

Programme Update #5 May-June 2019

Key capital projects in #thebigwaterstory

-  Otane Alternative Drinking Water Supply
-  Otane Wastewater Treatment Plant Upgrade
-  Waipukurau and Waipawa Wastewater Treatment Plant Upgrades
-  Waipawa Sewer Trunk Main Renewal
-  Waipukurau 2nd Drinking Water Supply
-  Takapau Wastewater Treatment Plant Upgrade
-  Takapau Drinking Water Treatment Improvement



-  Porangahau Drinking Water Treatment Improvement
-  Porangahau Wastewater Treatment Plant Upgrades
-  Te Paerahi Wastewater Treatment Plant Upgrades

There are many other smaller projects within the 10 year budget which will improve firefighting capability improvements, water reticulation resilience, water renewals and stormwater improvements.

Total budget on 3 Waters

Capital projects for next 10 years

Water.....	\$21m
Wastewater.....	\$8m
Stormwater.....	\$3m
Total.....	\$32m



15km of pipe to be laid

Otane Alternative Water Supply
approximately 5kms

Waipukurau 2nd Water Supply
approximately 10kms



Expected Growth in CHB

10 years: 535 households

30 years: 1025 households



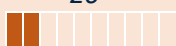



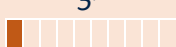

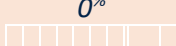




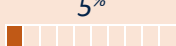



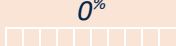

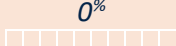

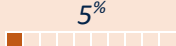

Planned Improvements



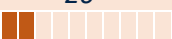





-  6 WASTEWATER TREATMENT PLANTS TO BE UPGRADED
-  5-6 DRINKING WATER TREATMENT IMPROVEMENTS
-  MANY FIREFIGHTING IMPROVEMENTS
-  2 SECOND OR ALTERNATIVE WATER SUPPLIES

PROGRAMME UPDATE

Updated: 30 June 2019

WATER						
PROJECT	STATUS	TIMELINE		PROGRESS	BUDGET	RISK LEVEL
		START	END		TOTAL	
Otane Alternate Water Supply	Build	Aug 2018	June 2020	20% 	\$2.6m	
Waipukurau 2nd Water Supply	Design	Aug 2018	June 2021	10% 	\$5.6m	
Waipukurau SH2 Bore Upgrade	Contract Negotiations	June 2018	Dec 2019	20% 	\$850k	
Waipukurau Firefighting and Shortfalls Improvements (Year 1-3)	Build	Aug 2018	June 2021	20% 	\$1.47m	
Otane Land Development (Water and Wastewater)	Complete	March 2018	Dec 2018	100% 	\$355k	
Waipukurau – Porritt Place Water Main Renewal	Complete	Dec 2018	Mar 2019	100% 	\$65k	
Porangahau Water Treatment Plant Upgrade	Build	Nov 2018	Oct 2019	30% 	\$1.03m	
Takapau Water Treatment Plant Upgrade	Build	Nov 2018	Oct 2019	30% 	\$680k	
Waipukurau – Mackie / Mclean St Water Main Renewal	Build	Nov 2018	Aug 2019	80% 	\$391k	

WASTEWATER						
PROJECT	STATUS	TIMELINE		PROGRESS	BUDGET	RISK LEVEL
		START	END		TOTAL	
Waipawa Trunk Sewer Main Renewal	Engagement & Build	Aug 2018	June 2020	20% 	\$1.77m	
CHB Wastewater Treatment Plants Project (Phase 1)	Engagement & Court Report	June 2018	June 2019	90% 	\$300k To June 2019	
CHB Wastewater Treatment Plants Project (Phase 2 – Improvements, Design & Consent)	Investigation	July 2019	Dec 2020	5% 	\$1.8m	
CHB Wastewater Treatment Plants Project (Phase 3 - Build)	Not Started	Jan 2021	TBC	0% 	TBC	
Otane Wastewater Infiltration and Inflow Study	Build	Jan 2019	June 2019	30% 	\$80k	
Otane Wastewater Treatment Plant Upgrade	Investigation	Apr 2018	Mar 2021	40% 	\$1.47m	
Otane to Waipawa Wastewater Pipeline	Design	June 2019	Mar 2021	5% 	TBC	
Takapau Wastewater Resource Consent Extension	Part 1 - complete	Aug 2018	June 2021	50% 	\$100k	
Takapau Wastewater Treatment Plant Upgrade	Not Started	2021	TBC	0% 	\$831k	
Porangahau/ Te-Paerahi Wastewater Treatment Plant Upgrade	Not Started	2019	2022	0% 	\$1.85m	
CHB Floating Wetlands Review	Investigations	April 2019	TBC	5% 	TBC	

STORMWATER						
PROJECT	STATUS	TIMELINE		PROGRESS	BUDGET	RISK LEVEL
		START	END		TOTAL	
Waipukurau Stormwater Improvements - Service Lane Overflow	Design	Aug 2018	June 2019	20% 	\$132k	
Waipukurau Stormwater Improvements - Savage/ Churchill/ Carpenter - Woburn/ Wilder	Build	Aug 2018	June 2019	20% 	\$481k	
Waipukurau Stormwater Helicoil Upgrades - Jellicoe to Tavistock	Build	Aug 2018	Aug 2019	40% 	\$219k	
Waipukurau Stormwater Helicoil Upgrades - Francis Drake Street	Build	Aug 2018	Aug 2019	70% 	\$280k	

PROGRAMME OVERVIEW

May and June 2019, has seen further progression of projects through their lifecycles and near physical construction. We expect the next few months will continue this trend and up to 10 projects may be underway across the district by August 2019.

