Chatham Islands Council

BOARD PACK

for

Council Meeting

Thursday, 11 September 2025

10:00 am (+1245)

Held at:

Chatham Islands Council

13 Tuku Road, Chatham Islands

Generated: 2025-09-05 11:09:32

INDEX

—Continued—

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AGENDA

COUNCIL MEETING

Name:	Chatham Islands Council
Date:	Thursday, 11 September 2025
Time:	10:00 am to 12:00 pm (+1245)
Location:	Chatham Islands Council, 13 Tuku Road, Chatham Islands
Board Members:	Cr Amanda Seymour, Cr Celine Gregory-Hunt, Cr Graeme Hoare, Cr Greg Horler, Cr Judy Kamo, Cr Keri Day, Mayor Monique Croon, Cr Nigel Ryan, Cr Steve Joyce
Attendees:	Ms Colette Peni, Ms Jo Guise, Paul Eagle

1. Opening Meeting

1.1 Meeting Opening — 10:00 am (5 min)

Mayor Monique Croon

Kia hora te marino
Kia whakapapa pounamu te moana
Hei huarahi mā tātou i te rangi nei
Aroha atu, Aroha mai
Tātou i a tatou katoa
Hui e! Tāiki e!

1.2 Apologies — 10:05 am (2 min)

1.3 Interests Register — 10:07 am (2 min)

For Information

Review and update the interests register of board members and key executives.

Supporting Documents:

1.3.a	Interests Register	8

1.4 Action List — 10:09 am (5 min)

For Noting

Review the progress of action items from previous meetings and discuss any pending tasks.

2. Confirmation of Minutes

2.1 Ordinary Meeting Minutes 31 July 2025 — 10:14 am (3 min)

For Decision

Review and confirm the minutes of the previous meeting.

Supporting Documents:

2.1.a	2.1 Minutes 31 July 2025.pdf	9

Supporting Documents:

3. Finance

3.1 Financial Report

10:17 am (10 min)

Paul Eagle

For Information

Supporting Documents:

4. Works & Services

4.1 Stantec Report

10:27 am (5 min)

For Information

Information to be received.

Supporting Documents:

4.2 Fulton Hogan Road Maintenance Report

10:32 am (5 min)

For Information

Information to be received.

Supporting Documents:

4.3 Fulton Hogan Water & Wastewater Report

10:37 am (5 min)

For Information

Information to be received.

Supporting Documents:

4.4 Fulton Hogan Waste Management Report

10:42 am (5 min)

For Information

An update for Council on Waste Management activities for June 2025.

Supporting Documents:

4.4.a	4.4 FH Waste Management Report.pdf	72
4.4.b	CIC Waste Management July 2025.pdf	73
4.4.c	Owenga Landfill Waste Record - Master.xlsx	
4.4.d	Summary of Te One and Owenga.xlsx	
4.4.e	Te One Waste Record - Master.xlsx	

4.5 Water and Wastewater Schemes Summary Report January to June 2025

Supporting Documents:

4.5.a	4.5 Stantec Water & Wastewater Six Monthly Report.pdf	78
4.5.b	rep_cic_6mth JanJun2025_dfc_Issued.pdf	79

4.6 CIC Road Maintenance Contract Procurement Update

Paul Eagle

Supporting Documents:

4.6.a	CIC Road maintenance Contract Procurement update_11Sep25 (002).docx	132
4.6.b	Tech memo - CIC 26_01 PW Procurement Update.pdf	133

5. Community

6. Regulatory

6.1 CIC Service Delivery transitioning arrangements update

Paul Eagle

Supporting Documents:

6.1.a	CIC Service Delivery transitioning arrangements update 11Sep25.docx	135

7. Emergency Management

8. Governmennt

9. Chatham Islands

10. Bylaws & Policies

11. Move to Public Excluded

11.1 Move to Public Excluded

Supporting Documents:

11.1.a	PE Cover Page 11 September 2025.docx	141

12. Public Excluded

12.1 Public Excluded Minutes 31 July 2025

10:47 am (2 min)

For Decision

For Approval

Supporting Documents:

12.1.a	PE.1 PE Minutes 31 July 2025.pdf	142
12.1.b	PE Minutes 31 Jul 2025 .pdf	143

12.2 Close the meeting

10:49 am

Next meeting: Council Meeting (Inaugural Meeting) - 23 Oct 2025, 9:00 am

Summarize the key decisions made and officially close the board meeting.

Interests Register

Chatham Islands Council

As of: 11 Sept 2025

Person	Organisation	Active Interests	Notice Date
Cr Amanda Seymour	CIC	6.8 - Whanau member of applicant	27 Sept 2024
Cr Celine Gregory-Hunt	CIC	6.4 Applicant	27 Sept 2024
Cr Greg Horler	CIC	6.8 Whanau member of applicant	27 Sept 2024
Cr Judy Kamo	CIC Councillor	5.1 Surf Boat Report - Project Lead	13 Feb 2025
Cr Keri Day	Chatham Islands Council	Interested party - Item 7.1 Water Tank Project Update	1 Feb 2024
Cr Steve Joyce	Chatham Islands Council	Director, Chatham islands Electricity Ltd - 6.1 Wind Turbines	14 Mar 2024
Mayor Monique Croon	Chatham Islands Council	Applicant in Item 6.2 - M Croon Subdivision	1 Feb 2024

chatham islands council

2. Democracy

2.1 Minutes of Ordinary Meeting 31 July 2025

Date of meeting	11 September 2025
Agenda item number	2.1
Author/s	Jo Guise, Executive Assistant

Purpose

For the Council to receive and confirm the minutes of the Ordinary Meeting held on 31 July 2025.

Recommendations

1. **THAT the minutes from the Ordinary meeting held on 31 July 2025 be a true and accurate record.**

MINUTES (in Review)

COUNCIL MEETING

Name:	Chatham Islands Council
Date:	Thursday, 31 July 2025
Time:	9:00 am to 11:15 am (+1245)
Location:	Chatham Islands Council, 13 Tuku Road, Chatham Islands
Board Members:	Cr Celine Gregory-Hunt, Cr Graeme Hoare, Cr Greg Horler, Cr Judy Kamo, Cr Keri Day, Mayor Monique Croon, Cr Nigel Ryan, Cr Steve Joyce
Attendees:	Ms Colette Peni, Ms Jo Guise, Paul Eagle, Mr Jack Boyd, Ms Kirsten Norquay, Mr Erin Von Elders, Ms Rebecca Tinga, Mr Nigel Lister
Apologies:	Cr Amanda Seymour
Guests/Notes:	Denise Thomas (CIC Financial Lead), Abby Biltcliff (CIC), Colleen Clearwater (CIC Regulatory Officer), Darren Cortnage (Fulton Hogan), Carl Tucker and Scott Pearson (Nexus). Members of the Public - Eileen Cameron, Jaye Goomes, Brenda Tuanui-Chisholm, Pam Seymour, Richard Seymour, Bridget Gibb, Jenna Gregory-Hunt, Jack Daymond, Andre Day, Rikard Kamo, Pana Ryan

1. Opening Meeting

1.1 Meeting Opening

Mayor Croon opened the meeting acknowledging the passing of Tuscan Coburn-Pirika and also Michael Lovett a senior executive from DIA and noted his support and work he did for the island.

1.2 Apologies

Apologies

THAT the apologies be received.

Decision Date:	31 Jul 2025
Mover:	Cr Graeme Hoare
Seconder:	Cr Judy Kamo
Outcome:	Approved

1.3 Interests Register

1.4 Action List

2. Confirmation of Minutes

2.1 Ordinary Meeting Minutes 19 June 2025

Minutes of Ordinary Meeting 19 June 2025

THAT the minutes from the Ordinary meeting held on 19 June 2025 be a true and accurate record, with amendments noted.

Decision Date:	31 Jul 2025
Mover:	Cr Graeme Hoare
Seconder:	Cr Nigel Ryan
Outcome:	Approved

Wording change for the notes to item 3.2 Annual Plan 2025/26 were noted.

3. Finance

3.1 Financial Report

Financial Report

THAT the Chatham Islands Council receive the report.

Decision Date:	31 Jul 2025
Mover:	Cr Graeme Hoare
Seconder:	Cr Judy Kamo
Outcome:	Approved

Tanya Clifford advised that the year-end financial figures were still subject to adjustments and audit, so they may change. Current results indicate a slightly better than expected cash position, though much of the balance was earmarked for future projects such as the Norman Kirk Memorial Fund and the water plan. The report focused on actual operational and capital expenditure rather than forecasts and compared 'actuals' to previous projections, and noted some variances with explanations provided. Benchmark trends had become less favourable over time.

Paul Eagle noted that the Department of Internal Affairs, which funds 95% of the Council's budget, had raised concerns about the operating deficit and cash flow. Current cash flow was positive due to extra funding, and a nine-year comparison had been prepared. Historically, the operating deficit had been $1.5–$2 million, but this year it was projected at $1 million. The Crown expected this to be reduced to zero, which would be a key focus over the next 12 months, and would be discussed further at the workshop on 27 August.

3.2 Fair Value Assessment

Annual Report - Fair Value Assessment of Property, Plant and Equipment

That the Chatham Islands Council:
a. Receives the initial fair value assessments for Council's infrastructural assets;
b. Notes that the assessed increase in the value of Council's roading assets, based on NZTA indexes, is approximately 6.37% or $6.26 million;
c. Notes that the assessed increase in Council's other infrastructural assets, based on generic Producer Price Indexes, is approximately 19.68% (or $0.7 million) for three waters assets and 12.90% (or $0.3 million) for waste management assets;
d. Assesses, based on the estimated fair value dollar movements, that the overall
increase in the value of Council's infrastructural assets is not significant;

e. Confirms that, based on this assessment, a revaluation of Council's infrastructural assets is not required for the 2024/25 financial year;

Decision Date:	31 Jul 2025
Mover:	Cr Keri Day
Seconder:	Cr Nigel Ryan
Outcome:	Approved

As part of the annual audit process, the auditor reviewed the assessment of Council's property, plant, and equipment. While a full revaluation was required periodically, audit feedback confirmed it would not be needed this year and could be deferred until next year. The calculated figures had been reviewed and accepted, though a reassessment using indices as at 30 June would still be done. Audit approval meant earlier concerns about New Zealand taking a different view were no longer relevant, and the paper now only required approval from point A.

4. Works & Services

4.1 Stantec Report

Stantec Report - June 2025

THAT the report be received.

Decision Date:	31 Jul 2025
Mover:	Cr Graeme Hoare
Seconder:	Cr Nigel Ryan
Outcome:	Approved

Kirsten Norquay and Jack Boyd were present on-island and provided an update on water activities.

Jack reported that leak repairs at Council Flats had reduced demand, and compliance monitoring was clear. He noted that a wastewater pipe blockage near the pump station had been cleared but capacity remained reduced, posing some risk, and there was ongoing stormwater infiltration increasing flows from 20 m³ to 100 m³. Letters had been sent to households with roof water connected to the sewer, though further leaks and manhole issues remained.

Kaingaroa's intake screens had been cleaned, chlorine levels remained stable, compliance was good and flow meters were being installed. Councillors discussed the need to address stormwater issues promptly, given recent heavy rainfall and the impact on community infrastructure.

Nigel Lister and Rebecca Tinga provided an update on road engineering activities.

Nigel referred to the procurement RFI which had been open for the previous month, and reported that they had received 9 genuine responses with 6 showing a willingness to tender. They were currently summarising them and would get the information to Council in the coming weeks. Based on six confirmed 'Intents to Tender', the process was expected to follow the government's procurement rules with an open competitive tender.

As of the end of June, 94% of the budget had been spent, with the remainder carrying over into the next year for similar activities, including more unsealed maintenance and the sealed rehab/resealing programme. Pitt Island works came in under budget, freeing funds for potential repairs at Kaingaroa and Owenga wharves using Make Safe/Better Off funding.

A recent network safety inspection found the overall network condition generally good, with only minor improvements suggested.

4.2 Fulton Hogan Road Maintenance Report

Fulton Hogan Road Maintenance Report

THAT the report be received.

Decision Date:	31 Jul 2025
Mover:	Cr Graeme Hoare
Seconder:	Cr Steve Joyce
Outcome:	Approved

Erin (Tomby) von Elders gave an update to the road maintenance contract report.

He reported ongoing challenges with road maintenance due to wet weather, though grading work had resumed and some metal had been laid in key areas. A short section of road strengthening was completed on North Road, with further work planned on a problem hill on Te Matarae Road to prevent rutting.

4.3 Fulton Hogan Water & Wastewater Report

Fulton Hogan Water and Wastewater Operation Contract Report

THAT the report be received.

Decision Date:	31 Jul 2025
Mover:	Cr Celine Gregory-Hunt
Seconder:	Cr Judy Kamo
Outcome:	Approved

In water and wastewater operations, recent issues were found with exposed pipes, possibly sagging, and pricing was being sought to replace the affected section.

4.4 Fulton Hogan Waste Management Report

Fulton Hogan Waste Management Report

THAT the report be received.

Decision Date:	31 Jul 2025
Mover:	Cr Keri Day
Seconder:	Cr Graeme Hoare
Outcome:	Approved

4.5 Water Services Delivery Plan

Darren Cortnage (Fulton Hogan), Carl Tucker and Scott Pearson (Nexus) were in attendance for this item.

Paul Eagle clarified that local authorities were required by new legislation to develop a Water Services Delivery Plan aimed at ensuring financially sustainable water operations. The council must approve a preferred delivery model and then consult publicly before submitting the plan to the Department of Internal Affairs (DIA) by 3 September 2025.

Carl Tucker gave a presentation.

Three main delivery options were being considered:

1. Partnering with Watercare (Auckland’s mature water services agency) to leverage their expertise and secure long-term Crown funding and operational support. This was the

preferred option as it maintained local control while improving capability and funding certainty.

2. A multi-council Council-Controlled Organisation (CCO) similar to previous government models, which has high implementation risk due to difficulty attracting partners without Crown funding.
3. A reduced investment approach focusing on compliance and resilience, especially for the Waitangi networks, using standalone water tanks and filters for some areas rather than full network connections, reducing capital costs to under $20 million.

The plan must balance funding challenges, compliance, and infrastructure needs. The council would consult the community over three weeks, adopt the final plan by 27 August, and submit to DIA by 3 September. Ongoing discussions with DIA and potential partners like Auckland Council and Watercare would follow to finalise operational arrangements.

Mayor Croon expressed Council's support for option 1B as the preferred water services delivery model, noting it aligned with the Long-Term Plan (LTP) and took a broader island-wide approach beyond just reticulated systems. She raised questions about the Crown funding, specifically whether the $20 million referenced by the Department of Internal Affairs (DIA) covered only the first 10 years or the full 30 years, expressing a preference for funding assurance over the longer term.

Carl Tucker clarified that financials were required only up to 2034 (the current LTP period), and highlighted that partnering with Watercare, which had borrowing capacity as a stand-alone CCO, could potentially enable financing of growth beyond the initial 10 years. This offered options not currently available to the council alone.

Mayor Croon also emphasised the importance of community consultation, especially with the Kaiangaroa area residents, since option 3 involved decommissioning its water network. She stressed the need to gather their preferences, including support for retaining the reticulated system, even if it required more funding than currently proposed.

Water Services Delivery Plan - Chatham Islands

Recommendations
1. Receive the report.
2. Approve the preferred option, option one, for public consultation from 1 to 21 August
2025.
3. Approve an additional (extraordinary) Council meeting to take place on Wednesday 27
August 2025 to specifically adopt the Water Services Delivery Plan for submission to
the Department of Internal Affairs prior to 3 September 2025.
4. Thank the Department of Internal Affairs, Auckland Council, Watercare Services,
Nexus Advisory, Fulton Hogan and Stantec for developing the Water Services Delivery
Plan.

Decision Date:	31 Jul 2025
Mover:	Cr Celine Gregory-Hunt
Outcome:	Approved

4.6 New Zealand Transport Agency: Investment Audit Report 2024

NZTA: Investment Audit Report 2024 - Key findings and next steps

That the Chatham Islands Council:
1. Receives the Report.
2. Notes the overall “Some Improvement Needed” rating in the 2024 Investment Audit.
3. Notes the importance of maintaining continuity of roading and infrastructure services
through to 30 June 2027, to support implementation of the Water Services Delivery
Plan.
4. Approve seeking New Zealand Transport Agency approval for an 18-month extension
to existing contracts with Fulton Hogan and Stantec, to align with the Crown appropriation cycle and provide a stable platform for service delivery and reform.
5. Approve exploring a broader Core Infrastructure Services Contract for the Chatham
Islands.

Decision Date:	31 Jul 2025
Mover:	Cr Nigel Ryan
Seconder:	Cr Celine Gregory-Hunt
Outcome:	Approved

The discussion focused on the recent audit of the road maintenance contract with Fulton Hogan, governed by NZTA standards. The audit results were positive, scoring between 65-84%, which is strong compared to mainland benchmarks. However, NZTA emphasised the need for stronger council involvement and institutional knowledge retention within the council itself, despite having contract managers in place.

Paul Eagle mentioned a request for NZTA Board approval to extend the current contract by 18 months (beyond an already approved 3 months), primarily to align with the timing for the Water Services Delivery Plan and potential combining of contracts (roads, water, solid waste) into one future contract. The extension would provide more time to prepare a robust, impartial contract.

The audit highlighted a need to continue to improve road safety outcomes and suggested that many crashes go unreported. Cr Gregory-Hunt recommended enhancing community awareness about how crash reporting influences funding. She also proposed closer collaboration with the New Zealand Police on targeted safety initiatives, noting that council previously employed a dedicated road safety officer but currently resources were not available for a full time role.

Daren Courtnage added that crashes don’t always need to be reported by those involved; third parties or property damage reports can also inform crash data.

Councillors were asked to approve seeking the 18-month contract extension with NZTA, emphasising that without this, a new procurement process would be needed soon.

5. Community

5.1 Heartlands Annual Report 2025

Heartlands Annual Report - June 2025

THAT the Chatham Islands Council receive the report.

Decision Date:	31 Jul 2025
Mover:	Cr Judy Kamo

Seconder: Cr Celine Gregory-Hunt
Outcome: Approved

5.2 Approval to build gym on Council land

Approval to build Gym on Council land

That the Chatham Islands Council:
1. Approve Norman Kirk Memorial Reserve Incorporated (NKMR) to sub-lease the
area outlined in the map attached, for the purpose of a gym to be built and operated by Whānau Fit Chatham Islands Incorporated (WFCI).
2. Approve the removal of the relevant trees at the cost of WFCI and/or NKMR.
3. Note that this proposal will come at no cost to Council, except for staff time.
4. Note that WFCI will be self-insured and maintain the facility.
5. Note that if WFCI dissolves, the asset will first be offered to Council to own and
manage, noting the Council will not take on any outstanding issues such as monies owed or be in the position to honour memberships from the date of acquisition. If declined, both parties will agree on transferring ownership to a similar organisation. If no transfer is possible, WFCI will arrange for the gym's removal.

Decision Date: 31 Jul 2025
Mover: Cr Nigel Ryan
Seconder: Cr Graeme Hoare
Outcome: Approved

6. Regulatory

6.1 Dog Control Report 30 June 2025

Dog & Stock Control Update

THAT the Chatham Islands Council receive the report.

Decision Date: 31 Jul 2025
Mover: Cr Graeme Hoare
Seconder: Cr Celine Gregory-Hunt
Outcome: Approved

6.2 CIC_2025_001 Combined GRS CI Airport

Combined GRS CI Airport - CIC_2025_001

THAT the Chatham Islands Council:

(i) That the application is considered on a non-notified basis having regard to sections 95A-E of RMA.
(ii) That pursuant to sections 104 and 104A of the RMA, Council grants consent to
Lockhead Martin and Land Information New Zealand (LINZ) to establish a Ground
Reference Station (GRS) at Chatham Islands Airport, on a site legally described as
SO 33498 subject to the following condition:
1. That the proposal is undertaken in general accordance with the application and plans submitted with the resource consent application dated 26.06.25.

Decision Date: 31 Jul 2025
Mover: Cr Graeme Hoare
Seconder: Cr Nigel Ryan
Outcome: Approved

6.3 CIC ECAN Q4 Report

Activity Report from Canterbury Regional Council (ECAN)

THAT the Chatham Islands Council:

1. Receive the report;
2. Thank Canterbury Regional Council officers for their continued delivery.

Decision Date: 31 Jul 2025
Mover: Cr Graeme Hoare
Seconder: Cr Celine Gregory-Hunt
Outcome: Approved

7. Emergency Management

8. Governmennt

9. Chatham Islands

10. Bylaws & Policies

11. Move to Public Excluded

11.1 Move to Public Excluded

Move to Public Excluded

THAT the public be excluded from the following part of the proceedings of the meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

Item No.	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under Section 48(1) for the passing of this resolution
PE.1	PE Minutes 19 June 2025	Good reason to withhold exists under Section 7	Section 48(1)(a)
PE 2		Good reason to withhold exists under Section 7	Section 48(1)(a)

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987, and the particular interest or interests protected by Section 6 or Section 7 of that Act which would be prejudiced by holding the whole or relevant part of the proceedings of the meeting in public, are as follows:

ITEM NO.	GENERAL SUBJECT OF EACH MATTER TO BE CONSIDERED	SECTION	SUBCLAUSE AND REASON	WHEN CAN REPORTS BE RELEASED
PE.1.	PE Minutes 8 May 2025	7(2)(b)(ii) 7(2)(h) 7(2)(i)	Would be likely to prejudice the commercial position of the person or persons who are the subject of the information To maintain legal professional privilege. To enable the Council holding the information to carry out, without prejudice or disadvantage, commercial activities.	
PE 2		7(2)(b)(ii) 7(2)(h) 7(2)(i)	Would be likely to prejudice the commercial position of the person or persons who are the subject of the information To maintain legal professional privilege. To enable the Council holding the information to carry out, without prejudice or disadvantage, commercial activities.	

and that appropriate officers remain to provide advice to the Committee.

Decision Date: 31 Jul 2025
Mover: Cr Nigel Ryan
Seconder: Cr Judy Kamo
Outcome: Approved

12.3 Close the meeting

Next meeting: Council Meeting - 11 Sept 2025, 9:00 am

Signature: **Date:**

chatham islands council

3. Finance

3.1 Financial Report

Date of meeting	11 September 2025
Agenda item number	3.1
Author/s	Paul Eagle, Chief Executive / Tanya Clifford, ECan

Purpose

To present to the Performance, Audit & Risk Committee the financial report as at 31 July 2025.

Recommendations

That the Chatham Islands Council receives the report.

Summary revenue and expense for the month ended 31 July 2025

	Budget to July $000	Actual to July $000	Forecast Aug to June $000	Year end Forecast $000	Year end Budget $000
Revenue					
General rates	409	446	-	446	409
Targeted rates	39	452	-	452	464
Rate penalties	-	14	-	14	-
Total rates	**448**	**912**	**-**	**912**	**873**
Operating subsidies and grants	4,347	4,314	1,689	6,003	5,930
Capital subsidies and grants	299	-	3,586	3,586	3,586
Total subsidies and grants	**4,646**	**4,314**	**5,275**	**9,589**	**9,516**
Fees and charges	15	16	161	177	177
Council dues	24	15	276	291	291
Petrol income	46	41	512	553	553
Interest on investments	4	-	47	47	47
Other income	25	28	270	298	298
Total revenue	**5,207**	**5,326**	**6,541**	**11,867**	**11,755**
Expenditure					
Employment benefits (including elected members)	100	159	1,037	1,196	1,196
Contractors, roading (FH, Stantec)	159	144	1,768	1,912	1,912
Contractors, water & wastewater (FH, Stantec)	43	34	482	516	516
Contractors, waste management (FH, Stantec)	60	51	665	716	716
Other key contractor, ECan	86	205	830	1,035	1,035
Other contractors	23	10	263	273	273
Petrol expense	44	12	515	527	527
Audit fees	10	-	121	121	121
Legal fees	4	40	8	48	48
Finance costs	-	-	-	-	-
Depreciation and amortisation	193	-	2,317	2,317	2,317
Other expenditure	150	204	1,592	1,796	1,796
Total expenditure	**871**	**859**	**9,598**	**10,457**	**10,457**
Total surplus/deficit	4,336	4,467	(3,057)	1,410	1,298
Capital expenditure	340	191	3,884	4,075	4,075
Loan repayments	-	-	-	-	-

Please note, the "year end budget" figures reflect those adopted as part of the Annual Plan, and have not been adjusted for expected savings.

The 2024/25 year end audit has not been completed, and therefore closing balances have not been transferred to the current financial year. This may result in minor timing differences occurring between the period.

Rates revenue: All rates have been levied for the year, with the fist rating instalment due 14 September 2025. Rates are invoiced based on the Council approved rates strike. Minor variances will occur with penalty payments or adjustments in the rating database. Progress is slowly being achieved in relation to collecting rate arrears.

Grants: Roading subsidy is based on 88% of actual expenditure, with no claim processed in the system due to timing of staff leave and report creation.

Other revenue: petrol receipts are an unbudgeted item, raising revenue recognised. No other issues.

Infrastructure projects: *Includes:* roading, water, wastewater and waste management contracts. Funding limitations have limited three waters work, impacting levels of service Council is able to provide; lack of investment in critical asset maintenance increases the risk of asset failure.

Contractor, ECan: Recognised expenditure relates to accrual for the final quart of 2025, included for completeness as not previously reported.

Contractor, Others: Includes resource management and minor works related to licencing fees.

Other expenditure: No significant areas of note, grants of $92k have been distributed to support community activities.
Council has previously received two grants in advance, where funding has not yet been fully distributed (NKMR and water tank installation). NKMR funds not allocated and therefore money remain held in 'trust'. All water tanks (except six) have been delivered and installed, with the remainder still to be allocated and any outstanding funds returned. These transactions have not been incorporated into the budget for 2025/26 and may place a further call on Council's cash. Council also received funding in June for the LWDW plan and consultation, which is expected to be approved in early September.

Overall comment: The budget approved in the 2025/26 estimates a cash loss of $598k. The 2024/25 year end cash position was better than anticipated, but further calls to cash are likely to occur with distribution of grants received in advanced (as highlighted in 'other expenditure', above). Consequently, areas for potential cost savings should be identified with urgency to ensure Council operates in a financially stainable manner.

Summary statement of cash flows for the month ended 31 July 2025

	Budget to July $000	Actual to July $000	Forecast $000	Year end Forecast $000	Year end Budget $000
Cash inflow from operating activities					
Receipts from rates revenue	70	95	739	834	834
Receipts from grants and subsidies	4,649	4,314	5,240	9,554	9,554
Receipts from fees & charges	5	34	31	65	65
Receipts from Council Dues	26	21	291	312	312
Interest received	4	-	47	47	47
Receipts from other revenue	64	424	349	773	773
Cash inflow from operating activities	**4,818**	**4,888**	**6,697**	**11,585**	**11,585**
Cash outflow from operating activities					
Payments made to employees (including elected members)	(97)	(159)	(1,001)	(1,160)	(1,160)
Payments made to key contractors, FH & Stantec	(262)	(480)	(2,664)	(3,144)	(3,144)
Payments made to key contractors, ECan	(86)	-	(1,035)	(1,035)	(1,035)
Interest paid	-	-	-	-	-
Other payments made to suppliers	(215)	(54)	(2,729)	(2,783)	(2,583)
Cash outflow from operating activities	**(660)**	**(693)**	**(7,429)**	**(8,122)**	**(7,922)**
Net cash flow from operating activities	**4,158**	**4,195**	**(732)**	**3,463**	**3,663**
Cash flow from investing activities					
Purchase of fixed assets	(355)	(244)	(4,017)	(4,261)	(4,261)
Sale/(purchase) of other assets	-	-	-	-	-
Net cash flow from investing activities	**(355)**	**(244)**	**(4,017)**	**(4,261)**	**(4,261)**
Cash flow from financial activities					
Loans raised/(transfer to investments)	(2,658)	(2,658)	2,658	-	-
Repayment of loans or grants	-	-	(400)	(400)	-
Net cash flow from financial activities	**(2,658)**	**(2,658)**	**2,258**	**(400)**	**-**
Increase/(decrease) in cash held	**1,145**	**1,293**	**(2,491)**	**(1,198)**	**(598)**
Opening cash balance	110	557	1,850	557	110
Closing cash balance	**1,255**	**1,850**	**(641)**	**(641)**	**(488)**
		(0)			

This report draws the readers attention to the **increase/(decrease) in cash held** and the **closing cash balance** line items in the cash flow report. If expenditure is not reduced, Council may need to extend the overdraft facility currently $500k.

Rates receipts: No issues to highlight.

Grant receipts: additional $200k received related to LWDW plan compliance in June 2025, additional (unbudgeted) expenditure will occur in this financial year.

Other receipts: No issues to highlight, relates to cash receipts from debtor balances in June 2025.

Contractor expenditure: No issues to highlight.

Other expenditure: adjustments made (highlighted in yellow) to reflect distribution of grant receipts, received in advance.

Cashflow reconciliation to net surplus/deficit for the month ended 31 July 2025

	Budget to July $000	Actual to July $000	Forecast $000	Year end Forecast $000	Year end Budget $000
Total surplus/deficit	**4,336**	**4,467**	**(3,057)**	**1,410**	**1,298**
Adjust for:					
remove depreciation	193	-	2,317	2,317	2,317
capital expenditure adjustments	(340)	(191)	(3,884)	(4,075)	(4,075)
financial expenditure adjustments	(2,658)	(2,658)	2,658	-	(138)
timing adjustments (reforecasting and accrual movements - net)	(386)	(325)	(525)	(850)	-
Calculated total	**1,145**	**1,293**	**(2,491)**	**(1,198)**	**(598)**
Cash increase/(decrease) for the period	**1,145**	**1,293**	**(2,491)**	**(1,198)**	**(598)**
	0	(0)	(0)	(0)	-

Grants summary for the month ended 31 July 2025

	Budget to July $000	Actual to July $000	Forecast $000	Year end Forecast $000	Year end Budget $000
Grants received					
Department of internal affairs (annual appropriation)	4,203	4,203	-	4,203	4,203
NZ Transport Agency Waka Kotahi	440	-	5,275	5,275	5,275
Better off funding	-	-	-	-	-
Other	3	111	-	111	38
Total grants	**4,646**	**4,314**	**5,275**	**9,589**	**9,516**
	-	-	-	-	-

4. Works & Services

4.1 Stantec Report – July 2025

Date of meeting	11 September 2025
Agenda item number	4.1
Author/s	Stantec New Zealand

Purpose

To update and inform Council about its Engineering Services contract.

Recommendations

THAT the reports be received.

Background

Members from the Stantec team will teleconference in to the meeting to give a verbal report on monthly activities.

Attachments

1. Stantec Monthly Report July 2025

CIC Engineering Services Contract: Monthly Report

Financial update – July 2025

Financial Position: Roading

The total roading budget allocated for the 2025/26 financial year is $5.8M. The approved budget for the subsidised Continuous Maintenance Programme is $5.7M.

