

AGENDA | 2018



*Ake Ake – Hakapiri
Hapupu, Chatham Islands*

Mayor and Councillors

Notice is hereby given that an Ordinary Meeting of the Chatham Islands Council will be held in the Council Chambers, Tuku Road, Waitangi, on **THURSDAY, 13 December 2018**, commencing at **1.30pm**.



Owen Pickles
Chief Executive Officer

RECOMMENDATIONS IN REPORTS ARE NOT TO BE TAKEN AS COUNCIL POLICY UNTIL ADOPTED BY THE COUNCIL

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Meeting held 13 December 2018

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- 3. Finance**
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2. DEMOCRACY

2. Democracy

2.1 Minutes of the Ordinary Meeting 1 November 2018

Date of meeting	13 December 2018
Agenda item number	2.1
Author/s	Jo Clark – Council Secretary

Purpose

For the Council to receive and confirm the minutes of the Ordinary Meeting of Council held on 1 November 2018.

Recommendations

THAT the Minutes from the ordinary monthly meeting of the Chatham Islands Council held on 1 November 2018 be a true and accurate record.

CHATHAM ISLANDS COUNCIL

**Minutes of the Ordinary Meeting of the Chatham Islands Council,
held in the Council Chambers, Tuku Road, Waitangi,
on Thursday, 1 November 2018, commencing at 1.30pm**

- Present:** His Worship the Mayor, AWM Preece
Deputy Mayor, JI Clarke
Councillors M Croon, RS Joyce, J Seymour, NC Ryan and KL Day.
Councillor EC Tuck joined the meeting via teleconference.
- Management & Officers:** Chief Executive Officer, Owen Pickles
Council Secretary, Jo Clark
Dog & Stock Control Officer, Donna Reed
- In Attendance:** Fulton Hogan Maintenance Manager, Bill Lind

2. DEMOCRACY

2.1 Minutes from Ordinary Meeting 20 September 2018

RESOLVED:

THAT the Minutes of the Ordinary meeting of the Chatham Islands Council, held on Thursday 20 September 2018 be confirmed and adopted as a true and correct record.

NC Ryan / J Seymour

CARRIED

Matters Arising

Cr Day queried if the new camera on the Council building was the CCTV camera requested by Police to cover the intersection of Tuku Road and Waitangi Owenga Road. The Chief Executive advised the camera was a trial for quality purposes, but had now been taken down.

2.2 Review of Representation Arrangements

Public consultation of the Review of Representation Arrangements closed on Monday 24 September 2018 with no submissions being received. Council agreed to stay with the status quo for the next Council elections in October 2019.

RESOLVED:

- 1. THAT the Council be a Mayor plus eight (8) Councillors**
- 2. THAT the Council be elected at large**
- 3. THAT there is no need or demand for community boards**
- 4. THAT there is no need or demand for Maori wards**
- 5. THAT the Voting System will continue to be First Past the Post (FPP)**

M Croon / JI Clarke

CARRIED

2.3 CIC Meeting Schedule 2019

The proposed Council Meeting Schedule for 2019 had been included in the agenda.

STEERING GROUP	AGENDA CLOSES	COUNCIL MEETING
8 February	13 February	21 February
22 March	27 March	4 April
3 May	8 May	16 May
14 June	19 June	27 June
26 July	31 July	8 August
6 September	11 September	19 September
	<i>Statutory Meeting</i>	<i>TBA</i>
25 October	29 October	7 November
6 December	11 December	19 December

RESOLVED:

THAT the Meeting Schedule 2019 be adopted.

C Ryan / EC Tuck

CARRIED

3. FINANCE

3.1 Council Dues Report

There were no outstanding manifests from Air Chathams Ltd. September 2018 Council Dues were still to be invoiced.

Chatham Islands Shipping Ltd were outstanding the September 2018 manifest.

RESOLVED:

THAT the Report be received.

M Croon / JI Clarke

CARRIED

3.2 2017-2018 Public Satisfaction Survey of Chatham Islands Council Services

Attached to the agenda was a report from Avalon Marketing covering the 2017-2018 Public Satisfaction Survey.

RESOLVED:

THAT the Report be received.

EC Tuck / J Seymour

CARRIED

3.3 Late Item – Annual Report Adoption Status

RESOLVED:

THAT the Late Item “Annual Report Adoption Status be considered as a Late Item.

JI Clarke / KL Day

CARRIED

The Chief Executive gave an update on the Annual Report Adoption Status.

He advised the Annual Report should have been adopted by 31 October 2018, but AuditNZ had concerns with two issues:

- An adjustment had been made to bring the accounts in to balance which had been outstanding since 2012.
- The roading valuation increase over a 5 year period, (agenda item in Council's September agenda).

AuditNZ had asked for Council's accounting staff to give a year-by-year breakdown for both items, which would be a time-consuming task. The Chief Executive advised this would not be happening after consultation with ECan management. The Auditors would now refer those two items to the Auditor General's office for advice on a way forward. There would be a comment made against both items, either a qualification of account, or an emphasis of matter.

The Chief Executive tabled a copy of a letter to Kirsten Norquay (ECan) who looked after Council's water compliance from AuditNZ. The letter contained 5 pages of questions, which included Kirsten's competency and the competency of the firm she worked for, and the competency of Fulton Hogan in relation to water testing. It highlighted the detailed attention the Auditors were taking.

RESOLVED:

THAT the Chatham Islands Council receive the information.

EC Tuck / J Seymour

CARRIED

4. WORKS & SERVICES

4.1 Fulton Hogan Road Maintenance Contract Monthly Report September 2018

Mr Bill Lind advised it had been a dry month in September with only 40mls rain. Fulton Hogan was continuing with road strengthening but had been held up with a broken roller.

Mr Lind was planning a visit to Pitt Island in the coming week. They were working with the Barge Society and going over a safety plan.

Cr Seymour inquired about the damaged footpath in Hight Place.
Cr Ryan declared an interest.

Mr Lind advised damage was via the resident driving his boat over the footpath and the crossing. The resident had asked for a quote to repair the footpath. Mr Lind advised payment would need to be paid prior to work being undertaken.

RESOLVED:

THAT the report be received.

RS Joyce / NC Ryan

CARRIED

4.2 Fulton Hogan Water & Wastewater Contract Monthly Report September 2018

Mr Lind noted the water supply at the Fulton Hogan yard had not been recovering overnight. The water would now be turned off overnight and locked so that staff could monitor amounts taken.

Mr Lind updated that the Hotel had fixed their leak. He suggested they could be collecting their own roof water for washing vehicles.

Two 30,000lt tanks and a pump were being installed at the wharf to be used for washing down.

Cr Clarke had received several inquiries about household water tank storage. The Chief Executive advised household water tanks were still included in the strategy but the barrier to it was funding to purchase a bulk lot of tanks.

RESOLVED:

THAT the report be received.

NC Ryan / EC Tuck

CARRIED

4.3 Report on Compliance with Drinking Water Standards

Mr Lind confirmed the E.coli found in the Kaingaroa water had been a sampling error.

RESOLVED:

THAT the report be received.

RS Joyce / KL Day

CARRIED

4.4 Engineers Report – September 2018

Cr Clarke advised new Roller doors for the Te One Landfill shed would be arriving on the next boat. The new doors held the highest wind specifications.

Cr Clarke explained the new Baler was being trialled. Fifteen fadges of plastic bottles had been compressed in to one bale. Staff were currently being trained.

Cr Day referred to a discussion on social media regarding the Owenga Transfer Station containers for glass and cardboard not being fit for purpose. Cr Clarke clarified the containers were only on trial and the Waste Manager would address those problems. Cr Day also noted the aggregate used as a base at the Transfer Station was large and asked if a finer stone could be put down.

RESOLVED:

THAT the report be received.

JI Clarke / KL Day

CARRIED

5. COMMUNITY SERVICES

5.1 Proposed Council / CIET Office and Museum

Cr Croon declared an interest.

Prior to the meeting, the Chief Executive had emailed Councillors a report on the design of the proposed Council / CIET and Museum building. Once approved, it was proposed the building may be completed by the end of 2019.

Mr Pickles noted there would be a need for Building Consent and Resource Consent, as there would be a change to the access of the subdivision beside the Council property, and possibly to encroach on the setbacks.

The next stage of the project was defining specifications. The Council's share of this work would be \$89k, with Ngati Mutunga O Wharekauri Iwi Trust and Chatham Islands Enterprise Trust paying the same. Once the project began, there would be a refund of those costs.

RESOLVED:

1. **THAT the report be received.**
2. **THAT the Council supports the project in principle.**
3. **THAT the portfolio committee work through the design and make any adjustments required.**
4. **THAT Council seek funding opportunities to cover the Museum shortfall.**
5. **THAT the Council consider alternatives for Comflat Road.**

RS Joyce / JI Clarke

CARRIED

5.2 Arts, Culture and Heritage Grant (Museum Fund)

Included in the agenda was a letter from the Prime Minister confirming the 2014 grant of \$1.076m had been extended through until 30 March 2019. There was a requirement to report on progress by 6 December 2018.

His Worship acknowledged this was good news and gave Council good leverage to go to funding agencies.

RESOLVED:

THAT the letter be received.

J Seymour / JI Clarke

CARRIED

5.3 Pitt Island Shed

Council had received an inquiry from Mr Brent Mallinson with an offer to lease the Council shed at Pitt Island for \$500.00 per annum. The shed was on land owned by Mr Ken Lanauze. The Chief Executive had talked to Mr Lanauze who had no issue with the proposal.

Mr Mallinson advised he would make repairs to the building and allow Fulton Hogan to use it if required.

RESOLVED:

THAT Council accepts Brent Mallinsons offer to lease the Council Shed at Pitt Island for \$500.00 per annum.

EC Tuck / J Seymour

CARRIED

5.4 Creative Communities Report

A report from Council Officer Orrin Kapua on the Creative Communities NZ fund had been included in the agenda.

Cr Croon confirmed the Ngati Mutunga representative on the committee was Thornton Lanauze-King.

RESOLVED:

THAT the report be received.

JI Clarke / EC Tuck

CARRIED

6. REGULATORY

6.1 Update from Environment Canterbury

The Chief Executive advised the Council had appointed an Operations Manager on secondment from ECan. Ms Cindy Butt was currently the Governance Manager at ECan. She would be on island next month for a week and would begin work in January 2019. Cindy would be in the position for a year and her salary would be met by ECan. Housing still had to be confirmed and Cindy's partner would be accompanying her.

His Worship updated that current Chief Executive Mr Owen Pickles had been the preferred candidate for the recently advertised Chief Executive role. Owen was working with Human Resources at ECan to make adjustments to his contract to be more inline with ECan's format.

His Worship acknowledged the support from ECan in the Human Resources area and in general. The arrangement the Council had with ECan was showing its value.

RESOLVED:

THAT the report be received.

M Croon / KL Day

CARRIED

6.2 Environment Canterbury Quarterly Report – October 2018

RESOLVED:

THAT the report be received.

NC Ryan / EC Tuck

CARRIED

6.3 Chatham Islands Control of Alcohol in Public Places Bylaw 2018

Submissions closed for the Chatham Islands Control of Alcohol in Public Places Bylaw 2018 on 21 September 2018. Two submissions had been received within the timeframe. Copies of both submissions had been included in the agenda.

Council would consider improving signage, especially at the airport for visitors.

The Chief Executive noted there would also be a need for an Alcohol Policy.

RESOLVED:

1. THAT the submissions be received.

2. THAT Council adopts the proposed bylaw.

NC Ryan / M Croon

CARRIED

6.4 Chatham Islands Council Dog Control Report

Council Dog & Stock Control Officer Donna Reed was in attendance.

His Worship thanked Donna for the work she had been doing with Dog Control, and also in her other role of Road Safety.

Donna would meet with the portfolio committee when Cr Tuck was next on the island.

RESOLVED:

THAT the report be received.

M Croon / EC Tuck

CARRIED

6.5 Dog Registrations

Included in the agenda was a report on Dog Registrations to date. Letters had been sent to owners of the 150 outstanding dogs yet to be registered, seeking registrations at \$62.00 or for advice of death or transfer.

RESOLVED:

THAT this information be received.

EC Tuck / M Croon

CARRIED

6.6 Chatham Islands District Licensing Committee Annual Report for the Period Ending 30 June 2018

The District Licensing Committee Annual Report from Liquor Licensing Inspector, Mr Ross Murphy had been included in the agenda. The report gave a summary of activities for the Chatham Islands District Licensing Committee for the financial year to 30 June 2018.

Cr Croon acknowledged the local police who had been pro-active within the community and had met with various groups to address any of their concerns.

RESOLVED:

THAT this information be received.

J Seymour / JI Clarke

CARRIED

7. EMERGENCY MANAGEMENT

7.1 Letter from Hon Kris Faafoi

A letter had been received from Hon Kris Faafoi, Minister of Civil Defence acknowledging submission of the proposed Chatham Island Civil Defence Emergency Management (CDEM) Group Plan for comment.

Minister Faafoi was satisfied the proposed Plan met the requirements of section 49(2) of the CDEM Act 2002.

RESOLVED:

THAT the letter be received.

JI Clarke / RS Joyce

CARRIED

Meeting Closure

After consideration of the In-camera Agenda, and there being no further business, the meeting was declared closed at 2.53pm.

CONFIRMED THIS 1st DAY OF NOVEMBER 2018

MAYOR

3. FINANCE

3. Finance

3.1 Council Dues Report to 4 December 2018

Date of meeting	13 December 2018
Agenda item number	3.1
Author/s	Colette Peni

Purpose

Report to Chatham Islands Council on current Council Dues as at 4 December 2018

Recommendations

THAT the Chatham Islands Council receive the report.

Key points

- Chatham Island Shipping – Outstanding Manifest – November 2018
- Air Chathams – Outstanding Manifest – November 2018
- Both Air Chathams and Chatham Island Shipping have paid their Council Dues in full to 31 October 2018

Background

Carrier	Date of last Payment	Amount Paid	Details
Air Chathams	22/11/18	\$25,326.16	September/October 2018
Chatham Islands Shipping	28/11/18	\$11,145.27	October 2018

3. Finance

3.2 Exemption of Council Controlled Organisations (CCO's)

Date of meeting	13 December 2018
Agenda item number	3.2
Author/s	Owen Pickles, Chief Executive

Purpose

Chatham Island Council has two dormant Council Controlled Organisations (CCO's), the Chatham Islands Housing Trust and the Chatham Islands Mayoral Disaster Relief Fund Trust. Small organisations can be exempted from reporting for up to 3 years.

Recommendations

1. That the Council exempt the Chatham Islands Housing Trust and the Chatham Islands Mayoral Disaster Relief Fund Trust from the requirements of being a Council Controlled Organisation (CCO) in accordance with s7(3) Local Government Act 2002.
2. That the exemption to be for a period of three years (covering the financial years 2018/19, 2019/20, 2020/21).

Background

The Chatham Islands Housing Trust was established to achieve affordable and quality social housing for the people of the Chatham Islands so that community well-being would be enhanced. On-island housing development is now being managed by another on-island entity. However, the trust remains open to respond to an event where responsibility for on-island housing returns to the Council.

The Chatham Islands Mayoral Disaster Relief Fund Trust was recently established to act as an entity to collect or apply for any grants in response to an on-island emergency. Whilst it is expected that the entity will have a small balance of cash available, it is not expected to be actively operating (unless an emergency event arises).

Consequently, it is recommended that Council exempts both Trusts from reporting as a CCO. Section 7 of the Local Government Act 2002 (the LGA) enables an organisation to be exempted CCO status if it is a small organisation and the Council has taken into account:

- The nature and scope of the activities provided by the Trust; and
- The costs and benefits, if the exemption is granted, to the Council, the Trust and the community.

The LGA establishes many financial reporting requirements for a CCO at Part 5 and schedule 8. Theoretically these requirements would no longer apply if the Trust is exempt, this includes:

- Statement of Intent and subsequent consistent decision making (ss60, 64, 65(2), 58, 59 (1)(a) and schedule 8);
- Contract for services between the Trust and Council (s61);
- Half yearly reporting (s66); and
- Annual report and audited financial statements (ss67-69).

Although it is recommended the Council exempt the Trusts from being a CCO, the Trust Deeds must be followed, including auditing financial information.

If the Trust is exempt from CCO status it will still be a council organisation. The definition of Council organisation means an organisation where the council can appoint one or more of the directors/trustees. CCOs can be considered a subset of types of council organisations. There is no exemption from being a council organisation. The provisions in Part 5 that will still apply to the Trust as a council organisation are:

- i. Directors/trustees must be appointed consistent with Council's policy for objective and transparent appointment and remuneration and have the appropriate skill set for guiding the organisation (s57);
- ii. Regular performance monitoring by Council of the organisation's objectives and Council's aims (s65(1));
- iii. Requires audit by the Office of the Auditor General. (This applies whether the Trust is exempted from being a CCO or not. It is still a Public Entity for the purposes of the Public Audit Act (2001)).

3. Finance

3.3 Adoption of Annual Report 2017/18

Date of meeting	13 December 2018
Agenda item number	3.3
Author/s	Owen Pickles, Chief Executive

Purpose

To adopt the Annual Report 2017/18.

Recommendations

THAT Council:

1. Receives the unaudited Annual Report and Summary Annual Report for the year ended 30 June 2018
2. Approves the representations made in Audit New Zealand's Letter of Representation dated 31 October 2018
3. Receives the audit opinion for the Annual Report and Summary Annual Report for the year ended 30 June 2018
4. Adopts the audited Annual Report and Summary Annual Report for the year ended 30 June 2018
5. Delegates the authority to the Council's Chief Executive to make alterations of a minor effect or to correct any other minor errors in the Annual Report and Summary Annual Report for the year ended 30 June 2018

The Council has the following equity reserves:

General Funds – Revenue appropriation account to fund future development.

Emergency Services Reserve - Funds are set aside for emergency events such as natural disasters.

Mayoral Relief Reserve – Funds are set aside for emergency relief.

Te Whanga Opening – Funds set aside for the opening of Te Whanga lagoon.

Burial Register Reserve – Fund to provide for the mapping of burial sites in the Chatham Islands with a view to accurately documenting these historic sites of significance in the form of a register.

Asset Revaluation Reserve – Reserves generated by revaluations in property, plant and equipment and other assets.

Of these reserves, the Te Whanga Opening and Burial Register reserve are no longer considered necessary to hold as a separate reserve, so targeted rates were used to create these reserves. Therefore, it is considered to be more appropriate to transfer these balances to the 'general fund' reserve to achieve a wider Council benefit.

It is recommended the Council:

1. The equity balances of the Te Whanga Reserve (of -\$3,000) and the Burial register reserve (of \$31,000) be transferred to General Funds equity balance
2. The Te Whanga Reserve and Burial Register Reserve be closed.



Chatham Islands Council

Annual Report

2017/18



chatham islands council

Our people, our Islands, our future

Profile of the Chatham Islands

The Chatham Islands and its people are a unique community, isolated by 800 kilometres of ocean from mainland New Zealand.

The Chatham Islands consist of two main inhabited islands, Chatham Island and Pitt Island. Pitt Island lies 23km south east of Chatham Island and both islands are surrounded by a number of smaller islands, all within a radius of approximately 50km. The main island, Chatham, has an area of 90,000 hectares. Pitt Island has an area of 6,300 hectares.

The islands were formed by a volcanic up-thrust and the land surface is predominantly flat with a number of peaks, the largest peak rising to 188 metres. A significant landmark of Chatham Island is 'Te Whanga' which is a large lagoon that covers approximately 20,000 hectares or about one-fifth of the island. There are five settlement areas on the main island - Waitangi, Te One, Owenga, Port Hutt and Kaingaroa.