Some key milestones and focus items over the last two months;

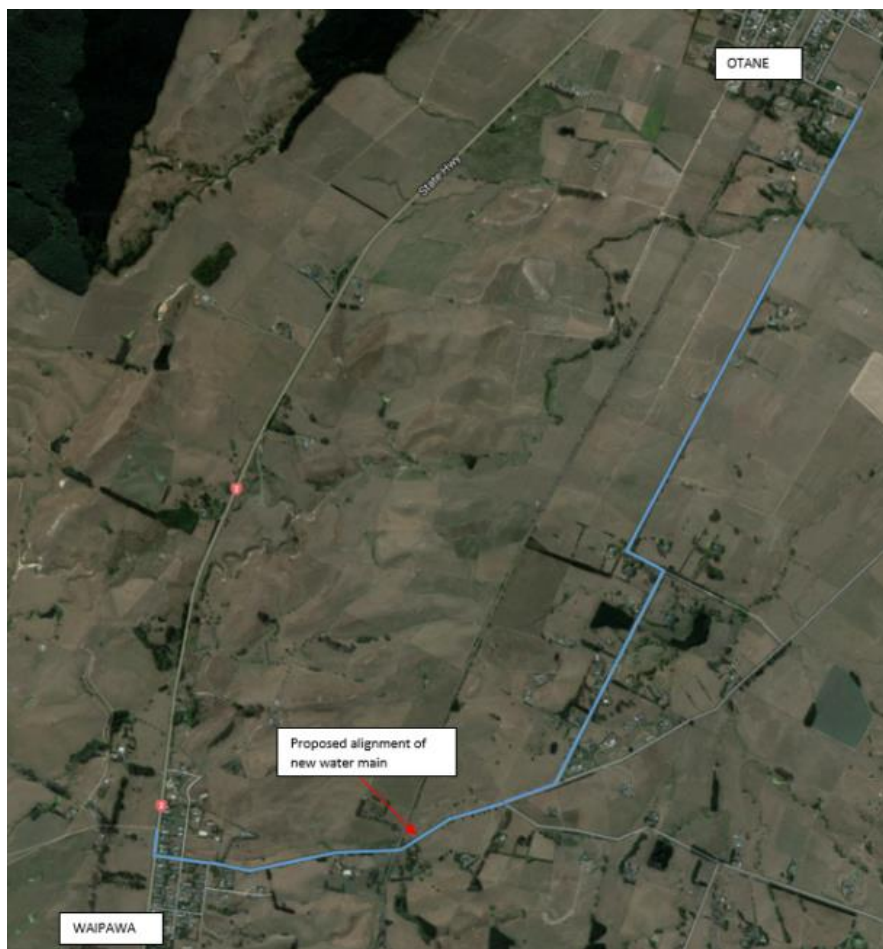
- **Physical construction planned or underway for;**
 - o Mackie St and McLean Tce, Waipukurau - Water Renewal
 - o Francis Drake and Jellicoe St, Waipukurau – Stormwater Helicoil Replacement
 - o Otane Alternate Water Supply
 - o Waipukurau Stormwater Improvements
 - o Porangahau and Takapau water treatment plant upgrades
 - o Otane I&I Study
- **Contract Negotiations are underway for;**
 - o Waipukurau Water Firefighting
 - o Waipukurau Water SH2 Borefield Upgrade
- **Engagement underway for;**
 - o Waipawa Trunk Sewer Main Renewal



PROJECT UPDATES

PROJECT: Otane Alternate Water Supply Project

STATUS	BUILD	
TIMELINE	Aug 2018 START DATE	JUNE 2020 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$2.6m TOTAL PROJECT	\$ 141k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

To install a 150-200mm PE pipeline approx. 5.2km from Sh2/ Racecourse Road intersection into new network at the intersection of Knorp Street and White Road.

ACHIEVEMENTS

Awarded the contract to Fulton Hogan Ltd to deliver the water pipeline by the end of 2019.

PLANNED

Works to commence w/s 8 July 2019 with site establishment, potholing, traffic management setup all to take place first prior to pipe being laid.

Construction to take place along Racecourse Road, SH2 and White Road as per the overview. Finalise wastewater pipeline design and specifications to allow contractor to price the additional work.

RISKS

There are some unknown risks on this project, namely around construction;

- Wastewater pipeline
- Location of existing services
- Crossing Kiwirail railway crossing on Racecourse road
- Working the plan to deliver the physical works with a contractor over our 2 year budget

PROJECT: Waipukurau Second Water Supply

STATUS	DESIGN & BUILD	
TIMELINE	AUG 2018 START DATE	JUNE 2021 END DATE
PROGRESS	10%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$5.6m TOTAL PROJECT	\$169k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

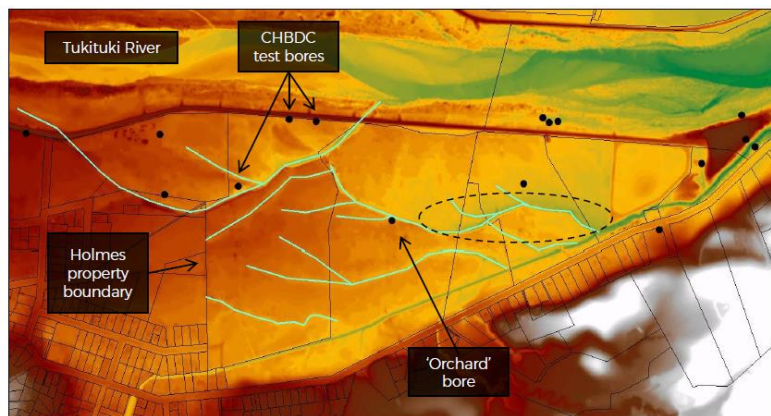


Figure 2.4: Current day bore locations and property boundaries overlain on LiDAR, with mapped paleochannels.