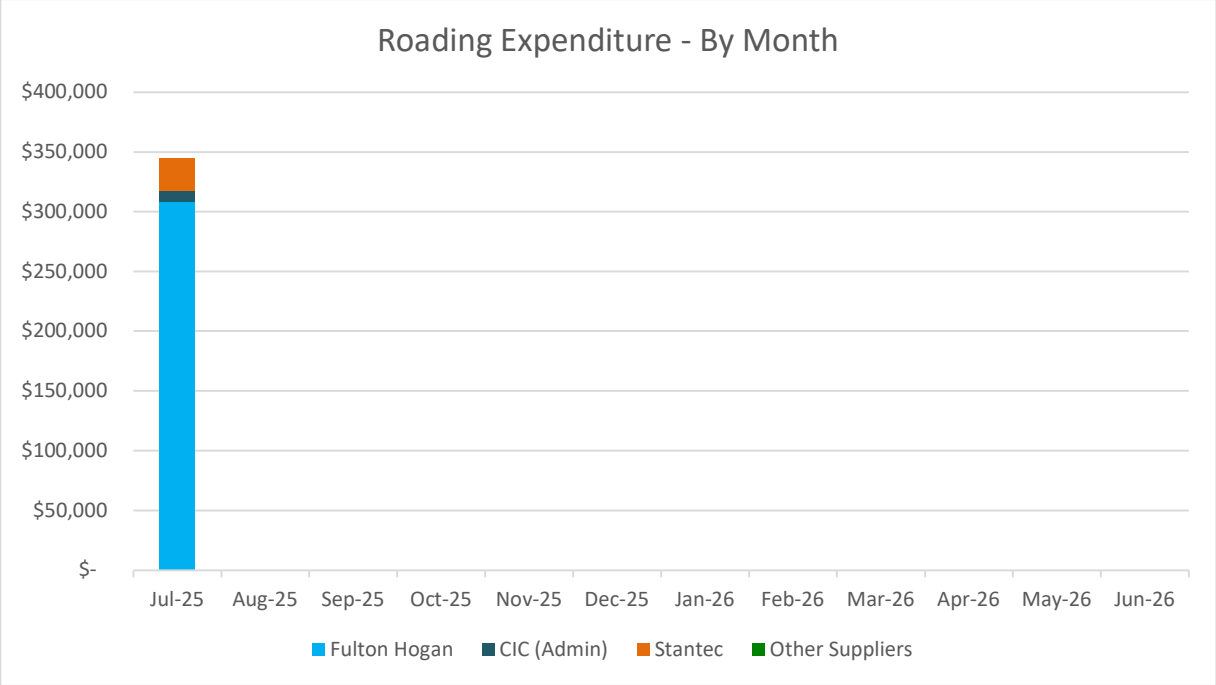
The July claim totalled $345k.

Expenditure of the Continuous Programme has used 6% of the funding allocated for 25/26 and we are 8% of the way through the 2025/26 financial year.

The largest construction cost in July was for pavement strengthening works on North Road. The largest engineering cost was for the analysis of the responses to the infrastructure maintenance and operations RFI.

Expenditure Tracking of Waka Kotahi Funding

Tracking graphs for roading expenditure are presented below.



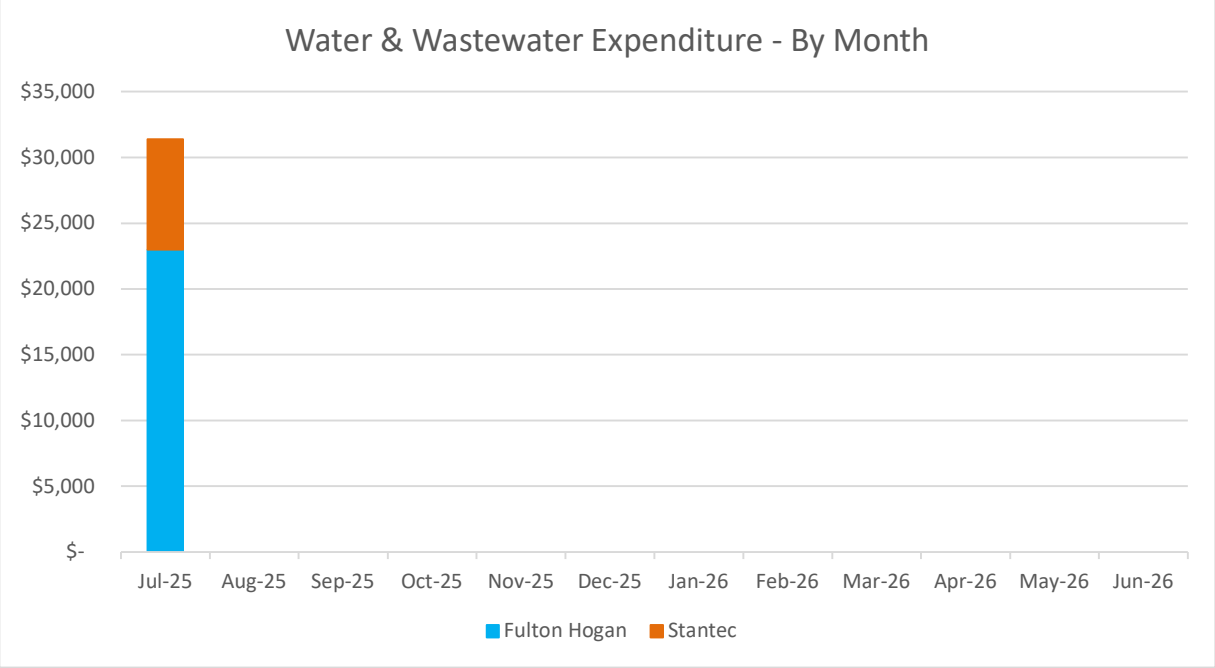
Financial Position: Water and Wastewater

The July claim totalled $31.3k

The main construction cost for July was for the blocked sewer pipe on WW-O Road, and the main engineering cost was for Water Service Delivery Plan inputs, and engineering support for the blocked sewer main.

Expenditure Tracking of Water & Wastewater Funding

Tracking graphs for the W+WW expenditure are presented below.



Stantec

Roading Update – July 2025

Short- & Medium-Term Roading Forward Work Programme	
Pavement Maintenance	• FH to begin planning for plant & crews and procurement of bitumen for next summer's round of sealed pavement maintenance (Reseals and rehabilitations)
Bridges and Structures	• Begin major component procurement for Maipito deck and beam replacement
Network & Asset management	• Update Procurement Strategy and discuss having this endorsed with NZTA • Begin preparing and updating contract tender documents ahead of the procurement for the next maintenance contract.
Long Term Roading Forward Work Programme	
Bridges & Structures	• Replacement of the deck and beams on the Maipito Bridge in 2025/26
Network & Asset management	• Advertise tender for Infrastructure Maintenance and Operations Physical Works in Oct/Nov 2025

Pavement Maintenance	
Previous Status: • Slip and debris clearing has been required following large rain events, but no significant pavement failures have occurred	***Updates:*** • Some unsealed pavement strengthening has been completed on North Road to complete the last of the works required to the south of the 300mm uplift. • FY25/26 is a sealed pavement maintenance year

Drainage Maintenance	
Previous Status: • Swale, high shoulder, and culvert, clearance carrying on ensuring pavements drain effectively coming into wetter months • On-going swale and drain clearance has kept the roads operating during heavy rains and prevented pavement blow-outs or failures.	***Updates:*** • A culvert on Target Hill is beginning to fail and will need to be replaced. As it is on the sealed network, a temporary repair has been completed. With a full replacement to be made during the summer when the equipment and materials are available to reseal the surface.

Bridge & Structures Maintenance	
Previous Status: • FH have been given the go-ahead to begin the procurement of the major timber beams and decking components for Maipito Bridge • The work is planned to start later in 2025 or early 2026 when the weather is more predictable	***Updates:*** • The Maipito structural component replacements will be main bridge and structure works for FY 25/26

Owenga Barge Landing	
Previous Status: • Awaiting confirmation from Barge Society representatives that the proposal for the rubber buffers will be adequate to address some concerns	***Updates:*** • Some general feedback has been received from a new representative from the Barge Society but on points that were addressed in the original memo. We are not sure if the original contact passed on the memo to the wider society.

Network & Asset Management	
Previous Status: • The RFI has been advertised to begin the market research stage of the procurement for the Maintenance term supply agreement. • The RFI is intended to better understand the supplier market on and off Island. • The responses to the RFI will confirm the exact procurement approach	***Updates:*** • The Infrastructure maintenance and operations RFI closed at the end of July. • A number of responses were received and a brief summary memo has been sent. A more detailed report will be produced that discusses the responses further.

Kaingaroa & Owenga Wharves	
Previous Status: • A condition report has been passed to Stantec regarding some bolts at Owenga Wharf. • FH will undertake an inspection	***Updates:*** • FH have presented a quote for the cost of the lighting at Owenga Wharf. Awaiting confirmation form CIC of allocation of funding.

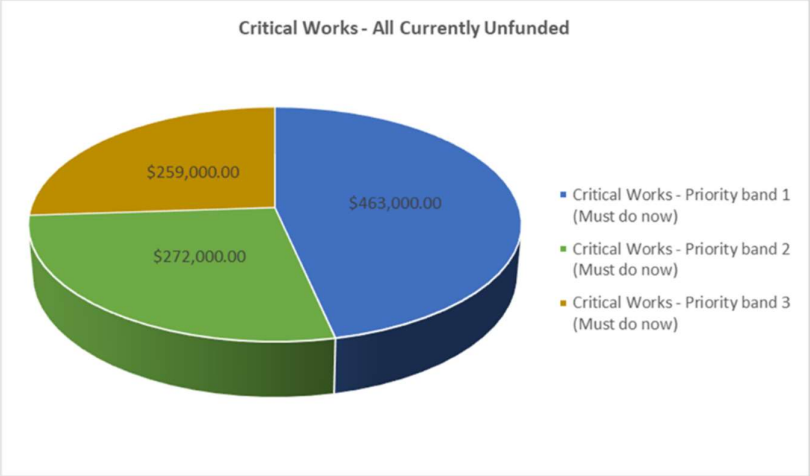
Stantec Site Visits	
Previous Status: • Rebecca and Nigel visiting with a Road Safety colleague 13th – 16th May	***Updates:*** • Nigel will visit in the week of August 19th to 22nd

CIC catch-ups in Christchurch	
Previous Status: • Rebecca & Nigel caught up with Paul and Jenna in Chch on the 13th of May	***Updates:*** • No updates

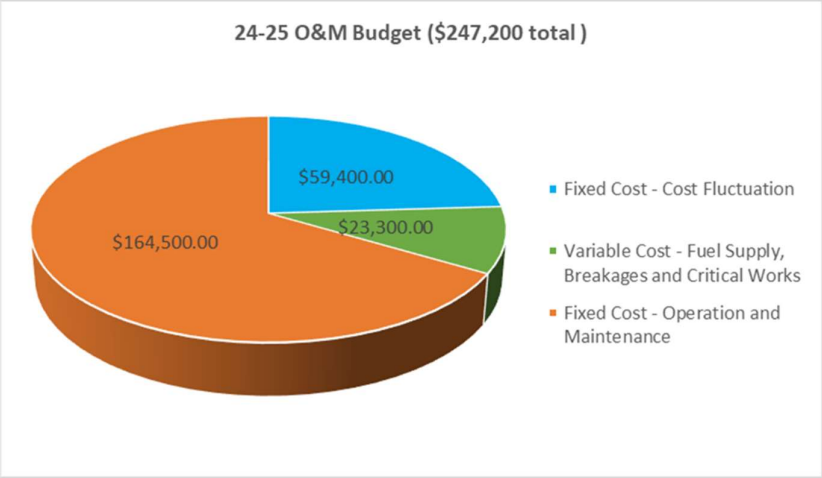
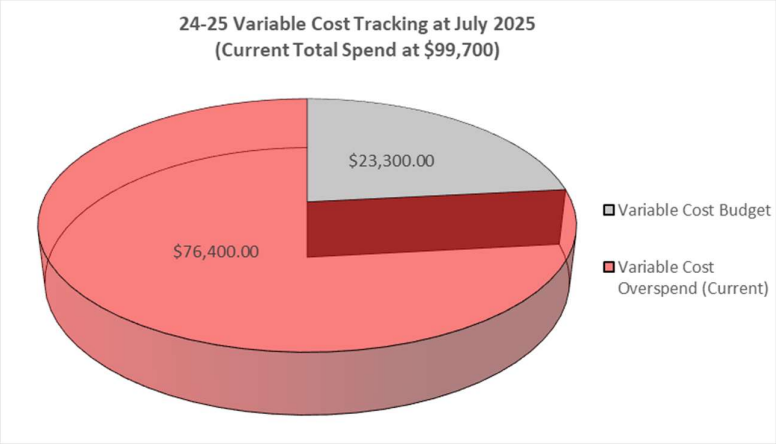
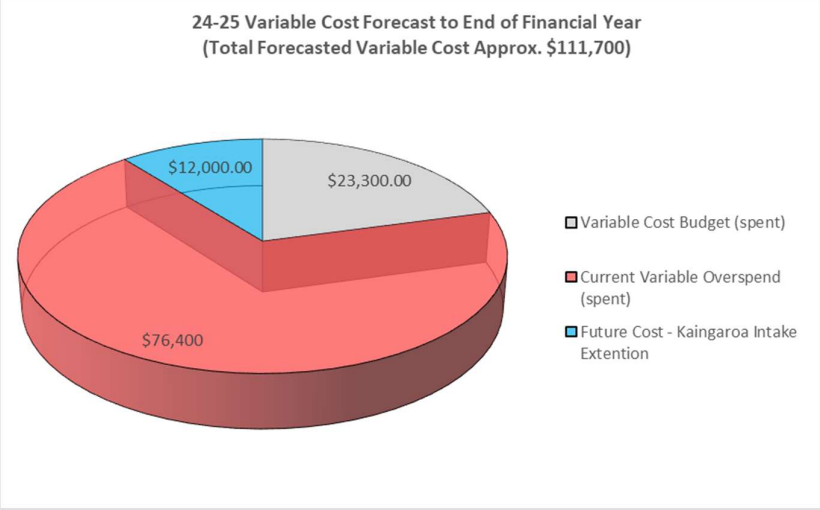
NZTA Waka Kotahi Updates	
Previous Status: • Initial feedback on the CIC Activity Management plan has been received. The AMP has been rated Fit For Purpose, and a number of light touch suggestions for improvement have been offered, which will be taken forward for the next update. • The Transport Agency have been in touch about the 2025 Procurement Strategy, and have requested some extra information which will be available when the market RFI responses are evaluated.	***Updates:*** • The results of the RFI will inform the next round of discussion with NZTA around the 2025 procurement strategy update

Stantec

CIC Water and Wastewater O& M meeting – July 2025

Three Waters Funding		
Item	***Current Status:***	***Action***
General	• An operational expenditure of $391,000 was allocated in the 2024-34 Long Term Plan for 2024/25. • The ship continues to operate as usual. The shipping company has approval to operate for approx. 6 months. No long-term plan in place. The ship has been delayed with recent bad weather. Salt and chlorine deliveries are on the next shipment but not urgently required. Ship should arrive before they are needed. Continue to monitor. Ship out of service from October (4th October), no replacement lined up. Last time it this happened the ship was out of service for 3 months. • FH are setting up a planned maintenance schedule on water outlook. FH will draft plans for upload to water outlook. Estimating about two-three months to finalise and upload. PC meeting with Chris Garner (RAMM) to upload everything to RAMM.  **Budget tracking update:**	PG

Stantec

	  	
Opportunities	*Opportunities:* • Work with Franz, refining treatment process. Seems to be working no re-filter on sample required. No further comments from Stantec team. PG to check whether Franz has a half hour for a catchup on how the improvements are working	*PG*
Water Supply		

Stantec

Project:	*Current Status:*	
Kaingaroa Water Supply Scheme	• **New Issues:** o Ongoing chlorate monitoring required as part of default sampling: ▪ January sampling recorded elevated chlorine (0.97 mg/L ± 0.32) ▪ February sampling recorded 0.37 mg/L ± 0.13 mg/L, below the 0.8 mg/L MAV. ▪ March sampling recorded 0.25 mg/L, below the 0.8 mg/L MAV. ▪ April sampling recorded 0.34 mg/L, below the 0.8 mg/L MAV. ▪ May sampling recorded at 0.67 mg/L, below the 0.8 mg/L MAV. ▪ June sampling recorded at 0.55 mg/L, below the 0.8 mg/L MAV. o The next lot of samples will be taken next week Tuesday 15 July 2025. o FAC probe fixed. o Turbidity meters aren't connecting to software. FH to reach out to Danny Ainsley from 2Connect. Still work in progress, all to do with the scale. Will check when trainer is on island – mid September TBC.	RP
	• **Work in Progress:** o Lake Rangitai intake extension (not invoiced). This will be installed when lake levels allow. This would involve installing about 100m of 90mm pipe with compression fittings and concrete mooring blocks, new strainer and float and is estimated to cost around 10-12k. FH has the materials in their yard. JB to discuss with PE at the next governance meeting. Lake has dropped about half a meter even though it has been wet. o Danny is checking pressure relief values and pump start up, these might need adjusting. System has improved since he has been back. o Need to fit a meter to one of the farm tanks, still waiting on the PVC fittings. o Ongoing operations and maintenance	JB
	• **Completed:** o Cleaned Lake Rangitai inlet screen o Ongoing operations and maintenance	
	• **Critical Works Updates** o As above – FH have updated the list.	
Waitangi Water Supply Scheme	• **New Issues:** o No records of the media which was installed on the chlorine makeup water supply to reduce chlorine sludge. JB has reached out to Filtec to confirm media type and filter details. RP to check details of unit. o The Port will not be connected as the new 'emergency only' connection was going to be used for other purposes. o Leaky private water assets (pipes, fittings, valves, header tanks) are increasing water demand. CIC have issued a letter to residents. Steady water demands this month with no major new leaks found. The last leak was split in the red line PE pipe, along the colour strip (installed 2004). Maybe manufactured for stockwater/ irrigation rather than potable water. Continue to monitor going forward. o Currently fixing the leak at the Council houses, water usage had increased from 2 m^3/day to 3 m^3/day. All connections completed, still to backfill. Water usage is much ~30 compared to 55 (summer peak)/ mid 40 (current). o FH have turned off the water supply at Nairn house to reduce water loss. Awaiting fix. o CIC issued letters to high users. o FH to ask Filtec for a copy of the annual WTP service reports.	JB/RP JB

	o JB to chase Filtec for the updated P & IDs	
	• **Work in Progress:** o Ongoing operations and maintenance	
	• **Completed:** o Leaks in network fixed	
	• **Critical Works Updates** o As above – FH have updated the list.	
Compliance Monitoring **June 2025**	***June 2025 Monthly Water Quality Compliance:*** • *Waitangi* o No E. coli or Total Coliforms detected in raw, treated, or network samples. o Treated water turbidity (0.05 NTU) was below the operational target (0.3 NTU). o The UVT for treated water was satisfactory at 99.0%. ▪ Protozoa compliance is being met. • *Kaingaroa* o Chlorate measured at 0.55 mg/L, below the 0.8 mg/L MAV. o No E. coli or Total Coliforms detected in the treated and network samples. o Low level of Total Coliforms and E.coli were detected in the raw sample, but as expected with a lake water source. o Treated water turbidity (0.15 NTU) was below the operational target (0.3 NTU). o The UVT for treated water was not satisfactory on the day of sampling at 45.5%. ▪ Protozoa compliance is being met. • *Recycling Center Supply* o No E. coli or Total Coliforms detected in treated sample • *Council Office Supply (not a CIC supply)* o No E. coli or Total Coliforms detected in treated sample. o The UVT was good at 99.5%	
Wastewater		
Project:	***Current Status:***	
Waitangi Wastewater Scheme	• **New Issues:** o Council have issued a letter requesting residents disconnect stormwater connections to the wastewater system. Properties with high infiltration are along Met Lane line and hospital. The hospital needs to raise gulley traps. o Flow jumps from 20m^3 to 100m^3 over rain events, pumps have kept up so far. The stormwater infiltration has a silty clay colour which is unlikely to be from the hospital/ met lane. FH to investigate next rain event. o Solids appear to be settling better in the sludge return tank following Franz's report recommendations. FH to monitor.	
	• **Work in Progress:** o Discharge consent review on-going (Stantec progressing). o Ongoing operations and maintenance	
	• **Completed:** o FH have cleaned out sludge return tank and the irrigations tank. o FH have cleaned out Solids tank o Circuit cut out and breaks and high-level alarm installed and operational. Standby pump now operational. o Ongoing operations and maintenance	

	• **Critical Works Update** o As above	
Compliance Monitoring **June 2025**	***June 2025 Monthly* Compliance Monitoring** • All parameters were below the annual median except for E. coli (0.6- log higher). The land application system will further reduce nitrogen and micro-organisms prior to reaching groundwater. • FH have cleaned UV sleeves and increased UV intensity no significant impact on results. Will monitor this months readings. • FH are dosing pool chlorine 250ml hypo once a week. No floating scum build up, helps a bit along with weather.	
AOB	Stantec (Jack and Kirsten) planning to visit the island end of July (28th July to 1st August) and attend the next Council meeting (Thursday 31 July) in person. JB to add Tomby to meeting minutes and monthly meeting invites	JB

Stantec

Solid Waste Update – July 2025

Landfill Operation	
Current Status. • Fulton Hogan are to summarise for CIC what the cost options are for the compaction plant. • FH have provided a quotation to make changes to the treated leachate application pipe. • FH are looking at getting the staff resources for the solid waste work to the appropriate level. • FH did a drone survey of the landfill, which will be used to check on the compaction. • FH has done sampling of leachate. Two results still outstanding. • It is uncertain who will be doing the surface water and groundwater sampling. This needs clarity so that sampling is done when needed, and for the parameters required under the consent conditions.	***Actions – Stantec*** • To assess the compaction of the landfill using drone survey results and annual tonnages. ***Actions - Council*** • CIC to authorise costs for changing leachate application pipe. • CIC to confirm who will do the surface water and groundwater sampling. ***Actions – Fulton Hogan*** • FH to provide Stantec with drone survey results. • FH to provide firm price proposal for compaction plant.
Te One Operations	
Current Status. • FH has emailed EnviroNZ to get confirmation of acceptance of recycling at Redruth. • FH has sent Chemwaste details of quantities of waste oil and batteries that need to be disposed of, so a quote can be prepared. • FH have been baling wastes. Whilst it provides a good result that makes it easier to landfill, it does cause a mess, which needs clearing up and sanitising. FH to provide details of what is required to make the operation easier, safer and more hygienic. • FH are to get a quotation for signs that provide messaging to the community about what is acceptable for disposal at the TS. CIC to approve messaging.	***Actions - Stantec*** • Work with Council and Fulton Hogan staff to identify a solution for the waste scrap metal. ***Actions - Council*** • Approve the messaging for the signs required at Te One. ***Actions – Fulton Hogan*** • Provide details of what is needed to make baling of wastes easier, more hygienic and safer. • Get a quotation for signs at Te One, once messaging is approved by CIC.
Other Waste Management Matters	
Current Status: • Monthly solid waste matters meetings have been re-scheduled for 1st Wednesday of each month. • There are still some issues at Kaingaroa TS. FH needs to ensure that the refuse is cleared weekly. • CIC is still to consider solid waste charges, which are most important for bulk users. Stantec has provided some brief advice on the process for formally implementing the charges.	***Actions - Stantec*** • Prepare an "Audit Report" based on the March visit, once budget approval is provided by CIC. ***Actions - Council*** • Council to approve PCN for additional SW budget. • Council to determine further action regarding Solid Waste Charging. ***Actions – Fulton Hogan*** • To continue to identify waste sources in OWLS returns. • To service Kaingaroa TS weekly.

CIC Engineering Services Contract: Monthly Report

Financial update – August 2025

Financial Position: Roading

The total roading budget allocated for the 2025/26 financial year is $5.8M. The approved budget for the subsidised Continuous Maintenance Programme is $5.7M.

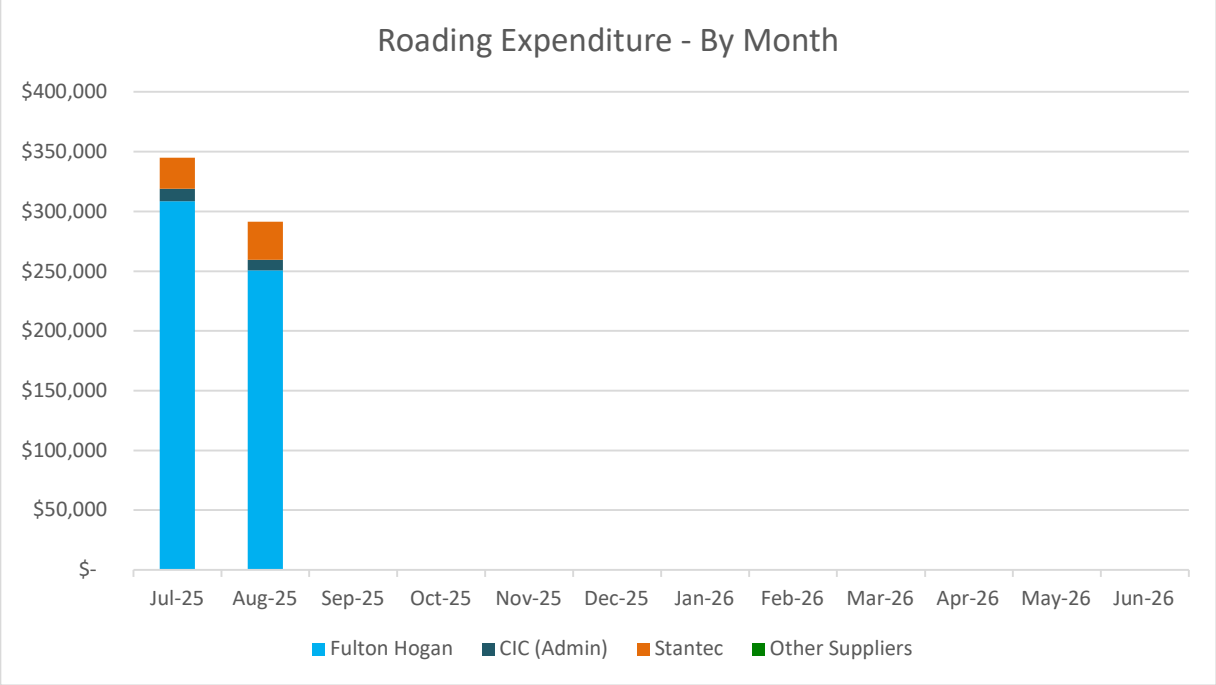
The August claim totalled $291k.

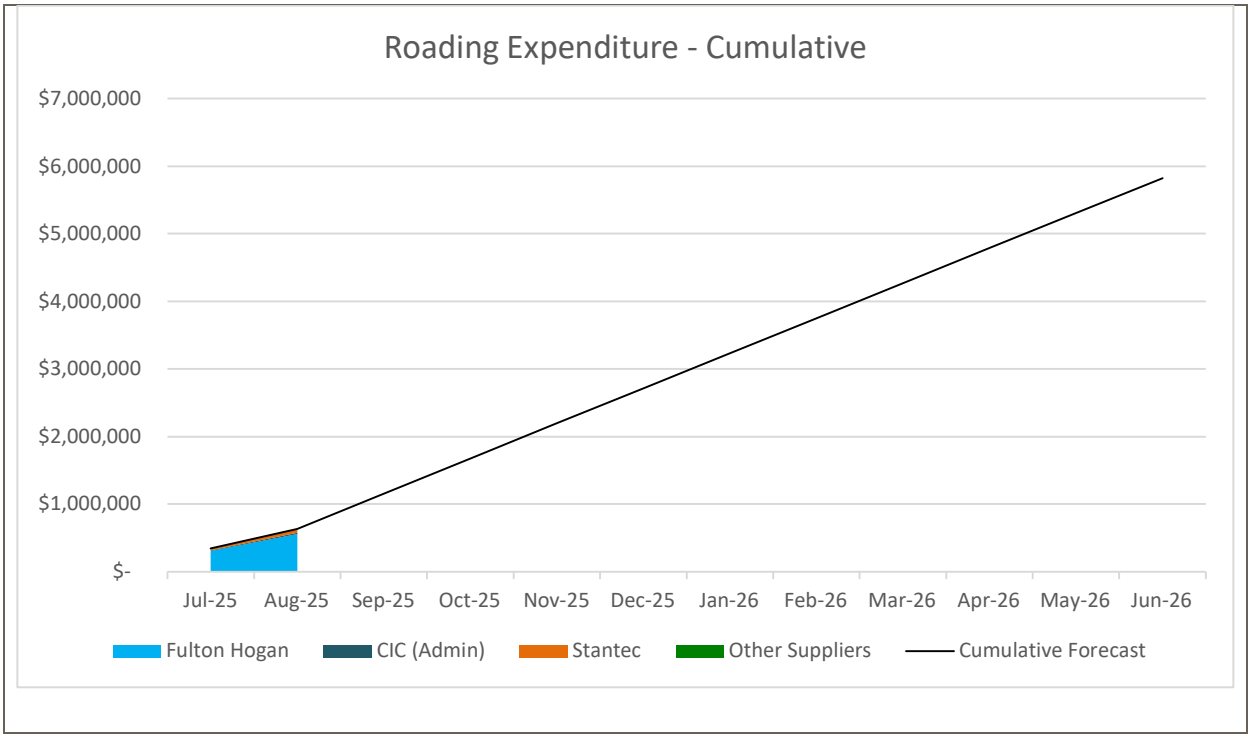
Expenditure of the Continuous Programme has used 11% of the funding allocated for 25/26 and we are 17% of the way through the 2025/26 financial year.

The largest construction costs in August were for unsealed pavement strengthening works on Te Matarae Road, and the Port Hutt Road repairs. The largest engineering cost was for the preparation of the tender documents for the next maintenance contract.

Expenditure Tracking of Waka Kotahi Funding

Tracking graphs for roading expenditure are presented below.




Roading Expenditure - Cumulative
$7,000,000
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$-
Jul-25
Aug-25
Sep-25
Oct-25
Nov-25
Dec-25
Jan-26
Feb-26
Mar-26
Apr-26
May-26
Jun-26
Fulton Hogan
CIC (Admin)
Stantec
Other Suppliers
Cumulative Forecast

Stantec

Financial Position: Water and Wastewater

The August claim totalled $50k

The main construction cost for August was for parts for the annual wastewater plant service, and the main engineering cost was for Kirsten and Jack's site visit in July.

Expenditure Tracking of Water & Wastewater Funding

Tracking graphs for the W+WW expenditure are presented below.

Stantec

Roading Update – August 2025

Short- & Medium-Term Roading Forward Work Programme	
Pavement Maintenance	• FH logistics coordination of bitumen, plant, and crews for next summer's round of sealed pavement maintenance (Reseals and rehabilitations)
Bridges and Structures	• Ongoing component procurement for Maipito deck and beam replacement
Network & Asset management	• Continue tender document preparation for the next maintenance contract
Long Term Roading Forward Work Programme	
Bridges & Structures	• Replacement of the deck and beams on the Maipito Bridge in 2025/26
Network & Asset management	• Advertise tender for Infrastructure Maintenance and Operations Physical Works in October 2025

Pavement Maintenance	
Previous Status: • Slip and debris clearing has been required following large rain events, but no significant pavement failures have occurred • Some unsealed pavement strengthening has been completed on North Road to complete the last of the works required to the south of the 300mm uplift.	***Updates:*** • A hill section at the south end of Te Matarae Road has been strengthened • A pavement failure on Port Hutt Road, due to a spring or water ingress has been repaired • FY25/26 is a sealed pavement maintenance year

Drainage Maintenance	
Previous Status: • Swale, high shoulder, and culvert, clearance carrying on ensuring pavements drain effectively coming into wetter months • On-going swale and drain clearance has kept the roads operating during heavy rains and prevented pavement blow-outs or failures. • A culvert on Target Hill is beginning to fail and will need to be replaced. As it is on the sealed network, a temporary repair has been completed. A full replacement to be made during the summer when the equipment and materials are available to reseal the required trench surface.	***Updates:*** • Design to be completed on Target hill culvert replacement to confirm pipe diameter required.

Bridge & Structures Maintenance	
Previous Status: • FH have been given the go-ahead to begin the procurement of the major timber beams and decking components for Maipito Bridge • The work is planned to start later in 2025 or early 2026 when the weather is more predictable	***Updates:*** • The Maipito structural component replacements will be the main bridge and structure works for FY 25/26. • Material orders for the long lead time structural items have been placed.

Owenga Barge Landing	
Previous Status: • Awaiting confirmation from Barge Society representatives that the proposal for the rubber buffers will be adequate to address some concerns. • Some general feedback has been received from a new representative from the Barge Society but on points that were addressed in the original memo. We are not sure if the original contact passed on the memo to the wider society.	***Updates:*** • Estimate submitted to implement some of the improvements identified.

