

# QUARTERLY 3 WATERS INFRASTRUCTURE FUNDING UPDATE

**Q4: to 31 DECEMBER 2021**







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Cover: Drilling in Hawkes Bay  
Haast WTP After rock work



# 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 to be complete by June 2022.

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.

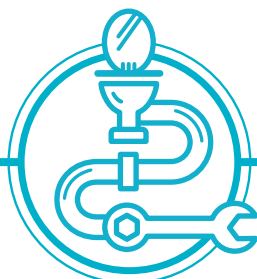
## TOTAL COMBINED SPEND BY INFRASTRUCTURE TYPE



## NATIONAL MAJOR INFRASTRUCTURE PROJECTED



**285km**  
DRINKING WATER PIPE UPGRADES



**151km**  
WASTE WATER PIPE UPGRADES

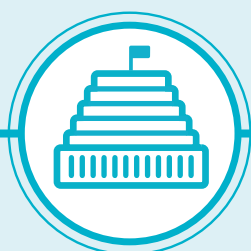


**109\***  
DRINKING WATER TREATMENT PLANT (WTP) UPGRADES



**122\***  
WASTE WATER TREATMENT PLANT (WWTP) UPGRADES

## OVERALL FUNDING 3 WATER INFRASTRUCTURE



**GOVERNMENT FUNDING**  
**\$523m**



**CO-FUNDING**  
**\$161m**

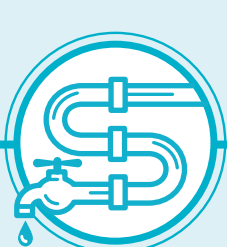


**TOTAL FUNDING**  
**\$684m**

\* Previously incorrectly reported as 321 WTP and 225 WWTP due to a data error.

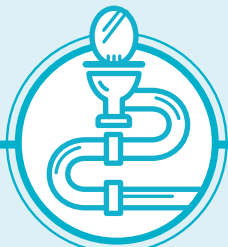
# Q4 HIGHLIGHTS 2021

## MAJOR INFRASTRUCTURE TYPES



**69km**

drinking water pipes



**36km**

wastewater pipes



**21**

WTP upgrades



**17**

WWTP upgrades

## FUNDING



**\$111.5m**

Government spend



**\$18.8m**

Co-funded spend



**\$130.3m**

Total spend

## WORKERS (Full Time Equivalent)



**PROGRESS TO  
PROJECTED: 231**



**GROWTH THIS  
QUARTER: 16%**



**FTE THIS QUARTER:  
1,395**

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



**\$56.6m**

Drinking water  
19% of projected



**\$47.5m**

Waste water  
20% of projected



**\$4.6m**

Stormwater  
16% of projected



**\$21.5m**

Tech and Design Work  
19% of projected

<sup>1</sup> Includes Government and co-funding



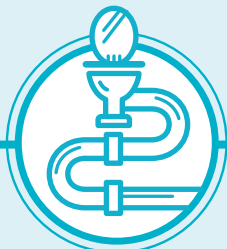
# PROGRESS TO DATE

## MAJOR INFRASTRUCTURE TYPES



**230km**

drinking water pipes  
81% of projected



**100km**

wastewater pipes  
66% of projected



**50**

WTP upgrades  
46% of projected



**43\***

WWTP upgrades  
35% of projected

## FUNDING



**\$336.8m**

Government spend  
64% of projected



**\$61.5m**

Co-funded spend  
38% of projected



**\$398.3m**

Total spend  
58% of projected

## WORKERS (Full Time Equivalent)



**PROGRESS TO  
PROJECTED: 1,655**



**PROJECTED:  
1,925**



**PROGRESS ACHIEVED  
OF PROJECTED: 86%**

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



**\$177.3m**

Drinking water  
58% of projected



**\$131.5m**

Waste water  
56% of projected



**\$13.0m**

Stormwater  
44% of projected



**\$76.5m**

Tech and Design Work  
69% of projected

<sup>1</sup> Includes Government and co-funding

\* Previously incorrectly calculated due to data error

# Q4: 3 WATERS INFRASTRUCTURE COMPLETIONS & PROGRESS

## ASHBURTON DISTRICT COUNCIL FIRST TO FINISH THREE WATERS STIMULUS PROGRAMME



*Pipelaying on approach to Ashburton River in gravel with high water table*

Ashburton District Council is the first council in New Zealand to finish its Three Waters Stimulus Programme.

The Ashburton District Council was allocated \$7.98 million in the Stimulus Programme announced by Government in August 2020.

