastewater, stormwater and drinking water services.

Twenty-three 30,000L water tanks were installed at different rohe, as well as drinking water and UV filtration water treatment systems.

One of those marae to benefit was Motuiti Marae on State Highway 1, north of Foxton, which belongs to Ngāti Raukawa hapū Ngāti Rākau. Previously the marae had four 20,000L concrete water tanks, but three were broken and leaking. The damage meant that there was only around 40,000L of water accessible at any time and there was no provision for water filtering.

Problems arose during large hui hosted at the marae and iwi would have to buy water to accommodate their visitors.

The marae now had three new high-grade polyethylene plastic tanks, which included debris filters.

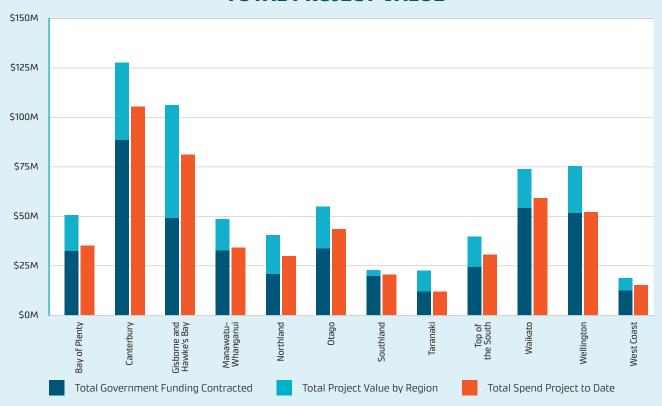
Twenty-three 30,000L water tanks have been installed alongside nine new drinking water and UV filtration water treatment systems. The upgrades highlight the significance of marae as community hubs and the importance of having well equipped facilities to meet the needs of the people.



Water treatment system installed with filters and UV

## **REGIONAL SUMMARY**

### TOTAL GOVERNMENT FUNDING CONTRACTED AND TOTAL PROJECT VALUE



Total project value is deemed on the same basis therefor is total value of contracted projects

#### **WORKER FTE PROJECTED AND PROGRESS TO PROJECTED**













In Progress

New water
source added

12 WT Plant upgrade **18.9km**Potable water mains/pipes upgraded

**1.0km**Wastewater pipes upgraded

14 WWTP upgrades

**(\$)** 

**FUNDING** 

\$20.8m Government spend to date \$9.0m Co-funded spend to date \$29.8m Total project spend to date

\$40.5m Total projected spend

LOCAL WORKERS FTE\* Progress to projected:

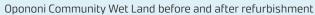
**89.6** 99% to projected

Growth this quarter: **3.1** 

Projected: **90** 

FTE this quarter **84.8** 































**4.6km**Wastewater pipes upgraded

Sludge removal from ponds **18.7km**Potable water mains / pipes upgraded

**2,661**Water meters installed

**78%**Strategy Study or report



**FUNDING** 

\$54.2m

Government spend to date

\$5.0m

Co-funded spend to date

\$59.2m

Total spend to date

\$74.0m

Total projected spend



LOCAL WORKERS FTE\* Progress to projected:

**148.1** 50% to projected

Growth this quarter:

4.3

Projected: **296.9** 

FTE this quarter 110.9



Waikato - Oxidation Pond Desludging



Waitomo - Mokau Water Treatment

















12.9km Wastewater pipes

upgraded

upgrades

16

WWTP

3 WTP upgrades

**0.4km** Stormwater pipes upgraded

16.4km Potable water mains/pipes upgraded



**FUNDING** 

\$32.5m

Government spend to date \$2.6m

Co-funded spend to date \$35.1m

Total spend to date \$50.5m

Total projected spend



**LOCAL WORKERS**  Progress to projected:

**176.6** 

132% to projected

Growth this quarter: **23.0** 

Projected: 134.0 FTE this quarter 176.6



Western Bay of Plenty OSET wastewater system for marae



Whakatane - Arsenic Analyser















8 WWTP upgrades 9.1km
Potable water mains /
pipes upgraded

**9.3km**Wastewater pipes upgraded

**69%** WTP Upgrades



**FUNDING** 

\$49.1m

Government spend to date

\$32.0m

Co-funded spend to date

\$81.1m

Total spend to date \$106.2m

Total projected spend



Progress to projected:

112.9

54% to projected

Growth this quarter:

9.8

Projected: **211** 

FTE this quarter

89.8



Gisborne WWTP





Te Kaunihera-ā-Rohe o Ngāmotu

#### New Plymouth District Council





INFRAST-RUCTURE TYPF 12.1km

Drinking Water pipes upgraded Waste pump station upgrades

**In Progress** Stormwater

pipes upgraded In Progress

Bore

upgrades

**5** WWTP upgrades



**FUNDING** 

\$11.8m

Government spend to date

\$0.7m

Co-funded spend to date

\$11.9m

Total spend to date

\$22.7m

Total projected spend



LOCAL WORKERS FTE\* Progress to projected:

**47.0** 

69% to projected

Growth this quarter:

4.8

Projected:

68

FTE this quarter

45.2



New Plymouth Waiwaka stormwater culvert relining



Stratford DC Watermain



















**21.3km**Wastewater pipes

upgraded

WWTP upgrades 14 WTP upgrades **0.5km** Stormwater pipes upgraded 10.7km Drinking water pipes upgraded



**FUNDING** 

\$32.6m

Government spend to date

\$1.6m

Co-funded spend to date

\$34.2m

Total spend to date

\$48.7m

Total projected spend



LOCAL WORKERS FTE\* Progress to projected: **105.8** 

71% to projected

Growth this quarter: **13.3** 

Projected: **148.4** 

FTE this quarter **67.5** 



New reservoir for Raetihi in the Ruapehu District



Absolutely Positively Wellington City Council Me Heke Ki Pôneke

















INFRAST-RUCTURE TYPE

WTP upgrades 5km Capital renewals 9.4km
Asset
condition
assessments

**18.0km**Maintenance (all waters)

80%
Data and technology projects



**FUNDING** 

\$51.6m Government

Government spend to date

\$0.6m

Co-funded spend to date

\$52.2m

Total spend to date

**\$75.3m**Total projected spend



LOCAL WORKERS FTE\* Progress to projected: **267.8** 

163% to projected

Growth this quarter: **37.6** 

Projected: **164.7** 

FTE this quarter **192.6** 



Capital Renewals - Titahi Bay laterals



Capital Renewals - Titahi Bay pipe lining











**4.3km**Drinking water pipes

upgraded

Waste pump station upgrades

**7.0km**Wastewater pipes upgraded

In Progress
WTP
upgrades

\$

**FUNDING** 

\$24.3m

Government spend to date

\$6.5m

Co-funded spend to date

\$30.8m

Total spend to date

\$39.8m

Total projected spend



LOCAL WORKERS FTE\* Progress to projected:

**96.7** 75% to projected

Growth this quarter: **6.7** 

ter: **128** 

Projected: **128.6** 

FTE this quarter **66.1** 



Pomona Reservoir in Tasman District.











**13.1km**Drinking water pipes

upgraded

2,030m<sup>3</sup>
Treated
water storage

**16.7km**Wastewater pipe inspections

**2.0km**Wastewater pipes upgraded

WTP upgrades



**FUNDING** 

\$12.3m

Government spend to date

\$2.9m

Co-funded spend to date \$15.3m

Total spend to date

**\$18.9m**Total projected

spend



LOCAL WORKERS FTE\* Progress to projected:

**78.2** 

163% to projected

Growth this quarter:

Projected:

48

FTE this quarter **16.6** 



Franz Josef Generator and Raw reservoir



Haast WWTP Septage Receive

























**64.1km**Wastewater
pipes
upgraded

113.0km Drinking water pipes upgraded

**7** WTP upgrades **315**Waste pump station upgrades

**291**Water meters installed



**FUNDING** 

\$88.7m

Government spend to date

\$16.8m

Co-funded spend to date

\$105.5m

Total spend to date

\$127.8m Total projected spend



LOCAL WORKERS FTE\* Progress to projected:

**471.4** 122% to projected

Growth this quarter:

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Projected: **387.6** 

FTE this quarter **297.9** 



Ashburton Relief sewer



Preparation for desludging at Kaikoura Wastewater Ponds















28.6km

Drinking water pipes upgraded 19 WTP upgrades **4** WWTP upgrade

In Progress
Treated water
storage

**4.5km**Wastewater pipes upgraded



**FUNDING** 

\$33.8m

Government spend to date

\$9.8m

Co-funded spend to date

\$43.6m

Total spend to date \$54.9m Total projected spend



LOCAL WORKERS FTE\* Progress to projected:

**103.9** 65% to projected

Growth this quarter:

\_

Projected: **160** 

FTE this quarter **75.3** 



Central Otago District Council Alexandra Northern Reservoir Tank Exterior



Central Otago District Council Wrightson's Pumpstation Stormwater Realignment











19.3km

Drinking water pipes upgraded

3.0km Wastewater pipes upgraded

WWT Plant upgrades

50.1km Wastewater pipe inspections

1.1km Stormwater pipes upgraded



**FUNDING** 

\$19.9m

Government spend to date \$0.5m

Co-funded spend to date \$20.4m

Total spend to date \$22.9m

Total projected spend



**LOCAL WORKERS**  Progress to projected:

63% to projected

Growth this quarter:

Projected: 88

FTE this quarter 31.2







Invercargill Branxholme Pipe

## **GLOSSARY**

#### INFRASTRUCTURE TYPE

**Drinking Water:** Drinking water (sometimes also referred to as potable water) projects include improvements to any of the components that are used to convey water from the source, make it safe to drink and deliver it to customers. This includes treatment plants, reservoirs, pumps, pipes and instruments.

**Wastewater:** Wastewater projects include improvements to any of the components that collect sewage and industrial wastewater, treatment to remove harmful contaminants and return the water to the environment. It includes pipes (sewers), pumps, treatment plants, instruments, and outfalls.

**Stormwater:** Stormwater projects include improvements to the dams and pipes which convey rainwater safely to streams, rivers, and the sea.

**SCADA:** Supervisory, Control and Data Acquisition systems are electronic networks which enable remote control and monitoring of unmanned network facilities.

**Bore:** A drilled hole or excavation to provide access to ground water.

Raw Water: Water that is taken from the environment and treated to produce water safe for drinking.

**Hydraulic Models:** Hydraulic models are computer programmes which mimic the flow and pressure of water, wastewater and stormwater in piped networks.

Potable water: Potable water contains no disease causing organisms nor harmful chemicals and is safe to drink.

**Treatment plant:** A facility to treat raw water to make it safe for drinking, as per the requirements of the Drinking water Standards of New Zealand.

**WTP:** Water Treatment Plant. This is a facility/equipment that takes in raw water and treats it through a variety of means (filters, chemical dosing, ultra-violet light) so it is safe and fit for human consumption.

**WWTP:** Wastewater Treatment Plant. There are many different ways to treat wastewater. A waterwater treatment plant typically consists of a number of different processes (screening, biological processes and sometimes disinfection) to remove solids and treat effluent before it is piped to land, river or sea or used for irrigation use.

#### **FTE Definitions:**

Projected FTE is the number of estimated workers that would be supported by a particular project. Established during the planning and due diligence process.

Progress to Projected FTE is the equivalent number of full-time equivalent workers that were employed over the main construction phase of a project or programme of work. For example, in the early stages of a project or programme the number of workers (FTE) can be low, but rapidly increases as a project enters the main construction phase; this is the appropriate number to compare against the project projected.