SCOPE

To find and construct a new water source bore, pipe a rising main to a reservoir, provide treatment and gravity feed back into Waipukurau to supply a second water supply to the town.

ACHIEVEMENTS

Drilled exploratory bores #1,2 and 3 in Waipukurau - no sufficient water found.

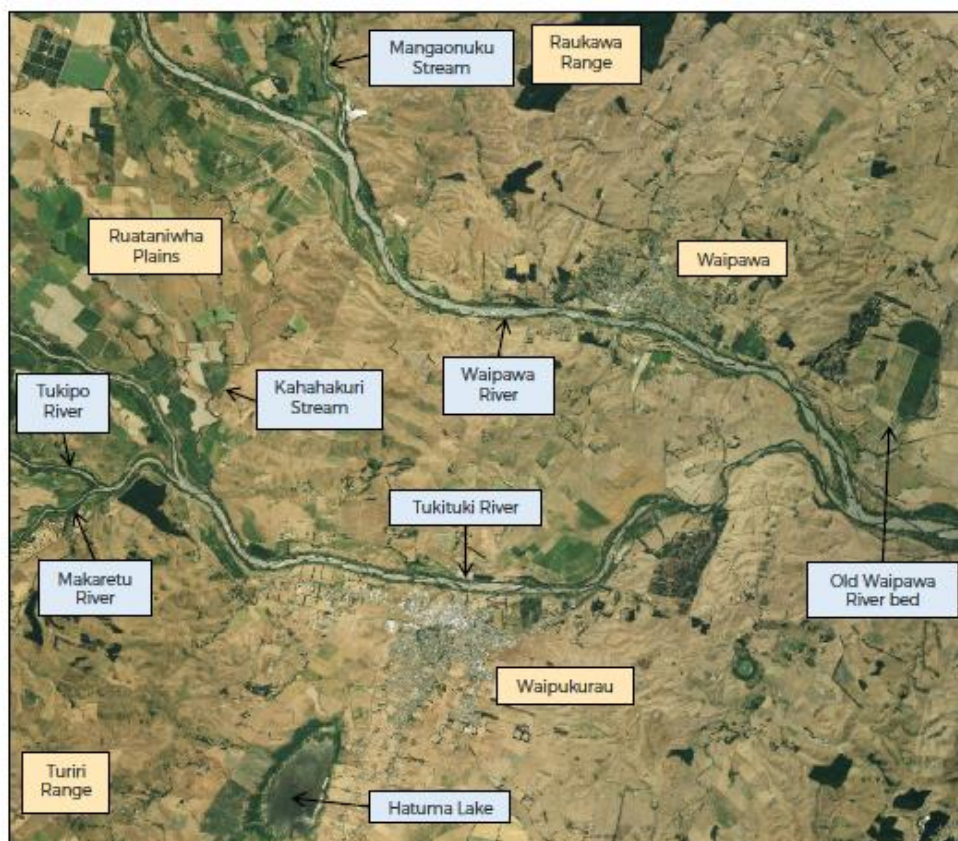
Completed a water source assessment across deepwater, groundwater and surface water sources.

Tested surrounding bores for quantity and found to be accurately linked to bore logs.

PLANNED

Complete Options Assessment, and prepare a multi-criteria analysis on options to take forward.

Prepare RFx documents, and take to market a package to find a partner to design and develop the solution.

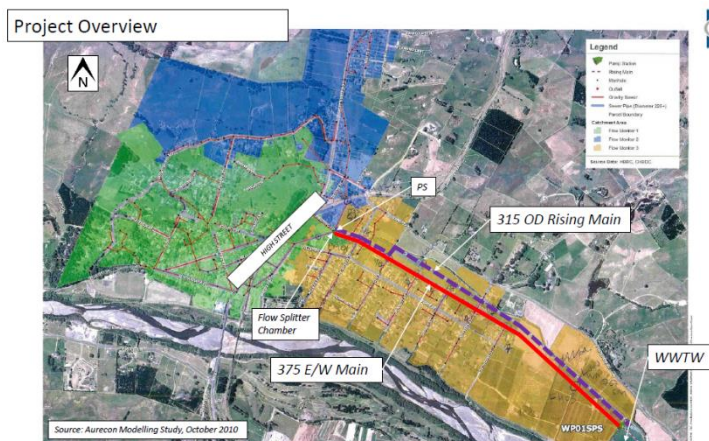


RISKS

- Power Supply to bore site
- Approval for reservoir site/ Timeframes to build reservoirs
- Water quality and flow from test bores

PROJECT: Waipawa Trunk Sewer Main Renewal

STATUS	ENGAGEMENT & BUILD	
TIMELINE	AUG 2018 START DATE	JUNE 2020 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$1.7m TOTAL PROJECT	\$171k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

To renew approx. 2200m of 375mm glazed earthenware pipe that is known to have poor leaking joints and allows a great deal of infiltration into the pipework through tree root intrusion and cracks along the pipeline.

ACHIEVEMENTS

Awarded contract to Pipeworks Ltd to reline 95% of the pipeline, Higgins Ltd will be the subcontractor to assist with civil works and the pump station upgrade.

Letters dropped to all affected landowners.

Discussion ongoing regarding upgrading pump station with affected landowner, and easement required for transformer/ power supply and access a separate discussion with a separate landowner.

PLANNED

Continue extensive stakeholder engagement with the stakeholders that may be affected by the renewal works. Implemented mapping tool for stakeholder management – map below.

Revised plan for works to commence in September 2019 – subject to approval from stakeholders.