Ashburton chose a single large project that was needed and would bring long-term benefits to the township of Ashburton. The 5km trunk sewer runs from Bridge Street to the newly installed river crossing adjacent to the town's treatment plant. This provides capacity for the residential and commercial growth in the north and north-east parts of the town, allows a pump-station to be retired and will reduce the likelihood of sewer overflows.

Knowing that this would be a major project to get underway, and to complete on time, the council adopted a fast-track approach that allowed for early orders to be placed for the pipe and fittings and tenders and negotiations to occur with the two contractors who had the experience and capability to undertake the works (Seipp Construction Ltd and Ashburton Contracting Ltd). To create sufficient capacity the project was split between the two contractors with separate worksites.

The works progressed smoothly despite the trench being up to 6m deep in gravel and the pipe being between 600mm and 800mm in diameter. Fortunately the major flood event that came through Ashburton in May 2021 did not significantly impact on the works. Disruption generated by COVID restrictions also had to be managed.

Despite the size of the project, and the heavy equipment involved, the project was completed with no Health and Safety incidents of any consequence.

The overall cost of the project is expected to be \$9.1 million with \$1.2 million being input by the council. Overall, approximately 46,000 hours of labour were utilised which translates to approximately 30 Full Time Equivalent (FTE) workers.

## WESTERN BAY OF PLENTY DISTRICT COUNCIL



*Tutereinga Marae pressure sewer tank - buoyancy compensation concrete pour*

Western Bay has focused \$3.424m of CIP funding towards supporting infrastructure at local marae and papakāinga housing. The funding has enabled Council to support 15 Marae with either an upgrade to their onsite effluent wastewater system or to connect them to Council's wastewater network. In addition, 22 houses (26 house lots) were connected to Council's wastewater system and 41 properties have been given access to safe drinking water. This infrastructure has had a significant impact on these communities to not only minimise environmental effects but also to ensure sanitary conditions for the people.

## MATAMATA-PIAKO DISTRICT COUNCIL

Matamata-Piako District Council water and wastewater assets have been challenged by the hidden danger of trees compromising our piped infrastructure.

This reform funded project started out as a small number of trees needing to be removed from critical infrastructure.





*Morrinsville raw water main repair*

Once investigations started the activity grew to include urgent infrastructure repairs, provision of access ways, the use of modern technology and data gathering activities.

The photo shows one of our particularly challenging sites where trees had grown around a large diameter raw water trunk main on a very steep embankment, putting the entire water supply to Morrinsville at risk.

The works are 80% complete now and would not have been discovered without the funding package.

## WAITOMO DISTRICT COUNCIL



*New Automatic Valveless Gravity filters will improve the water quality in Mokau by removing iron and manganese.*

Mokau is a small beachside community on the West Coast within the Waitomo District. The resident population is around 200, however it swells to near 1000 during the summer peak with many holiday makers and visitors. The water treatment plant providing drinking water to the town required a significant upgrade to meet this summer demand. The cost was a large burden on a small ratepayer base, so the 3 Waters stimulus funding allowed installation of the new Sand-filter and dual UV disinfection. This will provide improved water clarity and treatment resilience to the drinking water supply for the community and visitors.

## OPOTIKI DISTRICT COUNCIL

Terere Marae Ngati Ngahere Trustees informed Council the Marae was experiencing low pressure and limited water availability. Council investigated the issue and identified the water supply pipe, along the Te Rere Pa Road, were in poor condition and under capacity. This issue extended over 750m, from the Marae all the way back to the intersection with Otara Road, impacting the Marae, residents, orchards and the Ōpōtiki aerodrome. Utilising 3 Waters stimulus funding, along with the council co-funding, the main was upgraded to improve water supply, pressure and fire flow to these community facilities and residents.



*Pipes and fittings for Te Rere*

## WHAKATANE DISTRICT COUNCIL

Thanks to the 3 Waters stimulus funding, Whakatāne District Council can claim a New Zealand first in water treatment. The Council is the Authority for the Braemar Water Supply which produces up to 6500 cubic metres of water per day to communities on the Rangitāiki Plains.

Stimulus funding has seen Council award a design-build contract to upgrade the Braemar plant to remove arsenic levels twice the maximum allowable in its source water and address the potential for protozoa group pathogens.