Network & Asset Management	
Previous Status: • The Infrastructure maintenance and operations RFI closed at the end of July. • A number of responses were received and a brief summary memo has been sent. A more detailed report will be produced that discusses the responses further.	***Updates:*** • Works are continuing on the update of the Contract documents for the next term agreement

Kaingaroa & Owenga Wharves	
Previous Status: • FH have presented a quote for the cost of the lighting at Owenga Wharf. Awaiting confirmation form CIC of allocation of funding.	***Updates:*** • Approval received for Owenga wharf lighting to proceed. • Estimates submitted to CIC for further improvement works to Owenga Wharf (Deck planks, fender pile repairs) and Kaingaroa Wharf (Crane inspection and report) utilising remaining budget from Better off Fund. Awaiting approvals.

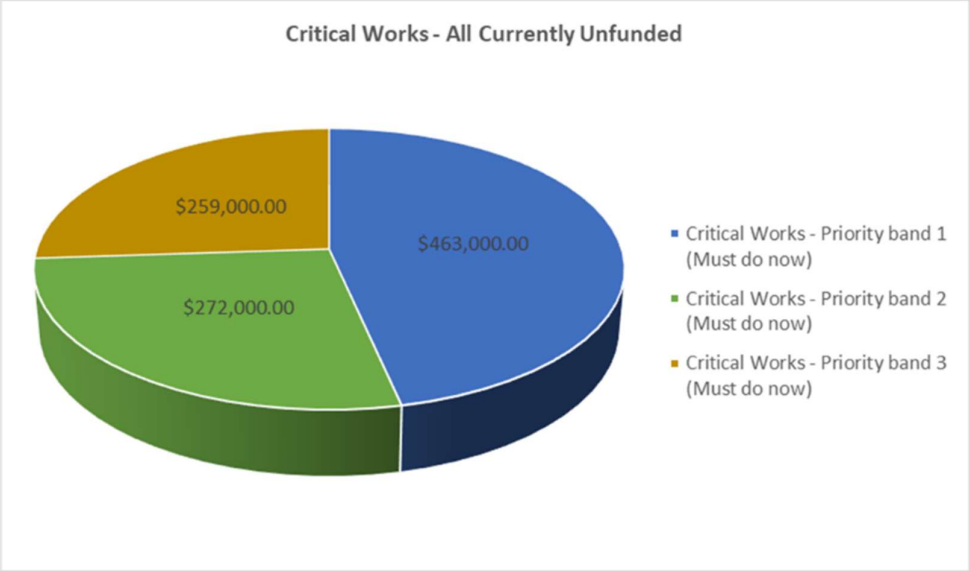
Stantec Site Visits	
Previous Status: • Rebecca and Nigel visiting with a Road Safety colleague 13th – 16th May	***Updates:*** • Nigel visited in the week of August 19th to 22nd

CIC catch-ups in Christchurch	
Previous Status: • Rebecca & Nigel caught up with Paul and Jenna in Chch on the 13th of May	***Updates:*** • No updates

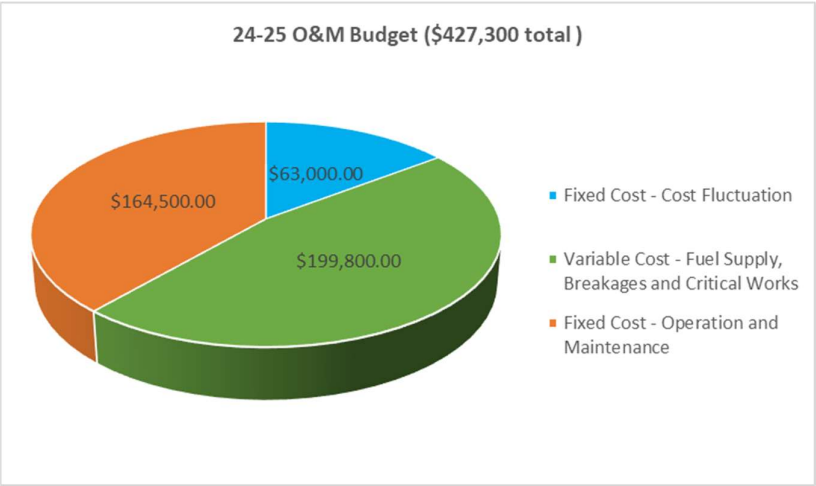
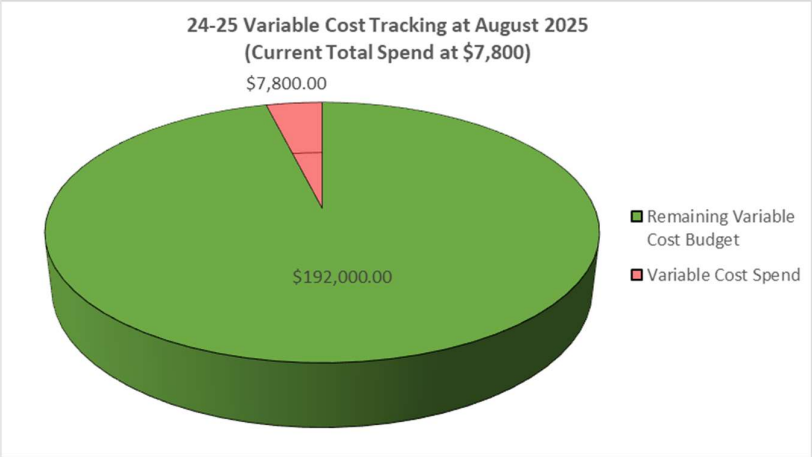
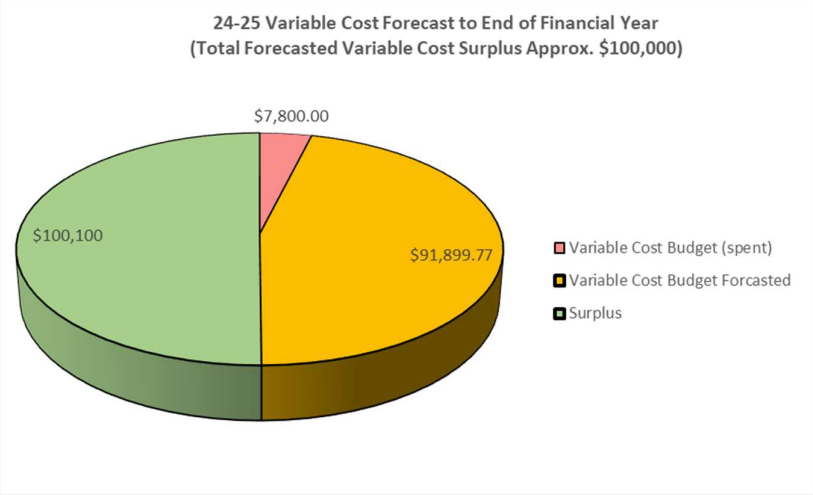
NZTA Waka Kotahi Updates	
Previous Status: • Initial feedback on the CIC Activity Management plan has been received. The AMP has been rated Fit For Purpose, and a number of light touch suggestions for improvement have been offered, which will be taken forward for the next update. • The Transport Agency have been in touch about the 2025 Procurement Strategy, and have requested some extra information which will be available when the market RFI responses are evaluated.	***Updates:*** • The results of the RFI have been discussed with NZTA's Procurement Advisor. This discussion and the RFI responses are being used to shape the future Procurement.

Stantec

CIC Water and Wastewater O& M meeting – August 2025

Three Waters Funding		
Item	***Current Status:***	***Action***
General	• An operational expenditure of $571,000 was allocated in the 2024-34 Long Term Plan for 2025/26. • JB to share latest critical works list with team. JB to set up a live version on SharePoint. • The ship is out of service from October (4th October) for maintenance, no replacement lined up. Salt and chlorine (2 x 20L) on the next shipment. Two shipments scheduled for next month. FH to ensure sufficient supplies sent on these shipments in case the ship is out of service for an extended period. • The Napier yard is no longer able to receive freight. An alternative yard in Hastings (Mainfreight) is being explored. • FH are setting up planned maintenance schedules electronically. Preference is to use Water Outlook rather than RAMM. PG to set up meeting with team and Pat (Water Outlook) to discuss requirements. JB to check what information Stantec would like included/ what was attempted before. • JB explained that we are currently forecasting a budget surplus for 25-26 financial year. The plan is to use any surplus to address critical works. JB to confirm which critical works are addressed following confirmation of available funding at governance meeting. **Critical Works**  	JB Tomby PG & JB JB

Stantec

	Budget tracking update:    	
Opportunities	*Opportunities:* • Work with Franz, refining treatment process. Seems to be working no re-filter on sample required. No further comments from Stantec team. PG to check whether Franz has a half hour for a catchup on how the improvements are working • Utilizing full potential of Water Outlook for monitoring and reporting.	PG

Water Supply		
Project:	***Current Status:***	
Kaingaroa Water Supply Scheme	• **New Issues:** o Ongoing chlorate monitoring required as part of default sampling: ▪ January sampling recorded elevated chlorine (0.97 mg/L ± 0.32) ▪ February sampling recorded 0.37 mg/L ± 0.13 mg/L, below the 0.8 mg/L MAV. ▪ March sampling recorded 0.25 mg/L, below the 0.8 mg/L MAV. ▪ April sampling recorded 0.34 mg/L, below the 0.8 mg/L MAV. ▪ May sampling recorded at 0.67 mg/L, below the 0.8 mg/L MAV. ▪ June sampling recorded at 0.55 mg/L, below the 0.8 mg/L MAV. ▪ July sampling recorded at 0.54 mg/L, below the 0.8 mg/L MAV. o The next lot of samples will be taken next week Wednesday 20 August 2025. o Turbidity meters aren't connecting to software. RP to talk to Craig Freeman (Ex Filtec) who may have a fix.	RP
	• **Work in Progress:** o Lake Rangitai intake extension (not invoiced). This will be installed when lake levels allow. JB to discuss with PE at the next governance meeting. Lake is very high. o Danny is pulling out the hydraulic pump and striping down to fix. The pump is currently hard to start. o Ongoing operations and maintenance	JB
	• **Completed:** o Flow meters fitted on raw water tanks o Ongoing operations and maintenance	
	• **Critical Works Updates** o None	
Waitangi Water Supply Scheme	• **New Issues:** o Chlorine make up water filter. Media may not have been changed during annual water treatment plant service. JB to confirm criticality with Kirsten. Propose to defer replacing media until next service if possible. The filter will need to be added to maintenance plans on Water Outlook to make sure it is not missed in the future. o Steady water demands this month with no major new leaks found. Water usage is around 30-40 m^3 compared to the pervious average use (45 m^3) and the summer peak (55 m^3). o FH have turned off the water supply at Nairn house to reduce water loss. Awaiting fix. o Tomby to ask Filtec for a copy of the annual WTP service reports. Suggest reaching out to Tracy (Filtec).	JB Tomby
	• **Work in Progress:** o Ongoing operations and maintenance	
	• **Completed:** o Leaks in network fixed	
	• **Critical Works Updates** o None	

Compliance Monitoring **July 2025**	***July 2025 Monthly Water Quality Compliance:*** • *Waitangi* o No E. coli or Total Coliforms detected in raw, treated, or network samples. o Treated water turbidity (0.06 NTU) was below the operational target (0.3 NTU). o The UVT for treated water was satisfactory at 98.0%. ▪ Protozoa compliance is being met. • *Kaingaroa* o Chlorate measured at 0.54 mg/L, below the 0.8 mg/L MAV. o No E. coli or Total Coliforms detected in the treated and network samples. o Low level of Total Coliforms and E.coli were detected in the raw sample, but as expected with a lake water source. o Treated water turbidity (0.19 NTU) was below the operational target (0.3 NTU). o The UVT for treated water was not satisfactory on the day of sampling at 53.3%. ▪ Protozoa compliance may not have been provided for this period. • *Recycling Center Supply* o No E. coli or Total Coliforms detected in treated sample • *Council Office Supply (not a CIC supply)* o No E. coli or Total Coliforms detected in treated sample. o The UVT was good at 98.3%	
Wastewater		
Project:	***Current Status:***	
Waitangi Wastewater Scheme	• **New Issues:** o Flow jumps from 20m^3 to 100m^3 over rain events, pumps have kept up so far. FH to investigate sources of stormwater infiltration to the wastewater network next rain event. Phil had suspected flows came from Met Lane and the Hospital. o Solids appear to be settling better in the sludge return tank following Franz's report recommendations. FH to monitor. o FH have priced a renewal for a section of the wastewater network by the pump station. Proposing to connect new a new DN150 pipe to the existing tank inlet pipe (an existing Cast Iron stub). Tomby to confirm proposed pipe material and pipe class and send to JB for a structural check. o Steve Riley is out on Island in October. RP and Steve are going to work on the inlet basket screen modification, replace the chain down to balance tank motors (replace with stainless). FH have a method for safely removing the pumps using a lifting gantry and chain grabs.	Tomby Tomby
	• **Work in Progress:** o Discharge consent review on-going (Stantec progressing). o Ongoing operations and maintenance	
	• **Completed:** o Ongoing operations and maintenance	
	• **Critical Works Update** o Added the wastewater pipe renewal at the pump station	
Compliance Monitoring **July 2025**	***July 2025 Monthly* Compliance Monitoring** • All parameters were below the annual median except for E. coli (0.2- log higher) and total nitrogen (7 mg/L higher). The land application system will further reduce nitrogen and micro-organisms prior to reaching groundwater. • Two wastewater samples were taken this month. One at the usual location and one at the bottom of the UV chamber. This was done to compare E. coli results.	

AOB	Kirsten will be on island next week (Monday 25th August). JB to set up a new monthly meeting invite	 JB

Stantec

Solid Waste Update – August 2025

Landfill Operation	
Current Status. • Fulton Hogan are to summarise for CIC what the cost options are for the compaction plant. • FH have provided a quotation to make changes to the treated leachate application pipe. • FH has provided results of the drone survey of the landfill to check on the compaction. • FH has done sampling of leachate. Two results still outstanding. A sampling pole is needed to make this operation safe. • It is uncertain who will be doing the surface water and groundwater sampling. This needs clarity so that sampling is done when needed, and for the parameters required under the consent conditions. • Stantec has provided an updated sampling schedule with plans showing sampling locations.	***Current Status.*** • Fulton Hogan are to summarise for CIC what the cost options are for the compaction plant. • FH have provided a quotation to make changes to the treated leachate application pipe. • FH has provided results of the drone survey of the landfill to check on the compaction. • FH has done sampling of leachate. Two results still outstanding. A sampling pole is needed to make this operation safe. • It is uncertain who will be doing the surface water and groundwater sampling. This needs clarity so that sampling is done when needed, and for the parameters required under the consent conditions. • Stantec has provided an updated sampling schedule with plans showing sampling locations.
Te One Operations	
Current Status. • FH is awaiting EnviroNZ confirmation of acceptance of recycling at Redruth. • FH is awaiting Chemwaste quote for dealing with disposal of waste oil and batteries. • FH have been baling wastes. Whilst it provides a good result that makes it easier to landfill, it does cause a mess, which needs clearing up and sanitising. FH to provide details of what is required to make the operation easier, safer and more hygienic. • FH are to get a quotation for signs that provide messaging to the community about what is acceptable for disposal at the TS. CIC to approve messaging.	***Current Status.*** • FH is awaiting EnviroNZ confirmation of acceptance of recycling at Redruth. • FH is awaiting Chemwaste quote for dealing with disposal of waste oil and batteries. • FH have been baling wastes. Whilst it provides a good result that makes it easier to landfill, it does cause a mess, which needs clearing up and sanitising. FH to provide details of what is required to make the operation easier, safer and more hygienic. • FH are to get a quotation for signs that provide messaging to the community about what is acceptable for disposal at the TS. CIC to approve messaging.
Other Waste Management Matters – No Change	
Current Status: • Monthly solid waste matters meetings have been re-scheduled for 1st Wednesday of each month. • There are still some issues at Kaingaroa TS. FH needs to ensure that the refuse is cleared weekly. • CIC is still to consider solid waste charges, which are most important for bulk users. Stantec has provided some brief advice on the process for formally implementing the charges.	***Current Status:*** • Monthly solid waste matters meetings have been re-scheduled for 1st Wednesday of each month. • There are still some issues at Kaingaroa TS. FH needs to ensure that the refuse is cleared weekly. • CIC is still to consider solid waste charges, which are most important for bulk users. Stantec has provided some brief advice on the process for formally implementing the charges.

4. Works & Services

4.2 Fulton Hogan Road Maintenance Report

Date of meeting	11 September 2025
Agenda item number	4.2
Author/s	Fulton Hogan Contract Manager

Purpose

To inform and update the Council on the Chatham Islands Road Maintenance programme.

Attached is the July 2025 monthly reports from Fulton Hogan.

Recommendation

THAT the report be received.

chatham islands council

Fulton Hogan

CHATHAM ISLANDS ROAD MAINTENANCE CONTRACT MONTHLY REPORT JULY 2025

Work Summary
Outline of work carried out during month
Routine Maintenance and Operations
Pavement Renewals
Sealed Road Resurfacing
Drainage Renewals
Bridge and Structure Renewals
Traffic Services
Minor Improvements
Vegetation Control
Dayworks
Programmed Work for following month
Schedule of Work by Road Name

1. Maintenance Grading
2. Unsealed Maintenance Metaling

Next Month's Target
Crash Damage Report Summary
Monthly Safety Report and Statistics

1. Safety Engagements

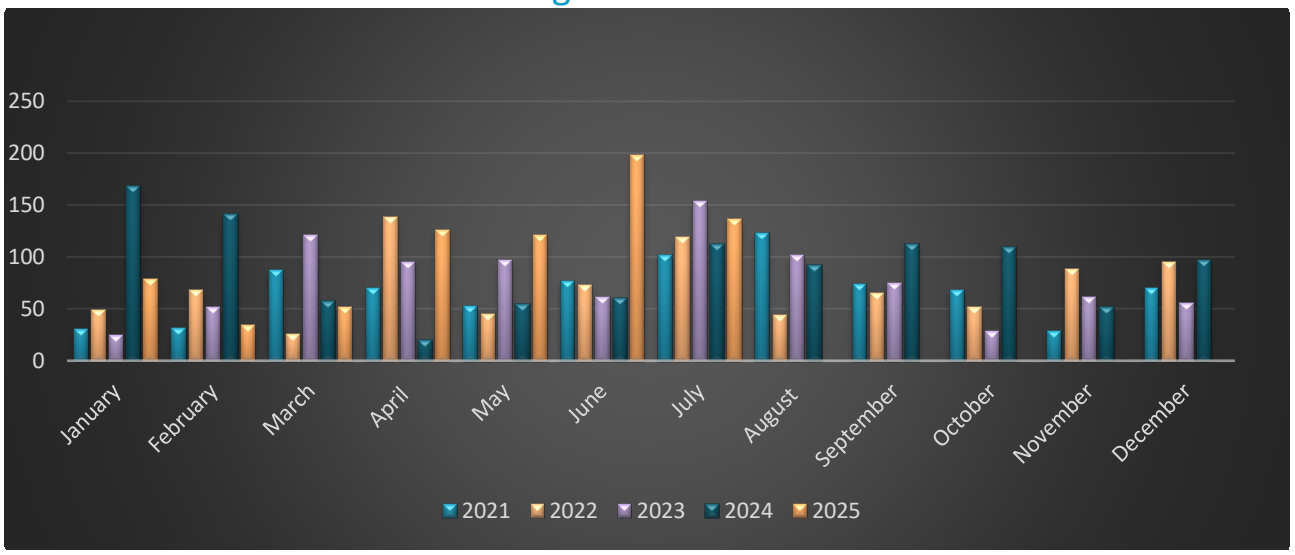
Metal Stockpiles
CIC Owned Materials
Signs
Culvert Pipes
Environmental Compliance & Feedback
Environmental Compliance
Stakeholder Complaints Register
Public Relations & Community Involvement
Innovation
When conditions allow we will continue with the blended maintenance material and continue to monitor areas already done to gauge how they perform in the wet/dry conditions.
Summary of Monthly Progress Claim by Work Category

1. Miscellaneous
2. Traffic Counting
3. Pitt Island
4. Wind Damage

Photos

Work Summary

Outline of work carried out during the month.



137mm rainfall recorded for 1st – 31st July in the Waitangi yard.

Routine Maintenance and Operations:

It was a very wet month which limited us to some of the programmed and routine work.
The roads are getting a hammering from the constant rain over the last two months which is causing a lot of potholes which has kept our graders very busy.
We also had flooding around the island at the end of the month where some culvert pipes couldn't keep up with the flow of water.
EMP replacements have been carried out around the network.

Pavement Renewals:

500-meter section on North Road has been done this month just past Waitaha quarry.

Sealed Road Resurfacing:

Some of the materials for the reseal season have started to show up.

Drainage Renewals:

Bridge and Structure Renewals:

Traffic Services:

EMP's installed to replace missing/broken ones.

Minor Improvements:

Vegetation Control:

Normal mowing and trimming are carried out around the network when the weather allows.

Dayworks:

Programmed Work for following month:

Still trying to get the last of our gear back from Pitt Island.
Normal maintenance and drainage.

Schedule of Work by Road Name

1. Maintenance Grading

- Carried out as required during the month on the following roads:

Road ID	Dispatch	Road ID	Start RP	End RP	Quantity M
WW-O ROAD	5912	11	11750	20395	10617
NORTH ROAD	5920	21	4590	48508	46012
PORT HUTT ROAD	5918	51	0	10003	10003
TUKU ROAD	5929	111	620	5300	4680
WHAREKAURI ROAD	5937	121	0	4724	4724
				Total	**82030m**
					82.03km

2. Unsealed Maintenance Metaling

Road	Dispatch	Road ID	Start RP	End RP	Quantity m3	
NORTH ROAD	5914	21	4590	30000	288	
PORT HUTT ROAD	5917	51	0	16615	48	
KAINGAROA ROAD	5913	126	0	2000	16	
TUKU ROAD	5931	111	2000	1400	40	
WW-O ROAD	5932	11	4440	24300	110	
		Totals		**This Month**	**502**	**m3**

Next Month's Target

8m3 over budget.

Crash Damage Report Summary

Date	Event	Action	Repaired Y/N
28/07/23	A vehicle went through both sets of railings on Nairn bridge and landed on the beach.	Damage not found till the next morning and made safe.	Y New post & railings installed.
12/08/23	Vehicle v's beast on North Road just past Murphy's causing extensive damage to the front end of the vehicle. Beast got up and ran away!	Vehicle moved off to the side to be recovered later.	N
17/09/24	Vehicle left at the shop with no hand brake applied = ran across the road and into the rail fence around the playground.	Vehicle removed and rails repaired.	Y
26/10/24	Vehicle hit concrete plinth during the night at D&G and shot across the road and through the fence into the trees.	Vehicle was removed and fence repaired.	Fence repaired by others. No damage to the pavement.
29/10/24	Vehicle ran off the road sometime during the night and through the fence by Wassa's pump shed on North Road.	Vehicle removed and fence to be repaired by others.	N

Network Inspections

Month	Inspection Type	Faults Identified	Inspected By
July 2024	Day	Drive around and check the network condition to program any maintenance works required.	Phil
August 2024	Day	Network checked during the Roadroid survey. No urgent faults found.	Tomby
October 2024	Day	Full network check during the Roadroid survey. No urgent faults found.	Tomby
December 2024	Day	Full network check to make sure all was good for the holiday period.	FH Crew
March 2025	Day	Full network check during the Roadroid survey. No urgent faults found.	Tomby
May 2025	Day	Full network check during the Roadroid survey.	Tomby
May 2025	Day/night	Network safety audit.	FH/Stantec

Monthly Safety Report and Statistics

Nothing to report.

1. Safety Engagements

Date	Near Miss	Incident	Lost Time Injury	Plant Damage	Depot/Worksite Inspections
12/05/23	N	N	N	N	Te Awainanga Bridge cleat replacements.
17/05/23	N	N	N	N	Whangamoe Bridge Replacement
16/08/23	N	N	N	N	Audit done on the workshop by Andy Allen.
19/10/23	N	N	N	N	New workshop washdown area checked while slab being poured to make sure everyone observing FH SOP's
20/12/23	N	N	N	N	Workshop inspected to see the changes made by the new mechanic = all good so far.
25 – 27 March 25	N	N	N	N	Visits to most FH sites with ECaNZ auditors to run through consents etc.

Metal Stockpiles

31/07/2025							
Site	***AP40 Schist***	***AP65***	***AP32 Basalt***	***AP100 Schist***	***AP20***	***G3 Chip***	***G5 Chip***
Waitaha Schist	1,779	0	0	0	0		
Waitaha Basalt	0	2,164	0	0	128	315	271
Paritu	1,805	0	0	481	0		
Stoney Crossing	0	424	3,952	0	2,480	311	111
FH Yard	0	80	200	0	16		
Ohinemama	0	0	0	0	0		
Muirsons Schist	3,168	0	0	848	0		
MPA Yard	0	0	0	0	0	51	230
	6,752	2,668	4,152	1,329	2,624	677	612

CIC Owned Materials

Signs

Item Description	Unit	Purchased	Used July 2025	End Measure	Comments
Signs					
CS85 North Rd	ea.			1	
CS85 Port Hutt Rd	ea.			1	
RG1	ea.			0	
RG2	ea.			0	
RM6 White	ea.			6	
RM6 Yellow	ea.			5	
RM7	ea.			16	
P66X242	ea.			7	
PW11	ea.			1	
PW11.1L	ea.			1	
PW11.1R	ea.			1	
PW12L	ea.			1	900
PW12R	ea.			1	
PW24	ea.			2	
PW25 65KM	ea.			1	
PW28	ea.			1	
PW34.1	ea.			1	900 Y
PW34.2	ea.			2	
PW37	ea.			1	900
PW49 FIRE ENGINE	ea.			2	
PWSX1	ea.			2	
RH-4	ea.			2	
PW54	ea.			2	
Marker pegs					
EMP	ea.		80	1032	
CULVERT MARKERS	ea.			4	
WHITE RAPID MARKERS	ea.			60	
Misc. Items					
ACROW PROPS	ea.			6	
ROAD COUNTER	ea.			1	
ROUGHOMETER	ea.			1	

Culvert Pipes

ALUFLOW

Item Description	Unit	Used	Purchased	End Measure
375mm	m			5
450mm	m			0
600mm	m			0
750mm	m			6
Civilboss				
225mm	m			24
300mm	m			30
375mm	m			18
450mm	m			24
525mm	m			15
600mm	m			30
700mm	m			30
800mm	m			24
1000mm	m			
Builders Mix				
CEMENT	T			0
GEOGRID Triax 160 3.8 x 75	Rolls			13
BIDIM CLOTH 3.9m x 100m	Rolls			0
BIDIM CLOTH 3.9m x 50m	Rolls			10.5

Environmental Compliance

Date	Site Inspected	Compliant Y/N	Abatement Order Issued	Corrective Action Required	Completed By
26/08/22	North Road Strengthening works	Y	N	N	Phil
13/10/22	Target Hill Rehab Site	Y	N	N	Phil
1/12/22	Kaingaroa Rehab Site	Y	N	N	Tomby
21/02/23	Whangamoe Bridge Replacement	Y	N	N	Tomby
18/05/23	Whangamoe Bridge Replacement	Y	N	N	Tomby
27/06/23	FH Workshop Wash Down Pad	Y	N	N	Phil
26/03/25	Biannual environmental and consent audit by ECaNZ.	Y	N	N	ECaNZ Phil

Stakeholder Complaints Register

Month	Council/ Public Complaint	Complaint	Repair Undertaken	Response Time
July 24	Public	Numerous potholes throughout the unsealed network.	Very wet conditions graders doing the best they can.	Ongoing.
October 24	Public	Road recently graded = rough with large rocks on road.	Nothing uncommon with a freshly graded road with a firm base.	Same Day = Nothing Done
December 24	Public	Soft areas appearing in the road pavement on Kaingaroa Road.	Holes filled, metal put on and graded.	2 Days
January 25	Public	Hugh pothole just past driveway on Tuku Road.	Filled and road graded = plant etc already on way there when call came in.	Same Day
March 25	Public	Hugh lip at property entrance off road.	Illegal entrance = not CIC or FH concern/problem.	30mins
June 25	Public	Flooding on Tuku Road @ RP8875.	Spoke to Council about history of this site.	30mins
June 25	Public	Potholes on Airbase Road.	E-mailed Council = Graders waiting on parts.	30mins

Public Relations & Community Involvement

Innovation

Summary of Monthly Progress Claim by Work Category

Jul-25	Seperable Portion One - Roading			
CIC GL Code	Value For Month	Value YTD	Annual Budget	% Of Annual Budget
201.2111.0144 - Sealed Pavement Maintenance	$ 11,507.98	$ 11,507.98		
201.2112.0144 - Unsealed Pavement Maintenance	$ 57,855.86	$ 57,855.86		
201.2113.0144 - Routine Drainage Maintenance	$ 4,000.00	$ 4,000.00		
201.2114.0144 - Structures Maintenance	$ 6,220.00	$ 6,220.00		
201.2121.0144 - Environmental Maintenance	$ 14,408.00	$ 14,408.00		
201.2122.0144 - Traffic Services	$ 4,481.84	$ 4,481.84		
201.2181.0144 - Council Facilities Maintenance	$ 499.11	$ 499.11		
202.9485.0214 - Traffic Services Renewal	$ 993.80	$ 993.80		
202.9511.0214 - Unsealed Road Metalling	$ 113,132.71	$ 113,132.71		
202.9513.0214 - Drainage Renewals	$ 92.81	$ 92.81		
202.9514.0214 - Sealed Pavement Rehab	$ 13,931.76	$ 13,931.76		
SP1 - Split Codes Cost Fluctuation	$ 81,503.70	$ 81,503.70		
Total:	**$ 308,627.57**	**$ 308,627.57**	**$ -**	

1. Miscellaneous

2. Traffic Counting

Ready to start again.

3. Pitt Island

Still waiting for machines to come back on barge.

4. Wind Damage

After a wild and wet month no reported or visible signs of damage.

Area of north Road ready for strengthening.


WHAREKAURI RD

4. Works & Services

4.3 Fulton Hogan Water and Wastewater Operation Contract Report

Date of meeting	11 September 2025
Agenda item number	4.3
Author/s	Fulton Hogan Contracts Manager

Purpose

To inform and update the Council on the Chatham Islands Water and Wastewater Operation programme.

Recommendations

THAT the reports be received.

Background

Attached is the July 2025 Water & Wastewater reports from Fulton Hogan.

chatham islands council

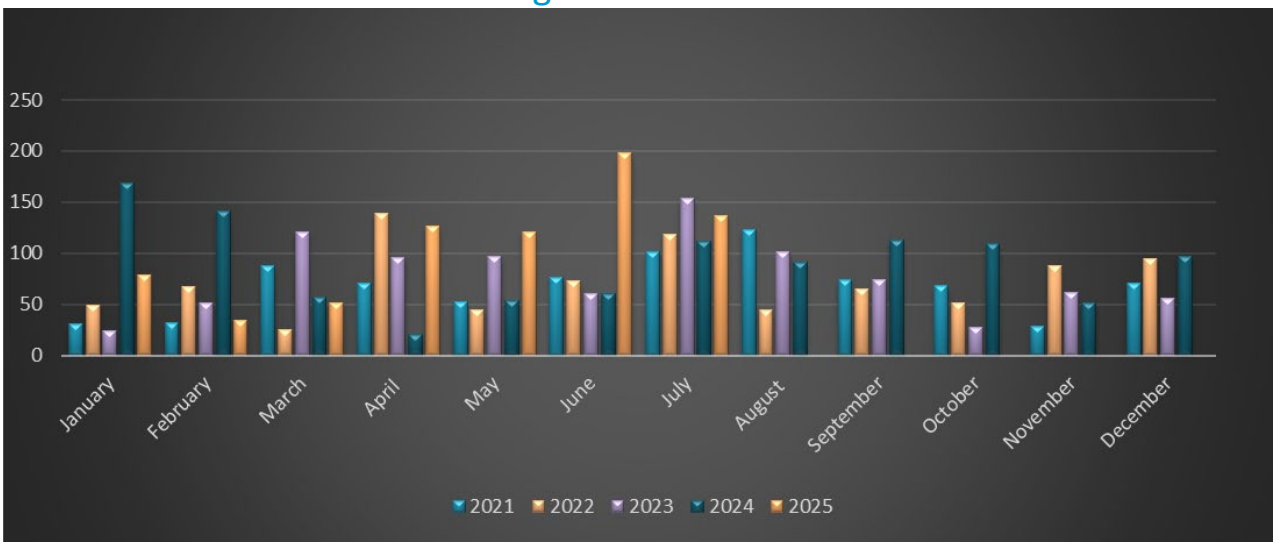
Fulton Hogan

One of the many joins in the sewer line near the solids tank

CHATHAM ISLANDS WATER AND WASTEWATER OPERATION CONTRACT MONTHLY REPORT July 2025

Work Summary

Outline of work carried out during the month:



137mm rainfall recorded for 1st – 31 July in the Waitangi yard.