RISKS

Some early risk identified within this project;

- Unknown current condition (structure) of the pipeline
- Lack of easement over the pipeline
- Key Stakeholders



PROJECT: Waipukurau SH2 Drinking Water Bore Upgrade

STATUS	CONTRACT NEGOTIATIONS	
TIMELINE	AUG 2018 START DATE	JUNE 2019 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$850k TOTAL PROJECT	\$234k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

To upgrade the bores and electrical configuration at the SH2 water borefield source that supplies Pukeora reservoir and Waipukurau. The scope involves upgrading and refurbishing 3 bores, pipework configuration, the electrical components, transformer, fencing and a tank for surplus water.

Additional components are to install flow and turbidity meters to contribute towards drinking water standard New Zealand (DWSNZ) compliance.

ACHIEVEMENTS

Casing assessments completed on Bore A and B. Pump A to be recommissioned w/s 8 July 2019,

Tender recommendation approved, resource consent lodged and approved to drill two new bores if required.

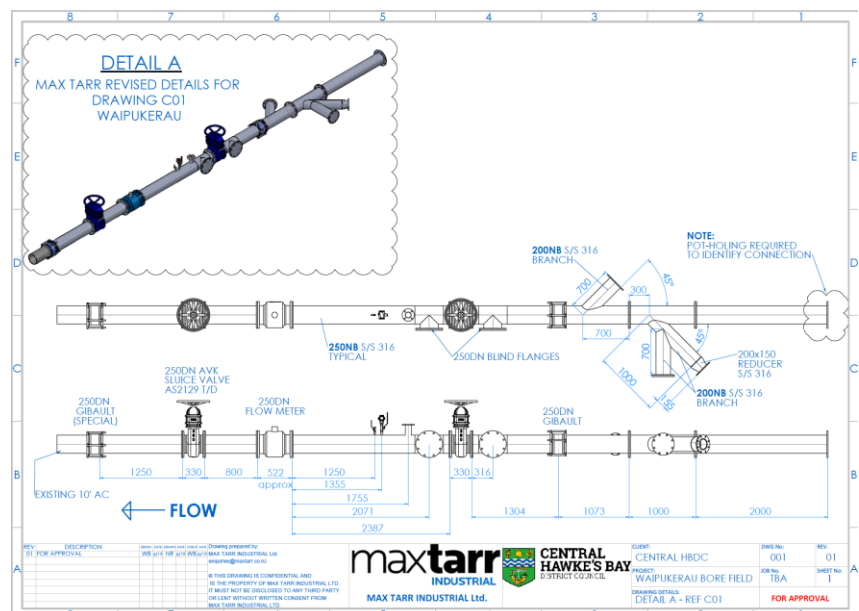
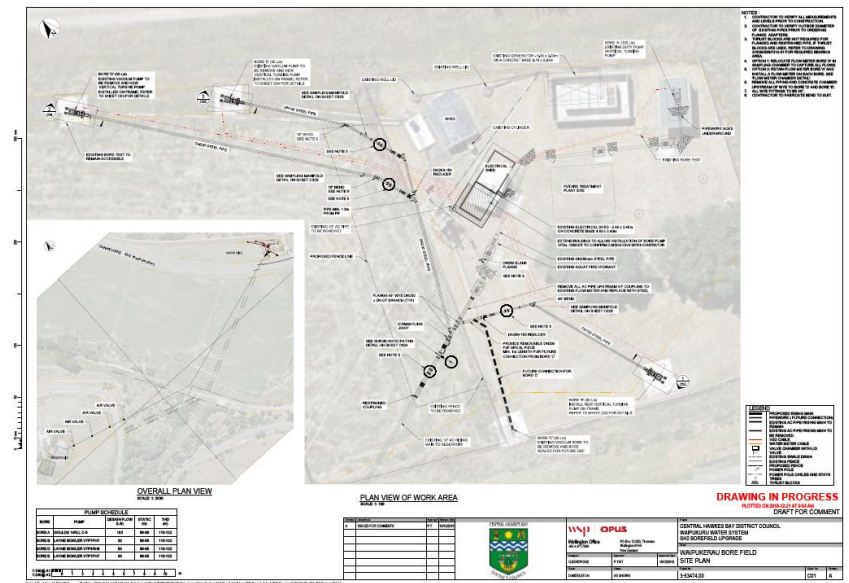
PLANNED

Undertake Casing assessments of Bore D, E prior to ordering of pumps to ascertain the integrity of the structures, plan to also take a sample of the AC rising main, to understand rating and class of main and how it will fare with upgrades.

RISKS

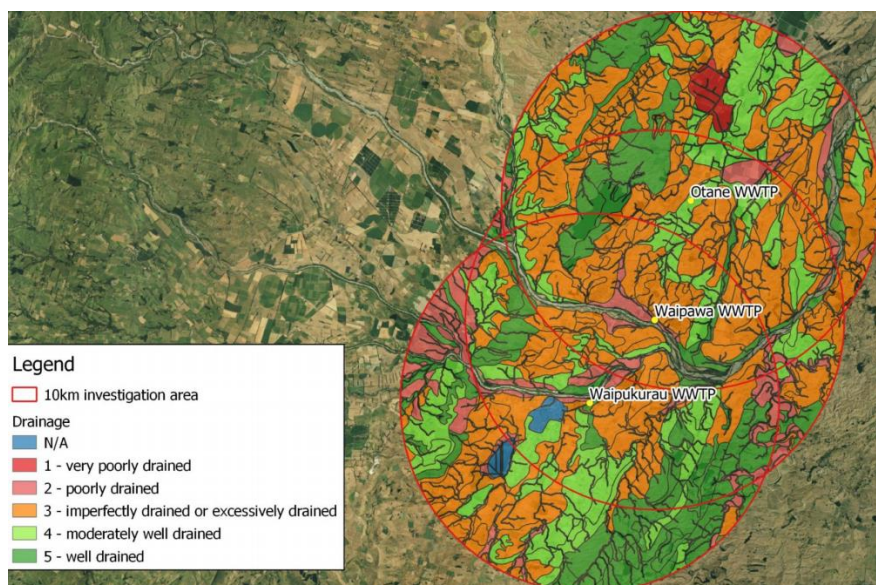
Some early risk identified within this project;