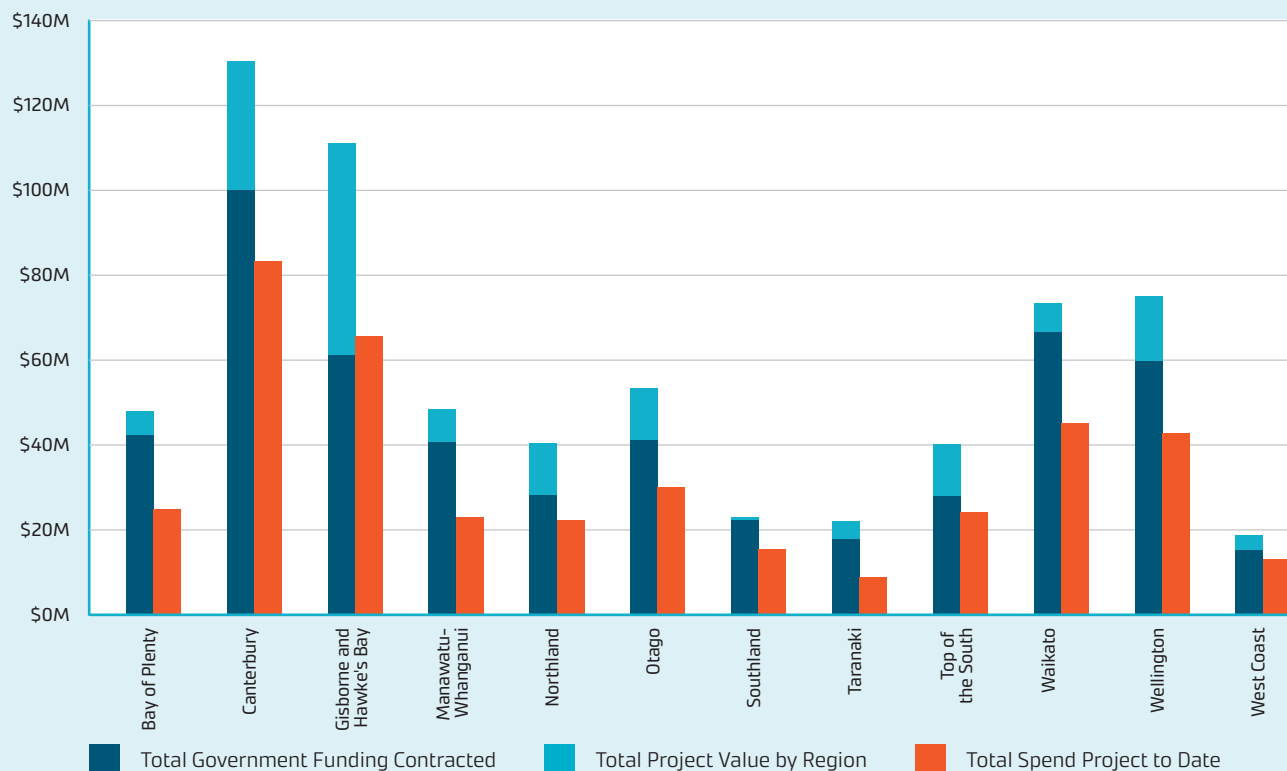
The completion of the project - the country's largest of its kind - will see a plant that achieves full compliance, providing peace of mind to community consumers.