The 'livelihood' for the majority of islanders is dependent on fishing and farming. Their continued welfare and the islands' viability are linked with the sustainable management of the natural and physical resource base. Chatham Islands Council is the smallest local authority in New Zealand. It has both district and regional council responsibilities.

The Islands at a glance

Usually 640 people live in the Chatham Islands.

Its population is the smallest in size out of the 53 districts in New Zealand.

The most common occupational group on the Chatham Islands is Labourers, compared with Professionals in New Zealand as a whole.

In total, 59% of households have access to the internet, compared with 77% of households throughout New Zealand.

In the Chatham Islands, 4% of households have access to a cellphone, compared with 77% for New Zealand. This is because there is no cell phone coverage on the Chatham Islands.

Among households in private occupied dwellings, 54% own the dwelling, with or without a mortgage; the equivalent figure is 65% for New Zealand as a whole.

The unemployment rate in Chatham Islands territory is 2.5% for people aged 15 years and over, compared with 7.1% for all of New Zealand.

Source: Statistics New Zealand 2013 Census Data



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Introduction

Welcome to the 2017/18 Annual Report. This is an account of Chatham Islands Council's financial and service performance in the year from 1 July 2017 to 30 June 2018. It outlines what we committed to achieving in the Long-Term Plan for the year and describes how we delivered it. The report can be divided into four sections:

1. The overview, including a summary of our strategic approach, function and highlights of the year.
2. Financial statements, detailing the Council's position and performance in financial terms.
3. Service performance summaries, which detail the work completed in each major area of Council activities.
4. Financial accountability at activity level is detailed in our funding impact statements in Appendix 1.

The Chatham Islands Council's key financial accountability documents are as follows:

The Long-Term Plan and Annual Plan

The 10-year Long-Term Plan and the Annual Plan set out in detail how the Council manages its funding. They cover what projects are to be undertaken and how this is to be funded.

These plans also document how the Council consults with its community including Māori and Māori. It identifies the Council's plans for the medium and long-term, including coping with uncertainty and changing circumstances.

Annual Report

The Annual Report details what was achieved compared with the objectives set in the Long-Term Plan or Annual Plan. It is the Council's key financial accountability document. It also provides ratepayers and other interested parties with a report on how well the Council's assets are being looked after and how well the Council is performing as an organisation. The Annual Report informs readers about the Council's progress towards achieving its vision.

Our strategic approach

The Council's vision

The Council's aim is to work towards creating a resilient and sustainable community that embraces diversity and builds growth for our people, our islands and our future.

These are the Council's priorities for ensuring that:

- we lead with integrity and respect,
- we work collectively for the greater good of the community to achieve community aspirations,
- we strive towards a sustainable future and actively pursue opportunities that can enhance the wellbeing and prosperity of our community, and
- we are accountable to our community and transparent in our decision-making.

Mayor and Chief Executive's report

It is with pleasure that we present to you the Chatham Islands Council Annual Report for 2017/18. It is a must-read document if you are interested in the progress being made toward's Chatham Island Council's goals of creating a resilient and sustainable community that embraces diversity and builds growth for our people, our islands and our future.

The Chatham Islands Council is unique in that approximately 88% of its funding comes from Central Government agencies to support on-island projects and to meet its statutory obligations as a Council with both regional and district functions. This year, we developed our 2018-28 Long-Term Plan in consultation with the community. One of the significant uncertainties in our funding model related to the level of funding support we would receive from Central Government agencies. In May 2018 the level of Central Government funding support was confirmed at prior year funding levels. This does not fully cover our roading programme, nor does it allow for investment in other on-island infrastructure, which is desperately needed. An application will be made to the Government to increase its annual contribution for 2019/20, to cover our expected operational funding shortfall and prudently provide for an on-island infrastructural investment programme. If the level of assistance is below this level, Council may need to consider whether any shortfall will be funded by reducing expenditure and levels of service to affordable levels, or temporarily funding the shortfall through debt.

Roading projects continue to be our major activity with between \$3.5 and \$4 million spent annually. The seal repairs from Pages Corner through to Te One have held well and it was good to get the works completed on Tuku Road and Wharf Road following the completion of the Waitangi Wharf project. We acknowledge the work of our engineers Stantec and contractors Fulton Hogan on this activity.

The implementation of the Waste Management Strategy is nearing completion with the establishment of the waste recovery and processing building. The transfer stations at Owenga and Kaingaroa are up and running though there is still a need for further education about waste sorting. The year ahead will see the commissioning of a bailing machine and the closing/rehabilitation of the old dump sites.

The planning/design works for the proposed combined offices and museum are progressing with plans and budgets hopefully ready for consideration in October.

Rate affordability for rates and Council dues also remains at the forefront of our minds, with Council committed to limiting rating increases to reflect inflationary movements, and no proposed increase in Council dues. We believe this is fair and in line with contributions from mainland New Zealand.

We have continued to build relationships with our regional partners including the Chatham Islands Enterprise Trust, Ngati Mutunga o Wharekauri Iwi Trust, Hokotehi Moriori Trust and other on-island Central Government agencies.

We wish to again highlight our appreciation to all those who work for and with the Council for their passion, hard work, and ongoing support that they have provided to our community including the various Government agencies for their ongoing financial assistance.



Alfred Preece
Mayor



Owen Pickles MNZM JP
Chief Executive

13 December 2018



Moriōri and Māōri engagement

The Council has an obligation to take into account the principles of the Treaty of Waitangi – Te Tiriti o Waitangi – and to recognise and provide for the special relationship between and with Moriōri, Māōri, their culture, traditions, land and taonga.

The obligation to consult includes recognising those who hold mana whenua or ancestral rights of land ownership. Within the Chatham Islands, the Council recognises the Hokotehi Moriōri Trust and Ngāi Mutunga o Wharekauri Iwi Trust as groups that represent mana whenua within the territory.

The Council recognises the obligation to actively promote Moriōri and Māōri participation in the decision-making process.

The key goals of the Council in progressing relationships with Iwi/Iwi are:

- Working towards formalising working relationships.
- Building capacity to enhance participation in the decision-making process.
- Providing information to assist Moriōri and Māōri to effectively contribute to the decision-making process.
- Providing education and raising awareness among staff and elected members so that they can gain an appreciation of the Moriōri and Māōri values and traditions in relation to the Local Government Act 2002 and the Resource Management Act 1991.
- Consulting with Moriōri and Māōri on key decisions.

The Council also recognises an obligation to the Chatham Islands community under the Long-Term Plan 2015–25 in enhancing and acknowledging the importance of tchakat henua/tangata whenua.

The Council's policy on Moriōri, Māōri and Chatham Islands Council was revised and adopted in 2015 as part of the Long-Term Plan 2015–25.



2017/18 in review

The 2017/18 financial year was one of change and challenges for the Council.

Waste Management Strategy

Our Waste Management Strategy has now been implemented and is in operation. A sanitary landfill complying with health and environmental standards has now been constructed, along with two transfer stations at Kaingaroa and Owenga. A waste processing and recovery facility has been provided at Te One.

Roading

On-island roading works have progressed in accordance with our asset management plan. This year we have focused on the quality issues associated with the sealed road network.

The ongoing sustainability of funding support for roading infrastructure continues to create challenges for us. Financial assistance received from the New Zealand Transport Agency (NZTA) has now been set at 88% of costs by the Minister of Transport. Historically, the level of support was 91%, this difference of approximately \$20,000 per annum must also be funded by Council. The Council has had to fund the difference from targeted rates and general funds, which has impacted on the Council's ability to provide other services to the community.

Emergency Management Operations Centre

The Emergency Management Operations Centre project development remains ongoing. However, the build has not yet commenced pending full funding for the project being secured.

Sustainable water

Council has been exploring where there are gaps in our current service; specifically, we have investigated water supply extensions for the areas of Waitangi and Te One. The Council has been working with the Ministry of Health to support water scheme upgrades for Waitangi and Te One. As yet, financial support has not been agreed and therefore these projects have been delayed. The purpose of the water upgrades is to address issues of non-compliance with minimum water standards, while responding to community concerns on the impacts of water quality on our health and safety.

Review of the Resource Management document

The draft Chatham Islands Resource Management document (CIRMD) is now partially operational, awaiting approval from the Minister for the Environment, before the document can be formally adopted by Council.

The Minister has withheld approval pending additional compliance work with the National Policy Statement on coastal and fresh water management.

Council offices and community complex

The Council and Chatham Islands Enterprise Trust are working with an on-island company with the view to lease a purpose-built office facility for the administration and museum part of the facility. An agreement has been negotiated which expects to be completed by late 2019. A one-off funding grant of \$1 million from the Ministry of Culture and Heritage towards the new museum remains secure.

The remaining elements of the community complex will be built later, as funding allows.

Social housing

Work towards the establishment of a housing project continues. Council collaborated with other island groups and organisations to formalise an agreement with the Chatham Islands Enterprise Trust, Hokotahi Moriori Trust and Ngāti Mutunga Wharekauri Iwi Trust to progress the project. This project is led by Ngāti Mutunga.

Other island infrastructure

The Council is working with other island groups and Government to upgrade the airport runway, improve broadband services, and to find a sustainable/affordable source for electricity.

Looking forward

Over the next 10 years Council will endeavour to progress current projects that contribute to enhancing the wellbeing of the community and realising the community outcomes.

Key projects include:

- The completion of a water project that provides a sustainable and compliant water supply for Te Ore, Owenga and Waitangi.
- A new Emergency Management Operations Centre.
- A new museum and administration facility.
- Roading projects.
- The implementation of the Islands Housing Solutions project.
- Successful Island relationships that achieve infrastructure outcomes such as the airport runway, high speed broadband and mobile telephone service covering all the islands, and cost-efficient energy sources.



2017/18 in review

Financial summary

The Chatham Islands Council has recognised an operating surplus of \$0.8 million for the year (excluding asset revaluations), this being the difference between our total operating income less our operating expenditure. In the previous year, the surplus was \$0.8 million.

Our operating surplus excludes the cost of purchasing capital assets, such as the cost of improving our roading infrastructure. With \$2.9 million in capital assets purchased during the year, our ability to operate in a financially sustainable manner has been impacted. A summary of our sources and applications of funding, from an operating and capital perspective are detailed in our Council and activity funding impact statements from page 56.

We expected to achieve a surplus of \$1.8 million in our 2017/18 Annual Plan; the variance is primarily due to budgeted capital works being delayed until financial support was confirmed. Further explanation regarding the variance between actual and budget figures is provided in note 18 of this document.

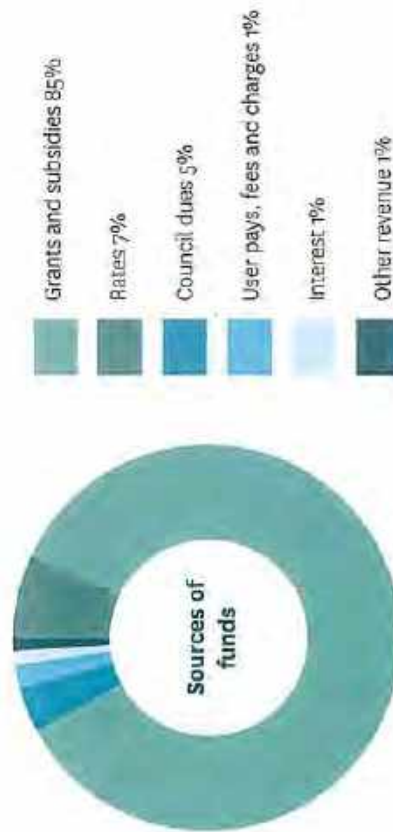
The Council does not have an investment portfolio or population base to independently support its on-island activities and meet required levels of service. Consequently, it is reliant on external support from Central Government to ensure the Council continues to operate in a financially sustainable manner.

Sources of funds

Council receives income from a range of sources, but is primarily reliant on Central Government grants to remain operational. The budget assumed sufficient funding would be provided during the year to support on-island projects, including infrastructural development integral to improving facilities for our community.

Grants for capital projects are below budget, with funding for several key projects not confirmed, therefore the on-island works did not proceed.

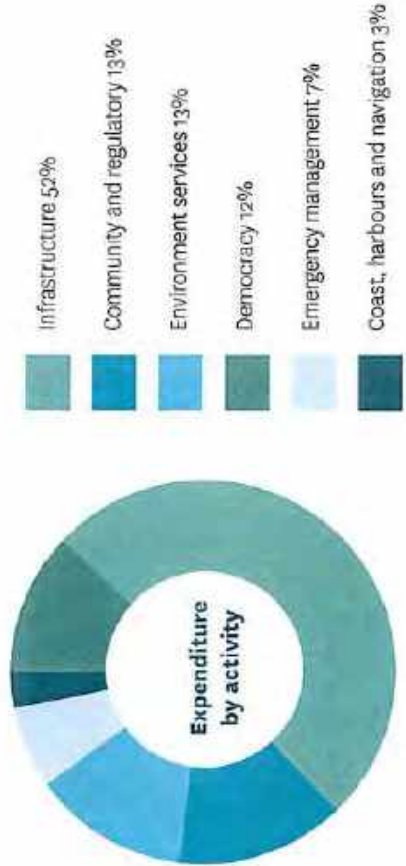
A summary of our funding sources for the year is detailed in the graph below:





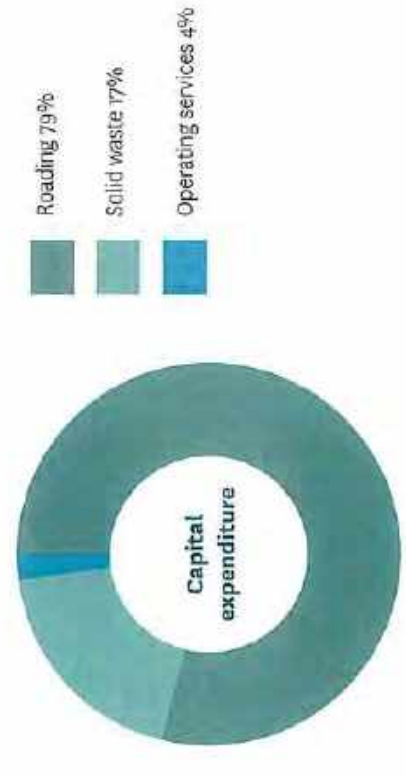
Allocation of funds

Operating expenditure by activity is summarised in the graph below; the largest portion of expenditure relates to on-island infrastructure works, particularly the roading network.



Capital expenditure

The graph below summarises the Council's capital expenditure programme by area. The majority of capital expenditure relates to maintaining and improving our roading infrastructure. At the end of the financial year, the Council's operational and infrastructural assets are valued at \$82.8 million, compared with \$58.9 million for the previous financial year. Of this variation, \$22.7 million is from the in-year asset revaluation.



Independent Auditor's report

AUDIT NEW ZEALAND

Mana Arotake Aotearoa

To the readers of Chatham Islands Council's Annual Report for the year ended 30 June 2018

The Auditor-General is the auditor of Chatham Islands Council (the Council). The Auditor-General has appointed me, Julian Tan, using the staff and resources of Audit New Zealand, to report on the information in the Council's annual report that we are required to audit under the Local Government Act 2002 (the Act). We refer to this information as "the audited information" in our report.

We are also required to report on:

- whether the Council has complied with the requirements of Schedule 10 of the Act that apply to the annual report; and
- the completeness and accuracy of the Council's disclosures about its performance against benchmarks that are required by the Local Government (Financial Reporting and Prudence) Regulations 2014.

We refer to this information as "the disclosure requirements" in our report.

We completed our work on 13 December 2018. This is the date on which we gave our report.

Opinion on the audited information

In our opinion:

- the financial statements on pages 16 to 29:
 - present fairly, in all material respects:
 - the Council's financial position as at 30 June 2018;
 - the results of its operations and cash flows for the year ended on that date; and
 - comply with generally accepted accounting practice in New Zealand in accordance with Public Benefit Entity Standards Reduced Disclosure Regime.
- the funding impact statement on page 55 presents fairly, in all material respects, the amount of funds produced from each source of funding and how the funds were applied as compared to the information included in the Council's annual plan;

- the description used for the statement of service performance on pages 34 to 54;
 - presents fairly, in all material respects, the Council's levels of service for each group of activities for the year ended 30 June 2018, including:
 - the levels of service achieved compared with the intended levels of service and whether any intended changes to levels of service were achieved;
 - the reasons for any significant variation between the levels of service achieved and the intended levels of service; and
 - complies with generally accepted accounting practice in New Zealand; and
- the statement about capital expenditure for each group of activities on pages 57 to 61 presents fairly, in all material respects, actual capital expenditure as compared to the budgeted capital expenditure included in the Council's long term plan; and
- the funding impact statement for each group of activities on pages 57 to 61, presents fairly, in all material respects, the amount of funds produced from each source of funding and how the funds were applied as compared to the information included in the Council's long term plan.

Report on the disclosure requirements

We report that the Council has:

- complied with the requirements of Schedule 10 of the Act that apply to the annual report; and
- made the disclosures about its performance against benchmarks that are required by the Local Government (Financial Reporting and Prudence Regulations 2014) on pages 30 to 33 which represent a complete list of the required disclosures and accurately reflects the information drawn from the Council's audited information and, where applicable, the Council's long term plan and annual plans.



Basis for opinion on the audited information

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. We describe our responsibilities under those standards further in the "Responsibilities of the auditor for the audited information" section of this report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on the audited information.

Responsibilities of the Council for the audited information

The Council is responsible for meeting all legal requirements that apply to its annual report.

The Council's responsibilities arise under the Local Government Act 2002 and the Local Government (Financial Reporting and Prudence) Regulations 2014.

The Council is responsible for such internal control as it determines is necessary to enable it to prepare the information we audit that is free from material misstatement, whether due to fraud or error.

In preparing the information we audit the Council is responsible for assessing its ability to continue as a going concern. The Council is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless there is an intention to amalgamate or cease all of the functions of the Council or there is no realistic alternative but to do so.

Responsibilities of the auditor for the audited information

Our objectives are to obtain reasonable assurance about whether the audited information, as a whole, is free from material misstatement, whether due to fraud or error, and to issue an audit report that includes our opinion.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers taken on the basis of this audited information.

For the budget information reported in the audited information, our procedures were limited to checking that the budget information agreed to the Council's annual plan and long term plan. We did not evaluate the security and controls over the electronic publication of the audited information.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the audited information, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Council's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council.

Independent Auditor's report

- We determine the appropriateness of the reported intended levels of service in the statement of service performance as a reasonable basis for assessing the levels of service achieved and reported by the Council.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Council and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast a significant doubt on the Council's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the related disclosures in the audited information or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our audit report. However, future events or conditions may cause the Council to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the audited information, including the disclosures, and whether the audited information represents, where applicable, the underlying transactions and events in a manner that achieves fair presentation.
- We communicate with the Council regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other information

The Council is responsible for the other information included in the annual report. The other information comprises the information included on pages 2 to 11, 56, and 62 to 65 but does not include the audited information and the disclosure requirements.

Our opinion on the audited information and our report on the disclosure requirements do not cover the other information.

Our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the audited information and the disclosure requirements, or our knowledge obtained during our work, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of the Council in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1 (Revised): Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board.

Other than the audit and our report on the disclosure requirements, we have no relationship with or interests in the Council.

Julian Tan

Julian Tan

Audit New Zealand

On behalf of the Auditor-General Christchurch, New Zealand

13 December 2018

Financial statements

Statement of compliance and responsibility

Compliance

Councillors and management of Chatham Islands Council confirm the statutory requirements in relation to the Annual Report, as outlined in the Local Government Act 2002, have been complied with during the year, with the following exception:

- Under section 98(3) of the Local Government Act 2002, Council is required to complete and adopt its Annual Report within four months of the end of the financial year. Council was unable to comply with this requirement for the year ended 30 June 2018.