- Budget
- Timing of equipment
- Existing bore structure
- Performance of Pump A



PROJECT: CHB Wastewater Treatment Plants Upgrade (Phase 1)

STATUS	CONSULTATION	
TIMELINE	JUNE 2018 START DATE	TBC END DATE
PROGRESS	90%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	TBC TOTAL PROJECT	\$299k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

Phase 1 : To work with the community to set criteria and work towards a preferred solution or Best Practicable Option (BPO) for the future of Waipukurau, Waipawa and recently the introduction of Otane into the project scope.

Phase 2: To design, consent and fund the future works

Phase 3: To build and upgrade the plant(s)

ACHIEVEMENTS

Presented report and key points to HBRC in June 2019, prepared to release report to the environment court, requested a 2 month delay by HBRC.

Floating wetlands and leachate evaluated to be undertaken as minor improvements.

PLANNED

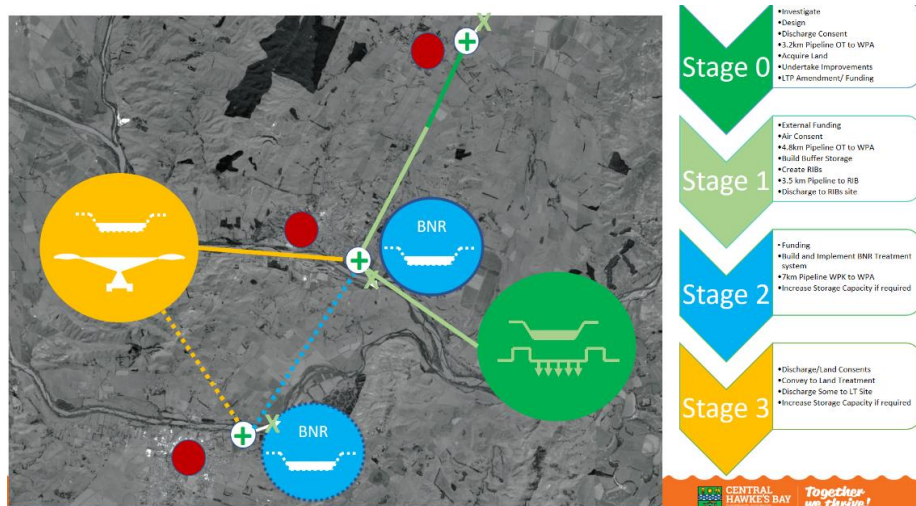
Environment court report to be issued to HBRC and the env court in August 2019.

Minor improvement on plants to improve performance longer term, consenting strategy and the approach to consenting the amendments and new plants.

Funding and finance progression of external options.

RISKS

- Funding
- HBRC council expectations



PROJECT: Otane Wastewater (I&I Study)

STATUS	BUILD	
TIMELINE	JUNE 2019 START DATE	SEPT 2019 END DATE
PROGRESS	30%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$80k TOTAL PROJECT	\$26k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

To undertake a study of infiltration and inflow into the network.

To minimise unnecessary flow in to the network and subsequently requiring treatment by the Oxidation pond.

ACHIEVEMENTS

Commenced study and completed

- 75% of visual inspections
- 25% of CCTV inspections

PLANNED

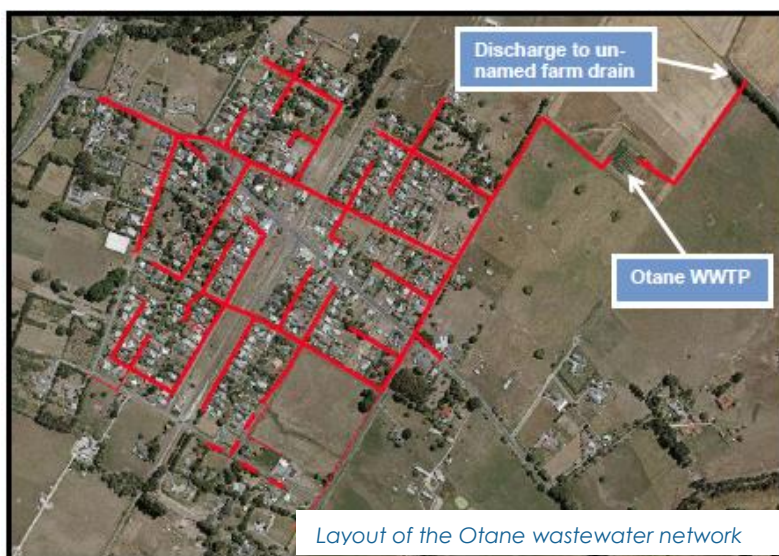
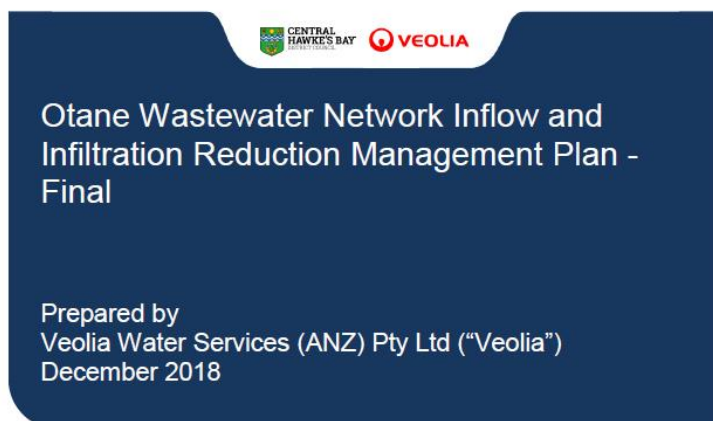
Continue the study to completion – sexpected end of August 2019.