Water Supply Operation & Maintenance:

No problems with the network operations this month.
We currently have four people sitting their level 4 drinking water standard.
We have been fitting water meters to the farm water tanks at Kaingaroa to help isolate leaks.

Water Treatment:

Tiki Tiki plant = nothing to report just normal maintenance.
Kaingaroa plant = nothing to report just normal maintenance.

Wastewater Treatment Plant at Waitangi:

Ongoing work with FH engineers to fine tune the process and get a more compliant effluent discharge.
Monitoring adjustments that were made last month.

Dayworks – Water:

Fitted meters to the Kaingaroa farm water tanks to help with trouble shooting leaks.

Dayworks – Wastewater:

Bad blockage between Solids tank and first manhole that took 3 days to clear properly.

Water and Wastewater Reticulation Network:

Network all good the past month apart from blockage in main sewer pipe by solids tank which resulted in wastewater entering the stream beside the playground.

We did manage to unblock the pipe, but this section will need replacing in the future to avoid this happening again.

Water and Wastewater Treatment Plant: Monitoring:

No issues this past month.

Kaingaroa Lake Monitoring Post = lake level is still very high preventing us from installing the new intake filter. Looking at options to install new intake while level is high.

Summary of Monthly Progress Claim by Work Category:

Jul-25	***Seperable Portion Two - Water & Wastewater***			
CIC GL Code	***Value For Month***	***Value YTD***	***Annual Budget***	***% Of Annual Budget***
General	$ 7,341.68	$ 7,341.68		
251.1741.0144 - Waitangi Wastewater	$ 1,652.62	$ 1,652.62		
271.1741.0144 - Water General	$ 6,114.65	$ 6,114.65		
271.1761.0255 - Waitangi Water Treatment	$ 4,056.69	$ 4,056.69		
271.1961.0255 Kaingaroa Water Treatment	$ 3,812.13	$ 3,812.13		
Total:	**$ 22,977.77**	**$ 22,977.77**	**$ -**	

Programmed Work for the Following Month:

Keep the plants and network operating as best we can.

Water Meter Report:

Next readings are due in September.

Irrigation Dosing:

Ground is waterlogged after the high level of rain this month but no excessive runoff evident.

Quality Assurance:

Site Safety Report:

Date	Near Miss	Incident	Lost Time Injury	Plant Damage	Depot/Worksite Inspections
23/08/23	N	N	N	N	WWWT Plant check once service had been completed.
19/03/24	N	N	N	N	Water & WWWT plant checks after services.

Environmental Non-Compliance:

Monthly Stocktake of Supplies:

General Supplies Stockpile – Month Ending June 2025

	Stock Purchased	Stock End of Previous Month	Stock Used	Stock Remaining End of Month
Salt		133 Bags	20	113bags
Chlorine	40	40lts	20L	60lts

PHOTOS

Trenching at The Council Flats.

Another join by the solids tank in Waitangi.

4. Works & Services

4.4 Fulton Hogan Waste Management Operation Contract Report

Date of meeting	11 September 2025
Agenda item number	4.4
Author/s	Asheesh Chand – Fulton Hogan Divisional Manager, Maintenance

Purpose

To inform and update the Council on the Chatham Islands Waste Management Operation programme.

Recommendations

THAT the reports be received.

Background

Attached to this report is the July 2025 Waste Management report from Fulton Hogan.

chatham islands council

Fulton Hogan

Owenga Leachate Pond

CHATHAM ISLANDS WASTE MANAGEMENT CONTRACT MONTHLY REPORT JULY 2025

Introduction

This report provides a summary of waste management activities through the month of July 2025.

Staff

We have potential 2 fulltime staff starting with us, currently going through the FH screening and HR processes.

Te One Transfer Station

A hive of activity this month emptying out the external sheds of Mitre 12 and setting them up for displaying timbers and building materials. The middle open bay will be used for small motors, lawnmowers for public to salvage. Bay 3 will be used as a temporary storage space for sorted woolpacks of recycling, awaiting to be baled. The big cream shipping container has been moved to the eastern side of the M12 building. We have loaded the shipping container with 15 good recycling bales of Tin, Aluminium cans, plastics #1 and Plastics #2 ready for shipping. Over time we should be able to fit a maximum of 42 bales.

The main forecourt has had a good covering of fresh metal spread. Water appears to be draining off better towards the back wall behind the skip bins and not settling on the main service area. Public have given good feedback of how tidy the space is looking.

Small safety improvements continued. The concrete floow gets slippery when wet, therefore, we have installed a carpet runner leading from the big door to the recycling station inside the MRF building. Utilising salvaged materials. Arlette has also made squeegee brooms out of old mop handles, some timber offcuts and some carpet underlay. These have been used to broom away any extra water after a full shed wash-down.

Our main MRF building has had a big tidy up allowing us to fit all the plant machinery inside at the end of each day out of the elements.

Tonne bag trial and skip bins. Our skip bins are in poorly condition while we await replacement, we are trialling the use of salvaged tonne bags for depositing the general bagged wastes. At the end of each day the tops are tied so that no wastes can get out. These are then loaded directly onto the Hino truck, weighed and transported out to Owenga landfill for tip out. At Owenga the bottoms of the bags are rigged up to lift together and empty by loosening the top ties. The tonne bags have been rewashed for reuse.

We have also had another go at baling bagged general waste with a mixture of soiled wet cardboard, we have identified some improvements required to improve this process moving forward and will continue to work with our waste team to make this possible. We see the benefit of implementing this process as the bales are already compacted when taken out to Owenga and are easy to place minimising disturbing the already processed wastes inside the cell.

Kaingaroa Transfer Station:

Our maintenance team continue to support with the Hiab lifting of the skip bins when required, in between staff have been using the smaller plant Hino and the trailer to continue the pickup of general wastes. Our compactor truck is currently in the workshop, so we remain vigilant and have had to do a couple of extra trips for smaller manageable loads.

Owenga Landfill

Weather conditions have hindered progress of work at Owenga. We are managing to keep the wastes covered and contained inside the cell. Our up-and-coming focus is the clearing of flora in and around the treatment plant drum and along the pipe that leads down behind the pines to the soak field. Another safety improvement completed is an added rail to the jetty leading out over the pond to the drain, strong and sturdy work by Tangi Pu contractor.

Appendix 1
Te One Waste Record

Owenga Waste Record

Summary Waste Record

4. Works & Services

4.5 Stantec Water & Wastewater Six Month Report – January - June 2025

Date of meeting	11 September 2025
Agenda item number	4.5
Author/s	Kirsten Norquay, Stantec New Zealand

Purpose

The Chatham Islands Council (Council) provides drinking water, non-potable water, wastewater and stormwater services to selected communities on Chatham Island. The schemes are owned by Council, managed by Stantec and operated and maintained by Fulton Hogan. Council Office primarily uses a private drinking water supply.

The purpose of this report is to summarise the performance of the schemes for the reporting period from 1st January 2025 to 30th June 2025 and recommend actions to protect public health, minimise adverse environmental effects, and ensure efficient and effective operation of the schemes, as funding allows.

Recommendations

THAT the reports be received.

Background

Members from the Stantec team will teleconference in to the meeting to accompany the report on six monthly activities.

Attachments

1. Stantec Six Monthly Water & Wastewater Report - January to June 2025

Water and Wastewater Schemes

Summary Report January to June 2025

PREPARED FOR Chatham Island Council | August 2025

We design with community in mind

Stantec

Revision schedule

Rev No	Date	Description	Signature of Typed Name (documentation on file)			
			Prepared by	**Checked by**	**Reviewed by**	**Approved by**
1	25/08/2025	Draft for client	Nicole Willoughby	Jack Boyd	Kirsten Norquay	Kirsten Norquay
2						

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Executive Summary

The Chatham Islands Council (Council) provides drinking water, non-potable water, wastewater and stormwater services to selected communities on Chatham Island. The schemes are owned by Council, managed by Stantec and operated and maintained by Fulton Hogan. Council Office primarily uses a private drinking water supply.

The purpose of this report is to summarise the performance of the schemes for the reporting period from 1st January 2025 to 30th June 2025 and recommend actions to protect public health, minimise adverse environmental effects, and ensure efficient and effective operation of the schemes, as funding allows. Key findings, progress and recommended actions for this reporting period are summarised below.

Scheme	Key findings	Progress	Recommended actions
Waitangi Water	Non-complying with DWQAR, primarily due to inadequate monitoring. No E. coli detected in raw, treated or reticulated water.	Based on monitoring results, UV system providing adequate protozoa treatment barrier.	Identify 'best practicable' approach for compliance. Complete commissioning of new plant and telemetry system. Seek funding for upgrades Update water safety plan
Kaingaroa Water	Non-complying with DWQAR, primarily due to inadequate treatment. No do not drink water notices were issued.	GAC filtration has improved UVT, but not consistently above 70% and not to a level that enables reliable chlorination. Additional GAC unit likely required. Intake extension pending low lake water level.	Identify 'best practicable' approach for compliance. Complete intake extension. Seek funding for upgrades. Review water safety plan.
Te One Transfer Station Water	No E. coli detected in treated water.		Prepare water safety plan.
Council Office/Museum Water	Private supply to Council leased building. No E.coli detected in treated water	n/a	Continue monitoring. Request landlord assesses regulatory requirements (e.g. registration, compliance).
Kaingaroa Non-Potable Water	Operational.	Public filling point installed.	Install appropriate signage and educate community of the relative benefits of this type of facility.
Owenga Non-Potable Water	Building supply to Council shed, not currently in use.	n/a	Maintain signage.
Waitangi Wastewater	Non-complying with resource consent, primarily due inadequate monitoring. Solids and organics below consent limits; elevated total nitrogen, ammonia-N, and E. coli.	Repaired pump station electrical circuit breaks and cutouts.	Finalise and lodge application to vary consent. Seek funding for upgrades.
Waitangi Stormwater	Storage tanks and pipes in state of disrepair.	System is not maintained.	Seek funding for upgrades.

Contents

List of appendices

List of tables

List of figures

Abbreviations

Abbreviation	Full Name
Ammonia N	Ammonia Nitrogen
BOD	Biochemical Oxygen Demand
BWN	Boil Water Notice
cfu	Coliform Forming Unit
CCP	Critical Control Point
CIC	Chatham Island Council
COD	Chemical Oxygen Demand
DIA	Department of Internal Affairs
DOC	Dissolved Organic Carbon
DWA	Drinking Water Assessor
DWQAR	Drinking-water Quality Assurance Rules
DWSNZ	Drinking-water Standards for New Zealand 2005 (Revised 2018)
ECan	Environmental Canterbury
E. coli	Escherichia coliform (E. coli)
FAC	Free Available Chlorine
FH	Fulton Hogan
GAC	Granular Activated Carbon
LTP	Long Term Plan
MAV	Maximum Acceptable Values
MPN	Most Probable Number
O&M	Operation and Maintenance
RBC	Rotating Biological Contactor
TOC	Total Organic Carbon
TSS	Total Suspended Solids
UV	Ultraviolet
UVT	Ultraviolet Transmittance
VSC	Very Small Communities
WSP	Water Safety Plan (formerly called Public Health Risk Management Plan, PHRMP)

Abbreviation	Full Name
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
WSEs	Water Services Entities

1 Introduction

1.1 Background

The Chatham Islands Council (the Council) provides the following on Chatham Island:

- Drinking water – reticulated supply for the Waitangi and Kaingaroa communities, community filling station in Waitangi, and building supply at the Te One Transfer Station
- Non-potable water – community filling station at Kaingaroa and building supply at the Owenga Landfill
- Wastewater – reticulated scheme for the Waitangi community
- Stormwater – reticulated scheme for a small part of Waitangi.

A large proportion of Chatham Island residents are not connected to a Council water or wastewater scheme (about 60% and 70% respectively) and are serviced by an individual or private system.

The Council Office / Museum Building in Waitangi is currently leased by Council and owned by Ngāti Mutanga. The Council Office / Museum Building is connected to the Council water supply, however, is mainly serviced by the private building supply.

The Council schemes are owned by the Council, managed by Stantec under a professional services contract, and operated and maintained by Fulton Hogan under an operations and maintenance (O&M) contract. Both contracts are combined water/wastewater and roading contracts, and do not include maintenance of the reticulated stormwater system. The 10-year O&M contract has recently been extended to 31 March 2026, while the professional services contract ends on 31 October 2026.

1.2 Purpose and Scope of Report

The purpose of this 6-monthly summary report (Summary Report) is to:

- Summarise information recorded for the Council schemes under the O&M contract
- Identify the degree of compliance with the Drinking Water Quality Assurance Rules (DWQAR) for Council drinking water supplies and with the resource consent for the Waitangi wastewater scheme
- Recommend actions to protect public health, minimise adverse environmental effects, and ensure the efficient and effective operation of the schemes, as funding allows.

This Summary Report covers the period from 1st January 2025 to 30th June 2025 (‘the reporting period’). The report is structured to align with the current drinking water compliance framework.

The DWQAR were amended 29 November 2024, which included modifications to monitoring and reporting requirements. These amendments are reflected in this report.

2 Waitangi Drinking Water Supply

An overview of the Waitangi drinking water supply, regulatory requirements and monitoring results is presented in Appendix A. This section summarises compliance, operation and maintenance of the supply for the reporting period.

Table 1 summarises the quarterly compliance as reported to Taumata Arowai. A review of compliance with all DWQAR rules will be carried out in the next reporting period to develop a 'best practicable' approach for Waitangi Water Supply.

Table 1: Waitangi Drinking Water Supply Quarterly Compliance Reporting

DWQAR Rule	Supply ID	Q1 Jan - Mar		Q2 Apr - Jun		Notes
		Complies	Non-Compliant Periods	Complies	Non-Compliant Periods	
S2.1	G01394	TRUE	0	TRUE	0	N/A
T2.1, T2.2, T2.4	TP02307	FALSE	3	FALSE	3	Treated water quality data (turbidity, UV dose, flow, FAC and pH) from online meters automatically uploaded to cloud-based portal. Instantaneous flow rate data is measured higher than the flow restrictor limit. However, the flow rate data is collected from a flow meter after the Treated Water Tank, which excludes the UV reactor flow restrictor. Treated water FAC was not consistently above 0.5 mg/L.
D2.1, D2.2	WAI158WA	FALSE	3	FALSE	3	Network FAC is measured and recorded on operator log sheets but not transcribed electronically. Working with operator to digitise the data.

Table 2 summarises operation and maintenance of the supply for the reporting period and recommended actions.

Table 2: Waitangi Drinking Water Supply Summary

Element	Key Findings, Progress and Recommended Actions
Type of Supply	• Reticulated, community drinking water supply. Registered with Taumata Arowai. • Community filling station in network accessible to public during working hours • Classified as a medium supply as it serves more than 100 but less than 500 people.
Water Demand	• Water demand during reporting period: - Exceeded sustainable yield (65 m^3/day) on 9 days: maximum of 91m^3/day. - 30-day moving average ranged from 39 to 63 m^3/day; average of 50 m^3/day. - Average daily demand of 294 L/p/day, based on 50 m^3/day and 170 people. • Average daily water use by all connections are below the residential limit, except for 8 of 77 connections. These 8 properties include a mix of commercial and residential connections. • Leaking private water assets are increasing water demand. CIC have issued letters to houses with high water use.
Customer Complaints and Level of Service	• Overall, Waitangi drinking water supply was non-compliant with the DWQAR for treatment (T2) and distribution (D2) rules, primarily due to inadequate monitoring. Regards to the source (S2) rule, Waitangi was compliant on both the first and second quarters of the year. See Table 1. • No boil water notices (BWN) were issued.

Improvements and Maintenance	• Completed annual water treatment plant service • Fixed water network leak near river • Fixed water network leak near the council houses • Fixed failed chlorine pump • Replaced failed UV fan
Recommended Actions	• Council reviews all DWQAR as planned to identify “best practicable” compliance approach and, where appropriate, amends monitoring • Council updates drinking water safety plan for the supply. • Council completes commissioning of new plant and telemetry system. • Council explores funding sources for unfunded projects in LTP and 30-year forecast.

3 Kaingaroa Drinking Water Supply

An overview of the Kaingaroa drinking water supply, regulatory requirements and monitoring results is presented in Appendix B. This section summarises compliance, operation and maintenance of the supply for the reporting period.

Table 3 summarises the quarterly compliance with DWAQR as reported to Taumata Arowai. A review of compliance with all DWQAR rules will be carried out in the next reporting period to develop a 'best practicable' approach for Kaingaroa Water Supply.

Table 3: Kaingaroa Drinking Water Supply Quarterly Compliance Reporting

DWQAR Rule	Supply ID	Q1 Jan-Mar		Q2 Apr-Jun		Notes
		Complies	Non-Compliant Periods	Complies	Non-Compliant Periods	
S1.1	S00858	TRUE	0	TRUE	0	N/A
T1.1	TP02306	TRUE	0	TRUE	0	N/A
D1.1	KAI041KA	TRUE	0	TRUE	0	N/A
Notes: • Protozoal barrier (UV disinfection) is not fully compliant. Additional organics removal required to improve the UV transmittivity (UVT) of the treated water, so it is consistently within the validation envelope for the UV system.						

Table 4 summarises operation and maintenance of the supply for the reporting period and recommended actions.

Table 4: Kaingaroa Drinking Water Supply Summary

Element	Key Findings, Progress and Recommended Actions
Type of Supply	• Reticulated, community drinking water supply. Registered with Taumata Arowai. • Classified as a small supply as it serves less than 100 people.
Water Demand	• Water demand during the reporting period: - Maximum daily flow was 35 m^3/day. - Average daily flow was 12 m^3/day. - Average daily demand of 200L/p/day, based on 12 m^3/day and 60 people.
Customer Complaints and Level of Service	• Overall, the Kaingaroa Water Supply was compliant with the DWQAR in both the first and second quarters of the year. See Table 3. • No customer complaints about supply (quantity or quality) in reporting period.
Improvements and Maintenance	• Completed annual water treatment plant service • Replaced two failed turbidity meters • Chlorate levels decreased in the network after an elevated chlorate reading in January (0.97 mg/L ± 0.32). No do not drink water notices were issued during the reporting period. • Ongoing chlorate monitoring added to default sampling. • Fixed faulty FAC probe. • Fixed UV fault at the water treatment plant • Installed flow meters at raw water tanks to monitor usage • Repaired raw water pump
Recommended Actions	• Council reviews all DWQAR as planned to identify "best practicable" compliance approach and, where appropriate, amends monitoring • Council completes water intake extension when lake level drops and completes commissioning of new plant and telemetry system. • Council explores funding sources for unfunded projects in LTP and 30-year forecast. • Council reviews the drinking water safety plan for the supply.

4 Te One Transfer Station Water Supply

An overview of the Te One Transfer Station building water supply, regulatory requirements and monitoring results are presented in Appendix C.

Table 5 summaries key matters for the reporting period and recommended actions.

Table 5: Te One Transfer Station Water Supply Summary

Element	Key Findings, Progress and Recommended Actions
Type of Supply	• Council owned building drinking water supply only used by staff. No public access. • Classified as a very small supply as it serves less than 25 people.
Monitoring	• Council carries out monitoring, but reporting is no longer required to Taumata Arowai under the amended DWQAR (29 November 2024). • No E.coli or total coliforms detected.
Building Occupant Complaints and Level of Service	• No complaints from building occupants about supply (quantity or quality) in reporting period.
Improvements and Maintenance	• Ongoing water quality monitoring
Recommended Actions	• Council prepares a water safety plan for the supply.

5 Council Office/Museum Water Supply

This section is for information only. The Council does not own or operate the water supply.

An overview of the privately owned Council Office / Museum building water supply and monitoring results is presented in Appendix D. Table 6 summarises key matters for the reporting period and recommended actions.

Table 6: Council Office/Museum Water Supply Summary

Element	Key Findings, Progress and Recommended Actions
Type of Supply	• **Privately owned and operated building drinking water supply; Council is not responsible for meeting regulatory requirements.** • Council leases the building, which is primarily serviced by a private building water supply but can use the Waitangi drinking water supply if required (e.g., if insufficient rainwater captured). • Water supply is used by Council staff, Councillors and the public when at the Council Office and Museum.
Monitoring	• Council carries out monthly monitoring of the treated water as it has a duty of care under the Health and Safety at Work Act. • Elevated concentrations of zinc have been detected in the Annual Report for 2024. Council will continue to monitor zinc annually and liaise with the building owner as required. • No E.coli or total coliforms detected.
Recommended Actions	• Council requests the landlord assess its regulatory requirements (including any registration, compliance monitoring and reporting) and carries out all required maintenance. • Council continues to carry out monthly monitoring in the interim.

6 Kaingaroa Non-Potable Water Scheme

An overview of the Kaingaroa non-potable water scheme is presented in Appendix E. Table 7 summarises key matters for the reporting period and recommended actions.

Table 7: Kaingaroa Non-Potable Water Scheme Summary

Element	Key Findings, Progress and Recommended Actions
Type of Supply	• Council owned community non-potable water filling station. • DWQAR do not apply as it is not a drinking water supply. • Council does not carry out water quality or quantity monitoring.
Recommended Actions	• Council installs appropriate signage (i.e., 'not for drinking') and educates community on its benefits of use.

7 Owenga Non-Potable Water Supply

Table 8 summarises key matters for the reporting period and recommended actions.

Table 8: Owenga Non-Potable Water Supply Summary

Element	Key Findings, Progress and Recommended Actions
Type of Supply	• Council owned non-potable building water supply at Owenga Landfill only accessible by staff. No public access. • Supply comprises a rainwater collection tank that supplies a tap in the site shed. Shed is not currently in use. Appropriate signage maintained at tap to advise the water is not suitable for drinking. • DWQAR do not apply as it is not a drinking water supply. • Council does not carry out water quality or quantity monitoring.
Recommended Actions	• Council to ensure appropriate signage is maintained at the tap.

8 Waitangi Wastewater Scheme

An overview of the Waitangi wastewater scheme, regulatory requirements and monitoring results is presented in Appendix F. This section summarises compliance, operation and maintenance of the scheme for the reporting period.

Table 9 summarises compliance for Waitangi Wastewater Treatment Plant (WWTP) for this reporting period for resource consent conditions with monitoring requirements as well as rationale for conditions the Council proposes to vary. The consent condition number given in Table 9 refers to the consent to discharge treated wastewater to land, and numbers marked by asterisk that refer to the consent for the discharge of contaminants to air.

Table 9: Waitangi Wastewater Scheme Six Monthly Consent Compliance

Consent Condition	Item	Consent Compliance	Notes and Recommended Actions
8, 12	UV intensity	UV intensity and UV alarms reviewed several times per week as required.	Cleaned UV sleeves. Minor improvement in treatment observed.
5, 18	Treated wastewater Quality	Annual median for TSS, COD, BOD less than consent limit. Annual median for total nitrogen, ammonia-N and E.coli exceeded consent limit.	**Recommend continue with application to vary consent.** The land application system will further reduce solids, organics, nitrogen and micro-organisms prior to treated wastewater discharge reaching groundwater. No adverse environmental effects have been observed.
6	Treated wastewater volume	All daily flows less than consent limit.	**Recommend new online discharge flow metering installed, as funding allows.**
7	Irrigation Rate	Insufficient data to determine irrigation rates. Operators manually rotate the area of land irrigated on a given day.	**Recommend continue with application to vary consent and pursuing funding for upgrades to maximise land application area.**
15	Groundwater quality	No groundwater sampling has been carried out. The shallow groundwater monitoring bores were installed at time of construction. However, as groundwater has never been present in the bores, sampling has not been able to be carried out.	**Recommend continue with application to vary consent.** Surrounding land use is mainly agricultural and no downstream potable groundwater takes
17	Soil conditions	No soil sampling, baseline or subsequent sampling, has been carried out.	**Recommend continue with application to vary consent.** Land application area supports lush vegetative growth.
23, 5*	Complaints Log	One complaint was received this reporting period related to the operation of the wastewater treatment plant and application field.	Further details regarding this complaint are unknown.

Table 10 summarises operation and maintenance of the scheme for the reporting period and recommended actions.

Table 10: Waitangi Wastewater Scheme Summary

Element	Key Findings, Progress and Recommended Actions
Type of Scheme	• Reticulated, community wastewater scheme, with discharge of treated wastewater to Council owned land adjacent to the Waitangi WWTP.
Complaints and Level of Service	• Overall, the Waitangi WWTP was non-compliant with the resource consent, primarily due to inadequate monitoring. See Table 9. As any adverse environmental impacts are considered to be no more than minor, no abatement notices, infringement notices, enforcement orders, or convictions were issued. The Council is preparing an application to vary the resource consent conditions.

Element	Key Findings, Progress and Recommended Actions
	• One customer complaint regarding the WWTP or land application system (i.e., odours, ponding, blockages). Further details about the nature of this complaint are not currently known.
Improvements and Maintenance	• Repaired electrical circuit breaks and cutouts at the pump station by the bridge • Sludge return, solids and irrigation tanks have been cleaned out. • Removed and replaced four broken irrigation sprinklers • Cleaned UV sleeves • Council issued a letter to residents requesting they disconnect stormwater connections to the wastewater system.
Recommended Actions	• Council rectifies issues identified in targeted CCTV of sewerage network, installs new online discharge flow metering, and extends land application system as funding allows. • Council progresses application to vary resource consent conditions • Council explores funding sources for unfunded projects in LTP and 30 year forecast.

9 Waitangi Stormwater Scheme

An overview of the Waitangi Stormwater Scheme is presented in Appendix G. Table 11 summarises operation and maintenance of the scheme for the reporting period and recommended actions.

Table 11: Waitangi Stormwater Scheme Summary

Element	Key Findings, Progress and Recommended Actions
Type of Scheme	• Reticulated stormwater scheme for part of Waitangi that discharges into an old water tank. This tank has several leaks, meaning stormwater ultimately discharges to a nearby watercourse. • No regulatory reporting requirements.
Improvements and Maintenance	• Due to budget constraints, system is not managed or maintained under the existing professional services or O&M contracts. • Storage tanks and pipework in state of disrepair. • Council reviews 30-year 3Water financial forecast in context of proposed legislation
Recommended Actions	• Council explores funding sources for unfunded projects in LTP and 30 year forecast.

Appendices

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Appendix A Waitangi Water

A.1 Historical Context

The Waitangi community is serviced by a treated, reticulated water supply. Key historical background is:

- Prior to 2005 the Waitangi community was serviced by a mixture of small community schemes, rainwater building supplies and private bores.
- The Ministry of Health (MoH) funded a major upgrade in 2005 to provide a single water scheme for Waitangi, with an extended piped network, a new water treatment plant (some plant was second-hand to reduce costs), and new treated water storage at Met Station. The existing community rainwater supply at Highet Place was converted into a reticulated stormwater system, with the treatment plant and treated water storage abandoned.
- MoH funding and Three Waters Stimulus funding from Department of Internal Affairs (DIA) was used to carry out critical replacements and urgent upgrades in 2021 – 2022 to mitigate public health risks, with new online monitoring and cloud-based data capture, improved filter backwashing, new UV disinfection system, new network toby boxes (flow meters and valves), and new backflow preventers on key water users.
- Further funding is required to address outstanding issues, including upgrading the Waitangi Water Supply with a new bore source as the current demand exceeds the sustainable yield of the existing aquifer during summer, a new treatment plant, and extending the reticulation to Te One.

A.2 Process Overview

Waitangi water supply is shown schematically in Figure 1. Raw water is drawn from the Tikitiki Bore at Tikitiki Hill. The raw water enters the water treatment plant (WTP) and is pumped through a multimedia filter (sand and anthracite media) to remove particulate matter. The water is softened to reduce scaling in pipes from excessive hardness in the water. Disinfection is provided via UV (Critical Control Point, CCP; provides protozoa protection) and sodium hypochlorite dosing (CCP; provides residual disinfection in the reticulation network). The Tikitiki Reservoir provides more than 30 minutes contact time prior to treated water being pumped into the network. The four, interconnected Met Station Reservoirs are within the network for storage. Most properties have a header tank and some also have a booster pump. A community filling point is located with the O&M Contractor's yard and is accessible during normal working hours.

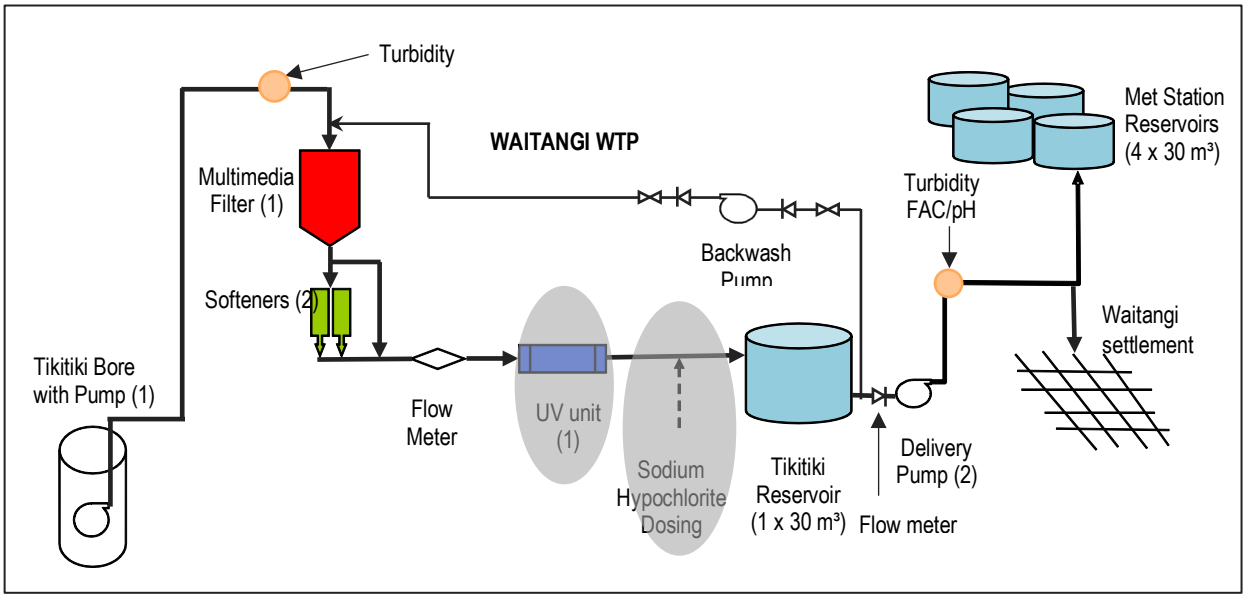


Figure 1: Waitangi Water Supply System schematic. CCPs shaded grey. The orange circles represent locations of online monitoring instruments.