Responsibility

Councillors and management of Chatham Islands Council accept responsibility for the preparation of the annual financial statements and the judgements used in them. They also accept responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of financial and service performance reporting.

In the opinion of the Councillors and management of Chatham Islands Council, the financial statements fairly reflect the financial position of the Council as at 30 June 2018, and the results of its operations, cash flows and the service performance achievements for the year ended on that date.



Alfred Preece
Mayor



Owen Pickles MNZM JP
Chief Executive

13 December 2018



Photo: iStockphoto.com

Financial statements

Statement of comprehensive revenue and expense for the year ended 30 June 2018

Revenue	Note	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000
Rates	2	558	575	548
Grants & subsidies	2,18	6,753	8,033	7,668
Council Dues		370	290	336
User pays, fees & charges		113	158	161
Interest		78	72	126
Other revenue		83	112	37
Total revenue	1	7,954	9,240	8,876
Expenditure				
Depreciation and amortisation	8	1,678	1,854	1,570
Employment benefits	3	1,001	887	1,233
Financial costs		17	23	25
Other expenditure	4	4,675	4,644	5,270
Total expenditure	1	7,371	7,408	8,057
Total surplus/deficit		583	1,832	778
Comprehensive revenue and expense				
Increase/(decrease) in revaluation reserve	8,13	22,706	-	-
Total other comprehensive revenue and expense		22,706	-	-
Total comprehensive revenue and expense		23,289	1,832	778

Statement of changes in equity for the year ended 30 June 2018

	Note	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000
Equity at the start of the year		58,373	61,491	57,595
Total comprehensive revenue and expense		23,289	1,832	778
Equity at the end of the year	13	81,662	63,323	58,373

Statement of financial position as at 30 June 2018

	Note	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000
Current assets				
Cash & cash equivalents	5	26	23	83
Cash funds held in trust	5	55	72	70
Cash investments	6, 18	1,508	-	1,467
Current trade and other receivables	7	744	516	889
Total current assets		2,334	611	2,509
Non-current assets				
Non-current trade and other receivables	7	44	137	72
Property, plant & equipment	8, 18	82,785	63,669	58,816
Total non-current assets		82,829	63,806	58,888
Total Assets		85,163	64,417	61,397

These statements should be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.



Statement of financial position as at 30 June 2018 (continued)

	Note	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000
Current liabilities				
Bank overdraft	5	358	-	241
Trade & other payables	9, 18	2,612	614	2,145
Employee entitlements	10	93	65	90
Current portion of provisions	11	118	50	146
Current portion of term liabilities	12	60	62	61
Total current liabilities		3,240	791	2,683
Non-current liabilities				
Provisions	11	-	-	25
Term liabilities	12	261	303	316
Total non-current liabilities		261	303	341
Total liabilities		3,501	1,094	3,024
Net assets		81,662	63,323	58,373
Public equity				
Accumulated funds & reserves		81,662	63,323	58,373
Total public equity	13	81,662	63,323	58,373

Statement of cash flows for the year ended 30 June 2018

	Note	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000
Cash flow from operating activities				
Receipts from rates revenue		560	574	538
Receipts from Council Dues		384	289	351
Receipts from grants and subsidies		6,639	8,014	7,668
Interest received		78	72	126
Receipts from other revenue		465	260	85
Payments made to employees		(1,002)	(885)	(1,204)
Interest paid		(17)	(23)	(35)
Other payments to suppliers		(4,335)	(4,633)	(5,061)
Net cash flow from operating activities		2,772	3,668	2,478
Cash flow from investing activities				
Purchase of fixed assets		(2,864)	(3,650)	(2,521)
Sale/(purchase) of other assets		(41)	(1,076)	(1,467)
Net cash flow from investing activities		(2,905)	(4,726)	(3,988)
Cash flow from financial activities				
Loans raised		-	-	-
Repayment of loans		(56)	(66)	(47)
Net cash flow from financial activities		(56)	(66)	(47)
Increase/(decrease) in cash held		(189)	(1,124)	(1,557)
Opening cash balance		(88)	1,219	1,459
Closing cash balance	5	(277)	95	(88)

Goods and Services Tax: The GST component of operating activities reflects the net GST paid to and received from Inland Revenue. The GST component has been presented on a net basis, as the gross amounts do not provide meaningful information.

These statements should be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Financial statements

Statement of accounting policies

For the year ended 30 June 2018

Reporting entity

Chatham Islands Council is a Unitary Local Authority under the Chatham Islands Council Act 1995 and the Local Government Act 2002 and is domiciled and operates in New Zealand.

Chatham Islands Council has designated itself as a public benefit entity for financial reporting purposes. The primary objective of the Council is to provide goods and services for community or social benefit rather than to make a financial return.

The financial statements of Chatham Islands Council are for the year ended 30 June 2018. The financial statements were authorised for issue on 13 December 2018.

Basis of preparation

The financial statements are prepared in accordance with the requirements of the Local Government Act 2002, which requires information to be prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP).

The financial statements comply with Public Benefit Entity International Public Sector Accounting Standards (PBE IPSAS). This includes preparing the accounts on a going concern basis.

Chatham Islands Council has elected to prepare the financial statements in accordance with Tier 2 PBE accounting standards as it is not publicly accountable or large and therefore reduced disclosure requirements will apply.

Measurement base

The financial statements have been prepared on a historical cost basis, modified by the revaluation of certain infrastructural assets.

The financial statements are presented in New Zealand dollars and all values are rounded to the nearest thousand (\$000). The functional currency of Chatham Islands Council is New Zealand dollars.

Critical financial assumptions, judgements and estimations

The financial statements require management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, revenue and expenses. These estimates and the associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and, if applicable, future periods if the revision affects both current and future periods.

Budget figures

The budget figures in the financial statements are those approved by Chatham Islands Council as part of the annual planning process. The Council has approved no additional expenditure outside the planning process.

The budget figures have been prepared in accordance with NZ GAAP and are consistent with the accounting policies adopted by the Council for the preparation of these financial statements.

The following accounting policies, which materially affect the measurement of results and financial position, have been applied.

Revenue recognition

Revenue is measured at the fair value of consideration received or receivable. The recognition criteria for specific revenue items are described below:

- Rates revenue is recognised when it is levied. General rates and targeted rates are non-exchange transactions
- The New Zealand Transport Agency (NZTA) roading subsidies are recognised when the conditions pertaining to eligible expenditure have been fulfilled. These subsidies and grants are non-exchange transactions
- Government assistance and grants are recognised when eligibility is established. Grants are non-exchange transactions
- Other grants and bequests are recognised when control over the asset is obtained. Grants are non-exchange transactions.

Borrowing costs

Borrowing costs are recognised as an expense in the period in which they are incurred.



Leases

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset. Lease payments under an operating lease are recognised as an expense on a straight-line basis over the lease term. Chatham Islands Council does not have any finance leases.

Taxation

Chatham Islands Council is a public authority and consequently is exempt from the payment of income tax, except for income derived from Council Controlled Organisations.

Goods and services tax

All amounts in the financial statements are exclusive of GST, except for debtors and creditors, which are shown inclusive of GST. The net amount of GST recoverable from or payable to the IRD is included as part of receivables or payables in the Statement of Financial Position.

The net amount of GST paid to or received from the IRD, including the GST relating to investing and financing activities, is classified as a net operating cash flow in the Statement of Cash Flows.

Commitments and contingencies are disclosed exclusive of GST.

Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less, and bank overdrafts.

For the purposes of the statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

Trade and other receivables

Trade and other receivables are measured at cost, less any provision for impairment.

A provision for impairment is established when there is evidence that the Council will not be able to collect all amounts due according to the original terms of receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of the amounts expected to be collected.

Other financial assets

Cash investments include investments in bank with maturities exceeding three months. They are initially measured at the amount invested, adjusted for interest received.

Financial assets are initially recognised at fair value plus transaction costs unless they are carried at fair value through surplus or deficit in which case the transaction costs are recognised in the surplus or deficit.

Purchases and sales of financial assets are recognised on trade-date, the date on which the Council commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Council have transferred substantially all the risks and rewards of ownership.

Financial assets are classified into the following categories for the purpose of measurement:

- Fair value through surplus or deficit
- Loans and receivables
- Held-to-maturity investments
- Fair value through other comprehensive revenue and expense.

The classification of a financial asset depends on the purpose for which the instrument was acquired.

Financial assets at fair value through surplus or deficit

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. These assets are included in current assets, except for maturities greater than 12 months after the balance date, which are included in non-current assets.

Property, plant and equipment

The initial or subsequent cost of an item of property, plant and equipment is recognised as an asset where it is probable that future economic benefits or service potential will flow to the Council. Costs that do not meet these criteria are expensed. Where an asset is acquired in a non-exchange transaction for nil or nominal consideration, the asset is initially recognised at fair value.

Work in progress is recognised at cost less impairment and is not depreciated.

Asset classes that are revalued are revalued with sufficient regularity to ensure that their carrying amount does not differ materially from fair value. The valuation cycle for revalued asset classes is normally five years. The results of revaluing are credited or debited to an asset revaluation reserve for that class of asset. Where this results in a debit balance in the asset revaluation, this balance is expensed in the statement of comprehensive revenue and expense.

Financial statements

The Council has the following classes of assets:

Operational assets

Land and buildings were valued at deemed cost by way of Government valuation, as at 1 July 1989. Subsequent additions are valued at cost. All other operational assets are valued at cost less accumulated depreciation.

Infrastructure assets

Roading: Roding assets (excluding land under roads) were revalued by Stantec Ltd (Registered Engineers) at depreciated replacement cost, as at 30 June 2018. Subsequent additions are included at cost. Land under roads is recorded at cost and is not depreciated.

Storm water and sewerage reticulation: The reticulation systems were valued by Stantec Ltd (Registered Engineers) as at 30 June 2018. The valuation provided is depreciated replacement cost. Subsequent additions are included at cost.

Solid waste: Solid waste assets were valued by Stantec Ltd (Registered Engineers) as at 30 June 2018. The valuation provided is depreciated replacement cost. Subsequent additions are included at cost.

Water: The reticulation systems were valued by Stantec Ltd at depreciated replacement cost as at 30 June 2018. Subsequent additions are included at cost.

Harbour: Harbour assets were valued by Stantec Ltd at depreciated replacement cost as at 30 June 2018. Subsequent additions are included at cost.

Depreciation

Depreciation is provided on a straight-line basis on all assets. Rates are calculated to allocate the asset's cost or valuation less estimated residual value over their estimated useful life, as follows.

Asset	Years
Operational assets	
Vehicles	5-10 years
Furniture/fitings	5-10 years
Buildings	25-50 years
Office equipment	5 years
Parks and reserves	25 years
Solid waste	25 years

Asset	Years
Infrastructure assets	
Roading	
Top surface (seal)	10 years
Pavement (base course)	66 years
Sealed	Not depreciated
Unsealed	5 years
Pavement	Not depreciated
Unsealed (wearing course)	75-100 years
Sub-base and formation	60 years
Culverts	25 years
Footpaths and kerbs	50 years
Signs	30-50 years
Street lights	25 years
Retaining walls	5-25 years
Bridges	80 years
Water reticulation	
Pipes, valves, hydrants	25 years
Pump stations	5-25 years
Tanks	80 years
Sewerage reticulation	
Pipes	80 years
Manholes	60 years
Sand filter	26 years
Storm water system	
Pipes	40-60 years
Harbour	
Owenga Wharf	50 years



Intangible assets

Intangible assets are primarily the costs associated with acquiring computer software, which is valued at cost less accumulated amortisation.

Amortisation

The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life. Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The useful lives and associated amortisation rates of major classes of intangible assets have been estimated as follows.

Asset	Years
Computer software	5 years

Impairment of property, plant and equipment and intangible assets

If an asset's carrying amount exceeds its recoverable amount, the asset is impaired and the carrying amount is written down to the recoverable amount. For revalued assets, the impairment loss is recognised against the revaluation reserve for that class of asset.

For assets not carried at a revalued amount, the total impairment loss is recognised in the Statement of Comprehensive revenue and expense.

Trade and other payables

Short-term payables are recorded at their face value.

Employee benefit liabilities

Provision has been made in respect of the Council's liabilities for annual leave, at balance date. This has been calculated on an actual entitlement basis. Chatham Islands Council recognises a liability for sick leave as the amount of unused entitlement accumulated at balance date that the Council anticipates employees will use in future periods in excess of the days they are entitled to.

Provisions

Chatham Islands Council recognises a provision for future expenditure of uncertain amount or timing when there is a present obligation (either legal or constructive) as a result of a past event; in such cases, it is probable that expenditures will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Provisions are not recognised for future operating losses. Provisions are measured at the present value of the future expected expenditure.

Borrowings

Borrowings are initially recognised at their fair value plus transaction costs. After initial recognition, all borrowings are measured at amortised cost using the effective interest method. Borrowings are classified as current liabilities unless the Council has an unconditional right to defer settlement of the liability for at least 12 months after balance date.

Public equity

Equity is the community's interest in Chatham Islands Council and is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into a number of reserves. The components of equity are:

- Retained earnings
- Restricted reserves
- Asset revaluation reserves.

Restricted reserves are a component of equity generally representing a particular use to which various parts of equity have been assigned. Reserves may be legally restricted or created by Chatham Islands Council. Restricted reserves are those subject to specific conditions accepted as binding by Chatham Islands Council and that may not be revised by Chatham Islands Council without reference to the Courts or a third party. Transfers from these reserves may be made only for certain specified purposes or when certain specified conditions are met. Also included in restricted reserves are reserves restricted by Council decision. The Council may alter them without reference to any third party or the Courts. Transfers to and from these reserves are at the discretion of the Council.

Council Controlled Organisations

The Council has created a newly established Council Controlled Organisation, the Chatham Islands Mayoral Disaster Relief Fund Trust, as a body to receive grants to respond to emergency events on the Chatham Islands. For the year ended 30 June 2018, the entity was dormant and had no assets or liabilities, nor has the entity made any other transactions during the year. The Council has not exempted this organisation from reporting under Section 7 of the Local Government Act 2002, and therefore the financial result for the Council group is consistent with the reported Council figures.

Financial statements

NOTE 1: SUMMARY OF REVENUE AND EXPENDITURE BY ACTIVITY

The cost of service for each of the Council's activities has been derived by allocating revenue and expenditure items directly to each activity statement, where directly attributable. Other indirect items, are those that cannot be identified in an economically feasible manner to an activity. These items are allocated to each activity using cost drivers. This may result in disproportionate gains or losses at an activity level where revenue and expenditure categories are matched.

Revenue by activity	Actual 2017/18 \$'000	Annual Plan 2017/18 \$'000	Actual 2016/17 \$'000
Democracy	1,158	3,218	881
Infrastructure	4,239	4,417	4,330
Community and Regulatory	1,584	574	854
Environment	261	701	925
Emergency Services	388	205	1715
Coasts, Harbours and Navigation	324	126	171
Total Revenue	7,954	9,240	8,876
Expenditure by activity			
Democracy	870	718	882
Infrastructure	3,853	4,551	3,485
Community and Regulatory	949	826	897
Environment	953	851	928
Emergency Services	496	259	1706
Coasts, Harbours and Navigation	230	183	204
Total Expenditure	7,371	7,408	8,098
Net Surplus/(Deficit)	583	1,832	778

NOTE 2: REVENUE

Rates is further broken down in the table below:

Rates Revenue	Actual 2017/18 \$'000	Actual 2016/17 \$'000
General Rates	287	285
Targeted rates		
Roading	53	53
Solid Waste	64	63
Water	67	66
Sewerage	85	64
Total Targeted Rates	249	246
Rates Penalties	20	17
Total Rates Revenue	556	548

Rating base information

The following rating base information is disclosed using rating base information at the end of 30 June 2017.

	30 June 2017
The number of rating units	695
The total land value of rating units	68,885,800
The total capital value of rating units	141,653,550



NOTE 2: REVENUE (CONTINUED)

Grants and subsidies is further broken down in the table below:

Grants and Subsidies	Actual 2017/18 \$000	Actual 2016/17 \$000
Department of Internal Affairs	3,206	3,270
NZTA roading subsidy	3,313	3,223
Fire & Emergency New Zealand	128	1,158
Other	106	17
Total Grants & Subsidies	6,753	7,668

For the Council, the principal grants and reimbursements are from the following sources:

- The Department of Internal Affairs provides an annual contribution to meet the Council's statutory obligations. The funding assistance arrangement is a continuing relationship with Central Government, with a direct correlation between the grant received and the services the Council can offer on-island.
- The New Zealand Transport Agency (NZTA), which reimburses part of the Council's costs for maintaining the local roading infrastructure. The reimbursements from NZTA are for costs already incurred with no unfulfilled conditions or other contingencies relating to the reimbursements.

NOTE 3: EXPENDITURE – EMPLOYMENT BENEFITS

Key management personnel of the Council include the Mayor, Councillors and the Chief Executive. The assessed total full time equivalent of the key management personnel is assessed as ten for the year ended 30 June 2018 (as at 30 June 2017, ten). Due to the difficulty in determining the full time equivalent figure for the Mayor and Councillors, the figure is based on head count.

Mayoral and Councillor remuneration

The following people held office as elected members of the Council's governing body during the reporting period:

Name	Position	Actual 2017/18	Actual 2016/17
Alfred Preece	Mayor	52,436	51,782
Jeffery Clark	Deputy Mayor	21,339	20,993
Eoin Chisholm	Councillor	16,127	15,835
Monique Croon	Councillor	16,358	16,066
Keri Day	Councillor	16,016	15,724
Richard Joyce	Councillor	16,348	11,724
Nigel Ryan	Councillor	16,340	16,048
Jason Seymour	Councillor	15,263	10,368
Eva Tuck	Councillor	16,348	11,724
Nathaniel Whaiteri	Councillor	-	4,885
Greg Horler	Councillor	-	4,838
Total Honoraria		186,575	179,784

The Remuneration Authority is responsible for setting the remuneration levels for elected members.

The elected members receive an annual salary, as opposed to a combination of meeting fee payments and annual salary. Elected members receive no other non-monetary benefits. Furthermore, there have been no appointments of elected members to other boards, with the purpose of representing Council's interests, related party transactions are disclosed as part of note 14.

NOTE 3: EXPENDITURE – EMPLOYMENT BENEFITS (CONTINUED)

Chief Executive remuneration

The total remuneration of the Chief Executive for the year ended 30 June 2018 was \$188,062 (as at 30 June 2017 \$182,979).

Other employee numbers and remuneration bands:

As at 30 June 2018, the Council employed nine full time and three full time equivalent employees (as at 30 June 2017, the comparative figures of employment were ten full time and two full time equivalent employees).

The table below identifies the number of people employed by the Council at the end of the financial year and identifies the breakdown of remuneration levels of employees into bands, where a band contains less than five staff members, the band is combined.

Band	Actual 2017/18
< \$59,999	7
\$60,000 - \$119,999	6
\$120,000 - \$199,999	1
	14

Band	Actual 2016/17
< \$59,999	6
\$60,000 - \$139,999	7
\$140,000 - \$199,999	1
	14

Severance payments:

For the year ended 30 June 2018, the Council made no severance payments (for the year ended 30 June 2017, nil).

NOTE 4: EXPENDITURE – OTHER SIGNIFICANT ITEMS:

Included within expenditure are the following notable items:

Other Expenses	Actual 2017/18 \$000	Actual 2016/17 \$000
Audit fees - financial statement	72	71
Audit fees - other	48	-
Donations and grants	130	70
Bad debts	15	-
Lease expense	41	41
Waitangi West fire	99	1,037

NOTE 5: CASH AND CASH EQUIVALENTS

Cash and cash equivalents include the following for the purposes of the statement of cash flows:

	Actual 2017/18 \$000	Actual 2016/17 \$000
Cash at bank and on hand	26	83
Funds held in trust	55	70
Bank overdraft	(358)	(241)
Total cash and cash equivalents	(277)	(88)

The Council holds funds in trust generated by the Chatham Islands Radio Society (now ceased) to support the provision of television reception for Islanders and run an on-island radio service, at year-end total funds available were \$55 thousand (2016/17: \$70 thousand).