Assess the findings of the study into the greater wastewater project, and undertake necessary repairs where required.

RISKS

Some early risk identified within this project;

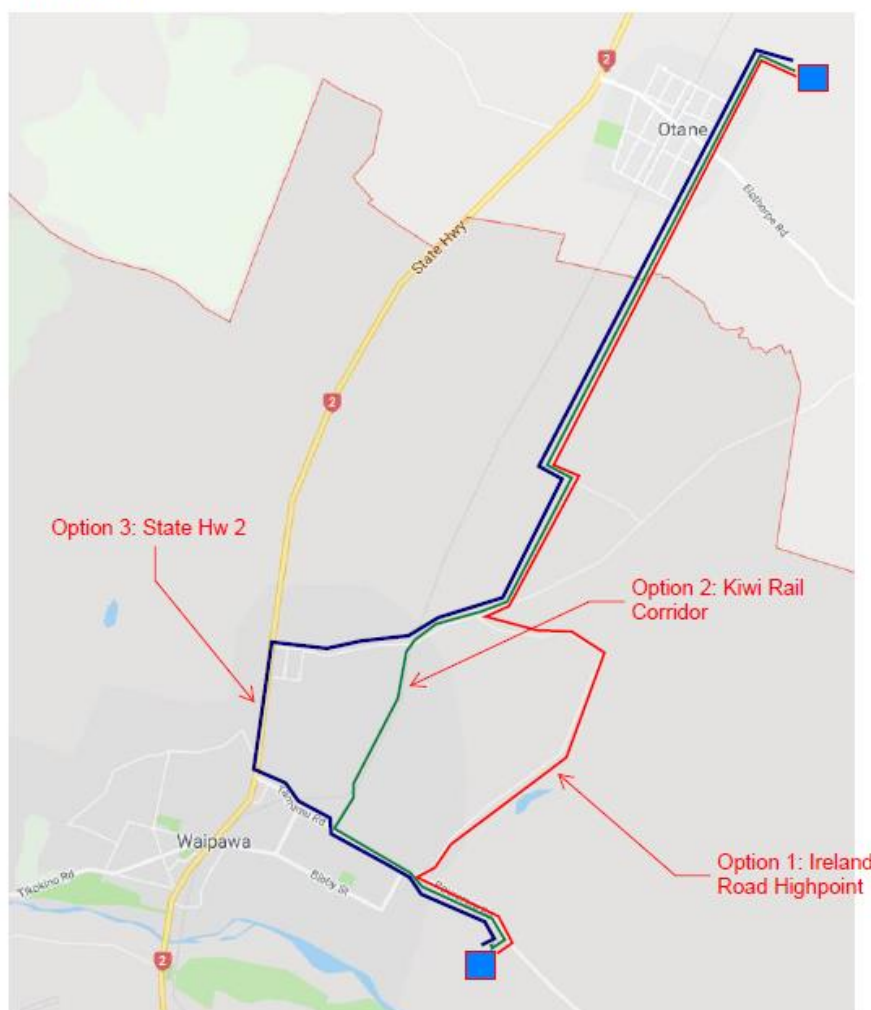
- I&I issues found and the subsequent works to rectify
- Findings



PROJECT: Otane Wastewater (Pipeline Otane to Waipawa)

STATUS	DESIGN	
TIMELINE	JUNE 2019 START DATE	TBC END DATE
PROGRESS	5%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$355k TOTAL PROJECT	\$290k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

Rising Main Routes:



SCOPE

To investigate and design a new wastewater pipeline to convey wastewater from Otane to Waipawa.

Include in the contractors scope of the Otane to Waipawa water pipeline.

ACHIEVEMENTS

Completed a multi criteria analysis to better understand the routes proposed and the benefits of each.

Early contractor engagement, and involvement in the project.

Discussions with landowners along preferred route.

Risk session developing risks and how the team will mitigate them.

PLANNED

Continued design, analysis of pump options and stations, completing an engineer's estimate and design drawings to allow our contractor to update pricing to complete in stages

RISKS

The following risks have been developed;

- Pipeline route affecting landowners
- Cost vs benefit of pipeline as treatment plant
- Early design prior to consenting
- New consents required
- Staging of works
- Multi stage approach (treated to WPA discharge, treated to WPA Plant, raw to WPA plant)

PROJECT: Waipukurau Stormwater Improvements

STATUS	BUILD	
TIMELINE	AUG 2018 START DATE	DEC 2019 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$613k TOTAL PROJECT	\$95k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

Waipukurau has had challenges with managing stormwater flows. This project will look to address this and alleviate flooding in streets, shops and houses during large rainfall events.

ACHIEVEMENTS

Highlighted three key sub-projects as part of these planned improvements at Woburn/ Wilder Rd (3), Churchill and Savage Cres (2) and in the Waipukurau CBD around the service lane (1*).

Awarded contract for Sections 2 and 3 to Fulton Hogan Ltd, works commencing in July 2019 to be completed by Dec 2019.

Easement obtained with landowner in Woburn Road.