A.3 Regulatory Overview

Key information about the Waitangi Water Supply is:

- Registered with Taumata Arowai as a water supply ID WAI158.
- Classified as a medium supply (i.e., greater than 101, less than 500 people) under Drinking Water Quality Assurance Rules (DWQAR), which means rules G, S2, T2, D2 apply.
- Due to remote location and associated transport logistics, CIC has adopted a 'best practicable' approach for routine compliance monitoring. This means the monitoring requirements under DWQAR are not being fully met.

- Water Safety Plan (WSP) and Critical Control Points (CCPs) have been submitted to Taumata Arowai. The CCPs were updated to reflect the 2021/22 WTP upgrades, however external funding is required to update the main body of the WSP. The current CCPs for UV disinfection and residual chlorination are provided below. The CCPs need to be updated once the cloud-based reporting systems are fully commissioned.

Table 12: Critical Control Points Process Control Summary – UV Disinfection

Process objectives:

1. Provide a **primary disinfection Critical Control Point** to inactivate bacterial, viral, and protozoan pathogens that may have entered upstream of dosing point.

Operational day-to-day monitoring of control process:	
What	• **UV dose** in mJ/cm^2 • **Turbidity** in NTU • **Flow** restricted to 37 L/min
When	• Manually recorded at least **5 days per week** from the instrument displays. • UV dose and turbidity data logged **continuously** to a local RTU and uploaded to a cloud-based platform at regular intervals (weekly)*.
Where	• UV reactor display (COMMcenter module) • UV outlet turbidity instrument display (Hach SC200)
How	• UV dose calculated and displayed by COMMcentre using UVI and maximum rated flow (based on flow restrictor) (Trojan UVMax Pro50). • NTU measured by turbidimeter and displayed on transmitter (Hach 1720E/SC200).
Who	• Water Treatment Plant Operator
Records	• Logbook hard copy kept at the WTP. Contract Manager inputs data straight away into WaterOutlook, a proprietary database that the Water Engineer can access remotely. • All monitoring data is uploaded automatically at regular intervals to a cloud-based platform via local RTU. There are alarm setpoints that will notify Operator by text message when the water quality does not comply. *

Process performance criteria at monitoring point:		***Correction if performance criteria are not met:***
Target Range:	• UV dose: 40-100 mJ/cm^2 • NTU: <1.0 (Treated Water) ○ NTU Operational Target: <0.3	• Operator to check filters are operating normally **(Multimedia, Softener)**; filters backwash automatically based on run time. • Perform **UV reactor sensor and lamp check** during routine inspections. • Check UV dose and turbidimeters.
Action Limits:	• UV dose: <40 mJ/cm^2 • NTU: 1.0-2.0 (>15 min) Alarm sent to Operator via text message to carry out corrective actions (Tier 2 Alarm). *	• Operator to check alarm condition of the UV reactor and rectify if required. • Operator to check filter pressures and turbidity instruments. • Operator to **manually backwash filters (Multimedia, Softener)** to achieve the target UV dose and turbidity. • Operator to **notify Contract Manager** • **Review online data*.**
Critical Limits:	• UV dose: <40 mJ/cm^2 • NTU: >2 (>3 min) Alarm sent to Operator via text message to shut down plant (Tier 1 Alarm). *	• Operator to **shut down network pump.** • Operator to undertake troubleshooting identified in 'Action Limits' above and then restart plant. If issues are not resolved, shutdown WTP. • Operator to **notify Contract Manager** • Contract Manager to **notify Water Engineer.** • Water Engineer to **notify CEO and DWA** if water outside of critical limits needs to be supplied or has been supplied and follow Contingency Plan 3: Failure of Treatment Process in the Water Safety Plan. • **Review online data*.**

Notes:

* Once online monitoring and cloud-based system is fully commissioned

Supporting programs:

1. **Monthly analysis** for **E. coli** and **total coliforms by accredited laboratory of raw, treated, and distribution network grab samples, and UVT of the treated water only.** Laboratory reports sent directly to Contract Manager and Water Engineer. Water Engineer reports monthly to CEO, and Water Engineer reports exceedances as soon as practicable to CEO and DWA if results are outside DWSNZ.
2. **Annual WTP servicing by service agent (FILTEC)**, which includes instrument servicing and equipment maintenance.
3. **Annual refresher training** of Operator in operation, maintenance and troubleshooting of treatment process units and instrumentation (i.e., calibrations) by service agent (FILTEC).
4. **Monthly monitoring instrument checks** and calibration by Operator.
5. ECan quarterly raw water chemistry sampling programme.
6. Flow Restrictor on UV unit limits process flow so hydraulic design capacity is not exceeded.
7. Minimum six-monthly water meter reading frequency.

Planned programs:

1. Upgrade of Waitangi Water Supply, including a new bore, new treatment plant, and modifications to the network.
2. Install telemetry and cloud-based reporting system for monitored parameters. Reliant on provision of cell phone coverage to Chathams via the government's rural connectivity project.

Table 13: Critical Control Points Process Control Summary – Residual Chlorination

Process objectives:

1. Provide a **primary disinfection Critical Control Point** to inactivate bacterial and viral pathogens that may have entered upstream of dosing point.
2. Provide **residual disinfection Control Point** to help inactive pathogens entering downstream of the dosing point.

Operational day-to-day monitoring of control process:		
What	• Free Available Chlorine (**FAC**) mg/L • **pH** in pH units. (Not able to be adjusted if outside ideal range) • **Turbidity** in NTU	
When	• Manually recorded at least **5 days per week** from the instrument displays. • FAC, pH, and turbidity data logged **continuously** to a local RTU and uploaded to a cloud-based platform at regular intervals (weekly)*.	
Where	• Treated Water Reservoir outlet FAC and pH instrument (Depolox 400M display) • UV outlet turbidity instrument (Hach SC200)	
How	• FAC and pH measured and displayed by instrument (Depolox 400M with FC2 and pH sensors). The instrument corrects the FAC at pH unit range of 6-8.75. • NTU measured by turbidimeter and displayed on transmitter (Hach 1720E/SC200).	
Who	• Water Treatment Plant Operator	
Records	• Logbook hard copy kept at the WTP. Contract Manager inputs data straight away into Water Outlook, a proprietary database that the Water Engineer can access remotely. • All monitoring data is uploaded automatically at regular intervals to a cloud-based platform via local RTU. There are alarm setpoints that will notify Operator by text message when the water quality does not comply. *	
Process performance criteria at monitoring point:		***Correction if performance criteria are not met:***
Target Range:	• FAC: 0.2 - 0.5 mg/L • pH: 6-8 • NTU: <1.0 (Treated Water) ○ NTU Operational Target: <0.3	• Operator to **adjust chlorine dosing** system to achieve target range. • Operator to check filters are operating normally and **manually backwash filters (Multimedia, Softener)** as required; filters backwash automatically based on run time. • Check turbidity, FAC and pH instruments during routine inspections.
Action Limits:	• FAC: < 0.2 mg/L or > 0.6 mg/L • pH: 6-8 • NTU: 1.0-2.0 (>15 min) Alarm sent to Operator via text message to carry out corrective actions (Tier 2 Alarm). *	• Operator to **adjust chorine dosing** to within targets. • Operator to undertake **troubleshooting** (e.g., dosing pump function, age of solution, filters, pressure, turbidity, chlorine, and pH check/calibration). • Operator to **manually backwash filters (Multimedia, Softener)** and **reduce flow** to achieve the target NTU. • Operator to **notify Contract Manager.** • **Review online data***.
Critical Limits:	• FAC: < 0.1 mg/L or > 1 mg/L • NTU: >2 (>3 min) • pH: >8 Alarm sent to Operator via text message to shut down plant (Tier 1 Alarm). *	• Operator to **shut down network pump** and **adjust chlorine level.** • Operator to undertake troubleshooting identified in 'Action Limits' above and then restart plant. • If issues are not resolved, shutdown WTP. • Operator to **notify Contract Manager.** • Contract Manager to **notify Water Engineer.** • Water Engineer to **notify CEO and DWA** if water outside of critical limits needs to be supplied or has been supplied and follow Contingency Plan 3 in the Water Safety Plan. • **Review online data***.

Notes:

* Once online monitoring and cloud-based system is fully commissioned

Supporting programs:

1. **Monthly analysis** for **E. coli** and **total coliforms by accredited laboratory of raw, treated at the WTP, and distribution network grab samples.** Laboratory reports sent directly to Contract Manager and Water Engineer. Water Engineer reports monthly to CEO, and Water Engineer reports exceedances as soon as practicable to CEO and DWA if results are outside DWSNZ.
2. **Annual WTP servicing by service agent (FILTEC)**, which includes instrument servicing and equipment maintenance.
3. **Annual refresher training** of Operator in operation, maintenance and troubleshooting of treatment process units and instrumentation by service agent (FILTEC).
4. **Monthly monitoring instrument checks** and calibration by Operator. FAC/pH to also be crossed-checked using a handheld meter (eXact Micro 20 Photometer)
5. ECan raw water chemistry sampling programme.
6. Flow Restrictor limits process flow so hydraulic design capacity is not exceeded.
7. Minimum six-monthly water meter reading frequency.

Planned programs:

1. Upgrade of Waitangi water supply, including a new bore, new treatment plant, and modifications to the network.
2. Install telemetry and cloud-based reporting system for monitored parameters. Reliant on provision of cell phone coverage to Chathams via the government's rural connectivity project.

A.4 Monitoring Data

The average daily water abstraction flows, based on manual readings of the WTP meter, are shown in Figure 2.

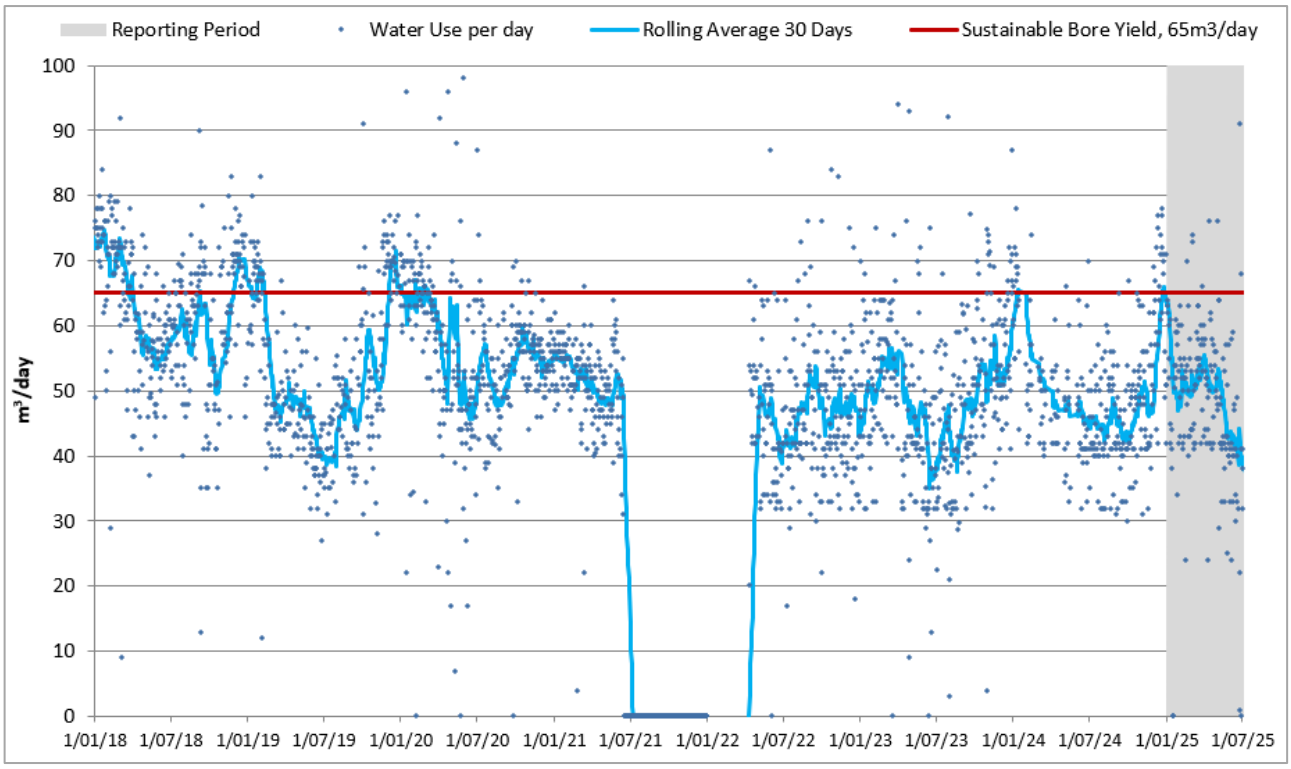


Figure 2: Average Daily Water Abstraction for Waitangi

Key points to note about the historic water abstraction data are:

- Prior to 2019 there was a higher demand due to on-island construction workers for the Waitangi Wharf Project.
- Demand returned to typical levels from mid-2019 when construction ended.
- No data is available from 2021 to 2022 due to a faulted flow meter.
- From 2021, demand increased due to more domestic tourists associated with COVID-19 travel restrictions.
- Demand returned to more typical levels from late 2022 – 2023 when COVID-19 restrictions were lifted with an increase in demand during the summer period.

Figure 3 summarises the average daily water use across the community for this reporting period. Meter readings are typically taken on a quarterly basis in January, April, June, and September. Most connections used less than the residential connection limit of 1.5 m^3/day (Chatham Island Water Strategy, December 2010). Those above the limit include both residential and commercial connections. Fulton Hogan continues to monitor water usage and investigates atypically high usage.

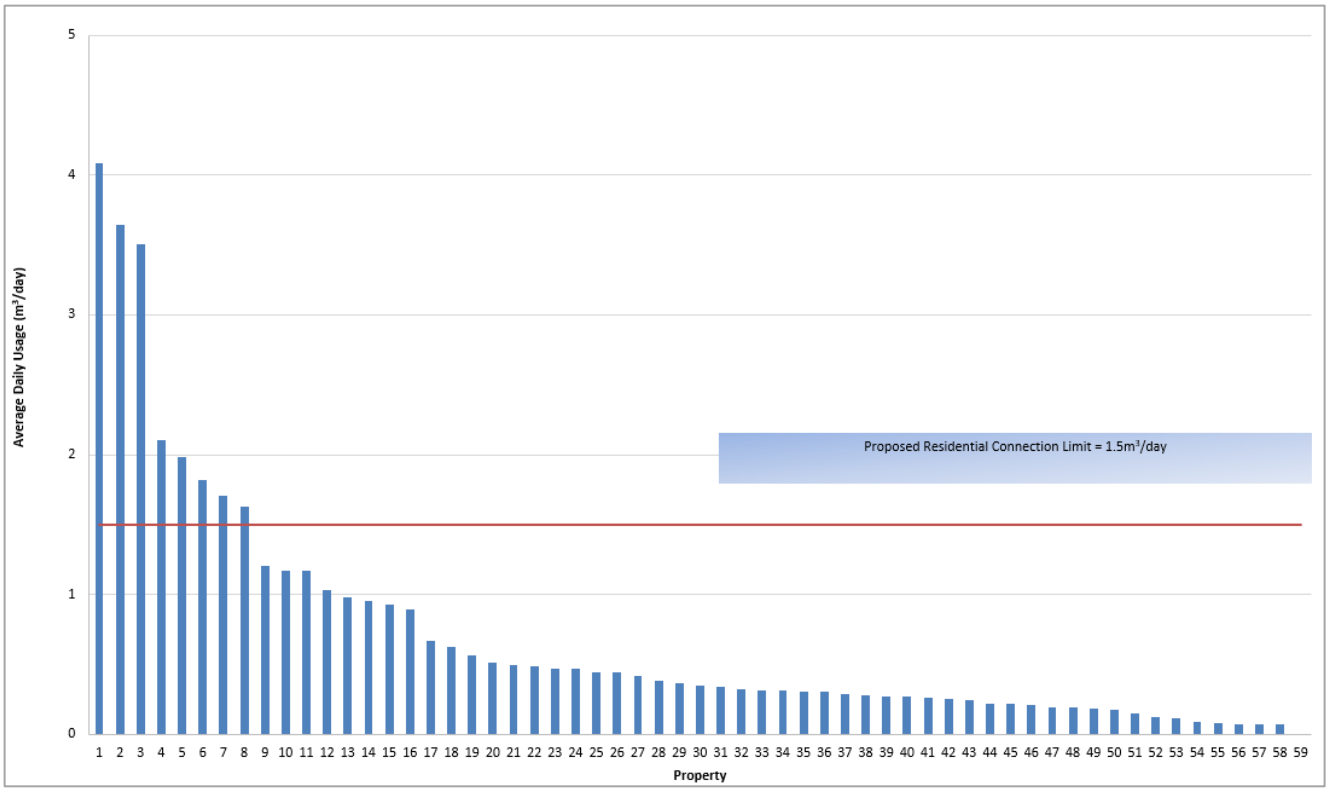


Figure 3: Average Daily Water Usage for Waitangi Connections During this Reporting period

Figure 4 presents treated water quality data, with pH and free available chlorine (FAC) based on on-site readings and turbidity based on analysis by Hill Laboratories.

Figure 4: Waitangi treated water pH, FAC and turbidity

Table 14 presents E.coli and total coliform concentrations from raw, treated and reticulation water samples based on analysis by Hill Laboratories from 2018. Previous data are recorded in previous reports, and they are stored in spreadsheet maintained by Stantec. Reticulation samples were taken from following locations and are identified with these respective colours: Council Office, Works Yard, Wilson Place, Council House, Hotel Chatham.

Table 14: Waitangi microbiological data

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Date of Sampling	Days between samples	Total Coliforms (MPN/100mL)		
		Raw	Treated	Reticulation			Raw	Treated	Reticulation
30/01/2018	42	<1	<1	<1	30/01/2018	42	<1	<1	<1
20/02/2018	21	<1	<1	<1	20/02/2018	21	<1	<1	<1
20/03/2018	28	<1	<1	<1	20/03/2018	28	<1	<1	<1
17/04/2018	28	<1	<1	<1	17/04/2018	28	<1	<1	<1
15/05/2018	28	<1	<1	<1	15/05/2018	28	<1	<1	<1
20/06/2018	36	<1	<1	<1	20/06/2018	36	<1	<1	<1
17/07/2018	27	<1	<1	<1	17/07/2018	27	<1	<1	<1
21/08/2018	35	<1	<1	<1	21/08/2018	35	<1	<1	<1
18/09/2018	28	<1	<1	<1	18/09/2018	28	<1	<1	<1
16/10/2018	28	<1	<1	<1	16/10/2018	28	<1	<1	<1
20/11/2018	35	<1	<1	<1	20/11/2018	35	<1	<1	<1
18/12/2018	28	<1	<1	<1	18/12/2018	28	<1	<1	<1
15/01/2019	28	<1	<1	<1	15/01/2019	28	<1	<1	<1
19/02/2019	35	<1	<1	<1	19/02/2019	35	<1	<1	<1
19/03/2019	28	<1	<1	<1	19/03/2019	28	<1	<1	<1
16/04/2019	28	<1	<1	<1	16/04/2019	28	<1	<1	<1
21/05/2019	35	<1	<1	<1	21/05/2019	35	6	<1	<1
18/06/2019	28	<1	<1	<1	18/06/2019	28	1	1	<1
16/07/2019	28	<1	<1	<1	16/07/2019	28	2	<1	<1
20/08/2019	35	<1	<1	<1	20/08/2019	35	3	<1	<1
17/09/2019	28	<1	<1	<1	17/09/2019	28	<1	<1	<1
22/10/2019	35	<1	<1	<1	22/10/2019	35	<1	<1	<1
19/11/2019	28	<1	<1	<1	19/11/2019	28	<1	<1	<1
24/12/2019	35	<1	<1	<1	24/12/2019	35	<1	1	<1
21/01/2020	28	<1	<1	<1	21/01/2020	28	<1	<1	34
18/02/2020	28	<1	<1	2	18/02/2020	28	<1	<1	>200
21/02/2020	3	<1	<1	<1	21/02/2020	3	<1	<1	<1
24/02/2020	3	<1	<1	<1	24/02/2020	3	<1	<1	<1
25/02/2020	1	<1	<1	<1	25/02/2020	1	<1	<1	<1
3/03/2020	7	<1	<1	<1	3/03/2020	7	<1	<1	<1
17/03/2020	14	<1	<1	<1	17/03/2020	14	<1	<1	<1
21/04/2020	35	<1	<1	<1	21/04/2020	35	<1	<1	<1
19/05/2020	28	<1	<1	<1	19/05/2020	28	<1	<1	<1
16/06/2020	28	<1	<1	<1	16/06/2020	28	<1	<1	<1
21/07/2020	35	<1	<1	<1	21/07/2020	35	<1	<1	<1
18/08/2020	28	<1	<1	<1	18/08/2020	28	<1	<1	<1
15/09/2020	28	<1	<1	<1	15/09/2020	28	<1	<1	<1
20/10/2020	35	<1	<1	<1	20/10/2020	35	<1	<1	<1
17/11/2020	28	<1	<1	<1	17/11/2020	28	<1	<1	<1
15/12/2020	28	<1	<1	<1	15/12/2020	28	3	<1	<1
26/01/2021	42	<1	<1	<1	26/01/2021	42	<1	<1	<1
16/02/2021	21	<1	<1	<1	16/02/2021	21	<1	<1	<1
16/03/2021	28	<1	<1	<1	16/03/2021	28	<1	<1	<1
20/04/2021	35	<1	<1	<1	20/04/2021	35	<1	<1	<1
18/05/2021	28	<1	<1	<1	18/05/2021	28	<1	<1	<1
16/06/2021	29	<1	<1	<1	16/06/2021	29	<1	<1	<1
20/07/2021	34	NT	<1	<1	20/07/2021	34	NT	<1	<1
24/08/2021	35	NT	<1	<1	24/08/2021	35	NT	<1	<1

* NT – Not Taken
Reticulation sample location: Council Office, Works Yard, Wilson Place, Council House, Hotel Chatham

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)		
		Raw	Treated	Reticulation
21/09/2021	28	<1	<1	<1
19/10/2021	28	<1	<1	<1
16/11/2021	28	<1	<1	<1
21/12/2021	35	<1	<1	<1
18/01/2022	28	<1	<1	<1
25/01/2022	7	<1	<1	<1
15/02/2022	21	<1	<1	<1
22/03/2022	35	<1	<1	<1
19/04/2022	28	<1	<1	<1
17/05/2022	28	<1	<1	<1
21/06/2022	35	<1	<1	<1
19/07/2022	28	<1	<1	<1
30/08/2022	42	<1	<1	<1
20/09/2022	21	<1	<1	<1
19/10/2022	29	<1	<1	<1
16/11/2022	28	<1	<1	<1
14/12/2022	28	<1	<1	<1
23/01/2023	40	<1	<1	<1
20/02/2023	28	<1	<1	<1
4/04/2023	43	<1	<1	<1
2/05/2023	28	<1	<1	<1
30/05/2023	28	<1	<1	<1
26/06/2023	27	<1	<1	NT
18/07/2023	22	<1	<1	<1
15/08/2023	28	<1	<1	<1
19/09/2023	35	<1	<1	<1
23/10/2023	34	<1	<1	<1
20/11/2023	28	<1	<1	<1
18/12/2023	28	<1	<1	<1
15/01/2024	28	<1	<1	<1
19/02/2024	35	<1	<1	<1
18/03/2024	28	<1	<1	<1
16/04/2024	29	<1	<1	<1
28/05/2024	42	<1	<1	<1
26/06/2024	29	<1	<1	<1
23/07/2024	27	<1	<1	<1
13/08/2024	21	<1	<1	<1
17/09/2024	35	<1	<1	<1
22/10/2024	35	<1	<1	<1
19/11/2024	28	<1	<1	<1
17/12/2024	28	<1	<1	<1
20/01/2025	34	<1	<1	<1
17/02/2025	28	<1	<1	<1
17/03/2025	28	<1	<1	<1
28/04/2025	42	<1	<1	<1
19/05/2025	21	<1	<1	<1
16/06/2025	28	<1	<1	<1

Date of Sampling	Days between samples	Total Coliforms (MPN/100mL)		
		Raw	Treated	Reticulation
21/09/2021	28	<1	<1	<1
19/10/2021	28	<1	<1	<1
16/11/2021	28	<1	<1	<1
21/12/2021	35	5	<1	<1
18/01/2022	28	NT	NT	NT
25/01/2022	7	<1	<1	<1
15/02/2022	21	<1	<1	<1
22/03/2022	35	<1	<1	<1
19/04/2022	28	2	<1	<1
17/05/2022	28	<1	<1	<1
21/06/2022	35	5	<1	<1
19/07/2022	28	<1	<1	<1
30/08/2022	42	<1	<1	<1
20/09/2022	21	<1	<1	<1
19/10/2022	29	<1	<1	<1
16/11/2022	28	<1	<1	<1
14/12/2022	28	<1	<1	<1
23/01/2023	40	<1	<1	<1
20/02/2023	28	<1	<1	<1
4/04/2023	43	<1	<1	<1
2/05/2023	28	<1	<1	<1
30/05/2023	28	<1	<1	<1
26/06/2023	27	<1	<1	NT
18/07/2023	22	<1	<1	<1
15/08/2023	28	<1	<1	<1
19/09/2023	35	<1	<1	<1
23/10/2023	34	<1	<1	<1
20/11/2023	28	<1	<1	<1
18/12/2023	28	<1	<1	<1
15/01/2024	28	<1	<1	<1
19/02/2024	35	<1	<1	<1
18/03/2024	28	<1	<1	<1
16/04/2024	29	<1	<1	<1
28/05/2024	42	<1	<1	<1
26/06/2024	29	<1	<1	<1
23/07/2024	27	<1	<1	<1
13/08/2024	21	<1	<1	<1
17/09/2024	35	<1	<1	<1
22/10/2024	35	<1	<1	<1
19/11/2024	28	<1	<1	<1
17/12/2024	28	<1	<1	<1
20/01/2025	34	<1	<1	<1
17/02/2025	28	<1	<1	<1
17/03/2025	28	<1	<1	<1
28/05/2025	72	<1	<1	<1
19/05/2025	-9	<1	<1	<1
16/06/2025	28	<1	<1	<1

** NT – Not Taken
Reticulation sample location: Council Office, Works Yard, Wilson Place, Council House, Hotel Chatham

Table 15: Waitangi UVT

Date of Sampling	Days between samples	Turbidity		UVT	
		Raw	Treated	Raw	Treated
16/11/2021	-	0.20	0.09	NT	96.8
14/12/2021	28	0.15	0.41	NT	93.8
21/12/2021	7	0.17	0.48	NT	94.7
25/01/2022	35	0.20	0.06	NT	98.5
15/02/2022	21	0.31	0.39	NT	96.9
22/03/2022	35	0.19	0.19	NT	97.5
17/05/2022	56	0.21	0.65	NT	97.8
21/06/2022	35	0.13	0.07	NT	98.4
19/07/2022	28	0.10	0.29	NT	98.0
30/08/2022	42	0.12	<0.05	NT	98.5
20/09/2022	21	<0.05	<0.05	NT	98.3
19/10/2022	29	0.29	0.26	NT	98.1
16/11/2022	28	0.17	0.27	NT	97.3
13/12/2022	27	<0.05	<0.05	NT	89.8
23/01/2023	41	<0.05	NT	NT	NT
20/02/2023	28	0.08	0.07	NT	89.9
4/04/2023	43	<0.05	<0.05	NT	98.1
30/05/2023	56	0.13	0.15	NT	98.0
19/06/2023	20	0.08	0.12	NT	97.7
26/06/2023	27	0.18	0.06	NT	97.4
18/07/2023	29	0.11	0.12	NT	97.9
15/08/2023	50	0.09	0.50	NT	98.0
19/09/2023	35	0.14	0.37	NT	97.9
23/10/2023	34	0.14	0.14	NT	98.0
20/11/2023	28	0.22	0.06	NT	97.5
18/12/2023	28	0.22	0.05	NT	97.9
15/01/2024	28	0.24	0.05	NT	98.2
19/02/2024	35	0.72	0.07	NT	96.0
18/03/2024	28	0.30	0.47	NT	97.9
16/04/2024	29	0.35	0.68	NT	98.3
28/05/2024	42	0.18	0.34	NT	95.8
26/06/2024	29	0.08	<0.05	NT	98.1
23/07/2024	27	<0.05	<0.05	NT	98.2
13/08/2024	21	0.09	<0.05	NT	98.2
17/09/2024	35	0.15	0.11	NT	98.0
22/10/2024	35	0.05	0.06	NT	93.0
19/11/2024	28	0.09	0.05	NT	97.9
17/12/2024	28	0.12	0.07	NT	96.9
20/01/2025	34	0.051	0.064	NT	98.0
17/02/2025	28	0.059	0.050	NT	98.2
17/03/2025	28	0.079	0.055	NT	98.1
28/04/2025	42	0.056	0.061	NT	98.3
19/05/2025	21	0.080	0.052	NT	98.2
16/06/2025	28	0.082	0.052	NT	99.0

* NT – Not Taken

Appendix B Kaingaroa Water

B.1 Historical Context

The Kaingaroa community is serviced by a treated, reticulated water supply. Key historical background is:

- The Kaingaroa supply was owned, built, operated by Moana Pacific Fisheries Ltd to service the fish processing factory and the community until it closed down. All assets were transferred to Hokotehi Moriori Trust, which requested the Council take over the supply. Due to lack of funding, the system fell into a state of disrepair.
- The Council took over ownership of the supply in 2009 and identified major upgrades required.
- The Ministry of Health (MoH) funded a major upgrade in 2014, with a new raw water intake pump, raw water storage, water treatment plant and treated water storage. Organics removal (required for effective UV disinfection and chlorine dosing), chlorine dosing and reticulation replacement was not included due to funding.
- MoH funding and Three Waters Stimulus funding from Department of Internal Affairs (DIA) was used to carry out critical repairs and urgent upgrades in 2021 -2022 to mitigate public health risks, including extending intake pipeline in to deeper water (construction pending due to high lake levels), new online monitoring and cloud-based data capture, new GAC filters (for organic removal) and chorine dosing, and a new community non-potable rainwater harvesting scheme (to reduce demand; see Appendix E).
- Further funding is required to address outstanding issues, including replacing the reticulation as it is now at the end of its useful life, resulting in frequent pipe breakages and leakage. The network is of unknown design, location or condition.

B.2 Process Overview

The schematic of Kaingaroa Water Supply is shown on Figure 5. Raw water is pumped from Lake Rangitai to the raw water reservoirs at the water treatment plant (WTP). This raw water is then pumped through a set of multimedia filters as preliminary treatment, and then a Macrolite filter to further remove particulate matter and for protozoa protection. In future the filter media will be replaced with Aqualite media, as Macrolite media is no longer available commercially, which provides 2-log protozoal removal based on AS/NZS 4348:1995. The water is softened and then passes through granular activated carbon (GAC) filters to reduce the concentration of dissolved organics. The water is then disinfected with UV (CCP, provides protozoa protection) and dosed with sodium hypochlorite (CCP, provides residual disinfection in reticulation network). The UV disinfection unit was validated for 4-log protozoa inactivation under NSF/ANSI 55 Class A at 70% UVT for flows up to 189 L/min; the flow through the reactor is restricted to 37 L/min. GAC filters and chorine dosing were installed in 2021; however, commissioning of some aspects, including telemetry and alarms, is ongoing.

The three treated water reservoirs provide storage and chlorine contact time at the WTP site. Most properties also have a header tank, and some have a booster pumps.