NOTE 6: CASH INVESTMENTS

The Council's investment programme is limited to holding term deposits with the on-island ANZ bank. Where the investment term exceeds three months at year end, the investment is classified as a cash investment.

Included within the cash investments balance is a grant to fund construction of the museum element of the Council offices and community complex. The grant is held in an interest bearing account, at year-end the total balance available was \$1.2 million (2016/17 \$1.2 million). Construction responsibilities have changed to when the grant was awarded (as outlined in note 9: trade and other payables). The museum grant will be applied to the museum part of the proposed complex or if that doesn't go ahead, to a standalone museum project. It will not be paid back to Ministry of Culture and Heritage.

NOTE 7: TRADE AND OTHER RECEIVABLES

Debtors and other receivables are non-interest bearing and receipt is normally on 30-day terms. Therefore the carrying value of debtors and other receivables approximates their fair value.

	Actual 2017/18 \$000	Actual 2016/17 \$000
Rates	105	108
Sundry debtors ¹	92	104
Sundry accruals	431	317
Warm Homes loans advanced current	20	18
GST refund	97	342
Total current trade and other receivables	744	889
Trade and other receivables non-current		
Warm Homes loans advanced non-current	44	72
Total Non-Current Trade and Other Receivables	44	72
Consisting of:		
Receivables from non-exchange transactions ²	724	871
Receivable from exchange transactions ²	64	90

¹ Council has no impairment provision. The movement in the provision for the impairment of trade and other receivables for 2017/18 was nil (2016/17 nil).

² Non-exchange transactions includes outstanding amount for rates, grants, infringement, and fees and charges that are partly subsidised by rates. Exchange transactions includes outstanding amount for commercial sales, and fees and charges that have not been subsidised by rates.

NOTE 8: PROPERTY, PLANT AND EQUIPMENT

Insurance of Assets	Actual 2017/18 \$000	Actual 2016/17 \$000
Total value of assets covered by insurance contracts	2,906	2,486
The maximum amount to which assets are insured under Council insurance policies	\$,888	\$,907

The Council is not covered by any financial risk sharing arrangements in relation to its assets.

The Council self-insures a portion of its assets. The majority of Council's self insured assets are roading infrastructure assets; they are not insured as any remedial work required will be carried out via the NZTA funded roading programme.

No property, plant and equipment is pledged as security for liabilities. There are no restrictions over the title of these assets.

Infrastructural revaluation

During the 2017/18 financial year, the Council revalued its roading, sewerages, solid waste and water infrastructure assets. The Council revalue their infrastructure assets every four or five years, as the Council considers this allows for a reasonable balance between the cost of revaluing their infrastructure assets with the accounts reflecting an appropriate fair value. This revaluation cycle is less frequent than most Councils. A less frequent revaluation cycle may result in greater movement between revaluations, and is more likely to be subject to variances from methodology changes.

The Council's 2017/18 roading revaluation resulted in a revaluation movement of \$21.6 million. This increase was mainly attributed to:

- A change in the revaluation methodology to utilise standard widths as the system information was considered unreliable,
- Updated sub-base depths that reflected current engineering design/construction practice for replacements,
- A significant change in the unit rates due to cost-price increases (including transportation of materials to the island), and a change in contractor with a different cost structure, since the prior revaluation

Financial statements

NOTE 8: PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Movements for each class of property, plant and equipment are as follows.

Actual 2017/18	Opening Cost/ Revaluation \$'000	Accumulated Depreciation \$'000	Carrying Value at the Start of the Year \$'000	Additions/ Transfers \$'000	Impairment/ Disposals at Cost \$'000	Depreciation \$'000	Revaluation \$'000	Closing Accumulated Depreciation \$'000	Carrying Value at the End of Year \$'000
Operational Assets									
Land	271	-	-	-	-	-	-	-	271
Buildings	1,473	(724)	749	-	-	(30)	-	(754)	718
Furniture and Fittings	128	(103)	25	1	-	(6)	-	(109)	20
Plant and Office Equipment	178	(132)	46	66	-	(25)	-	(157)	87
Vehicles	199	(87)	102	50	-	(77)	-	(104)	145
Parks and Reserves	99	(59)	30	-	-	(4)	-	(73)	25
Total Operational Assets	2,338	(1,115)	1,223	127	-	(82)	-	(1,197)	1,268
Infrastructural Assets									
Roading	58,881	(6,664)	52,197	2,363	-	(1,405)	21,620	-	74,775
Solid Waste	1,623	(184)	1,439	454	-	(74)	617	-	2,436
Storm water	14	(11)	3	-	-	-	-	(11)	3
Sewerage	1,397	(472)	925	-	-	(53)	217	-	1,089
Water	2,084	(427)	1,657	46	-	(33)	53	-	1,723
Harbour	1,470	(147)	1,323	-	-	(31)	199	-	1,491
Total Infrastructural Assets	65,469	(7,935)	57,544	2,863	-	(1,596)	22,706	(11)	81,517
Work in progress	49	-	49	(49)	-	-	-	-	-
Property, Plant and Equipment	67,856	(9,040)	58,816	2,941	-	(1,678)	22,706	(1,208)	82,785

CORE ASSETS 2017/18 (CONTINUED)

Included within the Infrastructure assets are the following core Council assets.

Actual 2017/18	Closing Book Value \$'000	Additions \$'000	Vested \$'000	Replacement Cost \$'000
Water				
Treatment, Plants and Facilities	379	-	-	603
Other Assets	1,244	46	-	1,687
Sewerage				
Treatment, Plants and Facilities	485	-	-	1,175
Other Assets	604	-	-	992

Actual 2017/18	Closing Book Value \$'000	Additions \$'000	Vested \$'000	Replacement Cost \$'000
Storm water				
Storm Drainage	3	-	-	13
Roads and Footpaths				
Roads and Footpaths	74,775	2,353	-	92,631
TOTAL	80,587	2,386	-	97,111



NOTE 8: PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Actual 2016/17	Opening Cost/ Revaluation \$000	Accumulated Depreciation \$000	Carrying Value at the Start of the Year \$000	Additions/ Transfers \$000	Impairment/ Disposals at Cost \$000	Depreciation \$000	Revaluation \$000	Closing Accumulated Depreciation \$000	Carrying Value at the End of Year \$000
Operational Assets									
Land	271	-	271	-	-	-	-	-	271
Buildings	1,473	(694)	779	-	-	(30)	-	(724)	749
Furniture and Fittings	128	(98)	32	-	-	(7)	-	(103)	25
Plant and Office Equipment	154	(112)	42	24	-	(20)	-	(132)	46
Vehicles	109	(74)	35	80	-	(13)	-	(87)	102
Parks and Reserves	99	(65)	34	-	-	(4)	-	(69)	30
Total Operational Assets	2,234	(1,041)	1,193	104	-	(74)	-	(1,115)	1,223
Infrastructural Assets									
Roading	55,539	(5,322)	51,217	2,342	-	(1,362)	-	(6,684)	52,197
Solid Waste	1,596	(167)	1,429	27	-	(17)	-	(184)	1,439
Storm water	14	(11)	3	-	-	-	-	(11)	3
Sewerage	1,397	(419)	978	-	-	(53)	-	(472)	945
Water	2,084	(394)	1,690	-	-	(33)	-	(427)	1,657
Harbour	1,470	(116)	1,354	-	-	(31)	-	(147)	1,323
Total Infrastructural Assets	63,100	(6,429)	56,671	2,369	-	(1,496)	-	(7,925)	57,544
Work in progress	-	-	-	49	-	-	-	-	49
Property, Plant and Equipment	65,334	(7,470)	57,864	2,522	-	(1,570)	-	(9,040)	58,816

CORE ASSETS 2016/17 (CONTINUED)

CORE ASSETS 2016/17
Included within the infrastructure assets are the following core Council assets.

Actual 2015/17	Closing Book Value \$000	Additions \$000	Vested \$000	Replacement Cost \$000
Water				
Treatment Plants and Facilities	362	-	-	475
Other Assets	1,295	-	-	1,566
Sewerage				
Treatment Plants and Facilities	412	-	-	881
Other Assets	513	-	-	950

Actual 2016/17	Closing Book Value \$000	Additions \$000	Vested \$000	Replacement Cost \$000
Storm water				
Storm Drainage	3	-	-	13
Roads and Footpaths				
Roads and Footpaths	52,197	2,342	-	73,578
TOTAL	54,782	2,342	-	77,463

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NOTE 9: TRADE AND OTHER PAYABLES

The Council's trade and other payables are generally non-interest bearing and are normally settled on 30-day terms. Therefore, the carrying value of payables approximates their fair value, these are summarised in the table below:

	Actual 2017/18 \$000	Actual 2016/17 \$000
Payables under exchange transactions		
General Creditors	1,536	1,055
Payables under non-exchange transactions		
Revenue in Advance	1,076	1,076
General Suspense	-	14
Total	1,076	1,090
Total Payable	2,612	2,145

The Council received a grant from the Ministry of Culture and Heritage of one million dollars to assist in funding construction of the museum within the new Council office and community complex, currently held as revenue in advance. Previously, it was intended the Council would fund the cost of the development and own the building. However, Council is now working with an on-island organisation to lease a purpose built facility, in partnership with the Chatham Islands Enterprise Trust. Whilst the scope and the cost of the building is still under negotiation, it is intended the grant will either be applied to the museum part of the proposed complex or if that does not go ahead, to a standalone museum project.

NOTE 10: EMPLOYEE BENEFIT LIABILITIES

A provision for employee benefit liabilities (holiday leave and outstanding remuneration) is recognised as a liability when benefits are earned but not paid, this includes the following items:

	Actual 2017/18 \$000	Actual 2016/17 \$000
Annual and sick leave	76	72
Accruals for employment benefits	17	18
Total Employment Benefit Liabilities	93	90

Council does not provide any retirement or long service leave benefits to staff.

NOTE 11: PROVISIONS

A provision for the future costs of closing our three landfills sites has been estimated by engineering firm Stantec Limited, who have estimated to provision using the Ministry for the Environment Guide to the management of closing and closed landfills in New Zealand. These landfills are now closed, with the costs to maintain and monitor these closed sites expected to occur imminently, now the new transfer stations and landfill site has opened. Consequently, closure costs have been re-estimated in light of current indicative costs to remediate the land and other available best practise estimates.

A provision has also been made for the estimated refund of one year of Council Dues to the Pitt Island Barge Society. Council Dues are repayable on the production of audited accounts by the Pitt Island Barge Society on an annual basis.

A summary of our provisions, including movements in material provisions above are analysed as follows:

	Actual 2017/18 \$000	Actual 2016/17 \$000
Landfill post closure costs		
Opening balance	146	146
Movement in provision	(53)	-
Closing balance	93	146
Consisting of:		
Current	93	121
Non-current	-	25
Pitt Island Barge Society	25	25
Total provisions	118	171



NOTE 12: BORROWINGS

The Council maintains a prudent borrowings position in relation to our equity and annual revenue. Council will enter into borrowing arrangements where there is sufficient assurance that additional funding assistance can be obtained to repay borrowings.

Council's current borrowings have supported upgrades to Council's current housing stock and the on-island warm homes loan scheme. Interest costs associated with the Council's borrowings is disclosed in note 4.

The Council received a 20-year suspensory loan of \$30,000 from Housing New Zealand that must be repaid if the Council does not meet the conditions of the loan prior to 2029. Due to the uncertain nature of this suspensory loan, the Council will not recognise the loan as revenue until it is certain the funding conditions will be met.

The carrying amount of term liabilities repayable within one year approximates their fair value, as the effect of discounting is not significant.

NOTE 13: EQUITY

The Local Government Act 2002 requires the Council to manage its finances prudently and in a manner that promotes the current and future interests of the community. Our general funds are largely managed as a derivative of managing revenues, expenses, assets, liabilities, investments, and general financial dealings.

The objective of managing these items is to achieve intergenerational equity, which is a principle promoted in the Local Government Act 2002 and applied by the Council. Intergenerational equity requires today's ratepayers to meet the costs of utilising the Council's assets but does not expect them to meet the full cost of long term assets that will benefit ratepayers in future generations. Additionally, the Council has asset management plans in place for major classes of assets, detailing renewal and programmed maintenance. These plans ensure ratepayers in future generations are not required to meet the costs of deferred renewals and maintenance.

The Local Government Act 2002 requires the Council to make adequate and effective provision in its Long-Term Plan to meet the expenditure needs identified in those plans. The Local Government Act 2002 sets out the factors that the Council is required to consider when determining the most appropriate sources of funding for each of its activities. The sources and levels of funding are set out in the funding and financial policies in the Council's Long-Term Plan.

NOTE 13: EQUITY (CONTINUED)

Equity reserves include the following notable funds:

General Funds	Actual 2017/18 \$000	Actual 2016/17 \$000
Opening Balance	15,737	14,969
Plus Net Surplus for the Year	583	778
Adjust for transfer (to)/from other reserves	-	(10)
Closing Balance	16,320	15,737
Emergency Services Reserve		
Opening Balance	250	250
Adjust for transfer (to)/from other reserves	-	-
Closing Balance	250	250
Mayoral Relief Reserve		
Opening Balance	25	15
Adjust for transfer (to)/from other reserves	-	10
Closing Balance	25	25
Te Whanga Reserve		
Opening Balance	(3)	(3)
Adjust for transfer (to)/from other reserves	-	-
Closing Balance	(3)	(3)
Burial Register Reserve		
Opening Balance	31	31
Adjust for transfer (to)/from other reserves	-	-
Closing Balance	31	31
Assets Revaluation Reserve		
Opening Balance	42,333	42,333
Revaluations/Impairments	22,708	-
Closing Balance	65,039	42,333
Total Equity at End of Year	81,662	58,373

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NOTE 13: EQUITY (CONTINUED)

Chatham Islands Council has the following reserve funds:

General Funds – Revenue appropriation account to fund future development.
 Emergency Services Reserve – Funds are set aside for emergency events such as natural disasters.
 Mayoral Relief Reserve – Funds are set aside for emergency relief.
 Te Whanga Opening – Funds set aside for the opening of Te Whanga lagoon.
 Burial Register Reserve – Fund to provide for the mapping of burial sites in the Chatham Islands with a view to accurately documenting these historic sites of significance in the form of a register.
 Asset Revaluation Reserve – Reserves generated by revaluations in property, plant and equipment and other assets.

NOTE 14: RELATED PARTY TRANSACTIONS

Related parties arise where one entity has the ability to affect the financial and operating policies of another through the presence of control or significant influence.

Related parties comprise of Council and key management personnel, including the Mayor, Councillors and the Chief Executive.

Council has entered into transactions with key management personnel during the year. These transactions were part of a normal supplier relationship and on terms and conditions no more or less favourable than those reasonable to expect the Council would have adopted in dealing with the party on an arm's length basis in the same circumstances.

In addition to the information disclosed above, the Council also provides accommodation to three staff, at a market based rental rate as approved by Council.

NOTE 15: STATEMENT OF CONTINGENCIES

The Council is not aware of any contingent assets or liabilities as at 30 June 2018.

NOTE 16: STATEMENT OF COMMITMENTS

The Council has entered into a lease arrangement, renting land for Council activities. Whilst the terms of this arrangement are subject to annual negotiation, the expected future commitment is as follows:

Contract Commitments	Actual 2017/18 \$'000	Actual 2016/17 \$'000
Not later than 1 year	42	46
Between 1 and 5 years	175	191
More than 5 years	496	565
	713	802

The Council has no contractual commitments for the acquisition of property, plant and equipment as at 30 June 2018 (as at 30 June 2017, nil). The Council has in place a number of contracts with external service providers to provide engineering services on infrastructural assets, as the scope of future work is dependent on organisational priorities and funding availability, where such funding is uncertain, no disclosure has been made.

NOTE 17: SUBSEQUENT EVENTS AFTER THE END OF THE REPORTING PERIOD

There are no events after the end of the reporting period that require adjustment to the financial statements or the notes to the financial statements.

Under section 98(3) of the Local Government Act 2002, the Council is required to complete and adopt its Annual Report within four months of the end of the financial year. Council was unable to comply with this requirement for the year ended 30 June 2018. The Annual Report and Summary Annual Report were not adopted until 13 December 2018.

NOTE 18: EXPLANATION OF MAJOR VARIANCES AGAINST BUDGET

Explanations for major variations from the Council's budget figures in its 2017/18 Annual Plan are as follows:

Statement of comprehensive revenue and expense

The grant & subsidies received in year is \$1.3 million less than expectation. Of this, \$1.0 million related to expected funding for the Emergency Management Operations Centre not secured and \$0.4 million related to support from the New Zealand Transport Agency (NZTA) being below the expected level of funding.

Statement of financial position

Property, plant & equipment (excluding revaluation impacts) is less than budgeted by \$3.6 million with key projects being deferred as they were deemed unaffordable due to lack of confirmed central government financial support.

The Council's 2017/18 revaluation resulted in a movement of \$22.7 million. This increase was mainly attributed to movements within the roading revaluation as outlined in note 8.

Cash investments are higher than budget by \$1.5 million, as a grant received to assist with the construction of the museum element of the Council offices and community complex was not utilised. Council was initially expecting to develop the purpose-built facility. However, Council is now working with an on-island organisation to lease a facility, in partnership with the Chatham Islands Enterprise Trust. The grant will be applied to the museum part of the proposed complex or if that doesn't go ahead, to a standalone museum project.

Trade & other payables have increased by \$2.0 million compared to budget, of this figure, \$1.0 million relates to revenue in advance on the grant associated with the construction of the new Council offices and community complex (mentioned above), this facility was expected to be constructed in year. The remainder reflects the Council's tight cash operating situation, reflective of expected financial support being below actual levels. Consequently, the Council has had to manage the operating shortfalls by delaying paying creditors until cash funds are available.



Financial statements

Financial prudence graphs

Annual Report disclosure statement for the year ended 30 June 2018

What is the purpose of this statement?

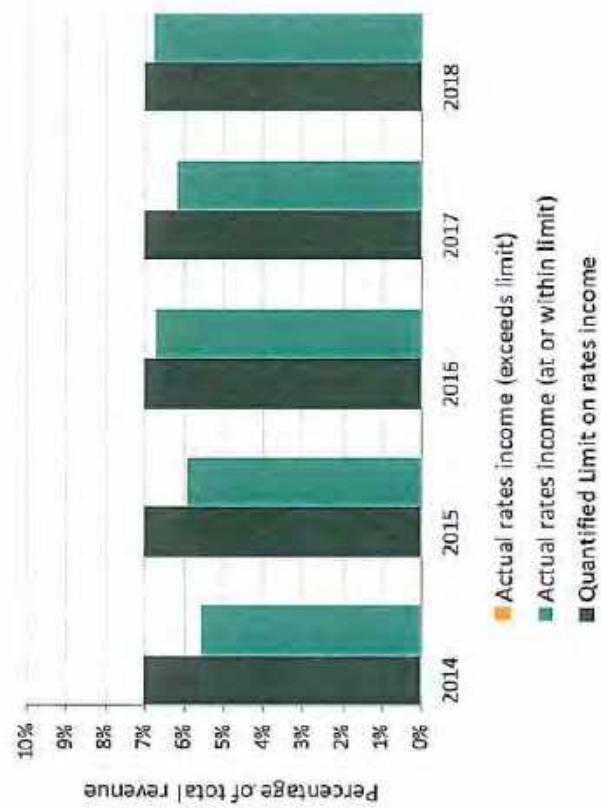
The purpose of this statement is to disclose the council's financial performance in relation to various benchmarks to enable the assessment of whether the council is prudently managing its revenues, expenses, assets, liabilities and general financial dealings. The Council is required to include this statement in its Annual Report in accordance with the Local Government (Financial Reporting and Prudence) Regulations 2014 (the regulations). Refer to the regulations for more information, including definitions of some of the terms used in this statement.