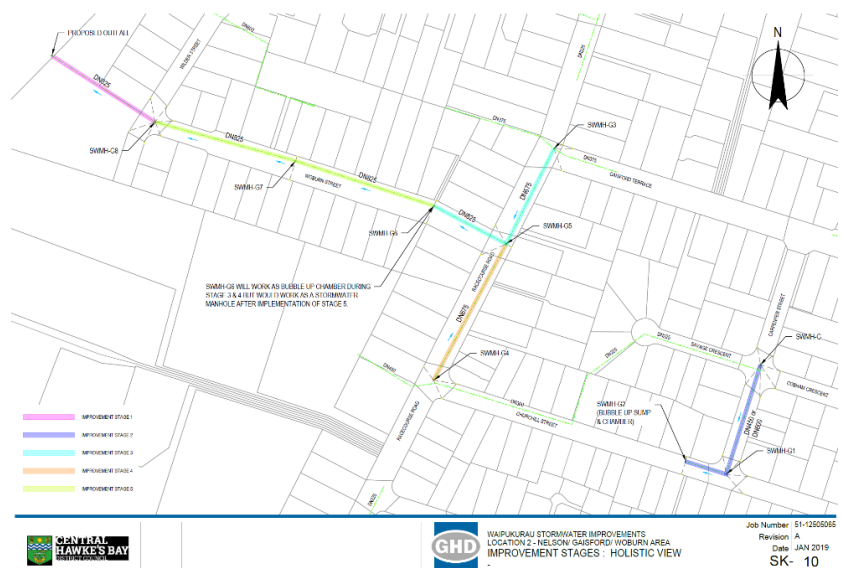
PLANNED

Development of design options for the CBD section, and look at alternative options to improve flows through the CBD.

RISKS

Some early risk identified within this project;

- Consequential effects redirecting stormwater flows
- Understanding rain events and levels of service we wish to achieve
- Community acceptance of stormwater designs and flow paths



Waipukurau stormwater improvement plan by stages



PROJECT: Waipukurau Stormwater Helicoil

STATUS	BUILD	
TIMELINE	AUGUST 2018 START DATE	AUGUST 2019 END DATE
PROGRESS	60%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$499k TOTAL PROJECT	\$95k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

The stormwater network within Waipukurau is suffering from failing Helicoil – aluminium ribbed pipeline corroding and creating voids within the road network. These projects are to replace the failing Helicoil network in 2 identified areas.

ACHIEVEMENTS

75 % of the project completed in Francis Drake Street as the failing Helicoil has been replaced by new concrete stormwater pipe, CCTV and ordering of the lining material for Francis Drake and Jellicoe / Tavistock is underway.

PLANNED

Lining works expected to take place in July and August 2019.

RISKS

Some early risk identified within this project;

- Pipeline through private property
- Suitable lining methods
- Weather delays



Installation of manholes on Francis Drake Street



Relocate of water main on Francis Drake Street

PROJECT: Takapau and Porangahau Water Treatment Upgrade

STATUS	DESIGN & BUILD	
TIMELINE	AUGUST 2018 START DATE	OCTOBER 2019 END DATE
PROGRESS	30%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$1.7m TOTAL PROJECT	\$314k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

To improve the water supply system in Takapau and Porangahau to remove iron and manganese, and hardness in Porangahau whilst ensuring we meet DWSNZ compliance. The project will also be looking to improve security of supply and storage whilst meeting the long-term needs and addressing the community concerns.

ACHIEVEMENTS

Design completed in early June 2019.

Land acquired adjacent to the Takapau WTP, building consents lodged for both plants. Designations lodged for Takapau.

Works commenced on site at Takapau WTP to prepare for foundations for containers.

Community engagement sessions held in May 2019.

PLANNED

Receive approved consents and designations to proceed with containers

Works progress on both sites – proactive community engagement on works and progress.

RISKS

Some early risk identified within this project;

- Time delays with equipment procurement
- Adverse weather conditions
- Delays with land and consents
- WW discharge at Porangahau

#the BIG Water Story

Please join us!

Takapau Water Treatment Plant Upgrade Community Drop in Meeting

We're holding an open evening to update the community on Takapau Water Treatment Plant Upgrade.

This is a great opportunity to come and learn more about what we are doing to respond to resident concerns, ask questions and to raise any other issues you may have.

Where: Takapau Town Hall
When: Monday 13th May 2019
Time: 6-8pm

Background
The Takapau water supply is taken from a deep bore (40 metres) located at the end of Mata St. Water is treated and pumped into the reticulation and into a 230m³ reservoir at the intersection of Sydney Street and SH 2.

Through #thebigwaterstory, Council heard your concerns regarding water quality and in particular, manganese and iron resulting in 'dirty' water.

The Contractor
Council is pleased to advise our new maintenance contractor Veolia ANZ Ltd are the head contractor and

#the BIG Water Story

Please join us!

Porangahau Water Treatment Plant Upgrade Community Drop in Meeting

We're holding an open evening to update the community on Porangahau Water Treatment Plant Upgrade.

This is a great opportunity to come and learn more about what we are doing to respond to resident concerns, ask questions and to raise any other issues you may have.

Where: Porangahau Hall
When: Monday 13th May 2019
Time: 2-4pm

Background
The Porangahau water supply includes the settlements of Te Pahi Beach and Porangahau Township. The source is groundwater taken from a shallow bore situated off Beach Road behind the Te Pahi Golf Club.

Through #thebigwaterstory, Council has heard your concerns regarding water quality and in particular, manganese and iron resulting in 'dirty' water, as well as hardness in the water supply.

The Contractor
Council is pleased to advise our new maintenance contractor Veolia ANZ Ltd are the head contractor and will be undertaking the design and construction work on behalf of Central Hawke's Bay District Council.