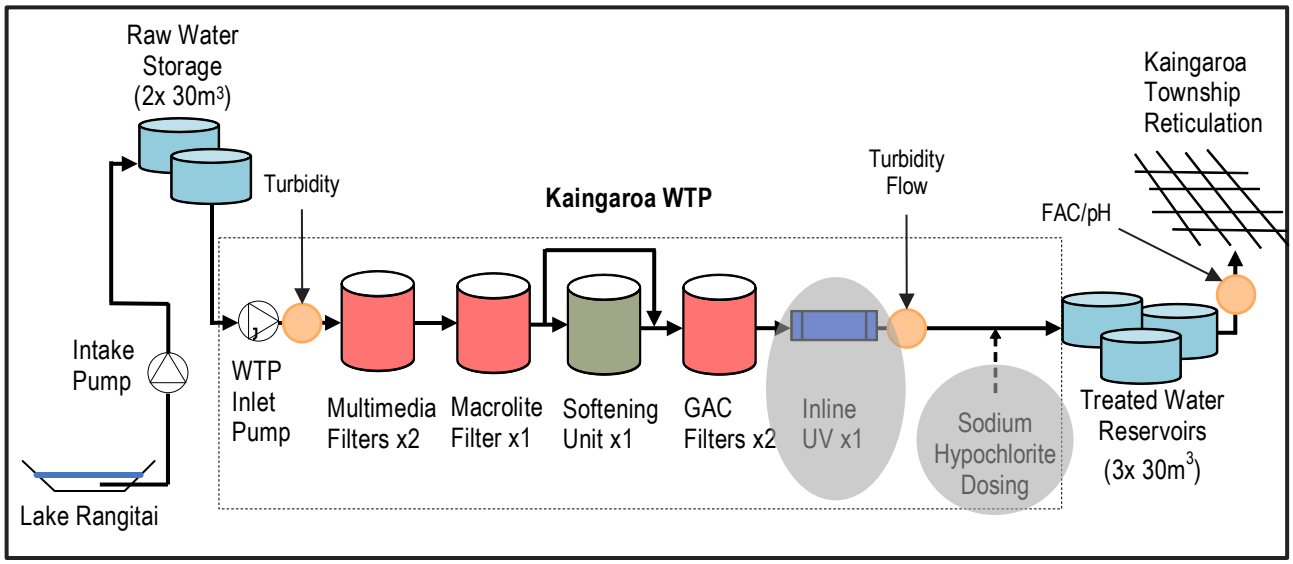


Figure 5: Kaingaroa Water Supply System schematic. CCPs are shaded grey. The orange circles represent locations of online monitoring instruments.

B.3 Regulatory Overview

Key information about the Kaingaroa Water Supply is:

- Registered with Taumata Arowai as a water supply ID KAI041.
- Classified as a small supply (i.e., greater than 26, less than 100 people) under the DWQAR, which means rules G, S1, T1, D1 apply.
- Due to the remote location of the supply and the associated transport logistics, monitoring carried out by Council will be reviewed to identify the 'best practicable' approach for compliance. Therefore, the system does not fully comply with the DWQAR presently.
- Water Safety Plan (WSP) and Critical Control Points (CCPs) have been submitted to Taumata Arowai. The CCPs were updated to reflect the 2021/22 WTP upgrades, however external funding was required to update the main body of the WSP. The current CCPs for UV disinfection and residual chlorination are provided below. The CCPs are to be updated once the cloud-based reporting systems are fully commissioned.

Table 16: Critical Control Points Process Control Summary – UV Disinfection

Process objectives:

1. Provide a **primary disinfection Critical Control Point** to inactivate bacterial, viral, and protozoan pathogens that may have entered upstream of dosing point.

Operational day-to-day monitoring of control process:		
What	• **UV dose** in mJ/cm^2 • **Turbidity** in NTU	• **Flow** restricted to 37 L/min
When	• Manually recorded at least **5 days per week** from the instrument displays. • UV dose and turbidity data logged **continuously** to a local RTU and uploaded to a cloud-based platform at regular intervals (weekly)*.	
Where	• UV reactor display (COMMcenter module) • UV outlet turbidity instrument display (Hach SC200)	
How	• UV dose calculated and displayed by COMMcentre using UVI and maximum rated flow (based on flow restrictor) (Trojan UVMax Pro50). • NTU measured by turbidimeter and displayed on transmitter (Hach 1720E/SC200).	
Who	• Water Treatment Plant Operator	
Records	• Logbook hard copy kept at the WTP. Contract Manager inputs data straight away into WaterOutlook, a proprietary database that the Water Engineer can access remotely. • All monitoring data is uploaded automatically at regular intervals to a cloud-based platform via local RTU. There are alarm setpoints that will notify Operator by text message when the water quality does not comply. *	
Process performance criteria at monitoring point:		***Correction if performance criteria are not met:***
Target Range:	• UV dose: 40-100 mJ/cm^2 • NTU: <1.0 (Treated Water) ○ NTU Operational Target: <0.3	• Operator to check filters are operating normally **(Multimedia, Macrolite, Softener, GAC)**; filters backwash automatically based on run time. • Perform **UV reactor sensor and lamp check** during routine inspections. • Check UV dose and turbidimeters.
Action Limits:	• UV dose: <40 mJ/cm^2 • NTU: 1.0-2.0 (>15 min) Alarm sent to Operator via text message to carry out corrective actions (Tier 2 Alarm). *	• Operator to check alarm condition of the UV reactor and rectify if required. • Operator to check filter pressures and turbidity instruments. • Operator to **manually backwash filters (Multimedia, Macrolite, Softener, GAC)** to achieve the target UV dose and turbidity. • Operator to **notify Contract Manager.** • **Review online data*.**
Critical Limits:	• UV dose: <40 mJ/cm^2 • NTU: >2 (>3 min) Alarm sent to Operator via text message to shut down plant (Tier 1 Alarm). *	• Operator to **shut down network pump.** • Operator to undertake troubleshooting identified in 'Action Limits' above and then restart plant. If issues are not resolved, shutdown WTP. • Operator to **notify Contract Manager** • Contract Manager to **notify Water Engineer.** • Water Engineer to **notify CEO and DWA** if water outside of critical limits needs to be supplied or has been supplied and follow Contingency Plan 3: Failure of Treatment Process in the Water Safety Plan. • **Review online data***.

Notes:

* Once online monitoring and cloud-based system is fully commissioned

Supporting programs:

1. **Monthly analysis** for **E. coli** and **total coliforms by accredited laboratory of raw, treated, and distribution network grab samples, and UVT of the treated water only.** Laboratory reports sent directly to Contract Manager and Water Engineer. Water Engineer reports monthly to CEO, and Water Engineer reports exceedances as soon as practicable to CEO and DWA if results are outside DWSNZ.
2. **Annual WTP servicing by service agent (FILTEC)**, which includes instrument servicing and equipment maintenance.
3. **Annual refresher training** of Operator in operation, maintenance and troubleshooting of treatment process units and instrumentation (i.e., calibrations) by service agent (FILTEC).
4. **Monthly monitoring instrument checks** and calibration by Operator.
5. ECan quarterly raw water chemistry sampling programme.
6. Flow Restrictor on UV unit limits process flow so hydraulic design capacity is not exceeded.

Planned programs:

1. Extend raw water intake into deeper water of Lake Rangitai.
2. Install telemetry and cloud-based reporting system for monitored parameters. Reliant on provision of cell phone coverage to Chathams via the government's rural connectivity project.

Table 17: Critical Control Points Process Control Summary – Residual Chlorination

Process objectives:

1. Provide a **primary disinfection Critical Control Point** to inactivate bacterial and viral pathogens that may have entered upstream of dosing point.
2. Provide **residual disinfection Control Point** to help inactive pathogens entering downstream of the dosing point.

Operational day-to-day monitoring of control process:	
What	• Free Available Chlorine (**FAC**) mg/L • **pH** in pH units. (Not able to be adjusted if outside ideal range) • **Turbidity** in NTU
When	• Manually recorded at least **5 days per week** from the instrument displays. • FAC, pH, and turbidity data logged **continuously** to a local RTU and uploaded to a cloud-based platform at regular intervals (weekly)*.
Where	• Treated Water Reservoir outlet FAC and pH instrument (Depolox 400M display) • UV outlet turbidity instrument (Hach SC200)
How	• FAC and pH measured and displayed by instrument (Depolox 400M with FC2 and pH sensors). The instrument corrects the FAC at pH unit range of 6-8.75. • NTU measured by turbidimeter and displayed on transmitter (Hach 1720E/SC200).
Who	• Water Treatment Plant Operator
Records	• Logbook hard copy kept at the WTP. Contract Manager inputs data straight away into Water Outlook, a proprietary database that the Water Engineer can access remotely. • All monitoring data is uploaded automatically at regular intervals to a cloud-based platform via local RTU. There are alarm setpoints that will notify Operator by text message when the water quality does not comply. *

Process performance criteria at monitoring point:		***Correction if performance criteria are not met:***
Target Range:	• FAC: 0.2 - 0.5 mg/L • pH: 6-8 • NTU: <1.0 (Treated Water) ○ NTU Operational Target: <0.3	• Operator to **adjust chlorine dosing** system to achieve target range. • Operator to check filters are operating normally and **manually backwash filters (Multimedia, Macrolite, Softener, GAC)** as required; filters backwash automatically based on run time. • Check turbidity, FAC and pH instruments during routine inspections.
Action Limits:	• FAC: < 0.2 mg/L or > 0.6 mg/L • pH: 6-8 • NTU: 1.0-2.0 (>15 min) Alarm sent to Operator via text message to carry out corrective actions (Tier 2 Alarm). *	• Operator to **adjust chorine dosing** to within targets. • Operator to undertake **troubleshooting** (e.g., dosing pump function, age of solution, filters, pressure, turbidity, chlorine, and pH check/calibration) • Operator to **manually backwash filters (Multimedia, Macrolite, Softener, GAC)** and **reduce flow** to achieve the target NTU. • Operator to **notify Contract Manager.** • **Review online data***.
Critical Limits:	• FAC: < 0.1 mg/L or > 1.5 mg/L • NTU: >2 (>3 min) • pH: >8 Alarm sent to Operator via text message to shut down plant (Tier 1 Alarm). *	• Operator to **shut down network pump** and **adjust chlorine level.** • Operator to undertake troubleshooting identified in 'Action Limits' above and then restart plant. • If issues are not resolved, shutdown WTP. • Operator to **notify Contract Manager.** • Contract Manager to **notify Water Engineer.** • Water Engineer to **notify CEO and DWA** if water outside of critical limits needs to be supplied or has been supplied and follow Contingency Plan 3 in the Water Safety Plan. • **Review online data***.

Notes:

* Once online monitoring and cloud-based system is fully commissioned

Supporting programs:

1. **Monthly analysis** for **E. coli** and **total coliforms by accredited laboratory of raw, treated at the WTP, and distribution network grab samples.** Laboratory reports sent directly to Contract Manager and Water Engineer. Water Engineer reports monthly to CEO, and Water Engineer reports exceedances as soon as practicable to CEO and DWA if results are outside DWSNZ.
2. **Annual WTP servicing by service agent (FILTEC)**, which includes instrument servicing and equipment maintenance.
3. **Annual refresher training** of Operator in operation, maintenance and troubleshooting of treatment process units and instrumentation by service agent (FILTEC).
4. **Monthly monitoring instrument checks** and calibration by Operator. FAC/pH to also be crossed-checked using a handheld meter (eXact Micro 20 Photometer)
5. ECan raw water chemistry sampling programme.
6. Flow Restrictor limits process flow so hydraulic design capacity is not exceeded.

Planned programs:

1. Extend raw water intake into deeper water of Lake Rangitai.
2. Install telemetry and cloud-based reporting system for monitored parameters. Reliant on provision of cell phone coverage to Chathams via the government's rural connectivity project.

B.4 Monitoring Data

The average daily treated water flows, based on manual and online readings of the WTP meter, are shown in Figure 6.

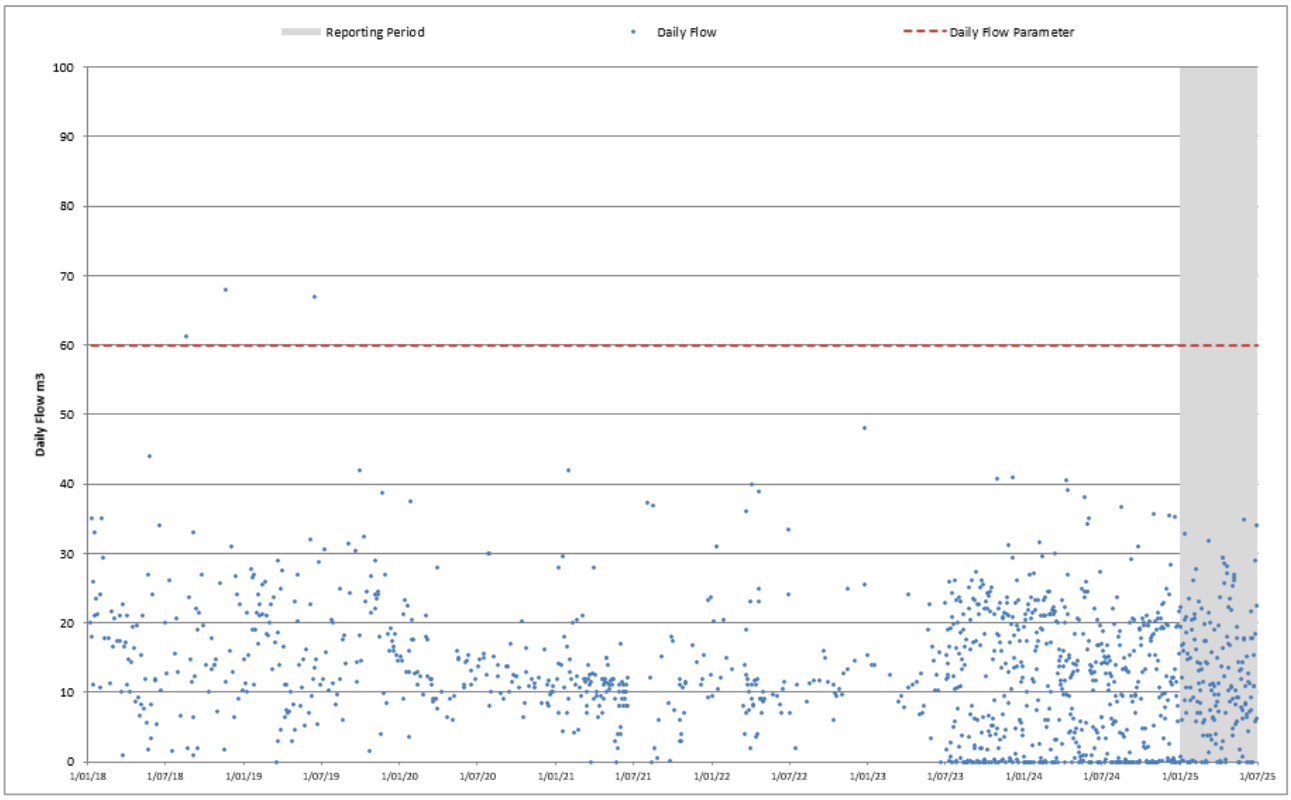


Figure 6: Kaingaroa treated water daily flow

Figure 7 presents treated water turbidity based on analysis by Hill Laboratories.

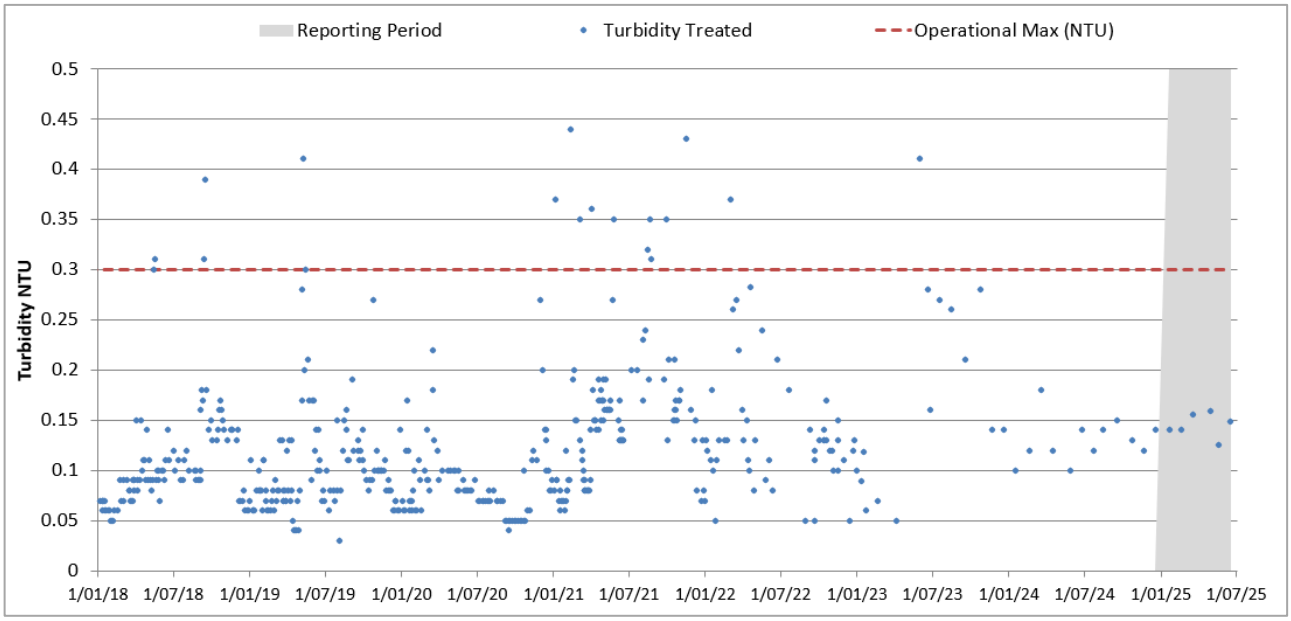


Figure 7: Kaingaroa treated water turbidity

Table 18 presents E.coli and total coliform concentrations from raw, treated and network water samples based on analysis by Hill Laboratories from 2018. Previous data are recorded in previous reports, and they are stored in spreadsheet maintained by Stantec. Network samples were taken from the following locations and are identified with the respective colours: Club and North Whaitiri.

Table 18 Kaingaroa microbiological data

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Total Coliforms (MPN/100mL)		
		Raw	Treated	Network*	Raw	Treated	Network*
30/01/18	42	14	<1	<1	109	3	2
20/02/18	21	12	<1	<1	>200	1	<1
20/03/18	28	1	<1	<1	16	31	19
27/03/18	7	1	<1	<1	15	16	3
17/04/18	21	8	<1	<1	36	16	12
15/05/18	28	<1	<1	<1	<1	1	<1
20/06/18	36	2	<1	<1	9	9	6
17/07/18	27	3	<1	<1	5	4	9
21/08/18	35	4	<1	>200	14	<1	>200
28/08/18	7	11	2	1	27	2	1
28/08/18	0			3			4
11/09/18	14	3	<1	<1	8	<1	<1
11/09/18	0			<1			1
18/09/18	7	8	<1	<1	9	<1	<1
18/09/18	0			<1			1
16/10/18	28	1	<1	<1	3	<1	<1
20/11/18	35	<1	<1	<1	5	<1	1
18/12/18	28	16	<1	<1	45	<1	200
15/01/19	28	<1	<1	<1	2	2	5
19/02/19	35	18	<1	<1	83	<1	1
19/03/19	28	16	<1	<1	130	<1	6
16/04/19	28	11	<1	<1	130	19	25
23/05/19	37	16	<1	<1	109	4	10
28/05/19	5	10	>200	<1	48	>200	<1
4/06/19	7	2	<1	<1	12	<1	8
11/06/19	7	8	<1	<1	21	<1	<1
18/06/19	7	8	<1	<1	>200	2	5
16/07/19	28	5	<1	<1	15	2	<1
20/08/19	35	5	<1	<1	18	<1	<1
17/09/19	28	5	<1	<1	165	<1	1
22/10/19	35	6	<1	<1	16	<1	<1
19/11/19	28	12	<1	<1	29	<1	<1
24/12/19	35	3	<1	<1	11	3	<1
21/01/20	28	8	<1	<1	94	<1	<1
18/02/20	28	<1	<1	<1	43	<1	<1
17/03/20	28	9	3	<1	74	53	8
23/03/20	6	1	<1	<1	>200	36	1
24/03/20	1	4	<1	<1	62	27	6
21/04/20	28	1	<1	<1	88	3	4
5/05/20	14	<1	5	<1	<1	70	1
19/05/20	14	<1	<1	<1	4	<1	1
26/05/20	7	21	<1	<1	34	11	4
9/06/20	14	2	<1	<1	6	<1	<1
16/06/20	7	5	<1	<1	19	2	<1
21/07/20	35	<1	<1	<1	3	<1	<1
18/08/20	28	<1	<1	<1	3	<1	<1
15/09/20	28	1	<1	<1	8	<1	<1
20/10/20	35	1	<1	<1	3	<1	<1

* NT – Not Taken
Reticulation sample location: Club and North Whaitiri

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Total Coliforms (MPN/100mL)		
		Raw	Treated	Network*	Raw	Treated	Network*
17/11/2020	28	32	<1	<1	38	<1	<1
15/12/2020	28	1	<1	<1	4	<1	<1
26/01/2021	42	165	<1	<1	165	<1	<1
16/02/2021	21	31	<1	<1	118	<1	<1
16/03/2021	28	2	<1	<1	32	1	3
20/04/2021	35	<1	<1	<1	11	4	<1
18/05/2021	28	1	<1	<1	15	<1	<1
16/06/2021	29	<1	<1	<1	4	<1	<1
20/07/2021	34	1	<1	<1	3	<1	<1
24/08/2021	35	45	<1	<1	66	<1	<1
21/09/2021	28	32	<1	<1	>200	<1	1
19/10/2021	28	2	<1	<1	19	27	15
26/10/2021	7	<1	<1	<1	4	8	10
16/11/2021	21	130	<1	<1	200	<1	<1
21/12/2021	35	NT	<1	<1	NT	<1	<1
18/01/2022	28	45	<1	<1	NT	NT	NT
25/01/2022	7	50	<1	<1	2	<1	<1
15/02/2022	21	32	8	2	43	12	2
22/02/2022	7	32	<1	<1	70	<1	<1
1/03/2022	7	NT	1	1	NT	2	1
8/03/2022	7	8	<1	<1	19	<1	1
15/03/2022	7	25	<1	<1	>200	2	2
22/03/2022	7	83	<1	<1	109	<1	<1
19/04/2022	28	15	<1	<1	43	2	<1
17/05/2022	28	1	<1	NT	8	<1	NT
21/06/2022	35	29	<1	<1	>200	<1	<1
19/07/2022	28	4	<1	<1	29	<1	<1
30/08/2022	42	43	<1	<1	130	<1	<1
20/09/2022	21	4	<1	<1	10	<1	<1
19/10/2022	29	3	<1	<1	6	<1	1
16/11/2022	28	31	<1	<1	165	<1	<1
14/12/2022	28	<1	1	<1	2	8	1
10/01/2023	27	2	<1	<1	12	<1	<1
16/01/2023	6	1	<1	<1	11	<1	<1
23/01/2023	7	3	<1	<1	26	<1	<1
20/02/2023	28	1	<1	<1	1203	<1	<1
4/04/2023	43	1	<1	<1	99	<1	<1
2/05/2023	28	2	<1	<1	12	<1	<1
30/05/2023	28	40	<1	<1	55	<1	<1
19/06/2023	20	7	NT	NT	17	NT	NT
26/06/2023	7	1	<1	NT	9	<1	NT
17/07/2023	21	3	<1	<1	20	<1	<1
14/08/2023	28	27	<1	<1	166	<1	5
18/09/2023	35	9	<1	<1	28	<1	<1
23/10/2023	35	2	<1	<1	22	<1	1
20/11/2023	28	5	<1	<1	131	<1	<1
18/12/2023	28	28	<1	<1	96	<1	<1
15/01/2024	28	17	<1	<1	27	<1	<1
19/02/2024	35	14	<1	<1	19	<1	<1
18/03/2024	28	82	<1	<1	148	<1	<1
16/04/2024	29	5	<1	<1	16	<1	<1
28/05/2024	42	15	<1	<1	39	1	<1
25/06/2024	28	2	<1	<1	3	<1	<1

* NT – Not Taken
Reticulation sample location: Club and North Whaitiri

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Total Coliforms (MPN/100mL)		
		Raw	Treated	Network*	Raw	Treated	Network*
23/07/2024	28	5	<1	<1	13	<1	<1
13/08/2024	21	5	<1	<1	10	<1	<1
17/09/2024	35	4	<1	<1	14	<1	<1
22/10/2024	35	<1	<1	<1	6	<1	<1
19/11/2024	28	2	<1	<1	5	<1	<1
17/12/2024	28	<1	<1	<1	9	<1	<1
20/01/2025	34	11	<1	<1	23	<1	<1
17/02/2025	28	17	<1	<1	38	<1	<1
17/03/2025	28	2	<1	<1	7	<1	<1
28/04/2025	42	36	<1	<1	130	<1	<1
19/05/2025	21	2	<1	<1	7	<1	<1
16/06/2025	28	1	<1	<1	26	<1	<1

* NT – Not Taken
Reticulation sample location: Club and North Whaitiri

Table 19 presents the DOC, TOC and UVT of the raw and treated water based on analysis by Hill Laboratories.

Table 19: DOC, TOC and UVT of Kaingaroa Raw and Treated Water

Date of Sampling	Days between samples	Turbidity (NTU)		DOC (g/m^3)		TOC (g/m^3)		UVT (%)	
		Raw	Treated	Raw	Treated	Raw	Treated	Raw	Treated
26/10/2021	-	NT	NT	NT	NT	NT	NT	NT	63.4
14/12/2021	49	NT	0.28	NT	NT	NT	NT	NT	67.2
21/12/2021	7	NT	0.15	NT	NT	NT	NT	NT	68.2
25/01/2022	35	NT	<0.05	NT	NT	NT	NT	NT	70.3
15/02/2022	21	NT	0.18	NT	NT	NT	NT	NT	66.9
22/02/2022	7	0.32	0.13	NT	NT	NT	NT	68.3	71.9
1/03/2022	7	NT	0.37	NT	NT	NT	NT	NT	69.9
8/03/2022	7	10.70	0.26	NT	NT	NT	NT	53	71.5
15/03/2022	7	0.60	0.27	NT	NT	NT	NT	63.1	70.9
22/03/2022	7	0.44	0.22	NT	NT	NT	NT	63.8	70.9
17/05/2022	56	0.85	0.24	NT	NT	NT	NT	63.2	74.2
21/06/2022	35	6.30	0.16	7.70	7.80	13.20	8.3	60.3	78.1
21/06/2022	0	2.20	0.21	NT	NT	NT	NT	77.3	60.4
19/07/2022	28	0.58	0.18	NT	NT	NT	NT	58.5	70.5
30/08/2022	42	5.70	<0.05	NT	NT	NT	NT	53.2	62.9
20/09/2022	21	0.67	<0.05	NT	NT	NT	NT	61.3	66.2
19/10/2022	29	2.70	0.17	NT	NT	NT	NT	62.1	70.1
16/11/2022	28	1.42	0.10	NT	NT	NT	NT	64.2	67.8
13/12/2022	27	1.10	<0.05	NT	NT	NT	NT	61.4	64.9
10/01/2023	28	0.59	0.09	NT	NT	NT	NT	58.4	63.1
16/01/2023	6	0.22	0.12	NT	NT	NT	NT	60	61.9
23/01/2023	7	0.29	0.06	NT	NT	NT	NT	49.4	75.5
20/02/2023	28	0.42	0.07	9.40	NT	10.30	NT	43.6	80.4
4/04/2023	43	0.25	<0.05	7.60	6.30	11.50	7.8	61.8	80.3
30/05/2023	56	0.48	0.41	11.60	6.40	12.30	12	54.2	69
19/06/2023	20	0.22	0.28	11.30	12.50	10.80	14	54.9	60.9
26/06/2023	7	0.38	0.16	9.50	9.70	11.00	9.6	54.6	67.1
17/07/2023	21	1.13	0.27	10.00	8.20	12.40	12.3	44	54.1
14/08/2023	28	1.76	0.26	10.1	7.4	13.1	8.6	43.5	52.6
18/09/2023	35	0.82	0.21	9.1	9.7	12.3	10	48.1	49.5
23/10/2023	35	0.99	0.28	11.2	8.1	11.4	11.5	43.5	50.4
20/11/2023	28	0.94	0.14	8.9	9.3	13.1	10.6	56.3	60.8
18/12/2023	28	0.38	0.14	8.8	10.6	16	10.2	57.2	65.4
15/01/2024	28	0.21	0.1	10	8.4	11.2	8.9	61.9	68.4
19/02/2024	35	0.68	0.12	9.0	6.6	10.2	7.9	59.1	67.1
18/03/2024	28	0.39	0.18	-	-	-	-	64.2	73.7
16/04/2024	29	0.32	0.12	8.3	7.8	10.4	7	63.9	79
28/05/2024	42	0.25	0.1	8.8	9.8	12.4	9.6	63.2	66.7
25/06/2024	28	1.65	0.14	10	9.4	14	8.2	66.8	72.5
23/07/2024	28	0.34	0.12	8.6	5.8	8.1	5.9	69.4	76.4
13/08/2024	21	0.45	0.14	9.9	9.3	10.5	8.5	60.4	66.2
17/09/2024	35	1.44	0.15	8.5	7.3	10	9.2	57.4	66.1
22/10/2024	35	0.28	0.13	11.2	8.8	11.5	10	55.8	62.6
19/11/2024	28	0.23	0.12	7.5	10.1	9.3	7	61	66.1
17/12/2024	28	0.26	0.14	9.6	6	10.4	6	59.7	62.7
20/01/2025	34	0.414	0.14	7.2	6.7	8.4	7.1	66	72.4
17/02/2025	28	0.235	0.14	12.7	14	13.1	11.6	66.6	72.8
17/03/2025	28	0.285	0.156	10.6	9.1	10.1	7.3	65.1	72.6
28/04/2025	42	0.231	0.159	9.3	9.6	10	8.4	66.2	73.3
19/05/2025	21	0.94	0.125	10.5	9.8	7.5	10.1	60.8	64.5
16/06/2025	28	1.46	0.149	13.3	12.8	15.5	15.9	35.8	45.4

* NT – Not Taken

Environment Canterbury analyses water from Lake Rangitai four times per year. The sampling point is from the lakeshore near the Kaingaroa raw water intake or, if lake levels are low, from the intake trench. The available data from 2018 is provided in Table 20 to augment raw water quality data obtained as part of the water supply monitoring. The data from 2005 to 2017 are recorded in the previous reports are stored in spreadsheet maintained by Stantec.