Rates affordability benchmark

The Council meets the rates affordability benchmark if its actual rates income equals or is less than each quantified limit on rates and its actual rates increases equal or are less than each quantified limit on rates increases.

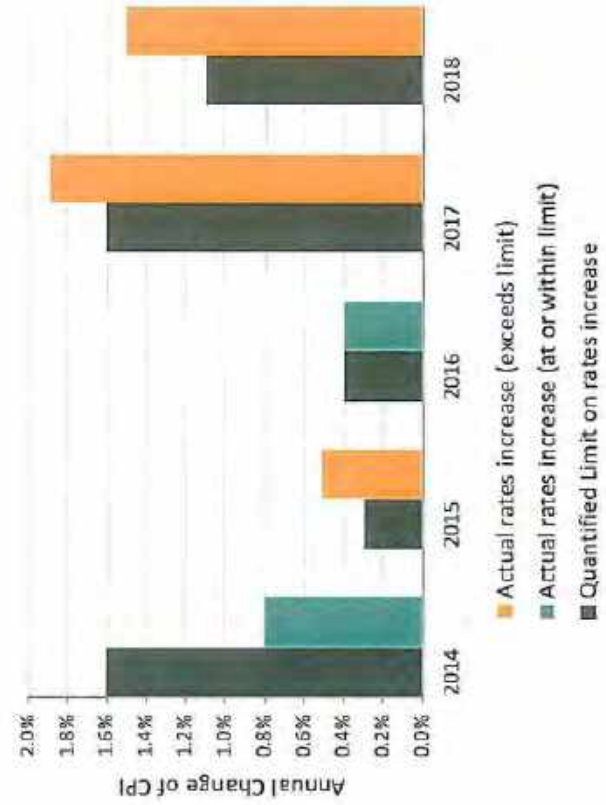
Rates (income) affordability

The following graph compares the Council's planned rates income with a quantified limit on rates contained in the financial strategy included in the 2015-25 Long-Term Plan. The quantified limit is 7% of total revenue.



Rates (increases) affordability

The following graph compares the Council's actual rates increases with a quantified limit on rates increases included in the financial strategy included in the Council's Long-Term Plan. The quantified limit is that rates will not exceed the rate of inflation.

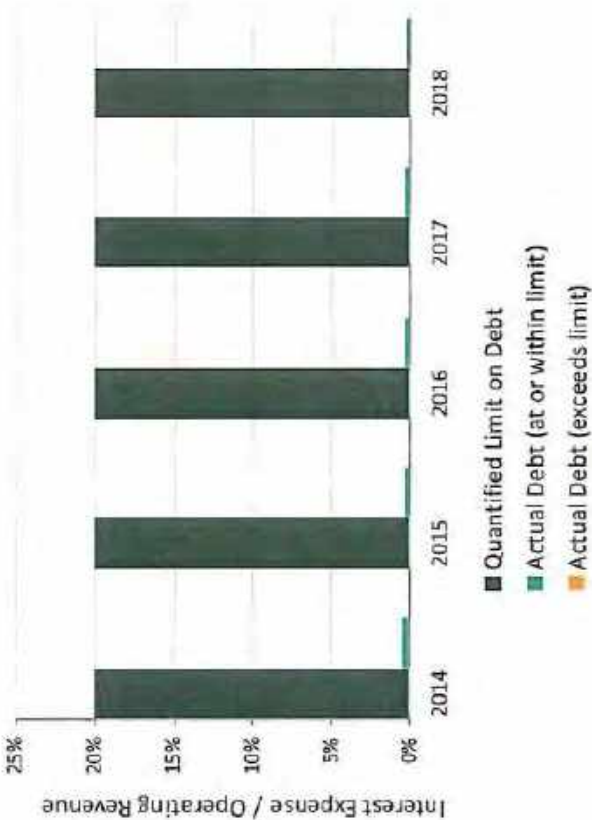




Debt affordability benchmark

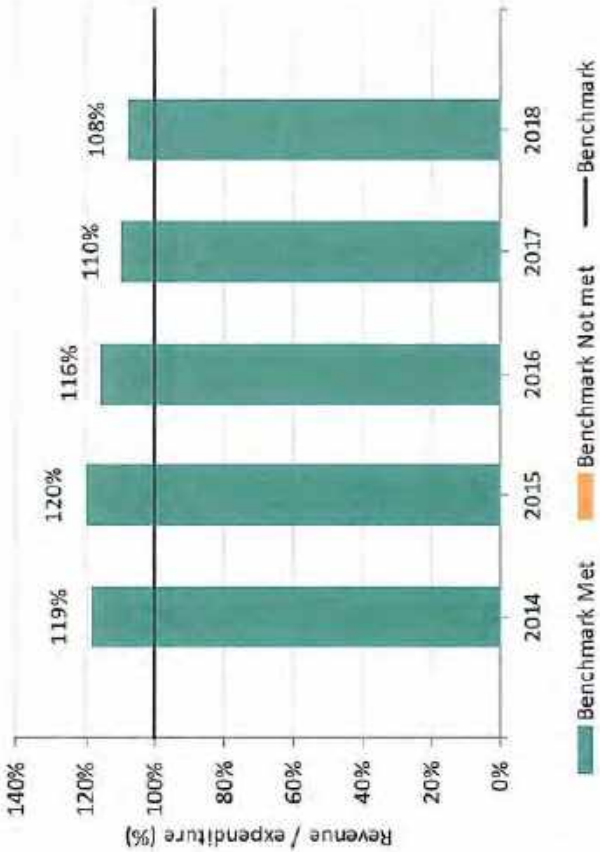
The Council meets the debt affordability benchmark if its actual borrowing is within each quantified limit on borrowing.

The following graph compares the council's actual borrowing with a quantified limit on borrowing stated in the financial strategy included in the Council's Long-Term Plan 2015-25. The quantified limit is that interest expense will not exceed 20% of operating revenue.



Balanced budget benchmark

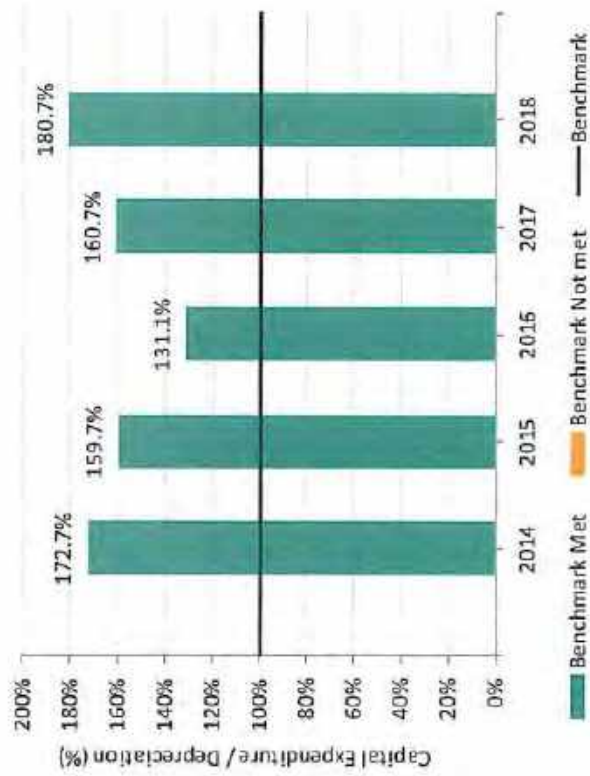
The following graph displays the council's revenue (excluding development contributions, financial contributions, vested assets, gains on derivative financial instruments and revaluations of property, plant or equipment) as a proportion of operating expenses (excluding losses on derivative financial instruments and revaluations of property, plant and equipment). The Council meets this benchmark if its revenue equals or is greater than its operating expenses.



Financial statements

Essential services benchmark

The following graph displays the Council's capital expenditure on network services as a proportion of depreciation on network services. The Council meets this benchmark if its capital expenditure on network services equals or is greater than depreciation on network services.



Debt servicing benchmark

The following graph displays the Council's borrowing costs as a proportion of revenue (excluding development contributions, financial contributions, vested assets, gains on derivative financial instruments and revaluations of property, plant or equipment).

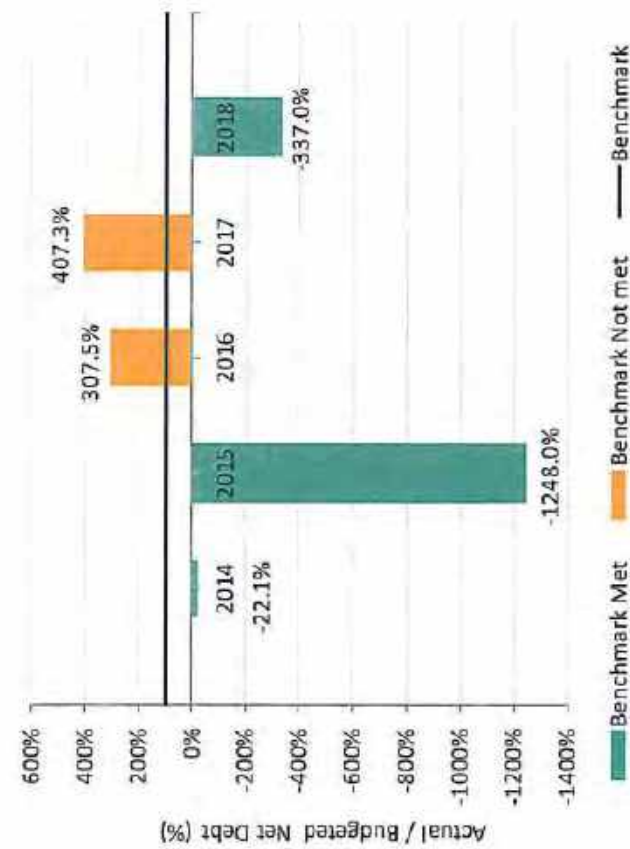
A local authority meets the debt servicing benchmark for a year if its borrowing costs for the year equal or are less than 10% of its revenue defined as above.



Debt control benchmark

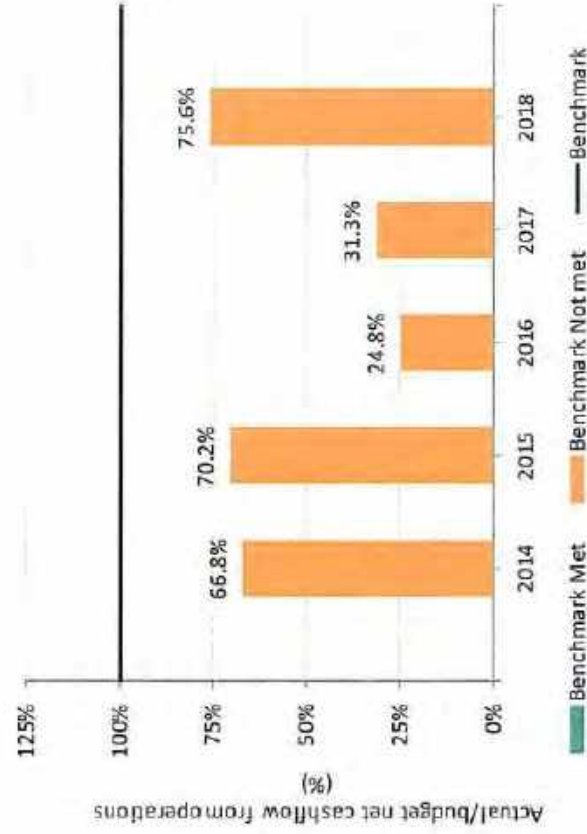
The following graph displays the Council's actual net debt as a proportion of planned net debt. In this statement net debt means financial liabilities less financial assets (excluding trade and other receivables).

The Council meets the debt control benchmark if its actual net debt equals or is less than its planned net debt.



Operations control benchmark

This graph displays the Council's actual net cash flows from operations as a proportion of its planned net cash flow from operations. The Council meets the operations control benchmark if its actual net cash flow from operations equals or is greater than its planned net cash flow from operations.



The operations control benchmark shows whether actual net operating cash flow is equal to or less than planned. The above graph reflects the reality of funding issues faced by the Council over the years. It is impossible for the Council to meet its legislative obligations and to operate in a self-sufficient manner without support from Central Government, given the small ratepayer base and a lack of investments. Many projects that were budgeted had to be postponed due to lack of funding.

Service performance summaries

Democracy services

We aim to meet our statutory responsibilities and provide effective governance and leadership

This activity includes planning and support for the Council and its committees, the provision of information regarding Council business, and the general oversight of the processes that underpin representative local government in the Chatham Islands Territory. This includes elections and consultation with the community.

Key activities for democracy services

- **Governance:** It is recognised that a collaborative approach to addressing island issues is essential to community wellbeing.
- **Partnership:** The Council will work with its key partners in central government and other island agencies to promote the interests of the islanders. It will seek to do this in a manner that is clearly defined and is transparent to Chatham Islands residents.
- **Community representation:** Elected Councillors provide a vital link with individuals and the community. Democratic processes allow the opportunity for the public to have their say. The Council is accountable to the community.
- **Community liaison:** The Council acknowledges and values the importance of tchakat henua/tangata whenua as an integral part of our community.

Community outcomes

Our Long-Term Plan 2015–25 identified the following aspirations for our democratic functions:

- A community that promotes economic development for its fishing, farming and tourism industries
- An enterprising and innovative community that promotes partnerships with leading organisations
- A culturally enriched community that acknowledges and values the importance of tchakat henua/tangata whenua as an integral part of our community.

Progress to achieving our democratic functions

- **Economic development and a sustainable Council:** Fundamental to sustaining financial viability, the Council places reliance on external funding sources to ensure it meets the legislative level of service requirements. The primary reason for this reliance is that the Council does not have an investment portfolio or the population base to support required levels of service unless core funding from Central Government is secured. In May 2018 the level of funding support was confirmed at prior funding levels. This does not fully cover our roading programme, nor does it allow for investment in other on-island infrastructure, which is desperately needed. An application will be made to the Government to increase its annual contribution for 2019/20, to cover our expected operational funding shortfall and prudently provide for an on-island infrastructural investment programme. If the level of assistance is below this level, Council may need to consider whether any shortfall will be funded by reducing expenditure and levels of service to affordable levels, or temporarily funding the shortfall through debt.
- **Building partnerships:** The Council continues to maintain a sound working relationship with the Chatham Islands Enterprise Trust and employs a collective island approach to finding solutions to addressing the sustainability of our along with other government departments infrastructure for the islands, along with other island issues.
- **Recognition of Imi/Iwi:** The establishment of a working relationship with Imi/Iwi continues. It is envisaged that protocols for a working relationship between the Council and Imi/Iwi will be developed and formalised. These protocols will assist in progressing matters relating to resource management and the recognition of Imi/Iwi and their relationship with their accustomed environments.
- **Engaging and informing our community:** The Council undertakes the local authority elections, runs decision-making processes such as Council meetings, and informs and engages with our community. The most recent local elections were held in 2017.

During this year, the Council adopted the 2018–28 Long-Term Plan. This provides a platform for meaningful engagement with the community. A summary consultation document was distributed widely through a mail-drop to all households and businesses.

The Council informs the community about our decision-making and activities through our website, the Chatham Islander newspaper, the community e-list and other publications such as Council agendas, the quarterly newsletter 'Uniquely Chathams', and Annual Plan/Annual Report summary documents.

The challenges we face delivering our democratic functions

- We rely on Government assistance to meet the Council's current statutory responsibilities. Securing continued funding support remains uncertain and failing to do so could potentially affect the Council's ability to deliver and maintain the required level of service in the future.
- We need to engage with the community in ways that the community find meaningful. A lack of effective engagement could potentially affect participation and make it more difficult to bring together skills, experiences and knowledge to promote a collective approach to finding solutions.
- We need to increase the community's understanding of Council decision-making processes and opportunities for input. A lack of understanding of the decision-making processes could potentially result in adverse reactions to Council decisions and inhibit opportunities for input.

A funding impact statement for the democracy group of activities is disclosed in Appendix 1.

Performance assessment

We aim to enable residents to be well informed and engaged in decision-making.

To assess our performance, we ask for the community's views in relation to whether they believe Council decisions are made in the best interests of the community and on the advocacy provided by the Mayor and Councillors.

We also record levels of participation in elections and monitor the performance of our legislative requirements for governance, reporting and planning. Our performance against key reporting deliverables is detailed on the next page.

Service performance summaries

1. Providing effective governance and leadership to the Chatham Islands community	
1.1	<p>Measure: The percentage of residents who feel confident that Council decisions are made in the best interests of the community.</p> <p>Target: 85% of residents are confident or very confident (measured by annual survey, on a scale of very confident, confident, unconfident, very unconfident).</p> <p>Result: This year's satisfaction result did not meet the 85% target. Overall, 59% of residents expressed confidence in our decision-making process (an increase of 9% on last year), 23% indicated they were unconfident in our processes (a decrease of 8% on last year) and the remaining 18% indicated they had no opinion. Whilst feedback received was insufficient to provide a clear explanation on why the community felt this way indicative information suggests the community are dissatisfied with the current state of the Council Building and emergency response base and the delays in constructing new purpose-built facilities for our combined Council office facility and emergency management operations centre.</p>
1.2	<p>Measure: Voter turnout.</p> <p>Target: In top quartile of New Zealand Territorial Authorities greater than 60%.</p> <p>Result: In the last Local Government Elections held in 2016, voter turnout was 72%, which is above the target of 60%. This provides an indication that our community is engaged in the democratic process. In 2013 the voter turnout was 54%.</p>

2. Meeting legislative requirements for governance, planning and reporting	
2.1	<p>Measure: The percentage of official meetings of elected representatives conducted in compliance with the Local Government Official Information and Meetings Act 1987 and Council Standing Orders.</p> <p>Target: 100%.</p> <p>Result: During the year, Council fully complied with these legislative requirements. The Local Government Official Information and Meetings Act 1987 requires the Council to make all agendas and reports available two days before a meeting, excluding extraordinary meetings. This is consistent with performance in 2016/17.</p>
2.2	<p>Measure: Long Term Plan/Annual Plan and Annual Report compliant with the Local Government Act 2002.</p> <p>Target: Audited without modification/qualification.</p> <p>Result: The 2018-28 Long Term Plan was completed, audited and adopted in compliance with the Local Government Act 2002. Audit New Zealand in the audit opinion highlighted our funding uncertainties from central government funding support, which the Council relies on to continue to operate and to provide services to its community. Our 2016/17 Annual Report was audited without modification.</p>

Looking ahead – key projects

- The Council will continue to work with Central Government to secure future funding support so that the Council can continue to meet its statutory responsibilities, further enabling a sustainable future for the island community.
- The Council will continue to take a collective approach to upgrading on-island infrastructure and promoting the interests of our Islanders. We will maintain working relationships with Central Government and the Chatham Islands Enterprise Trust to assist with development.
- The Council acknowledges the importance of Moriori and Māori in the decision-making process, and developing a sound platform for building a working relationship in which a pathway to the sustainable management of island resources is effectively followed.



Infrastructure services

We aim to meet our statutory responsibilities and provide access to quality infrastructure services

The Council is responsible for all public roads and service infrastructure on the Chatham Islands. As owner of these networks, the Council has a legal requirement to provide infrastructure to a certain standard.

