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New Zealand Government

Te Kāwanatanga o Aotearoa



**CROWN
INFRASTRUCTURE**
PARTNERS | HANGA NGĀTAHI

RURAL DRINKING WATER

30 JUNE 2024



RURAL DRINKING WATER OVERVIEW

CROWN INFRASTRUCTURE PARTNERS (CIP) WAS APPOINTED BY THE GOVERNMENT TO WORK WITH THE DEPARTMENT OF INTERNAL AFFAIRS (DIA) TO DELIVER A \$30M RURAL DRINKING WATER PROGRAMME.

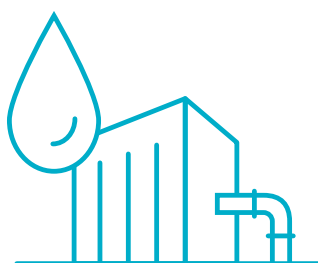
This programme primarily supports providing safe, affordable, and reliable rural drinking water to marae, Te Kōhanga, and Papakāinga, and other rural communities that are in areas of high deprivation and connected to council drinking water supply.

After a successful pilot phase in 2022, the Rural Drinking Water programme is now underway across the motu. It continues to provide treatment systems alongside training and maintenance to provide safe drinking water and also meet new regulatory requirements from Taumata Arowai. The sites have a range of water sources, including lakes, streams, rivers, springs, and roofs. Very few had any form of water treatment though, meaning communities are drinking untreated and possibly unsafe water.

The programme also equips local communities with the necessary knowledge to maintain and operate the treatment plants themselves. Following installation, all equipment will be owned by the rural drinking water supplier.

CIP delivered six initial sites in the pilot programme in partnership with Filtec who will also deliver the full programme. Filtec completed 51 new water treatment plants for communities by the end of FY24.

OUR TARGETS



INSTALLATIONS

~90



**GOVERNMENT
FUNDING**

\$30.0m



**INSTALLATION
SATISFACTION**

80%

QUARTER HIGHLIGHTS



INVESTIGATED

1



INSTALLATIONS

21



COMMISSIONED

20



GOVERNMENT
FUNDING*

\$6.0m

OVERALL PROGRESS



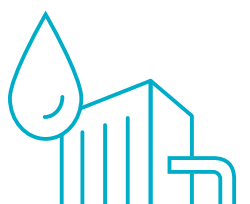
REGISTERED

216



INVESTIGATED

110



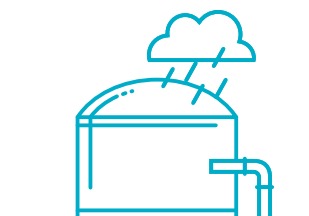
INSTALLATIONS

51



COMMISSIONED

46



TANKS INSTALLED

82



GOVERNMENT
FUNDING INVESTED*

\$12.4m



INSTALLATION
SATISFACTION

83%

SITE WATER SOURCE

PROGRESS TO DATE



DAM OR LAKE
INVESTIGATED: 5
INSTALLED: 3



RIVER OR STREAM
INVESTIGATED: 42
INSTALLED: 19



BORE SUPPLY
INVESTIGATED: 28
INSTALLED: 13



SPRING
INVESTIGATED: 22
INSTALLED: 11



ROOF WATER
INVESTIGATED: 6
INSTALLED: 2



OTHERS
INVESTIGATED: 7
INSTALLED: 3

WATER TREATMENT

PLANT SIZE

	INSTALLATIONS
25 cubic metres per day	5
50 cubic metres per day	32
100 cubic metres or more per day	14
TOTAL	51

RURAL DRINKING WATER CASE STUDIES

TE HIKU O TE IKA

TE HIKU O TE IKA, THE NORTHERNMOST MARAE IN THE COUNTRY, IS A MEETING PLACE FOR THE TE HĀPUA COMMUNITY AND THE IWI OF NGĀTI KURĪ. THE MARAE'S PRIMARY WATER SOURCE HAS BEEN RAINWATER, ASSISTED BY TANKERED WATER DELIVERIES IN TIMES OF LOW RAINFALL AND FOR ANY EVENTS HELD AT THE MARAE. WITH A ROUND TRIP FOR EACH LOAD OF 200KM TO KAITAIA, NOT ONLY WAS THIS COSTLY BUT ALSO UNSUSTAINABLE.

After registration with the Rural Drinking Water Programme the marae took the initiative and drilled a bore to solve their water shortage issues, however testing showed that there were very high levels of iron and silica in the water producing a blood-like taste (iron). These could not be removed by a standard Water Treatment Plant, so CIP's contractors Filtec designed a bespoke treatment plant for the marae and its community.

As the plant is close to the coast, the design of the treatment plant also enables it to be easily shifted up to a hill site

in the event of coastal erosion and inundation. The water treatment plant was installed in April 2024, and the marae and surrounding community now have a safe, reliable source of drinking water, and are pleased with the outcome.

"It means so much to us, we have been in water poverty for many years, and now we are proud to awhi our hāpori (community) and be in a state of resilience. Without the treatment plant to clean the water that comes out of the bore when we run out (of rainwater) we wouldn't have drinkable water'.



RURAL DRINKING WATER CASE STUDIES

WAIOHIKI MARAE

WAIOHIKI MARAE SITS ON THE OUTSKIRTS OF NAPIER BESIDE THE TŪTAIKURĪ RIVER AND IS THE HOME OF NGĀTI PARAU. IT CONTAINS A KŌHANGA REO AND IS THE COMMUNITY HUB FOR THE MANY PAPAKAINGA SURROUNDING IT. DURING CYCLONE GABRIELLE THE MARAE WAS INUNDATED BY THE TŪTAIKURĪ WHICH SENT A WAVE OF WATER THROUGH THE COMMUNITY, PAPAKAINGA AND THE KŌHANGA REO AT THE BASE OF THE MARAE GROUNDS.

While their wharenui (meeting house) was spared by a matter of centimetres, their source of water – their bore – was ripped out of the ground by the force of the water, and along with it their existing but outdated water treatment plant. In the months afterward the bore was replaced by the marae, and following that, CIP along with their contractors Filtec designed and installed a new water treatment plant which now serves the marae and in time will serve the kōhanga reo when re-built.

In order to future proof the marae in case of future weather events, the treatment plant was relocated by Filtec behind the wharenui beside their water storage tanks and will work in conjunction with their fire system. It will soon be connected to their new whare kai (kitchens and dining room) so that all who visit not only for gatherings but also in emergencies where the marae used as a hub will have safe drinking water.

These marae are just two examples of the treatment plants CIP has installed, making a difference not only in the Far North and in Hawkes Bay, but around Aotearoa.