Table 20: Data for Lake Rangitai (SQ34846) from December 2017 to date. Source: Environment Canterbury

Site Name	Date	Time	Sample Parameters								Ammoniacal Nitrogen	Chlorophyll a (planktonic)	Clarity Tube	Conductivity (Field)	Dissolved Organic Carbon	Dissolved Oxygen	Dissolved Oxygen % Saturation	Dissolved Reactive Phosphorus	E. coli	Enterococci	Nitrate-N + Nitrite-N	Salinity (Field)	Total Nitrogen	Total Phosphorus	Water Temperature (Field)	pH	Comments
			Rain	Rain Previously	Sample Comment	Site is dry	Water Clarity	Water Colour	Wind Direction	Wind Strength	(mg/L)	(ug/L)	(cm)	(mS/m)	(mg/L)	(mg/L)	(%)	(mg/L)	(MPN/100 ml)		(g/m3)	(ppt)	(g/m3)	(g/m3)	(C)		
Site Name: Lake Rangitai (Chathams) east shore off Taia-Hapupu Rd																											
SQ34846	11/12/17	13:56:00	not raining	nil		no	clear	no colour	NW	strong	<0.010	0.30	100.00	129.80	6.00	8.06	94.90	<0.0040	3.00		<0.002	0.65	0.42	<0.004	23.30	8.00	Lab mistakenly did not test for Entercocci
SQ34846	12/03/18	13:54:00	not raining	nil		no	clear	no colour	NE	light	<0.010	0.20	100.00	154.20	7.30	9.29	98.30	<0.0040	4.00		<0.002	0.78	0.47	0.01	18.20	8.20	Lab mistakenly did not test for Entercocci
SQ34846	7/06/18	10:11:00	not raining	light		no	clear	colourless	SW	light	0.02	0.40	100.00	90.80		12.08	105.00	<0.0040			<0.002	0.43	0.37	0.01	8.60	8.30	Lab mistakenly did not test for E.coli, Entercocci and DOC
SQ34846	17/09/18	14:30:00	not raining	light		No	clear	coffee	W	moderate	<0.010	0.80	96.00	121.50	9.60	9.38	93.80	<0.0040			0.00	0.61	0.43	0.01	15.60	8.10	
SQ34846	17/09/18	14:48:00	not raining	light		No	clear	coffee	N	moderate									7.00								
SQ34846	10/12/18	15:20:00	not raining	light		No	clear	no colour		strong	<0.010	0.50	100.00		6.10	9.30	104.40	<0.0040	126.00		<0.002		0.45	0.00	20.50	8.10	ProODO used = no EC or Salinity
SQ34846	18/03/2019	16:24:00									0.011	0.3	100	187.1	10.7	8.32	84	<0.0040	27		0.003	0.96	0.63	<0.004	16.1	8.1	
SQ34846	30/05/2019	15:00:00									0.35	0.5	100	153.6	13.2	7.67	75.5	<0.0040			0.018	0.78	0.86	0.008	14.2	8.3	E.coli sample frozen- not able to be processed by lab.
SQ34846	12/02/2019	3:16:00 pm	not raining	nil			clear	no colour											291								
SQ34846	18/03/2019	4:24:00 pm	not raining	nil			clear	no colour			0.011	0.3	100		10.7	8.32	84	<0.0040				0.96	0.63	<0.004	16.1	8.1	
SQ34846	18/03/2019	4:26:00 pm	Not raining	Nil			Clear	No colour											27								
SQ34846	30/05/2019	3:00:00 pm	not raining	nil			clear	no colour			0.35	0.5	100		13.2	7.67	75.5	<0.0040				0.78	0.86	0.008	14.2	8.3	
SQ34846	3/06/2019	3:54:00 pm	not raining	moderate			clear	no colour																			
SQ34846	16/09/2019	2:48:00 pm	not raining	light			clear	no colour			<0.010	3	82		12.8	7.93	79.5	<0.0040				0.62	0.63	0.015	15.2	8.2	
SQ34846	16/09/2019	2:56:00 pm	not raining	light			clear	no colour											63								
SQ34846	2/12/2019	3:16:00 pm	not raining	nil			clear	no colour			0.015	1.2	100		9.2	6.23	70.9	0.006				0.71	0.35	<0.004	21.3	8.4	
SQ34846	16/03/2020	3:03:00 pm	Lake level very lo	Not Raining		Nil	Opaque	Green	E	Light	0.121	1	11	151.7	8.5	11.42	114.9	<0.0040	20		0.007	0.77	0.72	0.022	15.4	8.2	
SQ34846	15/06/2020	2:45:00 pm	Water level low	Not Raining		Nil	Clear	Colourless		Calm	0.105	0.4	100	155.8	6	11.83	100.2	<0.0040	137		<0.002	0.79	0.54	<0.0040	8.6	8.2	
SQ34846	14/09/2020	2:19:00 pm	Not raining	Light		No	Colourless	Clear			0.01	0.5	100	152.6	9.91	105.6	105.6	0.004			0.002	0.77	0.34	0.004	18.5	8.6	
SQ34846	14/09/2020	2:45:00 pm	Not raining	Nil		No	Colourless	Clear	NW	Light									10								
SQ34846	11/12/2020	11:17:00 am	Not raining	Moderate		No	Colourless	Clear	N	Light			100	151.6	0.02		86.5		28			0.77			18		
SQ34846	8/03/2021	15:16:00	Not Raining	Heavy			Opaque	Colourless	SW	Strong	0.39	3.6	12	122.9	14.8	7.65	81.7	<0.0040			0.4	0.62	1.65	0.048	17.3	8	
SQ34846	8/03/2021	15:21:00	Not Raining	Heavy			Opaque	Colourless	SW	Strong									>2420								
SQ34846	3/06/2021	15:21:00	Not Raining	Light			Clear	Colourless	SW	Moderate	0.34	0.6	55	177.2	15.8	11.46	102	<0.0040			0.025	0.9	1.04	0.008	10.2	8.1	
SQ34846	7/06/2021	14:46:00	Not Raining	Nil			Clear	Colourless	N	Calm									11								
SQ34846	25/10/2021	2:35:00 PM	Not Raining	Nil		No	Clear	Coffee	NW	Moderate	<0.010		61	134.2	12.3	10.98	118.2	<0.0040	9		<0.002	0.67	0.39	0.006	18.9	8.4	
SQ34846	3/12/2021	11:36:00 AM	Not Raining	Nil		No	Clear	Colourless	NE	Light	<0.010	0.6		149.3	12	10.73	106.6	<0.0040			<0.002	0.76	0.49	0.006	15.7	8.4	
SQ34846	13/12/2021	7:33:00 PM	Not Raining	Nil		No	Clear	Colourless		Calm									18								
SQ34846	25/10/2021	2:35:00 PM	Not Raining	Nil		No	Clear	Coffee	NW	Moderate	0.005	0.7	61	134.2	12.3	10.98	118.2	<0.0040	9		<0.002	0.67	0.39	0.006	18.9	8.4	
SQ34846	3/12/2021	11:36:00 AM	Not Raining	Nil		No	Clear	Colourless	NE	Light	0.005	0.6		149.3	12	10.73	106.6	<0.0040			<0.002	0.76	0.49	0.006	15.7	8.4	
SQ34846	13/12/2021	7:33:00 PM	Not Raining	Nil		No	Clear	Colourless		Calm									18								
SQ34846	15/03/2022	3:16:00 PM	Not Raining	Light		No	Clear	Colourless			0.005	3.7	100	175.8	13.1	8.16	87.7	<0.0040			<0.002	0.9	0.48	0.011	18.6	8.6	pH field result (9.61) suspected value and much higher than lab result, removed in QA, SianB 20221010.
SQ34846	21/03/2022	2:16:00 PM	Not Raining	Nil		No	Clear	Colourless	E	Calm									613								
SQ34846	17/06/2022	11:59:00 AM	Not Raining	Light			Clear	Colourless	S	Moderate	0.056	2.8	60	108	8.3	10.24	82.3	0.009			0.013	0.8	0.71	0.013	8	8.3	
SQ34846	21/06/2022	7:11:00 AM	Not Raining	Light			Clear	Colourless	SW	Light									33								
SQ34846	15/09/2022	5:12:00 PM	Not Raining	Light		No	Clear	Colourless	NW	Moderate	<0.010	3.1		146.1	9.8	10.19	93	<0.0040			<0.002	0.7	0.58	0.008	11.2	8.3	
SQ34846	19/09/2022	3:17:00 PM	Not Raining	Nil		No	Clear	Colourless	N	Calm									2								
SQ34846	9/12/2022	12:22:00 PM	Not Raining	Nil		No	Clear	Colourless	N	Light	<0.010	0.6	100	137.7	9	7.45	87.1	<0.0040			<0.002	0.8	0.48	0.006	16.3	8.3	
SQ34846	13/12/2022	8:38:00 AM	Not Raining	Light		No	Clear	Colourless	N	Calm									46								
SQ34846	23/03/2023	12:24:00 PM	Not Raining	Light		No	Clear	Colourless	N	Moderate	<0.010	3.9	80	111.6	5.4	2.79	25.6	<0.0040			<0.002	0.6	0.53	0.011	18.3	8.4	
SQ34846	27/03/2023	2:04:00 PM	Not Raining	Moderate		No	Clear	Colourless	N	Calm									1								
SQ34846	16/06/2023	11:21:00 AM	Not Raining	Nil		No	Clear	Colourless	S	Light	<0.010	0.8	100	97.4	8.4	11.07	98.3	<0.0040			<0.002	0.7	0.42	0.006	10	8.4	
SQ34846	19/06/2023	2:16:00 PM	Not Raining	Light		No	Clear	Colourless	NE	Moderate									31								
SQ34846	18/09/2023	2:36:00 PM	Not Raining	Light		No	Clear	Red Brown	W	Strong	<0.010	1.6	47	94.1	9.1	9.39	91.6	<0.0040			<0.002	0.6	0.63	0.012	14.2	8.4	
SQ34846	18/01/2024	12:31:00 PM	Not Raining	Nil	Very warm	No	Clear	Colourless	W	Moderate	<0.010	2.8	100	147.5	10.7	7.85	95.7	<0.0040			0.007	0.74	0.61	0.007	25.5	8.7	
SQ34846	22/01/2024	1:46:00 PM	Not Raining	Light		No													26								
SQ34846	23/04/2024	2:07:00 PM	Not Raining	Moderate		No	Clear	Colourless	SW	Moderate	<0.010	2.4	100	148.5	10.6	11.52	105.3	<0.0040			<0.002	0.76	0.53	0.009	11.4	8.3	
SQ34846	23/04/2024	2:17:00 PM	Not Raining	Moderate		No	Clear	Colourless	SW	Moderate									9								
SQ34846	14/06/2024	11:32:00 AM	Not Raining	Light		No	Clear	Colourless			0.022	0.6	100	136.6	4	11.05	95.7	<0.0040			<0.002	0.71	0.45	0.007	8.7	8.4	
SQ34846	18/06/2024	7:25:00 AM	Not Raining	Heavy		No	Clear	Colourless											201								
SQ34846	12/09/2024	10:36:00 AM	Not Raining	Light		No	Clear	Colourless			<0.010	2.5	100	120.9	9.3	12.14	109.2	<0.0040			<0.002	0.62	0.46	0.006	10.4	8.4	
SQ34846	17/09/2024	2:15:00 PM	Not Raining	Light		No	Clear	Colourless											20								
SQ34846	17/12/2024	1:52:00 PM	Not Raining	Light	No dissolved ox	No	Clear	Colourless			<0.010	4.4	100	123.1	11.3			<0.0040			<0.002	0.68	0.49	0.01	22.5	8.7	
SQ34846	17/12/2024	1:58:00 PM	Not Raining	Light		No													22								
SQ34846	18/03/2025	10:39:00 AM	Not Raining	Nil		No	Clear	Colourless			<0.010	<0.2000		158.5	11.8	10.1	109.8	<0.0040			<0.002	0.82	0.54	<0.002	19.3	8.8	
SQ34846	24/03/2025	1:31:00 PM	Not Raining	Nil		No													23								
SQ34846	13/06/2025	10:46:00 AM	Not Raining	Moderate		No	Clear	Red Brown			<0.010	1.5	37	112.5	15	10.81	103.2	<0.0040			<0.002	0.55	0.73	0.008	12.3	8.8	
SQ34846	16/06/2025	2:47:00 PM	Not Raining	Nil		No													14								

Appendix C Te One Transfer Station Water

C.1 Historical and Process Overview

At the Te One Transfer Station, roof water is collected in a tank and used to supply sinks, toilet and shower in the building. The treatment system was installed and commissioned in August 2023 and consists of cartridge filters and an UV reactor.

C.2 Regulatory requirements

Key information about the Te One Transfer Building Water Supply is summarised below:

- Registered with Taumata Arowai on 20th November 2023.
- Classified as a Very Small Community (i.e., up to 25 people) under DWQAR, which means VSC rules apply. Monthly monitoring for total coliforms and E. coli has been started, which is more frequent than required by VSC.1.
- Council has not developed a Water Safety Plan (WSP) for the supply.

C.3 Monitoring Data

The monitoring of this water supply started on May 2023. Table 21 shows the analysis results by Hill Laboratories.

Table 21: Te One Transfer turbidity, UVT, total coliforms and E. coli results

Date of Sampling	Days between samples	Turbidity	UVT	Total Coliforms	E. Coli
		NTU	%	MPN / 100mL	MPN / 100mL
16/05/2023	-	NT	NT	>200	56
6/06/2023	21	NT	NT	130	62
15/08/2023	70	NT	NT	<1	<1
19/09/2023	35	NT	NT	<1	<1
24/10/2023	35	NT	NT	<1	<1
20/11/2023	27	NT	NT	<1	<1
18/12/2023	28	NT	NT	<1	<1
15/01/2024	28	NT	NT	<1	<1
19/02/2024	35	NT	NT	<1	<1
18/03/2024	28	NT	NT	<1	<1
16/04/2024	29	NT	NT	<1	<1
28/05/2024	42	NT	NT	<1	<1
26/06/2024	29	NT	NT	<1	<1
23/07/2024	27	NT	NT	<1	<1
13/08/2024	21	NT	NT	<1	<1
17/09/2024	35	NT	NT	<1	<1
22/10/2024	35	NT	NT	<1	<1
19/11/2024	28	NT	NT	<1	<1
17/12/2024	28	NT	NT	<1	<1
20/01/2025	34	NT	NT	<1	<1
17/02/2025	28	NT	NT	<1	<1
17/03/2025	28	NT	NT	<1	<1
28/04/2025	42	NT	NT	<1	<1
19/05/2025	21	NT	NT	<1	<1
16/06/2025	28	NT	NT	<1	<1

* NT – Not Taken

Appendix D Council Office/Museum Water

D.1Process Overview

Rainwater is collected from the building roof and is conveyed to below ground storage tanks. Raw water is treated as required for use, with raw water pumped through cartridge filters and a UV reactor, before being supplied to the Council Office/Museum on demand. There is no treated water storage.

If there is insufficient rainwater, then the Council Office/Museum can be supplied by the Waitangi reticulated drinking water supply.

D.2 Regulatory Requirements

The Council leases the building, which is primarily serviced by the private building water supply. Being a privately owned water supply, the Council is not responsible for meeting regulatory requirements. However, as the water supply is used by Council staff, Councillors and the public when at the Council Office and Museum, the Council carries out water quality monitoring.

D.3 Monitoring data

The monitoring of this water supply started on January 2023. Table 22 shows the analysis results by Hill Laboratories.

Table 22: Council Office/Museum turbidity, UVT, total coliforms and E. coli results

Date of Sampling	Days between samples	Turbidity	UVT	Total Coliforms	E. Coli
		NTU	%	MPN / 100mL	MPN / 100mL
23/01/2023	-	0	76.8	<1	<1
20/02/2023	28	0	80.4	<1	<1
4/04/2023	43	0	96.2	<1	<1
2/05/2023	28	NT	NT	<1	<1
30/05/2023	28	0	97.1	<1	<1
19/06/2023	20	0	97.3	<1	<1
18/07/2023	29	0	98.3	<1	<1
15/08/2023	28	0.16	98.4	<1	<1
19/09/2023	35	0.41	97.7	<1	<1
24/10/2023	35	0.80	93.2	<1	<1
20/11/2023	27	0.37	96.8	<1	<1
18/12/2023	28	0.27	97.4	<1	<1
15/01/2024	28	0.56	96.9	<1	<1
19/02/2024	35	0.20	97.6	<1	<1
18/03/2024	28	0.30	98.2	<1	<1
16/04/2024	29	0.26	97.2	<1	<1
28/05/2024	42	0.85	95.7	<1	<1
26/06/2024	29	0.12	98.6	<1	<1
23/07/2024	27	0.20	98.1	<1	<1
13/08/2024	21	0.22	98.1	<1	<1
17/09/2024	35	0.17	98.3	<1	<1
22/10/2024	35	0.19	94.7	<1	<1
19/11/2024	28	0.30	97.7	<1	<1
17/12/2024	28	0.28	95.4	<1	<1
20/01/2025	34	0.216	96.8	<1	<1
17/02/2025	28	0.252	96.7	<1	<1
17/03/2025	28	0.217	97.1	<1	<1
28/04/2025	42	0.221	97.1	<1	<1
19/05/2025	21	0.210	97.5	<1	<1
16/06/2025	28	0.174	>99.5	<1	<1

Appendix E Kaingaroa Non-Potable Water

E.1 Historical Context

The Kaingaroa community is serviced by a non-potable rainwater harvesting scheme. Key historical background is summarised below:

- Kaingaroa is serviced by a treated, reticulated water supply, which sources raw water from Lake Rangitai. The catchment area for Lake Rangitai is relatively small and so, during periods of low rainfall (e.g., summer months), the water level of the lake recedes. Other nearby lakes are brackish and not suitable drinking water sources.
- In 2021 – 2022 the Three Waters Stimulus funding from Department of Internal Affairs (DIA) was used to improve water resilience for Kaingaroa by installing a new community non-potable rainwater scheme to enable potable water to be conserved for potable uses, particularly when Lake Rangitai levels are low, which providing an alternative for non-potable uses (e.g., wash-down).
- The downpipes, rainwater tanks and filling point are owned by the Council. The land, buildings and all other plant and equipment are owned by the private landowner. Whilst there is no formal agreement between the Council and the private landowner, the private landowner agreed the Council could construct and operate the non-potable rainwater harvesting scheme on the site for the greater good of the community. Formal mechanisms were explored by the Council at the time but were considered cost prohibitive given the private landowner has been the Kaingaroa water treatment plant operator for more than 20 years.
- The Council's O&M contractor will be required to carry out ongoing maintenance of the scheme from the point of entry to the tank (i.e., tanks and fill points). Components upstream of the tank inlet (e.g., gutters and roof) will not be maintained by the Council
- The roof of the shed was replaced in 2021 prior to the spouting, downpipes and rainwater tanks being installed.
- The community filling station is yet to be plumbed. Once operational, a "not for drinking" sign will be installed at the filling station and the community will be advised what the water can and cannot be used for.
- The fire truck filling connection is operational and has been used by Fire and Emergency New Zealand (FENZ).

E.2 Process Overview

Rainwater is collected on a private shed and conveyed to two, hydraulically connected 30,000L tanks. There is no treatment for this source, other than a leaf guard.

The tanks are yet to be plumbed to a single community filling station, that members of the community can access to fill portable water tanks by gravity. Once operational, a "not for drinking" sign will be installed at the community filling station and the community will be advised what the water can and cannot be used for.

The tanks are plumbed to a fire truck filling connection. FENZ have successfully used the connection.

E.3 Regulatory Overview

The Drinking Water Quality Assurance Rules (DWQAR) do not apply as the supply is non-potable.

E.4 Monitoring Data

Currently no monitoring data is being collected. The filling station is currently operational.

Appendix F Waitangi Wastewater

F.1 Process Overview

Raw wastewater is collected from the Waitangi Township via a reticulated sewer network. The wastewater flows by gravity to the Inlet Pump Station (Old Septic Tank) and is pumped approximately 600 m to the Waitangi Wastewater Treatment Plant (WWTP). At the WWTP (
Figure 8), wastewater passes through the mechanical Inlet Screen into one Balance Tank, prior to being pumped to the Rotating Biological Contactor (RBC) units for biological treatment and clarification. In the clarification section of the RBC unit, particles in the wastewater settle to the bottom, while the clarified liquid gravity flows to the Final Holding Tank. The settled particles from the clarifier are pumped to the Sludge Tank, which is cleaned out periodically. The accumulated sludge is disposed off-site and the supernatant from the Sludge Tank is pumped to the Balance Tanks.

From the Final Holding Tank, the wastewater is pumped via the Irrigation Pump through disc filters to further reduce the suspended solids before entering the UV unit. The UV unit requires low suspended solids to ensure effective transmittance of UV light through the wastewater. The UV reactor disinfects the wastewater, which is then irrigated to land at the WWTP site.

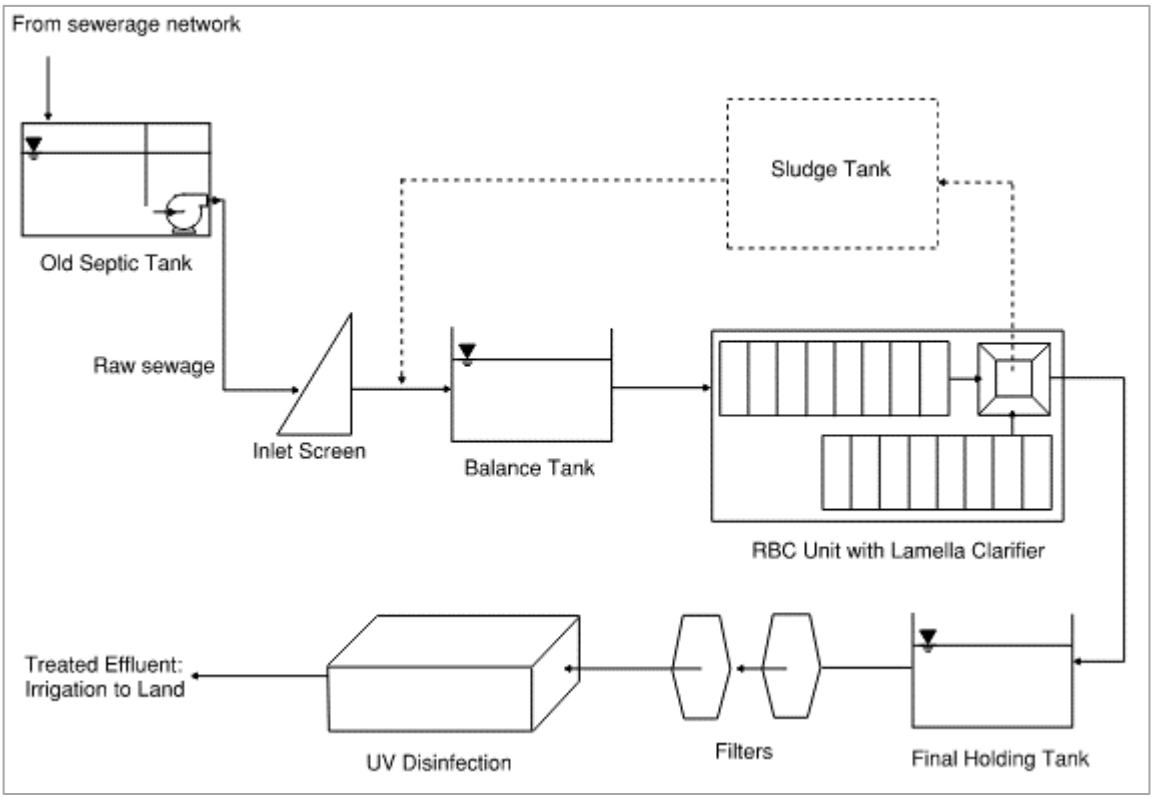


Figure 8 Waitangi Wastewater Treatment Plant Schematic

F.2 Regulatory Requirements

The resource consent for the Waitangi Wastewater Treatment Plant, granted in 2005 and expiring in 2040, gives the following key limits and monitoring requirements:

- The UV intensity should be monitored continuously online, and the results reviewed weekly.
- The treated wastewater parameters to be monitored monthly include:
  - Total suspended solids (TSS) not higher than 25 mg/L.
  - Ammonia N not higher than 25 mg/L, as a surrogate for total nitrogen not higher than 30 mg/L.
  - COD not higher than 75 mg/L, as a surrogate for BOD not higher than 25 mg/L.
  - E. coli not higher than 500 cfu/100mL.
- Volume on the discharge meter should be monitored daily and should not exceed 126 m^3/d.
- The irrigation application depth should not be higher than 5mm over five consecutive days and not exceed 8mm each day.

F.3 Monitoring Data

The average daily treated wastewater flow irrigated to land, based on manual readings of the WWTP discharge flow meter, are shown in Figure 9.

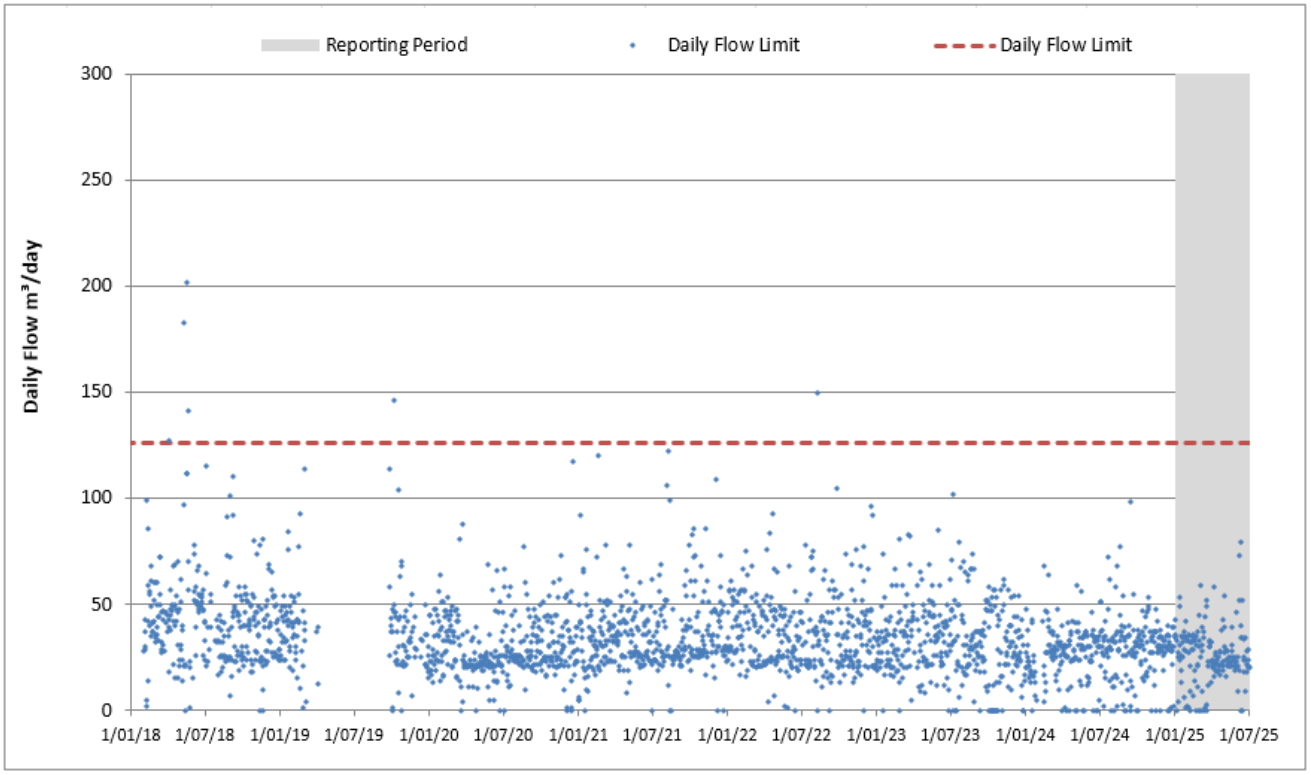


Figure 9: Waitangi treated wastewater irrigation flow from January 2018 to June 2025

Figure 10 presents the treated wastewater E. coli concentrations based on analysis by Hill Laboratories. Total coliform concentrations are also analysed but not presented in this report; this parameter has no consent limit and it is recommended this analysis is discontinued.

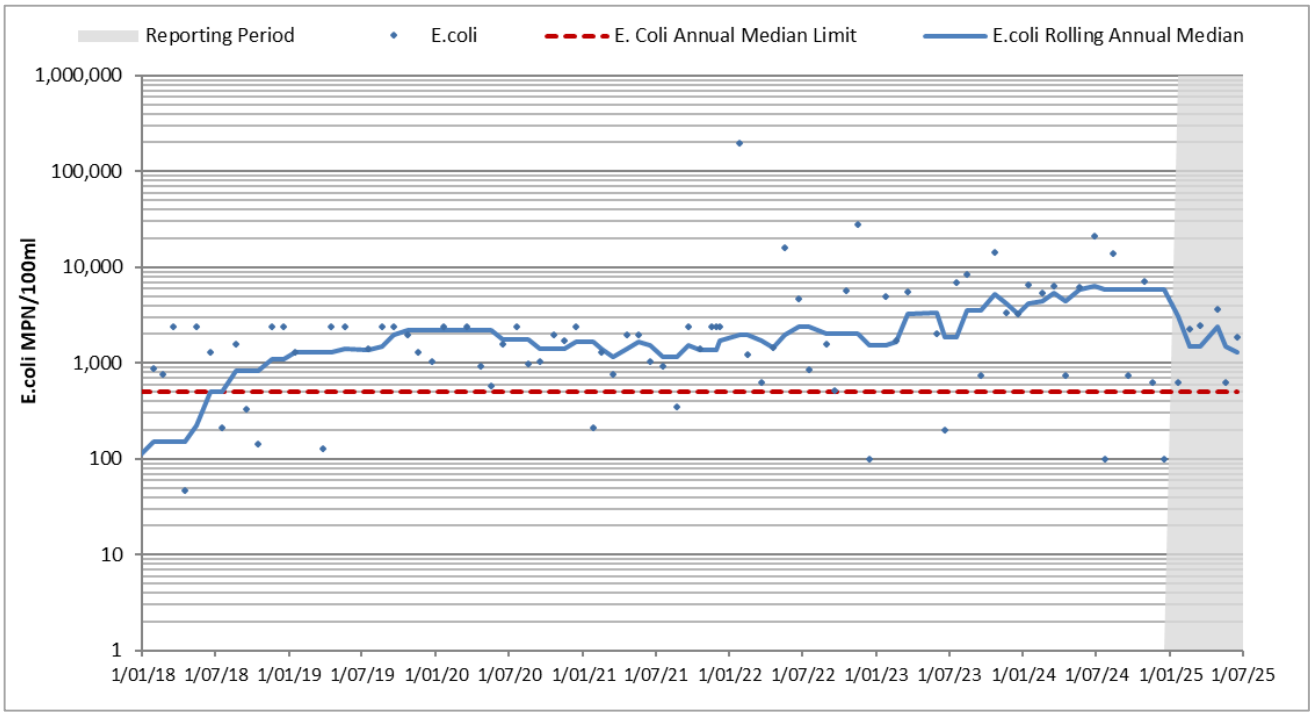
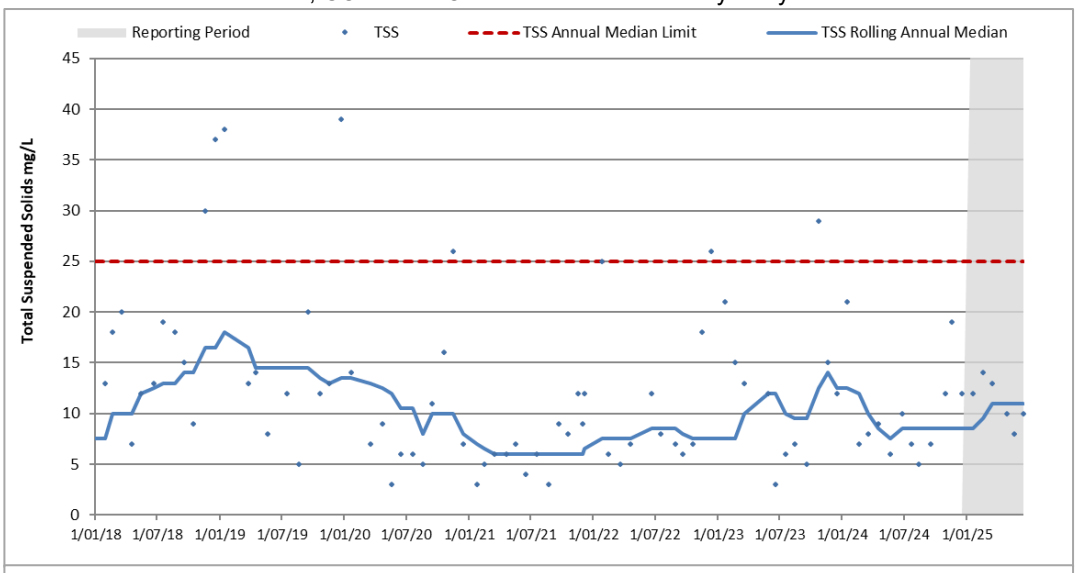
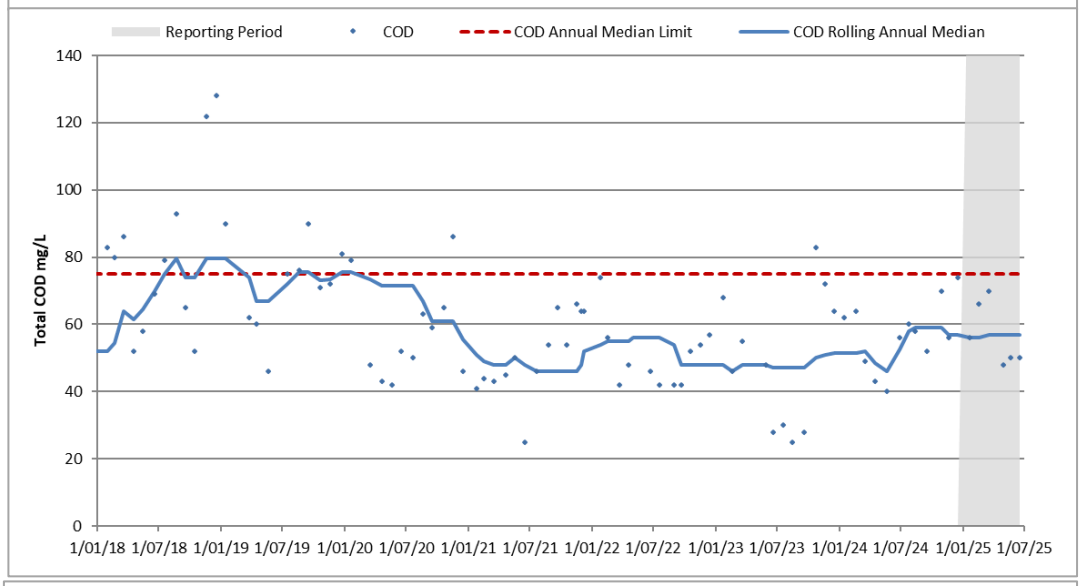


Figure 10: Waitangi treated wastewater E. coli concentrations from January 2018 to June 2025

The treated wastewater TSS, COD and BOD results based on analysis by Hill Laboratories are shown in Figure 11.