Key activities of infrastructure services

- **Roading:** The Council plans for movement of people and goods within the territory, providing public roads and roading-related infrastructure and promoting road safety.
- **Solid waste:** The Council provides waste management services for public health reasons and to protect the environment.
- **Water supply:** Operating a public water supply that services the Waitangi village and Kaingaroa; and providing fire fighting capability in part of Waitangi village.
- **Storm water:** The Council minimises damage to property from flooding and reducing erosion and water pollution.
- **Sewerage:** The Council provides for the collection, treatment and disposal of wastewater in Waitangi.

Community outcomes

Our Long-Term Plan 2015-25 identified the following aspirational outcomes for infrastructure services:

- A safe, secure and healthy community with access to quality infrastructure services
- An enterprising and innovative community that promotes economic development for its fishing, farming and tourism industries and has access to reliable transportation services
- An environmentally conscious community that protects, sustains and enriches the environment for future generations.

Progress to achieving our infrastructure service functions

- **Access to quality infrastructure:** The Waste Management Strategy establishment is nearing completion with the establishment of the waste recovery and processing building. The transfer stations at Owenga and Kaingaroa are up and running though there is still a need for further education about waste sorting to be completed. The year ahead will see the commissioning of a baling machine and the closing/rehabilitation of the old dump sites.
- **A safe and secure community:** Water scheme upgrades for Owenga, Waitangi and Te One are a key priority. These will address issues of non-compliance with minimum water standards and respond to community concerns about the impacts on health and safety. To provide sustainable and reliable water sources for these townships, the Council has been working with government agencies to provide financial support for these developments. The Council throughout the period has continued to work to find solutions to supply issues for Waitangi, Te One and Owenga.
- **Reliable transportation services:** The Council's implementation of the Chatham Islands Land Transport Strategy continues. The strategy sets out the features of the current land transport system and strategies for meeting the Islands' needs. The road maintenance programme has been adhered to over the year. Road safety and compliance remain a key focus of the roading programme.
- **Protecting our environment:** The Council continues to manage storm water assets and to minimise the damage to property from flooding, erosion and water pollution. The Waitangi sewerage systems continue to operate to compliance. This also ensures that the Moriōri/Māori relationship with their accustomed environment is not affected by any adverse effects the wastewater system may have on the environment.

The challenges we face delivering our infrastructure service functions

- There is uncertainty over the level of grants for roading, and other Central Government support that is the subject of a government review. This in turn could affect our ability to maintain and sustain a viable and compliant Council.

A funding impact statement for the group infrastructure services of activities is disclosed in Appendix 1.

Service performance summaries

Performance assessment

We aim to meet our statutory responsibility with the provision of our infrastructure services. To assess our performance, we ask for the community's views on their levels of satisfaction in relation to the overall extent and safety of our road network and our water schemes. We also assess our performance by the number of complaints received and responded to within specified timeframes, and the level of compliance with resource management conditions and New Zealand Standards relating to roading and water.

1. Roading – a safe, smooth, well-maintained and well-managed road network			
1.1	Measure: The percentage of maintenance and renewal work identified in the Annual Roadway Strategy that is undertaken.	Target: 100%.	
	Result: Maintenance work was completed to 100% of that set in the Annual Roadway Strategy. This is consistent with results in 2016/17.		
1.2	Measure: Number of motor vehicle crashes causing injury where alcohol was not involved or heavily suspected.	Target: Less than three injury crashes.	
	Result: Only one motor vehicle crash occurred where alcohol was suspected, in 2016/17 no such events were noted.		
1.3	Measure: The percentage of minor improvement projects identified in the Annual Roadway Strategy that are completed.	Target: 100%.	
	Result: Minor improvement projects in Hight Place and Waipapaku Bridge were constructed, completed to 100% of the works listed in the Annual Roadway Strategy. In 2016/17, 40% of minor improvement projects were constructed, with other work prioritised.		
1.4	Measure: The number of infestations of plant pests within the road reserve found in quarterly inspections.	Target: None.	
	Result: No infestations of pest plants have been reported. Plant infestation is based primarily on no observed infestations during Stantec's quarterly network inspections. This is also supported by no public complaints being received. This is consistent with results in 2016/17.		
1.5	Measure: The number of requests or complaints about the road network.	Target: No more than 10 complaints a year.	
	Result: Twenty-eight roading complaints have been received during the year covering: dust, signage, road side weeds, road works, potholes, pit island road conditions, loose chip stones, grading and slippery roads. In 2016/17, Council received twenty-four roading related complaints. These complaints provide indications on where our communities priorities sit in relation to our roading strategy and help shape our future programme of roading works.		

1. Roading – a safe, smooth, well-maintained and well-managed road network (continued)			
1.6	Measure: The percentage of the contractor's responses that are made to written requests or complaints within a time that meets its contractual obligations.	Target: 100% within contractual obligation.	
	Result: All 100% of our contractor's responses to written requests and complaints were attended to within contractual time periods. This is consistent with results in 2016/17.		
1.7	Measure: The percentage of residents who are satisfied with the chip-sealed road network.	Target: 75% of residents are satisfied or very satisfied (measured by annual survey, on a scale of very satisfied, satisfied, dissatisfied, very dissatisfied).	
	Result: This year's satisfaction result did not meet the 75% target. Overall, 59% of respondents were satisfied with our chip-sealed roads (a decrease of 24% on last year), 27% were dissatisfied (an increase of 16% on last year) and 14% indicated no opinion. In 2016/17 the roading contractor Fulton Hogan completed a significant amount of chip-seal work close to when the survey was completed, potentially influencing our community's views.		
1.8	Measure: The percentage of residents who are satisfied with the unsealed road network.	Target: 75% of residents are satisfied or very satisfied.	
	Result: This year's satisfaction result did not meet the 75% target. Overall, 20% of respondents were satisfied with our unsealed road network (a decrease of 19% on last year), 58% dissatisfied (an increase of 9% on last year) and 24% provided no opinion. Feedback received from the survey highlighted a discontent from the community over the number of potholes, dogs and stock on the roads.		
1.9	Measure: The percentage of residents who are satisfied with the safety of the road network.	Target: 75% of residents are satisfied or very satisfied.	
	Result: This year's satisfaction result did not meet the 75% target. Overall, 39% of respondents were satisfied with the safety of our road network (a decrease of 4% on last year), 42% dissatisfied (an increase of 5% on last year) and 20% provided no opinion. Feedback received from the survey was insufficient to provide a clear explanation as to why our community felt this way.		



2. Providing Roads and Footpaths – mandatory measures	
2.1	<p>Measure: Road Safety.</p> <p>Target: The number of fatalities and serious injury crashes on the local road network is less than two crashes.</p> <p>Result: One roading fatality was reported during the year, with no fatalities or serious crashes reported for 2016/17.</p>
2.2	<p>Measure: Road Condition.</p> <p>Target: The average quality of ride on a sealed local road network, measured by smooth travel exposure.</p> <p>Result: The average ride quality is rated as "good", with the sealed road average NAASRA¹ score of 73 (or 109 on the International Roughness Index (IRI)). This measure was not assessed in 2016/17².</p>
2.3	<p>Measure: Road Maintenance.</p> <p>Target: The percentage of the sealed local road network that is resurfaced.</p> <p>Result: Of the road network, 18% was resurfaced in year, the majority related to roads in Waitangi after the wharf project was completed. In 2016/17, this target was not measured.</p>
2.4	<p>Measure: Footpaths.</p> <p>Target: 100% of footpaths are maintained in accordance with the roading maintenance contract specifications. New target for this year.</p> <p>Result: All footpath maintenance was completed. Highest Place footpaths were partially renewed, with the finished footpath expected to be complete early 2018/19. In 2016/17 only 70% of footpath maintenance was completed.</p>
2.5	<p>Measure: Response to service requests.</p> <p>Target: The Council responds to 100% of customer service requests relating to roads and footpaths within five working days.</p> <p>Result: All 100% of our contractor's responses to written requests and complaints were attended to within five working days. This is consistent with results in 2016/17.</p>

¹ National Association of Australian State Road Authorities

² The vast majority of the road network on the Chatham Islands is unsealed (only 13km of sealed road), therefore targets relating to sealed road networks have not been set.

3. Solid and hazardous waste management – providing convenient and effective resource recovery and waste management facilities for the Chatham Islands that are economically and environmentally sustainable and protect public health.	
3.1	<p>Measure: The percentage of the population within 20km of a transfer station or landfill.</p> <p>Target: 75%.</p> <p>Result: Of our residents, 75% live within 20km of the three refuse sites provided at Kaingaroa, Waitangi and Owenga. This is consistent with 2016/17 performance.</p>
3.2	<p>Measure: The number of complaints about facilities.</p> <p>Target: No more than two complaints a year.</p> <p>Result: No complaints have been received in year. Refuse transfer stations are located at Kaingaroa and Owenga with the main transfer and recycling refuse site in Waitangi. A public awareness initiative had been implemented during the period under review by way of quarterly newsletters regarding waste minimisation, recycling and the short and long-term waste management outcomes. In 2016/17 four complaints were received in year.</p>
3.3	<p>Measure: The time to respond to written requests or complaints.</p> <p>Target: 100% within five working days of notification.</p> <p>Result: No complaints have been received in year. In 2016/17, all complaints were responded to within five working days of notification.</p>

Service performance summaries

4. Water supply – providing a safe and reliable water supply for Waitangi and Kaingaroa		
4.1	<p>Measure: Compliance of monthly water quality testing with New Zealand Drinking Water Standards</p> <p>Result: All testing is fully compliant with the New Zealand Drinking Water Standards. Based on monthly testing throughout the year, no reports of E.coli were identified at either the Waitangi or Kaingaroa sites. This is consistent with achievement in the 2016/17 financial year.</p> <p>The Kaingaroa water scheme complies with the Council's approved water safety plan, which shows the Council is taking 'all practicable steps' to comply with the New Zealand Drinking Water Standards. The Waitangi water scheme has been assessed as no longer having secure bore status and therefore the scheme at this site does not fully comply with the New Zealand Drinking Water Standards. To rectify this assessment, either the bore status will need to be confirmed as secure or if required, the treatment scheme upgraded, this assessment is unlikely to be changed without Central Government funding assistance.</p>	Target: 100% compliant
4.2	<p>Measure: The percentage of customers who are satisfied with the Waitangi and Kaingaroa water supply schemes</p> <p>Result: This year's satisfaction result did not meet the 80% target. Of the respondents who were connected water supplies, 67% were satisfied with the water supply scheme (a decrease of 8% on last year), 28% were dissatisfied (an increase of 27% on last year) and 5% provided no opinion. Feedback from this survey indicated residents were dissatisfied with supply during the summer period and an unpleasant taste of water.</p>	<p>Target: 80% of residents are satisfied or very satisfied (measured by annual survey, on a scale of very satisfied, satisfied, dissatisfied or very dissatisfied)</p> <p>Measure: The number of complaints about the water supply.</p>
4.3	<p>Result: Two complaints were received related to water supply, one related to a water testing concerns and one relating to loss of water supply. In 2016/17, no complaints were received.</p>	Target: No more than five complaints a year.
4.4	<p>Measure: The time taken to respond to complaints and to restore lost supply</p> <p>Result: All complaints about water supply were responded to within targeted timeframes. In 2016/17, no complaints were received.</p>	<p>Target: 95% of complaints are responded to within two hours and lost supply restored within eight hours of notification.</p>

5. Water Supplies – mandatory measures		
5.1	<p>Measure: Safety of drinking water.</p> <p>Target: The Council's drinking water complies with: a) Part 4 of the drinking water standards (bacteria compliance criteria), b) Part 5 of the drinking water standards (protozoal compliance criteria)</p> <p>Result: For the year in review, the Council was taking all practicable steps to comply with the drinking water standards at Waitangi and Kaingaroa. Both schemes have a Ministry of Health (MoH) approved Water Safety Plan (WSP) in place and complied with all monitoring requirements of the WSP. The Council is working to address issues identified during the MoH's recent audit as funding permits. Higher standards of compliance are required under parts 4 and 5 of the drinking water standards than the approved WSP. This includes greater frequency of monitoring and, in the case of Kaingaroa, the treatment process. Council's funding application to address drinking water safety issues have been unsuccessful to date.</p>	
5.2	<p>Measure: Maintenance of the reticulation network.</p> <p>Target: The percentage of real water loss from the Council's networked reticulation system does not exceed 20%.</p> <p>Result: One incidence of water loss reported, this did not exceed 20% water loss from the Council's networked reticulation system.</p>	
5.3	<p>Measure: Fault response times.</p> <p>Target: Where the Council attends a call-out in response to a fault or unplanned interruption to its networked reticulation system, the following median response times are measured:</p> <p>a) Attendance for urgent call-outs: the time from when the Council receives notification to when service personnel reach the site does not exceed two hours.</p> <p>b) Resolution of urgent call-outs: the time from when the Council receives notification to when service personnel confirm resolution of the fault or interruption does not exceed eight hours.</p> <p>c) Attendance of non-urgent call-outs: the time from when the Council receives notification to when service personnel reach the site does not exceed two hours.</p> <p>d) Resolution of non-urgent call-outs: the time from when Council receives notification to when service personnel confirm resolution of the fault or interruption does not exceed eight hours.</p> <p>Result: The following median response times are measured: All urgent call outs were attended to immediately, within two hours and resolved within eight hours. There were no non-urgent call-outs were received in year. In 2016/17, there were no urgent or non-urgent call-outs.</p>	



5. Water Supplies – mandatory measures (continued)		
5-4	Measure: Customer Satisfaction.	
	Target: The total number of complaints received by Council about any of the following: a) Drinking water clarity b) Drinking water taste c) Drinking water odour d) Drinking water pressure or flow e) Continuity of supply. The Council's response to any of these issues does not exceed five complaints per year, 5% of connections.* * Percentage has been used as the scale as the Chatham Islands Council coverage is below the par 1,000 mandatory measure level.	
	Result: No complaints were received in year, consistent with 2016/17.	
5-5	Measure: Demand Management.	
	Target: The average consumption of drinking water per day per resident within the territorial authority district, is less than 500L/person/day.	
	Result: In Waitangi, average annual usage is 370L/person/day, whereas in Kaingaroa average usage was 330L/person/day.	
6. Storm water – Managing the level of Te Whanga and minimising flooding		
6.1	Measure: The frequency of opening Te Whanga outlet.	Target: Te Whanga outlet is opened as required.
	Result: The Te Whanga outlet was not required to be opened during 2017/18. The outlet had been last opened in 2010/11.	
7. Storm Water – Storm water Drainage- mandatory measures		
7.1	Measure: System and Adequacy.	
	Target: a) The number of flooding events that occur in a territorial authority district does not exceed two per year. b) For each flooding event, the number of habitable floors affected does not exceed two per year.**	
	Result: No flooding events occurred. This is consistent with 2016/17.	

7. Storm water – Storm water Drainage– mandatory measures (continued)		
7.2	Measure: Discharge compliance.	
	Target: Compliance with Council's resource consents for discharge from its Storm water system is measured by the number of: a) Abatement notices. b) Infringement notices. c) Enforcement orders. d) Convictions. Non-compliance reports do not exceed three events per year.	
	Result: No notices issued. This is consistent with 2016/17.	
7.3	Measure: Response times.	
	Target: The median response time to attend a flooding event, measured from the time taken that the territorial authority receives notification to the time that the service personnel reach the site, will not exceed two hours.	
	Result: No events of flooding occurred. This is consistent with 2016/17.	
7.4	Measure: Customer Satisfaction.	Target: The number of complaints received by the Council about the performance of its Storm water system does not exceed five per year.**
	Result: No complaints were received in year. In 2016/17, four complaints were received.	
	**Targets have been set relating to Storm water in order to measure Council performance. However, there are no ratepayers connected to the Council's Storm water system, therefore the mandatory per 1,000 scale cannot be applied.	
8. Sewerage – providing a reliable, environmentally friendly sewerage system		
8.1	Measure: Compliance with resource consent conditions (monthly monitoring of the system and an annual soil test).	Target: 100% compliance, other than minor non-compliance with nil or short-term adverse environmental effects.
	Result: Council was fully compliant with annual resource consent limits, with no reports of non-compliance. In 2016/17, there were minor instances of non-compliance with ammonia nitrogen and E.coli levels, assessed as having minimal adverse environmental impacts.	

Service performance summaries

8. Sewerage – providing a reliable, environmentally friendly sewerage system (continued)		
8.2	Measure: The number of complaints about odours or any other nuisances.	Target: No more than two complaints a year.
	Result: No complaints about odours were received. This is consistent with performance in 2016/17.	
8.3	Measure: The number of complaints about the sewerage system.	Target: No more than five complaints a year.
	Result: No complaints about odours were received. This is consistent with performance in 2016/17.	
8.4	Measure: The time taken to respond to complaints of loss of service and to restore lost service.	Target: 95% of complaints are responded to within two hours and investigated within 12 hours and minor faults remedied within 24 hours of notification.
	Result: No complaints about loss of service were received. This is consistent with performance in 2016/17.	
9. Sewerage and the treatment and disposal of sewerage – mandatory measures		
9.1	Measure: System and adequacy.	Target: The number of dry-weather sewerage overflows from the sewerage system is less than five per year, 5% of properties connected.*
	Result: No sewerage overflows in the year or 0% of properties connected. This is consistent with performance in 2016/17.	
9.2	Measure: Discharge compliance.	
	Target: Compliance with resource consents for discharge from its sewerage system as measured by the number of: a) Abatement notices b) Infringement notices c) Enforcement orders d) Convictions is fewer than two events per year.	
	Result: No notices issued. This is consistent with 2016/17.	

9. Sewerage and the treatment and disposal of sewerage – mandatory measures (continued)		
9.3	Measure: Fault response times.	Target: Where the Council attends to sewerage overflows resulting from a blockage or other fault in the Council's sewerage system, the following median response times are measured: a) Attendance time: the time when the territorial authority receives notification to when the service personnel reach the site does not exceed 12 hours. b) Resolution time: the time from when the territorial authority receives notification to when the service personnel confirms resolution of the blockage or other fault does not exceed 24 hours.
	Result: No incidences of blockages or faults had occurred. This is consistent with 2016/17.	
9.4	Measure: Customer satisfaction.	Target: The total number of complaints received by the Council about any of the following: a) Sewerage odour b) Sewerage systems faults c) Sewerage system blockages d) The Council's response to issues with its sewerage system Does not exceed two per year, 3% of properties connected.*
	Result: No complaints regarding the sewerage system were received. This is consistent with 2016/17.	
	*Percentage has been used as the scale as the Chatham Islands Council coverage at 100 connections is below the per 1,000 mandatory measure level.	

Looking ahead – key projects

- Continue to work towards sustainable and reliable water sources for the townships of Waitangi, Te One and Owenga.
- Continue to provide a safe, smooth, well-maintained and managed road network.



Community and regulatory services

We aim to promote community development and provide regulatory services that meet the community's needs

The Council seeks to promote community development through recreation, the arts and cultural heritage and to enhance the health and safety of the community through an effective and reliable administration of relevant legislation.

Key activities of community and regulatory services

- **Providing services to the community:** Chatham Islands Council considers social and community development to be a cornerstone of the wellbeing of the Chatham Islands community. It views recreation, arts and culture as essential to the health and wellbeing of society and believes that a strong community is knowledgeable of its heritage, and preserves and respects achievements of the past.
- **Processing licensing and building consents:** Wellington City Council ensures compliance with the New Zealand Building Code. Chatham Islands Council has the responsibility to protect and promote public health by undertaking the licensing and inspection of premises to ensure compliance with the Health Act 1956, Sale and Supply of Alcohol Act 2012, Local Government Act 2002 and Hazardous Substances and New Organisms Act 1996 and Council bylaws.
- **Dog and animal control:** The Council carries out animal control functions in accordance with the Dog Control Act 1996, the Impounding Act 1955 and animal control bylaws.