*Arsenic Analyser*

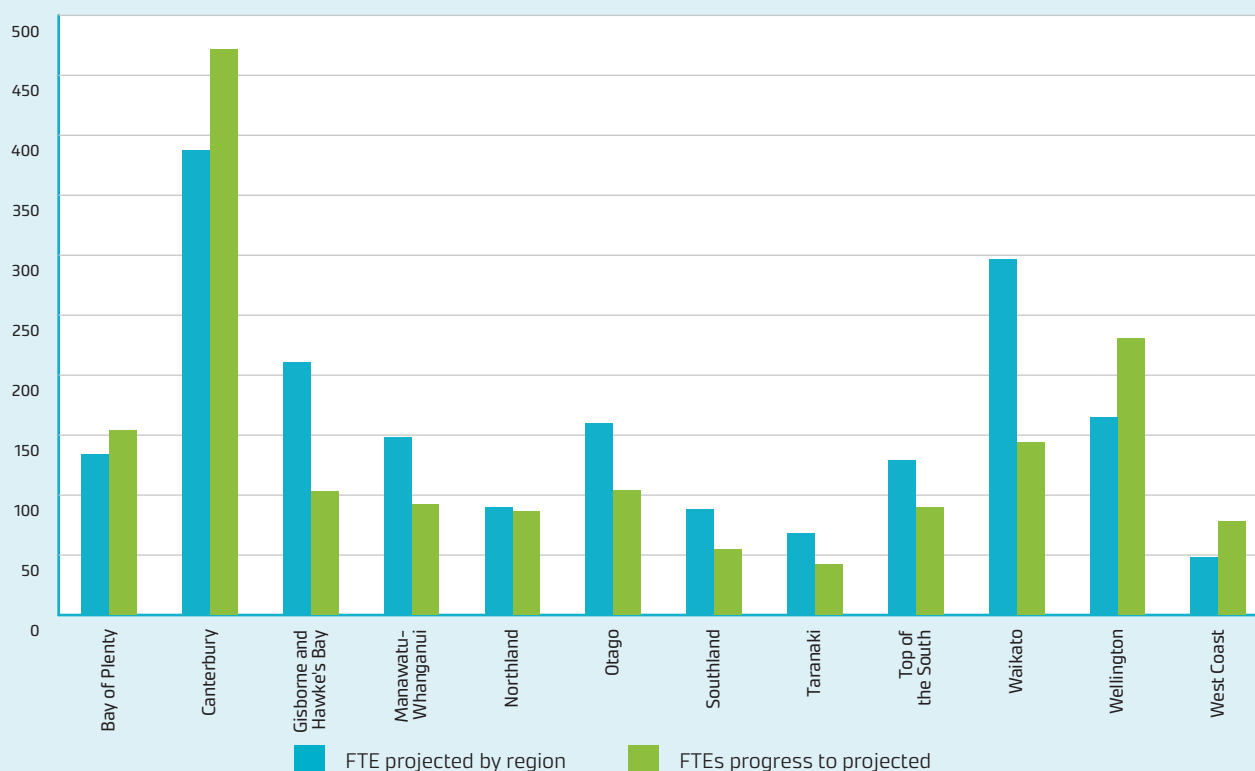
# REGIONAL SUMMARY

## TOTAL GOVERNMENT FUNDING CONTRACTED AND TOTAL PROJECT VALUE



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

## WORKER FTE PROJECTED AND PROGRESS TO PROJECTED







# UPDATE BY REGION

*Weld -string for the Waikouaiti Watermain replacement, East Otago, Dunedin City Council*





# NORTHLAND



## INFRASTRUCTURE TYPE

**In Progress**  
New water source added

**7**  
WT Plant upgrade

**14.0km**  
Potable water mains/pipes upgraded

**0.9km**  
Wastewater pipes upgraded

**3**  
WWTP upgrades



## FUNDING

**\$16.5m**  
Government spend to date

**\$5.7m**  
Co-funded spend to date

**\$22.2m**  
Total project spend to date

**\$40.4m**  
Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**86.6**  
96% to projected

Growth this quarter:  
**25.1**

Projected:  
**90**

FTE this quarter  
**47.1**



Sweetwater Bore - New water source project in Kaitia

\* FTE refers to number of jobs that are equivalent to full time employment.  
COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





# WAIKATO



## INFRASTRUCTURE TYPE

**3.6km**  
Wastewater pipes upgraded

**4**  
Sludge removal from ponds

**18.6km**  
Potable water mains / pipes upgraded

**901**  
Water meters installed

**58%**  
Strategy Study or report



## FUNDING

**\$43.1m**  
Government spend to date

**\$2.1m**  
Co-funded spend to date

**\$45.2m**  
Total spend to date

**\$73.5m**  
Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**143.8**  
48% to projected

Growth this quarter:  
**20.8**

Projected:  
**296.9**

FTE this quarter  
**109.2**



Morrinsville WTP upgrade



SWDC WWTP Dentrification Plant

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





# BAY OF PLENTY



## INFRASTRUCTURE TYPE

**11.5km**

Wastewater pipes upgraded

**9**

WWTP upgrades

**1**

WTP upgrades

**0.5km**

Stormwater pipes upgraded

**15.3km**

Potable water mains / pipes upgraded



## FUNDING

**\$24.2m**

Government spend to date

**\$0.5m**

Co-funded spend to date

**\$24.8m**

Total spend to date

**\$47.9m**

Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**153.6**  
115% to projected

Growth this quarter:  
**82.3**

Projected:  
**134.0**

FTE this quarter  
**148.1**



Opotiki District Water Mains extension



WBOP Te Rereatukahia end of Cased Road Crossing

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





## INFRASTRUCTURE TYPE

**6**  
WWTP upgrades

**4.2km**  
Potable water mains / pipes upgraded

**7.0km**  
Wastewater pipes upgraded

**55%**  
WTP Upgrades



## FUNDING

**\$38.9m**  
Government spend to date

**\$26.8m**  
Co-funded spend to date

**\$65.7m**  
Total spend to date

**\$111.0m**  
Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**103.1**  
49% to projected

Growth this quarter:  
**21.5**

Projected:  
**211**

FTE this quarter  
**103.1**



WWTP Clarifier Pump Station



WWTP Lamella Clarifier base pad

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.