Project Milestones

Design to be completed:	end of May 2019
Construction to commence:	June 2019
Construction completed:	end of August 2019
Commissioning:	September 2019

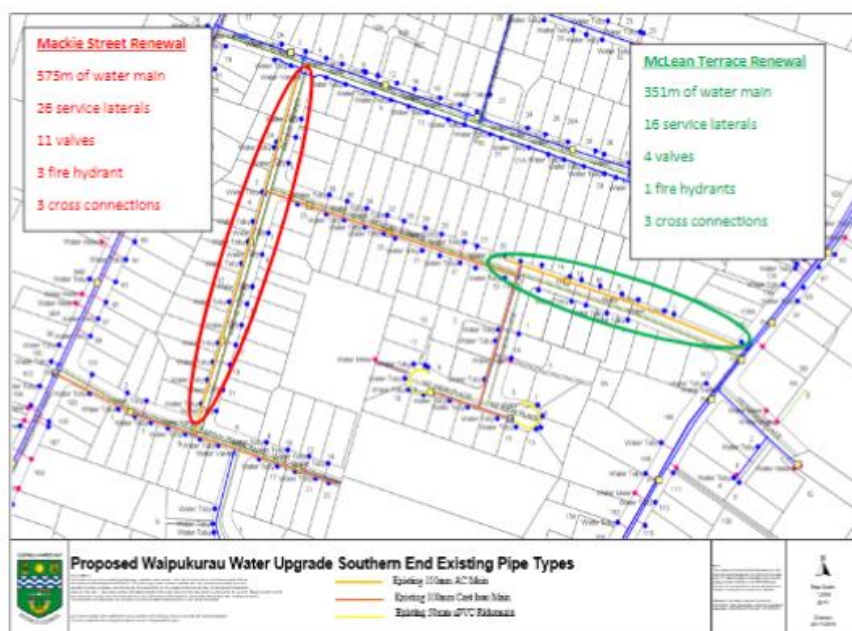
For further information visit our website www.chbdc.govt.nz

CENTRAL HAWKE'S BAY DISTRICT COUNCIL
www.chbdc.govt.nz PO Box 127 - 28 - 32 Ruatennui Street, Wairoa 4210
Register us Today! E: info@chbdc.govt.nz

CENTRAL HAWKE'S BAY DISTRICT COUNCIL

PROJECT: CHB Water Renewal – Mackie/ Mclean, Waipukurau

STATUS	BUILD	
TIMELINE	DEC 2018 START DATE	AUGUST 2019 END DATE
PROGRESS	80%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$391k TOTAL PROJECT	\$247k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	



SCOPE

To replace approx 926m of failing AC water main, and 42 laterals across two streets within Waipukurau as part of the FY18/19 water main renewals, this work was initiated due to ongoing issues raised by our operations and maintenance contractor through 2017 and 2018. Council continues to work on long term forward works plan for water renewals.

ACHIEVEMENTS

Contract awarded to Fulton Hogan Ltd for this work, to be completed by Aug 2019.

Works completed on Mackie Street – all commissioned. McLean Tce, pipe laid, and change over occurring.

Good progress made and performance of the contractor.

PLANNED

McLean Terrace cut ins, and change overs.

Reinstatement of all completed works, asbuilding.

RISKS

Risk identified within this project are;

- Unknown GIS
- Existing network integrity



PROJECT: Waipukurau Water Firefighting/ Pressure Improvements (Years 1-3)

STATUS	BUILD	
TIMELINE	DEC 2018 START DATE	JUNE 2021 END DATE
PROGRESS	20%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BUDGET	\$1.47m TOTAL PROJECT	\$154k SPEND TO DATE
RISK LEVEL	<div><div></div><div></div><div></div></div>	

SCOPE

Central Hawkes Bay District Council plans to create a 7 year works programme with the budget set aside in the 2018-28 long term plan, the programme will;

- Prioritise the upgrade works; and
- Prepare a work programme for the next 7 years.

Plan works for the Years 1 to 3 and review the improvements and effect on the network.

ACHIEVEMENTS

Completed development of a 7yr works programme. Finalised designs, specs and tender for Years 1 to 3.

Successfully tendered, and working through final contract negotiations

PLANNED

Engagement with affected properties and businesses, work with parks team for the Hunter Park section.

Works planned to commence on site 29 July 2019.

RISKS

Risk identified within this project are;

- Affected stakeholders, businesses
- Weather
- Unplanned findings
- Ground conditions

LOCALITY PLAN

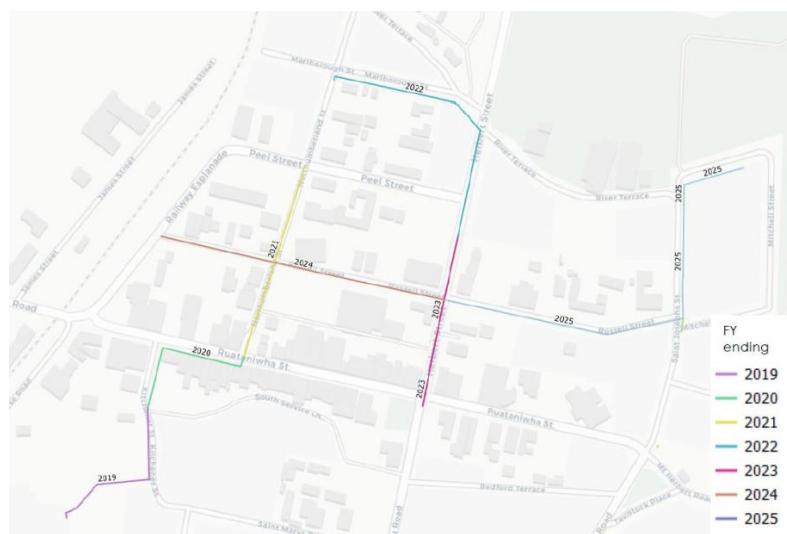


Figure 4-2: Overview of the upgrades completed with the 7 year programme