Community outcomes

Our Long-Term Plan 2015-25 identified the following outcomes as aspirations for community and regulatory services:

- A safe, secure and healthy community with access to affordable, quality housing, access to education opportunities for all ages and access to recreation and sports facilities
- An enterprising and innovative community that promotes economic development for its fishing, farming and tourism industries
- A culturally enriched community that protects and values the Chatham Islands way of life and traditions, that values and supports the arts as a means of sustaining our heritage and that values its taonga and treasures.

Progress to achieving our community and regulatory functions

- **Access to education opportunities for all ages:** The Council provides a library service that enables access to knowledge.
- **A safe and secure community:** A level of compliance is maintained through the administration of liquor licensing, health registrations and dog and animal control in order to reduce the impact of alcohol, health and animal related harm. A Liquor Ban Bylaw is in place.
- **Access to recreation and sports facilities:** The Council maintains a good working relationship with the Norman Kirk Memorial Reserve committee that oversees the Council's recreational asset, providing a sports and recreation facility for the community. The Council continues to administer the Sport NZ funding.
- **A community that promotes economic development for its fishing, farming and tourism industries:** The Council continues to provide community support by way of in-kind contributions to the Visitor Industry Group.
- **A community that values the Chatham Islands way of life and traditions:** The Council maintains and sustains a morgue, public cemeteries and a burial register. Having the ability to comply with the requirements of the Health Act 1956 and to provide a qualified mortician remains challenging. The Council currently does not comply with this Act. However, the provision of public cemeteries and the acknowledgement of the Chatham Islands' burial traditions are important for Islanders. In these ways, the relationship between the Council and its community on matters of cultural sensitivity can be realised.
- **A community that values and supports the arts as a means of sustaining our heritage:** The Council provides grants and donations that enables participation in the arts through administering the Creative Communities Scheme and in-kind contributions.
- **A community that values its taonga and treasures:** The Council over the year has continued to support the Cultural Heritage Trust and the museum.

Service performance summaries

The challenges we face delivering our community and regulatory services functions

- The Council's housing stock and Council buildings require on-going maintenance: without such maintenance, the assets could degrade significantly. Replacement of council houses remains uncertain. Maintenance of the Council's community flats continues.
- While conditions on liquor licences and health registrations may constrain individuals' choices or actions, benefits accrue to the wider community and the environment from having such conditions.
- The Council continues to be non-compliant with the Health Act 1956 while there is no qualified on-island mortician.
- There remains uncertainty over the demand for community housing.

A funding impact statement for the community and regulatory services group of activities is disclosed in Appendix 1.

Performance assessment

We aim to meet our statutory responsibility with the provision of our community and regulatory services. To assess our performance, we ask for the community's views on their levels of satisfaction in relation to community and regulatory services. We also assess our performance on compliance with New Zealand Standards, processing within statutory timeframes, frequency of inspections and by the number of complaints received and responded to within specified timeframes.

1. Community services – providing community services		
1.1	Measure: The percentage of residents who are satisfied with community services.	Target: 85% of residents are satisfied or very satisfied (measured by annual survey, on a scale of very satisfied, satisfied, dissatisfied, or very dissatisfied).
	Result: This year's satisfaction result did not meet the 85% target. Overall, 55% of respondents were satisfied with the level of community services we provide (a decrease of 1% on last year). 18% indicated they were dissatisfied with their community services (no change from last year) and 28% indicated no opinion. Feedback received was insufficient to provide a clear explanation related to why our community felt this way.	
1.2	Measure: The number of complaints about community services.	Target: No complaints.
	Result: Two complaints were received in year, one related to housing and spouting and one related to the public toilet. In 2016/17, three complaints were received.	
1.3	Measure: Time taken to respond to complaints about operations and facilities and to remedy faults.	Target: 100% are investigated within 12 hours and minor faults remedied within 24 hours of notification.
	Result: The two complaints received were attended to within 24 hours of notification. However, these issues were not resolved within 24 hours of notification as they required time to repair. In 2016/17, three complaints were received and only one was attended to within 24 hours.	
1.4	Measure: Compliance with NZS 5898 for safety of playground equipment	Target: 100% compliance
	Result: Council fully complied with this standard, with no incidences of non-compliance being reported. This is consistent with performance in 2016/17.	
1.5	Measure: The occupancy rate for Council housing.	Target: Greater than 95%.
	Result: Council housing was fully occupied for the year. This is consistent with performance in 2016/17.	



2. Community services – providing a local library service		
2.1	Measure: Community satisfaction with the existing library service. Result: This year's satisfaction result did not meet the 100% target. Overall, 50% of respondents were satisfied with the library service (no change from last year). 8% indicated they were dissatisfied with the service (an increase of 1% on last year) and 43% had no opinion. Feedback received was insufficient to provide a clear explanation related to why our community felt this way. Measure: Renewal of library books. Result: Books were renewed approximately every ten weeks during the year, five renewals of library books were undertaken during the period under review. In 2015/17, books were renewed four times during the year.	Target: 100%. Target: Books renewed every six weeks.
2.2	Measure: Renewal of library books. Result: Books were renewed approximately every ten weeks during the year, five renewals of library books were undertaken during the period under review. In 2015/17, books were renewed four times during the year.	Target: 100%.
3. Licensing and building – processing liquor licences and building consents		
3.1	Measure: The percentage of applications processed within statutory timeframes. Result: For liquor licences, 82% of applications were processed within statutory timeframes which is below the 95% target. Due to a number of objections to the licensing process requiring further investigation and a statutory liquor licensing hearing occurring in year, in 2016/17 100% of all liquor licences were issued within statutory timeframes. The Chatham Islands Council no longer issues building consents, with Wellington City Council now performing this function. The Chatham Islands Council acts as an agent to receive applications and payment of fees; eleven building consents were issued during 2017/18.	Target: 95%.
3.2	Measure: The number of Liquor Licensing inspections. Result: Two liquor licensing inspections were undertaken during March and June 2018. In 2016/17, two inspections were completed.	Target: At least one licensed premises inspection annually.
4. Licensing and building – monitoring and enforcing compliance with food premises and building consent conditions		
4.1	Measure: The frequency of inspections of food premises, and premises registered as hairdressers, camping grounds, offensive trades, funeral directors, and mobile traders to assess compliance with public health standards. Result: One inspection was completed during May 2018. This is consistent with 2016/17 performance.	Target: At least one food and registered premises inspection annually.
4.2	Measure: The number of complaints about non-compliance with building consent conditions. Result: No complaints were received during the year. This is consistent with 2016/17 performance.	Target: No more than five complaints received a year.
4.3	Measure: Time taken to respond to complaints about non-compliance with consent conditions. Result: No complaints were received during the year. This is consistent with 2016/17 performance.	Target: 100% are resolved or have a resolution strategy in place within 21 days of notification.
	Result: No complaints were received during the year. This is consistent with 2016/17 performance.	

5. Dog and animal control – a safe and secure living environment for the community		
5.1	Measure: The number of complaints about dog and animal control. Result: For the year under review, 50 complaints were received, of these 45 related to stock and five complaints relating to dogs. In 2016/17 28 dog complaints were received. The wandering stock issue resulted from some farm areas lacking sufficient roadside fencing. Historically, the Council has been reluctant to address this risk as it would impose additional costs on farmers and community feedback varied as to whether it required action. To address resident concerns, Council has increased the hours of the dog and stock control ranger and has approved a new bylaw, the Chatham Islands Council Stock Control and Keeping of Poultry, Bees & Pigs and Boundary Fencing Bylaw 2018, effective 1 November 2018. Measure: The time taken to respond to complaints. Target: 100% are responded to as follows: a) Dog attacks and rushes attended to within one hour of notification. b) Possible threats to public safety attended to within five hours. c) Complaints of general nuisance attended to within 48 hours. d) All other complaints investigated within two working days. Result: All complaints about animals were attended to within targeted timeframes: a. Two complaints of worrying sheep were attended to within an hour. b. No complaints received where there was a threat to public safety. c. Three complaints of general nuisance were received and attended to within 48 hours of notification. d. No other incidences of animal complaints were received requiring action. In 2016/17, 13 complaints were received and 12 were responded to within targeted timeframes.	Target: No more than five complaints a year.
5.2	Measure: The number of island-wide inspections (including Pitt Island) carried out each year to make sure dogs are registered and to check animal welfare. Result: One partial inspection (Chatham Island only) was undertaken during June 2017. This is consistent with 2016/17 performance. Measure: The percentage of residents who are satisfied with dog and animal control services. Target: 100% of residents are satisfied or very satisfied (measured by annual survey, on a scale of very satisfied, satisfied, dissatisfied, or very dissatisfied). Result: This year's satisfaction result did not meet the 100% target. Overall, 42% of respondents were satisfied with dog and animal control (an increase of 2% on last year), 37% were dissatisfied (no change from last year) and 21% indicated no opinion. Feedback indicated the public were concerned with wandering dogs, stock on the roads and road safety issues associated with this.	Target: Two inspections.
5.3	Measure: The number of island-wide inspections (including Pitt Island) carried out each year to make sure dogs are registered and to check animal welfare. Result: One partial inspection (Chatham Island only) was undertaken during June 2017. This is consistent with 2016/17 performance. Measure: The percentage of residents who are satisfied with dog and animal control services. Target: 100% of residents are satisfied or very satisfied (measured by annual survey, on a scale of very satisfied, satisfied, dissatisfied, or very dissatisfied). Result: This year's satisfaction result did not meet the 100% target. Overall, 42% of respondents were satisfied with dog and animal control (an increase of 2% on last year), 37% were dissatisfied (no change from last year) and 21% indicated no opinion. Feedback indicated the public were concerned with wandering dogs, stock on the roads and road safety issues associated with this.	Target: 100%.
5.4	Measure: The percentage of residents who are satisfied with dog and animal control services. Target: 100% of residents are satisfied or very satisfied (measured by annual survey, on a scale of very satisfied, satisfied, dissatisfied, or very dissatisfied). Result: This year's satisfaction result did not meet the 100% target. Overall, 42% of respondents were satisfied with dog and animal control (an increase of 2% on last year), 37% were dissatisfied (no change from last year) and 21% indicated no opinion. Feedback indicated the public were concerned with wandering dogs, stock on the roads and road safety issues associated with this.	Target: 100%.
5.5	Measure: The level of cost recovery through registration fees and fines. Result: Only 80% of animal control costs were recovered through registrations and fines. This was due to higher animal welfare and the review of the dog control by-law and policy. This is lower than the 100% target. In 2016/17, 100% of costs were recovered.	Target: 100%.

Service performance summaries

Looking ahead – key projects

- **Staff housing on-island:** The Chatham Islands Housing Partnership (CIHP) was established in 2017 under the administration of the Ngati Mutunga O Wharekauri Iwi Trust. CIHP Trust draws its members from the two Iwi Trusts, Chatham Islands Council and Chatham Islands Enterprise Trust. The CIHP Trust was established with a \$2 million Government grant, with the aim of assisting the community with the provision of a wide range of housing initiatives, including social housing.
- **Morgue:** The Council continues to look at ways to address issues relating to the morgue and appropriate mortician services. Discussions with Canterbury District Health Board and Manaaki Whanau O Wharekauri are ongoing with a view to address ways to better operate this service.
- **Council community complex:** After listening to our community, the Council proposed the construction of a new purpose built community facility, which included Council offices, museum and other community facilities. Funding constraints have resulted in the facilities development being split into two stages, design and planning works for the Council office and museum are underway, ready for consideration in October. The initial stage of the complex will be built by an independent entity with council renting the purpose build facility. The later stages of this project would include the possibility of an indoor sports stadium, library and additional meeting room space.

Environmental services

We aim to maintain, sustain and protect our natural resources now and for future generations

The Council seeks to maintain and sustain natural resources in order to promote a sound resource base and to protect the environment from threats that could be detrimental to the needs of the community now and in the future.

Key activities of environmental services

- **Managing the community's resources:** The Council is responsible for the monitoring and reporting on the state of the Chatham Islands environment – its land, air, water and coastal resources and compliance with the requirements of the Resource Management Act 1991.
- **Biosecurity control:** The Council carries out work under the Biosecurity Act 1993; this is to ensure the economic and ecological sustainability of the territory. The Council will carry out pest management in accordance with National and Regional Pest Management Strategies.
- **Water quality and hydrology:** The Council monitors and reports on the Chatham Islands environment to identify water quality, river flows and rainfall trends.
- **Protection of historic places:** The Council ensures compliance with the Heritage New Zealand Pouhere Taonga Act 2014 to protect historic areas and wāhi tapu on the islands. There are 11 registered historic places on the islands.

Community outcomes

Our Long-Term Plan 2015-25 identified the following as aspirational outcomes for environmental services:

- An enterprising and innovative community that promotes economic development for its fishing, farming and tourism industries
- An environmentally conscious community that protects, sustains and enriches the environment for future generations and promotes a safe, healthy and secure community
- A culturally enriched community that acknowledges and values the importance of tchakat henu/tangata whenua as an integral part of our community and values its taonga.



Progress to achieving our environmental services functions

- **A community that promotes economic development for its fishing, farming and tourism industries:** Through its contract with Environment Canterbury, the Council monitors any changes in government policy, such as aquaculture reforms, that may have an impact on the Chatham Islands. The Council also continues to implement the Chatham Islands Pest Management Strategy in compliance with the Biosecurity Act 1993.
- **A community that protects, sustains and enriches the environment for future generations:** The Council promotes the importance of maintaining and sustaining the Chatham Islands' natural environment through informing the community. 'Uniquely Chatham's' is a quarterly newsletter that aims to raise awareness and appreciation of the environment.
- **A safe, secure and healthy community:** The Council maintains a contract with Environment Canterbury, which oversees the Council's regional resource management responsibilities.
- **A community that acknowledges and values the importance of tchakat henu and tangata whenua as an integral part of our community:** The Council engages with Imi/Iwi on matters relating to resource management. This enables the relationship between the Council, the community and Māori/Māori on matters of natural resources and the environment to be realised.
- **A community that values its taonga and treasures:** The Council works towards gathering baseline information and monitoring water quality in order to maintain, sustain and protect natural resources and the environment.

The challenges we face delivering our environmental services functions

- The introduction and spread of new plant and animal pests pose a significant risk to the Chatham Islands.
- A funding impact statement for the environmental services group of activities is disclosed in Appendix 1.

Performance assessment

We aim to meet our statutory responsibility with the provision of our environmental services. To assess our performance, we measure compliance, the maintenance of water quality and frequency of inspections.

We also assess our performance on maintaining internal border control.

1. Resource management – authorising the use of natural and physical resources			
1.1	Measure: The percentage of resource consents processed within statutory timeframes.	Target: 100%.	
	Result: All three subdivisions were received and consented during the year under review. In 2016/17 on subdivision resource consent was received and consented.		
2. Resource management – responding to breaches of the Resource Management Act 1991			
2.1	Measure: The time taken to respond to and initiate investigations for: a) breaches of the Resource Management Act; b) breaches of consent conditions	Target: Within one hour of notification.	
	Result: No breaches of the Resource Management Act 1991 or consent conditions reported. This is consistent with performance in 2016/17.		
2.2	Measure: The time taken to develop a plan to resolve individual breaches.	Target: 80% within one week and 100% within one month	
	Result: No plan was required to be developed, as there were no individual breaches. This is consistent with 2016/17.		
3. Resource management – keeping the Resource Management Document compliant and up to date			
3.1	Measure: The Chatham Islands Resource Management Document is compliant and up to date.	Target: 100% compliant and up to date.	
	Result: A review of the Chatham Islands Resource Management Document has been completed. The document is awaiting final approval from the Ministry for the Environment. The document will be completed once the work relating to the Coastal Policy Statement is agreed and the Minister of Conservation has authorised it. In the interim, the document become partially operative on 31 January 2018.		
4. Water quality and hydrology – monitoring the water quality of Chatham Islands streams, rivers and lakes			
4.1	Measure: Sample and analyse water quality for 20 sites on the Chatham Islands four times a year	Target: State of the environment water quality monitoring programme maintained at the current level (all sites are monitored).	
	Result: All water quality sites were monitored, and data stored in database (fully available on request) as well as displayed on council's website: www.cic.govt.nz .		

Service performance summaries

5. Water quality and hydrology – monitoring the river flows and rainfall of Chatham Islands	
5.1	<p>Measure: Monitor and record river flows, lagoon level (Te Whanga) and rainfall on the Chatham Islands.</p> <p>Target: Six river flow sites; three rain gauges and two lagoon water level recorders fully operational (example results: all sites monitored, data recorded and available to the public e.g. via the website).</p> <p>Result: All river flows, Te Whanga lagoon level and rainfall sites monitored and data stored in database (fully available on request) as well as displayed on council's website: www.cic.govt.nz.</p>
6. Water quality and hydrology – reporting the water quality and hydrology of Chatham Islands	
6.1	<p>Measure: A Summary Report of water quality and hydrology (river flow, lagoon level and rainfall) is available for the public.</p> <p>Target: A report is available by the end of August following every financial year (example results: short report provided to Council and then available via the website).</p> <p>Result: A Water Quality Report was prepared in June 2018 and displayed on council's website: www.cic.govt.nz.</p>
7. Biosecurity – preventing the arrival and establishment of new pests	
7.1	<p>Measure: Results of inspection of at risk sites.</p> <p>Target: No new pest incursion found at risk sites.</p> <p>Result: No new pests were found at risk sites. However, there was one incursion of German wasps found in a bundle of fence posts. The fence posts were fumigated, and wasps risk addressed. The Chatham Islands Dive team is now fully operational and in September 2017, they were at the forefront of stopping a major marine pest incursion. Several vessels were involved transporting materials for the Waitangi Wharf rebuild and it was found that two vessels had five unwanted organisms present with only one already present in port at the Chatham's. With the prompt Council response and a compliant vessel owner, the two vessels departed Chatham's waters to Lyttelton where they underwent extensive anti-fouling.</p>
7.2	<p>Measure: Maintaining an internal border between Chatham Island, Pitt Island, and New Zealand.</p> <p>Target: Training provided to freight handlers at major ports supplying the Chatham Islands. Establishing a partnership with Biosecurity New Zealand to develop a Marine Biosecurity Plan as a part of the internal border.</p> <p>Result: Regular freight handler training is provided by SPS Biosecurity. In mid-2018, a trained rat dog was purchased to strengthen the border protection between Chatham and Pitt Islands. Chatham Island has rats, but Pitt Island is currently rat free. Council works in partnership with Biosecurity New Zealand to maintain the internal border.</p>

7. Biosecurity – preventing the arrival and establishment of new pests (continued)	
7.3	<p>Measure: Public awareness.</p> <p>Target: Regular media coverage of pests.</p> <p>Result: Regular communications relating to biosecurity activities and projects are circulated in the Chatham Islands Community Focus Trust weekly newsletters, the monthly Chatham Islander newspaper and the quarterly environmental newsletter 'Uniquely Chathams'. This is consistent with performance in 2016/17.</p>
8. Biosecurity – monitoring and enforcing operational and property plans	
8.1	<p>Measure: Results of enforcement action to ensure landowners and occupiers do not introduce, sell, propagate or distribute pest species.</p> <p>Target: 80% of plans implemented.</p> <p>Result: The level of plant pest awareness from landowners has significantly increased over the past few years. This is primarily due to having two very proactive resident biosecurity staff on the island. There have been numerous cases where landowners are contacting Environment Canterbury staff about pest related issues because of their increased level of awareness and concern.</p>
8.2	<p>Measure: Results of enforcement action to ensure landowners carry out control of feral goats and gorse.</p> <p>Target: 80% of plans implemented.</p> <p>Result: The feral goat population has been eradicated from one geographical area (over 1,050 shot). This has left about 40-50 goats left in one other totally separate area. Biosecurity staff have been working with the new owner and culled another 23 goats to date.</p>
9. Biosecurity – preventing the arrival and establishment of marine pests	
9.1	<p>Measure: An annual underwater surveillance programme to determine the presence or absence of the ten most invasive marine pests that are present in New Zealand or are likely to arrive from some other destination.</p> <p>Target: Annual survey to be undertaken on all Ports on Chatham and Pitt Islands.</p> <p>Result: The first surveys of all ports on the Chatham Islands were carried out in October 2016 and again in September 2017. No new marine pests have been found as part of the completed survey or other site reviews. The invasive marine pest undaria has been identified in some areas and spread is constantly being monitored and reviewed, it does not appear to have spread to the entrance of Port Hutt.</p>
9.2	<p>Measure: Public awareness.</p> <p>Target: Regular media coverage on marine pests.</p> <p>Result: In late 2017, Environment Canterbury produced a book entitled 'Chatham Islands Biosecurity: A snapshot 2011 to 2017'. This Booklet covered all aspects of the biosecurity work Environment Canterbury complete on behalf of the Chatham Islands Council. This document is also available on the Council website: www.cic.govt.nz. Overall reception to the booklet has been positive.</p>



Looking ahead – key projects

- The Council will continue to authorise the use of natural and physical resources and respond to breaches of the Resource Management Act 1991.
- The Council will continue to maintain the water quality programme of Chatham Islands' streams, rivers and lakes, the water quality monitoring programme in the Chatham Islands and the water quality of Te Whanga.
- The Council will continue to prevent the arrival and establishment of new pests and monitor progress with operational and property plans according to the Chatham Islands Pest Management Strategy.