# TARANAKI



Te Kaunihera-ā-Rohe o Ngāmotu

**New Plymouth  
District Council**



Te Kaunihera o Taranaki ki Te Tonga  
**South Taranaki  
District Council**



TE KAUNIHERA Ā ROHE O  
**WHAKAAHURANGI  
STRATFORD  
DISTRICT COUNCIL**



## INFRASTRUCTURE TYPE

**9.0km**

Drinking  
Water pipes  
upgraded

**2**

Waste pump  
station upgrades

**In Progress**

Stormwater  
pipes  
upgraded

**In Progress**

Bore  
upgrades

**2**

WWTP  
upgrades



## FUNDING

**\$8.6m**

Government  
spend to date

**\$0.1m**

Co-funded  
spend to date

**\$8.8m**

Total  
spend to date

**\$22.0m**

Total projected  
spend



## LOCAL WORKERS FTE\*

Progress  
to projected:  
**42.2**  
62% to projected

Growth  
this quarter:  
**3.0**

Projected:  
**68**

FTE this quarter  
**42.2**



Waiwaka Terrace stormwater culvert liner



Waiwaka Terrace stormwater culvert liner

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





# MANAWATŪ-WHANGANUI



## INFRASTRUCTURE TYPE

**11.2km**

Wastewater pipes upgraded

**12**

WWTP upgrades\*

**5**

WTP upgrades

**0.2km**

Stormwater pipes upgraded

**10.1km**

Drinking water pipes upgraded



## FUNDING

**\$22.4m**

Government spend to date

**\$0.4m**

Co-funded spend to date

**\$22.9m**

Total spend to date

**\$48.4m**

Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:

**92.5**

62% to projected

Growth this quarter:

**-**

Projected:

**148.4**

FTE this quarter

**72.4**



Dam Floor Tararua



Irrigation units for Feilding wastewater plant - Manawatu

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.