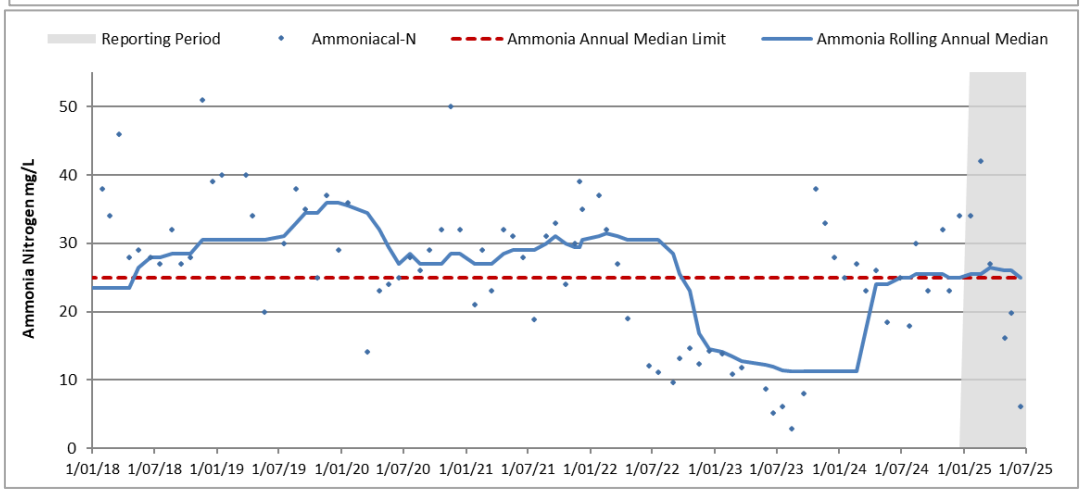
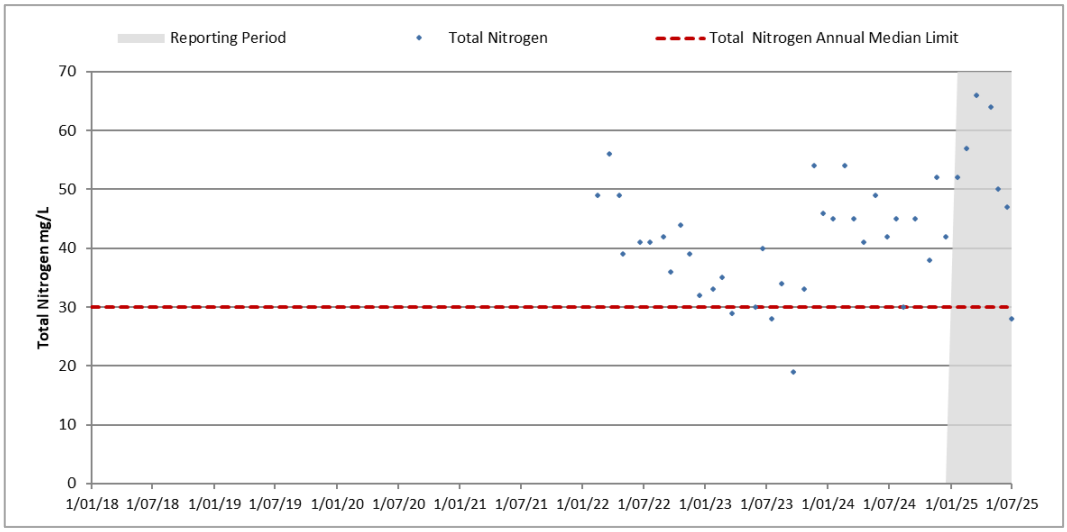
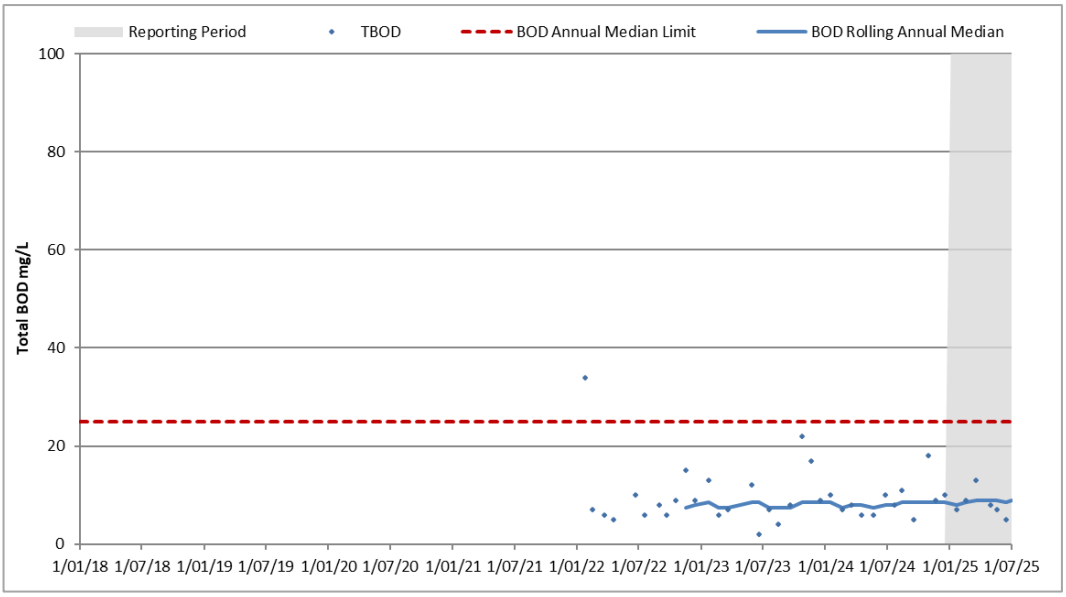


Figure 11. Waitangi treated wastewater TSS, COD and BOD concentrations from January 2018 to June 2025

Figure 12 presents the ammoniacal nitrogen, total nitrogen and pH analysis, respectively.





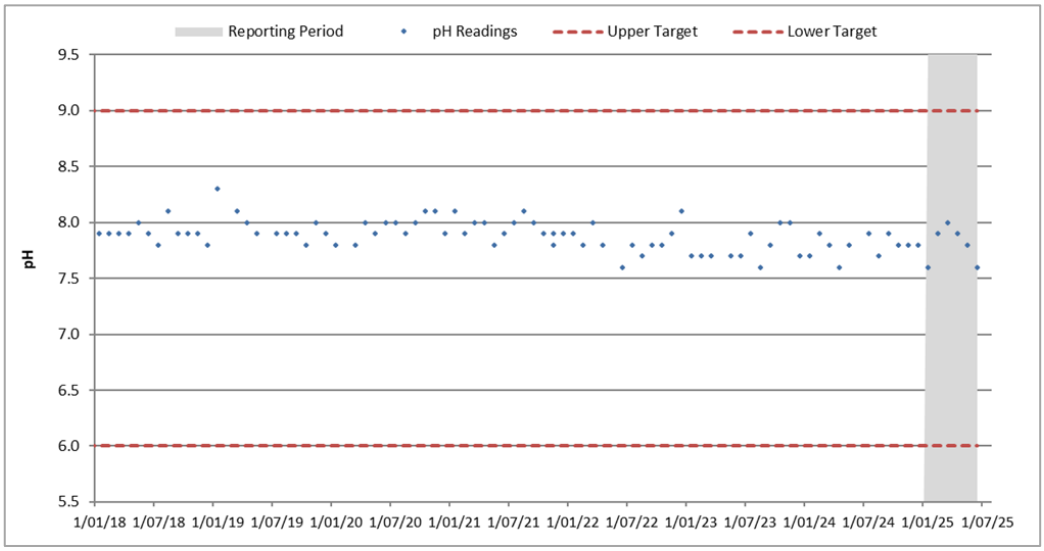


Figure 12. Waitangi treated wastewater ammonia-nitrogen, total nitrogen concentrations and pH from January 2018 to June 2025

The electrical conductivity measurements are shown in Figure 13.

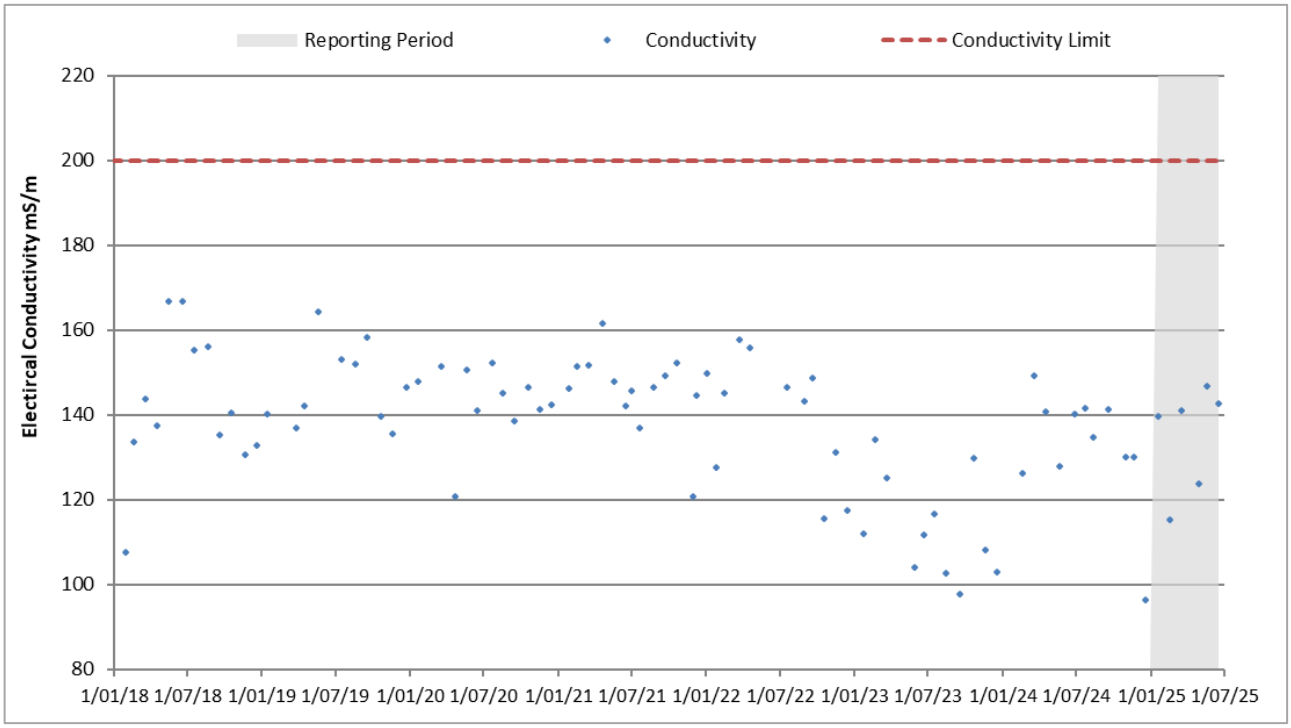


Figure 13: Waitangi treated wastewater electrical conductivity January 2018 to June 2025

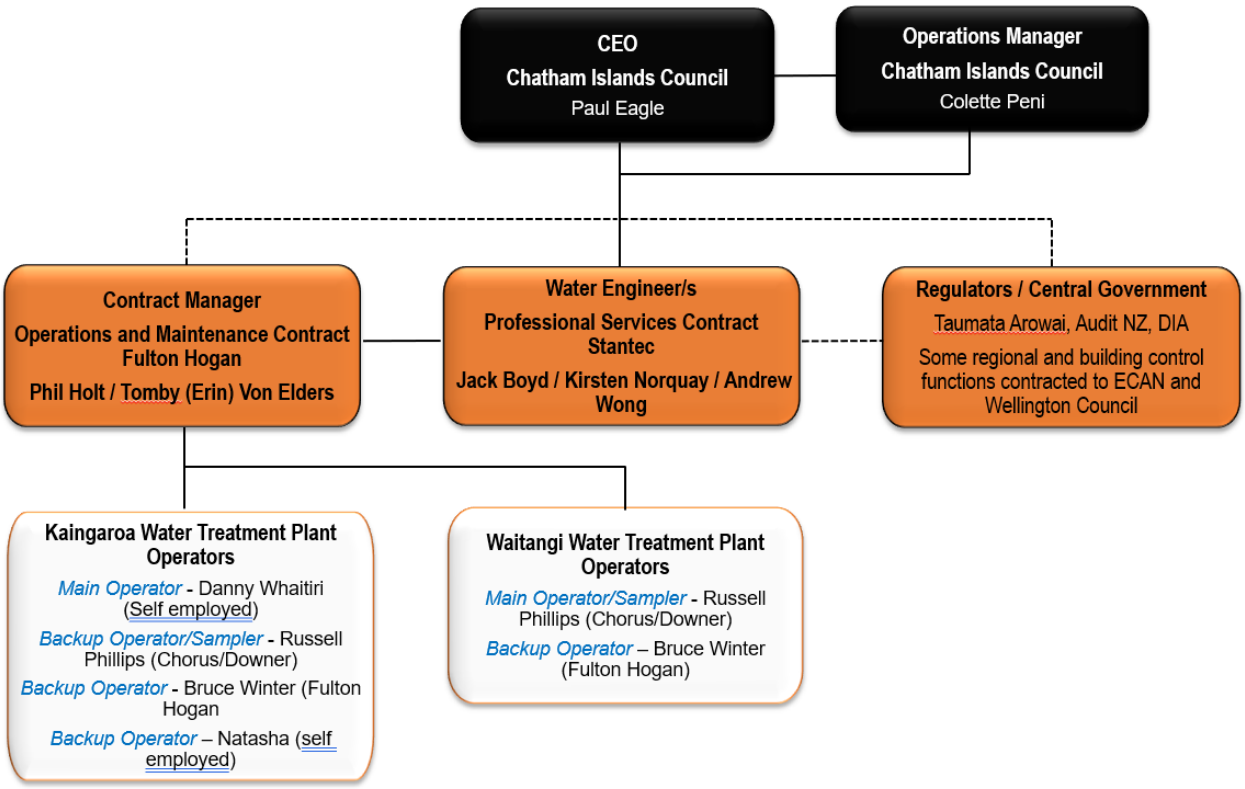
Appendix G Waitangi Stormwater

Council provides a reticulated stormwater scheme to part of Waitangi.

The infrastructure was originally installed by the Ministry of Works to provide a drinking water supply to some houses in Waitangi. Rainwater collected on the roof of each house was conveyed via a common drain to storage tanks, treated, pumped to treated water storage tanks, and then gravitated back to the houses for drinking water. When the current Waitangi reticulated drinking water scheme was installed, the original water treatment plant, treated water storage and drinking water mains were abandoned, but the stormwater collection and water storage tanks were retained, with all stormwater directed to the discharge structure at the neighbouring water course.

Due to budget constraints, the system is not being actively maintained and the storage tanks are in a state of disrepair.

Appendix H Organisation Information



Appendix I Reports Issued

The reports issued to the Council in this report period are summarised in Table 23.

Table 23 - Report issued between January 2025 and June 2025

Report Name	Subject	Date Issued

DESIGN WITH COMMUNITY IN MIND

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

Stantec trades on the TSX and the NYSE under the symbol STN.
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PO Box 13052, Armagh, Christchurch 8141
Tel 03 477 0885 | www.stantec.com

4. WORKS & SERVICES

4.6 Road maintenance Contract Procurement update

Date of meeting	11 September 2025
Agenda item number	4.6
Author/s	Nigel Lister, Stantec / Paul Eagle, Chief Executive

Purpose

To update Council on the current status of the procurement process for a new combined Road, Water and Wastewater and Solid Waste maintenance and operations physical works Contract, and to seek approvals to allow for the advertising and deferral of advertising as appropriate.

Recommendation

That the Chatham Island Council:

1. **Receive** the report.

2. **Approves** the advertisement of the works contract Request for Tender competitively (at the value of the Engineers Estimate in section three).

3. **Approves** the Request for Tender advertisement be deferred if approval from New Zealand Transport Agency is received for the 18-month contract extension (prior to the 10 October 2025).

Background

As per attached memo update.

Attachment

1. Tech Memo – CIC 26_01 PW Procurement Update

Stantec

Technical Memorandum

To:	Chatham Islands Council	**Attention:**	Colette Peni, Paul Eagle
Project:	CIC 26/01 Physical Works Maintenance Contract Procurement	**Project No:**	310206344
From:	Nigel Lister	**Date:**	2/9/2025

Revision Schedule

Revision No.	Date	Description	Prepared by	Quality Reviewer	Independent Reviewer	Project Manager Final Approval
Rev 1	02/09/2025	Final	Nigel Lister	Rebecca Tinga	n/a	n/a

CIC 26/01 Physical Works Maintenance Contract Procurement

1. Introduction

This memo updates the previous procurement memo presented to council in May, which discussed the likely procurement process for the next term supply agreement for the maintenance and operation of Council's Roading, Water, Wastewater, and Solid Waste infrastructure and services.

The current Roading, Water and Wastewater Physical Works Maintenance Contract (CIC 15/01) has been extended with NZTA's permission by 3 months to end on the 31st of March. This was permitted due to the original contract end date being an especially difficult date for smooth transition between suppliers in the event of a change.

The following provides a summary of the proposed procurement approach and sets out an updated timeline.

This memo is discussing what we would like to consider as the "Business as Usual" (BASU) approach – we are aware that discussion between CIC and NZTA is ongoing regarding a longer 18-month contract extension. This memo is discussing the process that should be followed to ensure that Council will have continuity of works contractor appointed without any breaks in service, in the case the longer extension is not confirmed by NZTA.

2. Proposed BAU Procurement Method

It is proposed to continue with the two-stage procurement set out in the memo presented in May.

The first stage was undertaken as a Request for Information (instead of the Registration of Interest included in the May memo). This was to test market interest without making the first stage a conditional stage. By advertising an RFI there was no requirement for prospective suppliers to return a response, and tenderers can bid for the actual works when the Request for Tender (RFT) ifs advertised without having submitted a response to the RFI.

It is proposed that the second stage of the procurement process is to advertise the tender to an open competitive market. The responses to the RFI suggested there is a robust supply market comparable to mainland markets other local authorities would be expected to advertise competitively in.

The NZTA are of the position that a competitive tender will give CIC the best ability to measure and demonstrate the relative value for money requirements of the National Land Transport Fund investment they administer.

The responses to the RFI are not used to pre-qualify prospective suppliers, and proceeding to an open tender retains the opportunity for parties who did not submit a response to the RFI to still compete for the actual works agreement.

3. Contract Engineers Estimate

The Proposed contract will bundle the Roading, Water and Wastewater, and Solid Waste operations and maintenance into the same agreement, with three separable portions for each infrastructure type.

The Engineer's Estimate for the value of the total works agreement over the ten years is:

Item	Description	Total Amount
1	SP1 – Roading & Wharves	$ 46,700,669.60
2	SP2 – Water and Wastewater	$ 3,687,534.31
3	SP3 – Solid Waste	$ 7,657,697.07
	TOTAL CONTRACT VALUE (Ten Years)	***$ 58,045,900.98***

4. Proposed Procurement Timeline

The following timeline summary provides broad details on the expected timeframes for delivery of the new Physical Works Maintenance Contract (CIC PW 26-01) via the BAU tender process:

- August to Mid-October – Development of the updated CIC 26/01 Tender Documentation,
- September – Provisional endorsement of 2025 Procurement Strategy from NZTA,
- Week c. 13th October – Advertisement of Request for Tender (RFT) via GETS,
- 21st November – Deadline for submissions to RFT
- 24th November – Tender Evaluation Process begins
- 4th December – Tender evaluation completed and presented to Council with recommendation of award,
- 8th December – Contract 26/01 Awarded,
- Wednesday 1st April 2026 – New Contract commences.

In the case that permission to extend the existing service agreement is granted, this process will be deferred to resume in line with the new extended contract end date.

The timelines above set out when CIC would need to have absolute certainty of extending the existing contract by. The Drop-Dead date for this decision from NZTA should be the 10th of October. If the decision to extend the existing contract is not known by this date, CIC must proceed with normal procurement, to avoid a period with no contracted infrastructure maintenance and operations supplier.

Even if the contract extension is granted, CIC will need to undertake a full tendered procurement after that extension, so the work to prepare the tender documents will not be wasted effort.

5. Recommendations

The following recommendations are presented to Council for approval:

- Council approves the advertisement of the works contract RFT competitively, at the value of the Engineers Estimate in Section Three,
- Council approves that the RFT advertisement be deferred if permission for the 18-month contract extension is granted before the 10th of October 2025.

6. Regulatory

6.1 Service Delivery transitioning arrangements update

Date of meeting	11 September 2025
Agenda item number	6.1
Author	Paul Eagle, Chief Executive

Purpose

To update elected members on the termination of the service contract with Environment Canterbury, and to outline the process underway to secure a more sustainable future for the Chatham Islands Council, likely involving partnership with another local authority to deliver those services.

Recommendations

That the Chatham Islands Council:

1. **Receive** this report.

2. **Notes** that the Performance, Audit and Risk Committee have reviewed and endorsed the approach.

3. **Notes** that the Chief Executive is engaging with the Public Services Commissioner and the Department of Internal Affairs (DIA) on the long-term viability and sustainability of the Chatham Islands Council.

4. **Notes** the work that is underway to ensure the Chatham Islands Council receives support in fulfilling its critical services from another local authority.

Key points

Following confirmation of Environment Canterbury's notice of termination of the existing contract for services:

- The Chief Executive has been working to secure support for the Council's critical services moving forward;
- Auckland Council has been identified as another local authority with the necessary expertise and capability to provide these services, noting that Auckland Council is both a unitary authority with extensive rural areas (70%) and has expertise in managing two populated islands within its region, namely Waiheke Island and Great Barrier Island;

- Conversations between the Chief Executives of both councils are ongoing to identify the particular services that the Council requires assistance with moving forwards and whether Auckland Council is in a position to assist;
- Once the services have been identified and the value of the contract for those services has been determined, this matter will be brought to the Council for its consideration before any further action is taken.

Background

Chatham Islands Council (**Council**) receives a range of services and support from several organisations, including Environment Canterbury, Wellington City Council, Hamilton City Council and the Department of Internal Affairs.

Over the last 20 years, Environment Canterbury has provided support across a number of critical services for the Council. This arrangement was formalised in a contract for services, the most recent contract covering the period of 1 July 2022 to 30 June 2026, for the following services:

- Corporate services, including Procurement, Human Resources, Democracy/Governance services, Health and Safety advice and support, and IT services (all withdrawn on 1 July 2025);
- Audit services, Risk and Assurance and service performance
- Financial services, including Local Government Act 2002 compliance with the Annual Plan and Long-Term Plan processes, Payroll services, and monthly financial reporting;
- Navigation safety;
- Corporate services (communications), including website support and support with community engagement and communications;
- Compliance, monitoring and enforcement;
- Resource Management (Environmental data collection, planning services);
- Biosecurity; and,
- Civil Defence and Emergency Management.

The work programme to be undertaken by Environment Canterbury was agreed annually between the Council and Environment Canterbury.

In 2023, the Council and Environment Canterbury jointly funded an audit into how Environment Canterbury was fulfilling its obligations under the contract for services. This audit was undertaken by Price Waterhouse Coopers (**PWC**) and took place between April 2023 and September 2023. The report prepared by PWC following the audit was presented to this Committee at its meeting on 6 November 2023.

In summary, the PWC audit found that although there was an “open and honest relationship in place” between the Council and Environment Canterbury, Environment Canterbury’s contractual obligations lacked consistent clarity, which in turn affected the delivery of the intended outcomes expected under the contract for

services, largely as a result of a perceived lack of funding and resources available under the contract for services.[1]

The PWC report contained a number of recommendations, including ensuring greater clarity around roles and responsibilities between the Council and Environment Canterbury, and ensuring a clear linkage between the contractual focus areas and the focus areas identified within the Council's Long-Term Plan.

Following the report, both organisations attempted to work together to reset the relationship in order to clarify roles and responsibilities. However, correspondence received from the Chief Executive of Environment Canterbury on 24 October 2024 indicated that if an acceptable, updated work programme and associated budget was not provided to Environment Canterbury within two weeks of the date of the letter, a notice of termination of the contract for services may be issued.

The Council responded that same day, highlighting several issues the Council had encountered in attempting to reach agreement on the work programme, including changes to senior personnel within Environment Canterbury resulting in an institutional knowledge gap with respect to the relationship.

Ultimately, Environment Canterbury decided to issue a notice of termination of the contract for services, and the Mayor received a letter confirming this action on 9 May 2025.

The discussions with Environment Canterbury regarding the updated work programme highlighted that many of the Council's critical services with which it required assistance with did not fall within the functions of a regional council, such as Environment Canterbury.

This prompted consideration as to whether the Council may be better supported moving forward by another unitary authority.

A number of conversations with other Chief Executives of local authorities across New Zealand confirmed this view, with Auckland Council being identified for this purpose.

The Chief Executive, supported by other Chief Executives of local authorities across New Zealand, is also speaking with the Public Services Commissioner and the Department of Internal Affairs (DIA) around the long-term viability and sustainability of the Chatham Islands Council and the community. While the Council will always rely on assistance from other local authorities, DIA is responsible for considering the financial sustainability, long-term future for the Council.

Auckland Council

Auckland Council is a large unitary authority that is both well-resourced and well placed to assist this Council moving forward for the following reasons:

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[1] Environment Canterbury Regional Council – Chatham Islands Council Contract for Service Internal Audit dated 4 October 2023, page 4.

- Auckland Council is a unitary authority and therefore responsible for both regional and territorial authority functions under the Resource Management Act 1991. This means that there is alignment as between the Council and Auckland Council's statutory obligations (as opposed to Environment Canterbury, having the functions of a regional council only);
- Auckland Council's rohe includes extensive rural areas (70% of their boundary) that require careful management, as well as two populated islands, namely Waiheke Island and Great Barrier Island;
- Auckland Council has the scale and capability to deliver corporate, technical, water, and other essential services through its group structure and council-controlled organisations.
- Auckland Council's involvement will provide the necessary confidence to the Department of Internal Affairs that the Council is supported in its operations moving forward, particularly given the Council's fixed budget and minimal funding.

Conversations between the Chief Executives of both councils are ongoing to identify the particular services that the Council requires assistance with moving forward and whether Auckland Council is in a position to assist.

Mayor Monique Croon met Auckland Mayor Wayne Brown on 12 August 2024 to outline our situation and secure support for our future needs.

Once the services have been identified and the value of the contract for those services has been determined, this matter will be brought to the Council for its consideration before any further action is taken.

Cost, compliance, and communication

Financial implications

Council's annual budget is just under $10M, with $8.55M funded by the Crown, including a $4.2M annual appropriation.

The Environment Canterbury services contract is budgeted at $1.5M. Council has approved $0.5M for the final 2025/26 work programme, with the remaining $1.0M ringfenced to complete delivery, and to manage the transition of services before 30 June 2026.

This transition will see responsibilities move from Environment Canterbury and, where appropriate, other entities to a new local authority partner such as Auckland Council and its companies.

Environment Canterbury is contractually required to work with Council on a transition plan to ensure an orderly handover. However, Council must meet all actual and reasonable costs incurred by Environment Canterbury during the transition noting it will be the first time in more than 20 years the expenditure has had to be carried. Their obligation to provide transition services is capped at six months.

Council has also incurred additional costs linked to the termination of the Environment Canterbury contract, including legal fees associated with navigating this process.

Services provided through Wellington and Hamilton City Councils remain only partially cost-recovered from users.

Risk assessment and legal compliance

With the termination of Environment Canterbury's contract for services, including the immediate termination of many of the corporate services that Environment Canterbury has historically provided, the Council has been left in a vulnerable position with respect to meeting its obligations and identified levels of service in its Long-Term Plan.

Given this, the Chief Executive is working at pace to prioritise securing support for the Council's critical services moving forward.

Engagement, significance, and Moriori and Māori participation

Ensuring that the Council is able to meet its obligations with respect to critical services moving forward is consistent with the Council's commitment to working in partnership with Moriori and Māori, in particular by ensuring that Council, Moriori and Māori resources are able to used more efficiently and effectively (with the support of another local authority).

Consistency with Council policy

Before any decision is made by Council with regards to entering into a contract for services with Auckland Council, the Council will need to consider its Significance and Engagement Policy outlined in its Long-Term Plan. As referred to below, the Council will also need to be satisfied that it has sufficient understanding and knowledge of community views and preferences to discharge its obligations under section 78 of the Local Government Act 2002.

Communication

No further communication regarding this process is required at this stage. However, before any decision is made by the Council as to whether to enter into a contract for services with Auckland Council, the Council will need to be satisfied that it has sufficient understanding and knowledge of the community's views and preferences in accordance with section 78 of the Local Government Act 2002.

Next steps

Work is underway to identify the services that the Council requires immediate assistance with, and services that the Council will require assistance with moving forwards.

Further discussions will take place in the coming weeks with Auckland Council representatives to document the scope of the services required, the value of those services, and how Auckland Council can deliver those services.

Updates regarding these discussions will be provided to the Committee as they become available before this matter is brought to the Council for its consideration.

Public Excluded Agenda

11 September 2025

Mayor to Move

THAT the public be excluded from the following part of the proceedings of the meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

Item No.	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under Section 48(1) for the passing of this resolution
PE.1	PE Minutes 31 July 2025	Good reason to withhold exists under Section 7	Section 48(1)(a)

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987, and the particular interest or interests protected by Section 6 or Section 7 of that Act which would be prejudiced by holding the whole or relevant part of the proceedings of the meeting in public, are as follows:

ITEM NO.	GENERAL SUBJECT OF EACH MATTER TO BE CONSIDERED	SECTION	SUBCLAUSE AND REASON	WHEN CAN REPORTS BE RELEASED
PE.1.	PE Minutes 31 July 2025	7(2)(b)(ii) 7(2)(h) 7(2)(i)	Would be likely to prejudice the commercial position of the person or persons who are the subject of the information To maintain legal professional privilege. To enable the Council holding the information to carry out, without prejudice or disadvantage, commercial activities.	

and that appropriate officers remain to provide advice to the Committee.