# Incorrectly reported in previous quarter



# WELLINGTON

Absolutely Positively  
**Wellington City Council**  
Me Heke Ki Pōneke

**Greater Wellington**  
Te Pane Matua Taiao

**Te Kaunihera o  
Te Awa Kairangi ki Uta  
Upper Hutt City Council**

**Kāpiti Coast  
DISTRICT COUNCIL**  
He Kaitiaki Māori, He Kaitiaki Māori

**SOUTH WAIRARAPA  
DISTRICT COUNCIL**  
Kia Reretahi Tātau

**HUTT CITY**  
TE AWA KAIRANGI

**MASTERTON  
DISTRICT COUNCIL**  
Te Kaitiaki Māori, He Kaitiaki Māori

**CARTERTON  
DISTRICT COUNCIL**



## INFRASTRUCTURE TYPE

**1**  
WTP  
upgrades

**5km**  
Capital  
renewals

**9.4km**  
Asset  
condition  
assessments

**14.0km**  
Maintenance  
(all waters)

**48%**  
Data and  
technology  
projects



## FUNDING

**\$42.2m**  
Government  
spend to date

**\$0.6m**  
Co-funded  
spend to date

**\$42.8m**  
Total  
spend to date

**\$75.0m**  
Total projected  
spend



## LOCAL WORKERS FTE\*

Progress  
to projected:  
**230.2**  
140% to projected

Growth  
this quarter:  
**69.9**

Projected:  
**164.7**

FTE this quarter  
**223.8**



Ngauranga Reservoir roof resurfacing

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





### INFRASTRUCTURE TYPE

**2.7km**

Drinking water pipes upgraded

**1**

Waste pump station upgrades

**5.4km**

Wastewater pipes upgraded

**In Progress**  
WTP upgrades



### FUNDING

**\$20.1m**

Government spend to date

**\$4.1m**

Co-funded spend to date

**\$24.2m**

Total spend to date

**\$40.1m**

Total projected spend



### LOCAL WORKERS FTE\*

Progress to projected:  
**90**  
70% to projected

Growth this quarter:  
**-**

Projected:  
**128.6**

FTE this quarter  
**76.1**



CCTV investigations in Blenheim



Wastewater pump station in Motueka

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





# WEST COAST



## INFRASTRUCTURE TYPE

**13.0km**  
Drinking water pipes upgraded

**1,900m<sup>3</sup>**  
Treated water storage

**19.5km**  
Wastewater pipe inspections

**2.0km**  
Wastewater pipes upgraded

**5**  
WTP upgrades



## FUNDING

**\$10.6m**  
Government spend to date

**\$2.4m**  
Co-funded spend to date

**\$13.0m**  
Total spend to date

**\$18.8m**  
Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**78.1**  
163% to projected

Growth this quarter:  
**-**

Projected:  
**48**

FTE this quarter  
**30.7**



Haast WTP after rock work



Hokotika Blue Spur Res concrete pour

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.



# CANTERBURY

Christchurch  
City Council



Waimate  
District Council



WAIMAKARIRI  
DISTRICT COUNCIL

TIMARU  
DISTRICT COUNCIL

chatham islands council

Ashburton  
DISTRICT COUNCIL

HURUNUI  
District Council



Selwyn  
DISTRICT COUNCIL



KAIKŌURA  
DISTRICT COUNCIL



## INFRASTRUCTURE TYPE

**51.7km**  
Wastewater  
pipes  
upgraded

**108.3km**  
Drinking  
water pipes  
upgraded

**4**  
WTP  
upgrades

**291**  
Waste pump  
station  
upgrades

**213**  
Water meters  
installed



## FUNDING

**\$70.3m**  
Government  
spend to date

**\$12.9m**  
Co-funded  
spend to date

**\$83.2m**  
Total  
spend to date

**\$130.3m**  
Total projected  
spend



## LOCAL WORKERS FTE\*

Progress  
to projected:  
**471.8**  
122% to projected

Growth  
this quarter:  
**-**

Projected:  
**387.6**

FTE this quarter  
**423.6**



Geobags Twizel desludging



Preparation for desludging at Kaikoura Wastewater Ponds

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.





# OTAGO



## INFRASTRUCTURE TYPE

**19.9km**

Drinking water pipes upgraded

**13**

WTP upgrades

**In Progress**  
WWTP upgrade

**In Progress**  
Treated water storage

**3.5km**

Wastewater pipes upgraded



## FUNDING

**\$24.3m**

Government spend to date

**\$5.7m**

Co-funded spend to date

**\$30.0m**

Total spend to date

**\$53.3m**

Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**103.9**  
65% to projected

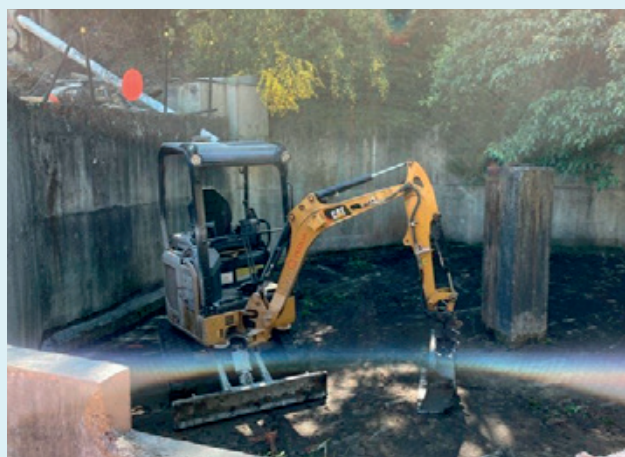
Growth this quarter:  
**-**

Projected:  
**160**

FTE this quarter  
**86.1**



Alexandra Northern Reservoir



QLDC

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.



# SOUTHLAND



## INFRASTRUCTURE TYPE

**14.4km**

Drinking water pipes upgraded

**2.0km**

Wastewater pipes upgraded

**2**

WWT Plant upgrades

**34.9km**

Wastewater pipe inspections

**0.7km**

Stormwater pipes upgraded



## FUNDING

**\$15.5m**

Government spend to date

**\$0.0m**

Co-funded spend to date

**\$15.5m**

Total spend to date

**\$23.0m**

Total projected spend



## LOCAL WORKERS FTE\*

Progress to projected:  
**55**  
63% to projected

Growth this quarter:  
**-**

Projected:  
**88**

FTE this quarter  
**32.5**



Invercargill Bore



Invercargill Braxholme main renewal

\* FTE refers to number of jobs that are equivalent to full time employment. COVID Level 3 and 4 restrictions over this quarter have had an impact on FTE numbers.



# 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 wastewater 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.