Emergency management

We aim to provide emergency management that responds effectively to the needs of the community

The Council seeks to provide an efficient and effective system of emergency management that minimises the potential effect of all hazards on the community and the environment.

Key activities of emergency management

- **Civil defence:** The Civil Defence Emergency Management Act 2002 imposed statutory obligations on the Council to carry out hazard-based risk management in four areas: reduction of risk, readiness for events, response and recovery after an event. Fire Emergency Services New Zealand (FENZ) will take over responsibility for rural fire services from 1 July 2018.
- **Marine oil spill response:** The Maritime Transport Act 1994 requires the Council to prepare, maintain and review regional marine oil spill contingency plans.

Community outcomes

Our Long-Term Plan 2015–25 identified the following aspirational outcomes for emergency management:

- A safe and secure community
- An environmentally conscious community that protects, sustains and enriches the environment for future generations

Service performance summaries

Progress to achieving our emergency management functions

- **A safe and secure community:** The Council continues to progress the Emergency Management Operations Centre project. With the challenges associated with isolation and remoteness, it is necessary to establish a resourced facility that supports, enables and strengthens community resilience in times of threat. This facility is significant and fundamental to New Zealand's most isolated community and continued community wellbeing. Land for the facility has been secured. No funding for this project has been secured as yet. However, the Council continues to actively pursue funding options.
- **Promoting economic development and enriching the environment:** The Council, through the Civil Defence Emergency Management (CDEM) Group plan, has a hazard risk analysis in place. This will assist organisations, agencies and groups to better plan for their needs.
- **Valuing the way of life and traditions:** The Council continues to ensure emergency management is proactive in understanding and protecting community values and the natural environment.

The challenges we face delivering our emergency management functions

- A significant emergency could potentially affect the Chatham Islands economically as well as both short-term and long-term quality of life. The safety (life and property) of a potentially larger percentage of the community would be at risk and the recovery period could be longer.
- A funding impact statements for the emergency management group of activities is disclosed in Appendix 1.

Performance assessment

We aim to meet our statutory responsibility with the provision of emergency management. To assess our performance, we measure the community's readiness and the effectiveness of recovery.

We also assess our performance by the time taken to respond to events.

1. Emergency management – coordinating hazard analysis and planning, providing an effective emergency response and recovery capability and raising community preparedness		
1.1	Measure: The state of readiness of the Emergency Management Operations Centre, including staff and volunteers, emergency management equipment, control facilities and communication systems. Result: The state of readiness of the Emergency Management Operations Centre was assessed at 100%. Readiness was last tested in response to a post fire in Waitangi West in 2017 and Cyclone Pam in 2015. Staff and volunteers were assessed as being 100% trained and resourced, with training being provided on an ongoing basis. In 2016/17, the state of readiness was assessed at 80%.	Target: a) 100% readiness, 24-hours/7 days b) 100% of staff and volunteers are appropriately trained and resourced.
1.2	Measure: All emergency management plans are compliant with statutory requirements. Result: All emergency management plans were completed within statutory timeframes, two plans were under review during the reporting period: the CDEM Group Plan and the Welfare Plan. Nineteen plans are in place. This is consistent with performance in 2016/17	Target: 100% compliant.
1.3	Measure: The percentage of members of the multi-agency response team who have completed basic specialist emergency services training. Result: As of 1 July 2017, responsibility for rural fire now sits with Fire and Emergency New Zealand (FENZ). The response team for Civil Defence is currently under review by the Ministry of Civil Defence and Emergency Management and therefore, during the year no specialist training was undertaken. Specialist training relates to both Rural Fire and Civil Defence.	Target: 80%
1.4	Measure: The percentage of residents who consider they are prepared and know what to do in an emergency. Result: This year's readiness result did not meet the 75% target. Overall, 74% of respondents felt that they were prepared in the event of civil defence emergency (a decrease of 5% from last year), with 12% considering they were not prepared (an increase of 2% on last year) and 14% providing no opinion.	Target: 75% of residents are well prepared or prepared on a scale of well prepared, prepared, not well prepared.



2. Emergency management – providing support for and assisting the recovery of social, emotional, economic and physical wellbeing of individuals and communities following emergency events	
2.1	<p>Measure: The effectiveness of recovery assistance after emergencies.</p> <p>Target: a) Immediate welfare needs of those affected have been met, b) Systems have been established or reinstated to assist individual and community self-sufficiency, c) Essential services have been restored to minimum operating levels.</p> <p>Result: There was no assessed emergency event during the 2017/18 financial year. However, welfare needs, systems and essential services were tested with the Waitangi West fire in the 2016/17 year, it was considered these services were attended to promptly as required by assessed need.</p>
3. Emergency management – providing an effective rural fire prevention and response capability	
3.1	<p>Measure: Time taken to respond to events.</p> <p>Target: 100% are responded to within one hour of notification.</p> <p>Result: No emergency events occurred during the period under review. In 2016/17, two major fire events were attended to within one hour of notification.</p>
4. Marine oil spill response – work closely with providers and community groups to ensure integrated analysis, planning and provision of services to provide a safe environment	
4.1	<p>Measure: Number of training exercises.</p> <p>Target: At least one water equipment deployment exercise conducted annually.</p> <p>Result: One oil spill training exercise was held during September 2017. This result is consistent within 2016/17 performance.</p>
4.2	<p>Measure: Time taken to evaluate reports of oil spills.</p> <p>Target: Oil spill reports evaluated within one hour of notification.</p> <p>Result: Two incidences of marine oil spills were reported, with only one incidence evaluated and responded to within one hour of notification. In 2016/17, no incidences of oil spills were reported.</p>

Looking ahead – key projects

- The Emergency Management Operations Centre project employs a collective approach to addressing the need for a unified Island Civil Defence and Emergency Management centre that can respond to the needs of the community. The Council's overarching objective for the centre is to provide an efficient and effective system of emergency management that minimises the potential effect of all hazards on the community and the environment.

Coasts, harbours and navigation

We aim to promote, maintain and sustain a safe environment for both commercial and recreational maritime activities

Harbour control is undertaken primarily to ensure safety in the territory's waterways. The Chatham Islands have approximately 360 kilometres of coastline that is used extensively for commercial fishing, some recreational purposes and potential aquaculture industries.

Key activities of coasts, harbours and navigation

- Ensuring navigational safety:** The Council is tasked with the responsibility of addressing matters of navigation and safety within this area as required by the Local Government Act 2002 and the Maritime Transport Act 1994.

The Council seeks to promote, maintain and sustain a safe environment for both commercial and recreational maritime activities.

Community outcomes

Our Long-Term Plan 2015–25 identified the following aspirational outcomes for coasts, harbours and navigation:

- A safe, healthy and secure community with access to quality infrastructure services
- An enterprising and innovative community that promotes economic development for its fishing, farming and tourism industries and provides access to reliable and affordable transportation services
- An environmentally conscious community that protects, sustains and enriches the environment for future generations.

Service performance summaries

Progress to achieving our coasts, harbours and navigation function

- **Access to quality infrastructure:** The Council continues to recognise the need to play both a facilitating and a leading role in working with others to address barriers to social and economic development that are constraints on community wellbeing. Funding support from the Government for the Waitangi Wharf development has been approved, with construction underway.
- **Promoting economic development:** The Owenga Wharf assists the development of the fishing industry. The coasts, harbours and navigation activity assumes that the resources from the sea continue to be a major part of the Chatham Islands economy.
- **Reliable transportation services:** During the year, the Council continued to maintain the 'lifeline' from Chatham Island to Pitt Island through the provision of the Owenga Wharf, which enables the movement of stock and goods.
- **Protecting our environment:** The Council continues to implement the Navigation Safety Bylaw and Regional Maritime Oil Contingency plans. During the year a review of the Navigation Safety Bylaw was undertaken and further training in oil spill response was undertaken.

The challenges we face delivering our coasts, harbours and navigation functions

- The ongoing maintenance costs of Owenga Wharf are funded through the New Zealand Transport Agency.

A funding impact statement for the coasts, harbours and navigation group of activities is disclosed in Appendix 1.

Looking ahead – key projects

- The Council will ensure the community receives a service that meets its needs for safety, including by ensuring navigational aids are maintained in proper working order and lifeline access are provided between Chatham and Pitt islands.
- The Council will work with its key partners to promote the interests of Islanders in relation to the Waitangi Wharf upgrade.

Performance assessment

We aim to meet our statutory responsibility with the provision of our coasts, harbours and navigation services. To assess our performance, we ask for the community's views on their levels of satisfaction in relation to the administration of the bylaw, the availability of the wharf and frequency of inspections.

We also assess our performance by the number of complaints received and responded to within specified timeframes.

1. Coasts, harbours and navigation – the community receives a service which meets its needs for safety		
1.1	Measure: The Navigation Safety Bylaw is kept up-to date.	Target: Reviewed every three years.
	Result: The Navigation Safety Bylaw has been reviewed and assessed in year as appropriate.	
1.2	Measure: Formally respond to incidents and deal with complaints within seven days.	Target: 85% responded to within seven days.
	Result: Two complaints were received and responded to within seven days.	
2. Coasts, harbours and navigation – navigational aids are maintained in proper working order		
2.1	Measure: The frequency of inspection of leading lights.	Target: Inspections carried out every three months.
	Result: One inspection was completed in year, this is consistent with 2016/17 performance.	
2.2	Measure: Number of complaints about navigation aids.	Target: No more than five a year.
	Result: One outage was reported at Kaingaroa, in 2016/17 no outages were reported.	
2.3	Measure: The time to replace outages.	Target: Outages repaired within 24 hours.
	Result: The outage at Kaingaroa was not remedied within 24 hours, due to the supply of materials, in 2016/17 no outages were reported.	
3. Coasts, harbours and navigation – provide lifeline access between Chatham and Pitt Islands		
3.1	Measure: The availability of the Owenga Wharf for safe and efficient movement of people, stock and goods.	Target: Available at all times.
	Result: No safety or inefficiency complaints were received in year, consistent with 2016/17.	



Council funding impact statement

The Local Government Act 2002 and the Local Government (Financial Reporting and Prudence) Regulations 2014 require the Council to adopt a Funding Impact Statement both for the Council and for each group of activities. The objective of the policy makers is to provide information that is more easily understood. The Funding Impact Statement must identify: the sources of funding to be used; the amount of funds expected to be produced from each source; and how the funds are to be applied.

Revenue and expenditure in the Funding Impact Statements are recognised on a basis consistent with the financial statements. However, transactions with no funding impact, such as depreciation, have been removed. The regulations also require the Funding Impact Statement for each group of activities to disclose internal charges and cost allocation and not eliminate these as required by Generally Accepted Accounting Practice (GAAP).

The Revenue and Financing Policy contained in the Long-Term Plan 2015-25 sets out Chatham Islands policies with respect to which funding mechanisms are to be used to finance the operating and capital expenditure.

Reconciliation of Operating Funding to Statement of Comprehensive Revenue and Expense				
	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000	Annual Plan 2016/17 \$000
Surplus (Deficit) of Operating Funding	176	348	(80)	231
Subsidies and Grants for Capital Expenditure	2,085	3,338	2,423	6,920
Depreciation	(1,678)	(1,854)	(1,565)	(2,885)
Statement of Total Comprehensive Income	583	1,832	778	4,266

COUNCIL				
	Actual 2017/18 \$000	Annual Plan 2017/18 \$000	Actual 2016/17 \$000	Annual Plan 2016/17 \$000
Source of operating funding				
General Rates, Uniform Annual General Charge, Rates Penalties	307	287	302	283
Targeted Rates	182	288	180	184
Subsidies and Grants for Operating Purposes	4,689	4,695	5,230	4,178
Fees and Charges	67	78	66	68
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	544	554	676	641
Total Operating Funding	5,869	5,902	6,448	5,354
Applications of operating funding				
Payments to Staff and Suppliers	4,068	4,678	5,151	5,101
Financial Costs	17	23	(4)	22
Other Operating Funding Applications	1,608	853	1,381	-
Total Application of Operating Funding	5,693	5,554	6,528	5,123
Surplus/(Deficit) of Operating Funding	176	348	(80)	231
Source of capital funding				
Subsidies and Grants for Capital Expenditure	2,085	3,338	2,423	6,920
Increase/(Decrease) in Debt	(61)	-	-	-
Total Source of Capital Funding	2,024	3,338	2,423	6,920
Application of capital funding				
Capital Expenditure				
- to improve the level of service	538	990	2,517	3,651
- to replace existing assets	2,402	2,668	5	3,500
Increase/(Decrease) in Reserves	(740)	28	(179)	-
Total Applications of Capital Funding	2,200	3,686	2,343	7,151
Surplus/(Deficit) of Capital Funding	(176)	(348)	80	(231)
Funding Balance	-	-	-	-

Appendix 1 – Funding impact statements

DEMOCRACY SERVICES	Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
Source of Operating Funding			
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-
Targeted Rates	-	-	-
Subsidies and Grants for Operating Purposes	993	714	688
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	165	133	130
Total Operating Funding	1,158	847	818
Applications of Operating Funding			
Payments to Staff and Suppliers	305	313	303
Financial Costs	-	-	-
Internal Charges and Overheads Applied	557	486	472
Total Application of Operating Funding	862	799	775
Surplus (Deficit) of Operating Funding	296	48	43
Source of Capital Funding			
Subsidies and Grants for Operating Purposes for Capital Expenditure	-	1,378	1,330
Increase (Decrease) in Debt	-	-	-
Total Source of Capital Funding	-	1,378	1,330
Application of Capital Funding			
Capital Expenditure	-	-	-
-- to improve the level of service	-	-	-
-- to replace existing assets	12	1,426	1,341
Increase (Decrease) in Reserves	284	-	32
Total Applications of Capital Funding	296	1,426	1,373
Surplus (Deficit) of Capital Funding	(296)	(48)	(43)
Funding Balance	-	-	-
<i>Excludes depreciation</i>	9	14	13

INFRASTRUCTURE SERVICES – ROADING	Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
Source of Operating Funding			
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-
Targeted Rates	53	55	54
Subsidies and Grants for Operating Purposes	1,228	2,031	1,988
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	-	6	5
Total Operating Funding	1,281	2,093	2,047
Applications of Operating Funding			
Payments to Staff and Suppliers	1,393	1,819	1,723
Financial Costs	-	-	-
Internal Charges and Overheads Applied	-	-	-
Total Application of Operating Funding	1,393	1,819	1,723
Surplus (Deficit) of Operating Funding	(111)	274	324
Source of Capital Funding			
Subsidies and Grants for Capital Expenditure	2,085	2,285	2,913
Increase (Decrease) in Debt	-	-	-
Total Source of Capital Funding	2,085	2,285	2,913
Application of Capital Funding			
Capital Expenditure	-	-	-
-- to improve the level of service	-	127	745
-- to replace existing assets	2,368	2,413	2,491
Increase (Decrease) in Reserves	(394)	19	-
Total Applications of Capital Funding	1,974	2,559	3,237
Surplus (Deficit) of Capital Funding	111	(274)	(324)
Funding Balance	-	-	-
<i>Excludes depreciation</i>	1,399	2,297	2,050

Appendix 1 – Funding impact statements

INFRASTRUCTURE SERVICES – SEWERAGE				
Source of Operating Funding	Actual 2017/18 \$'000	Long-Term Plan 2017/18 \$'000	Long-Term Plan 2016/17 \$'000	
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-	-
Targeted Rates	65	68	67	67
Subsidies and Grants for Operating Purposes	78	80	80	80
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	13	37	36	36
Total Operating Funding	155	185	183	183
Applications of Operating Funding				
Payments to Staff and Suppliers	135	143	138	138
Financial Costs	-	-	-	-
Internal Charges and Overheads Applied	44	38	37	37
Total Application of Operating Funding	178	181	175	175
Surplus (Deficit) of Operating Funding	(23)	4	8	8
Source of Capital Funding				
Subsidies and Grants for Operating Purposes for Capital Expenditure	-	-	-	-
Increase (Decrease) in Debt	-	-	-	-
Total Source of Capital Funding	-	-	-	-
Application of Capital Funding				
Capital Expenditure				
-- to improve the level of service	-	-	-	-
-- to replace existing assets	1	-	-	-
Increase (Decrease) in Reserves	(24)	4	8	8
Total Applications of Capital Funding	(23)	4	8	8
Surplus (Deficit) of Capital Funding	23	(4)	(8)	(8)
Funding Balance	-	-	-	-
Excludes depreciation	53	67	78	78

INFRASTRUCTURE SERVICES – SOLID WASTE				
Source of Operating Funding	Actual 2017/18 \$'000	Long-Term Plan 2017/18 \$'000	Long-Term Plan 2016/17 \$'000	
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-	-
Targeted Rates	64	66	64	64
Subsidies and Grants for Operating Purposes	371	332	325	325
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	24	11	11	11
Total Operating Funding	459	409	400	400
Applications of Operating Funding				
Payments to Staff and Suppliers	364	368	355	355
Financial Costs	-	-	-	-
Internal Charges and Overheads Applied	29	25	25	25
Total Application of Operating Funding	393	393	380	380
Surplus (Deficit) of Operating Funding	66	16	20	20
Source of Capital Funding				
Subsidies and Grants for Capital Expenditure	-	-	-	-
Increase (Decrease) in Debt	-	-	-	-
Total Source of Capital Funding	-	-	-	-
Application of Capital Funding				
Capital Expenditure				
-- to improve the level of service	524	-	-	-
-- to replace existing assets	1	-	-	-
Increase (Decrease) in Reserves	(453)	15	20	20
Total Applications of Capital Funding	66	16	20	20
Surplus (Deficit) of Capital Funding	(66)	(16)	(20)	(20)
Funding Balance	-	-	-	-
Excludes depreciation	77	126	112	112

Appendix 1 – Funding impact statements

DEMOCRACY SERVICES	Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
Source of Operating Funding			
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-
Targeted Rates	-	-	-
Subsidies and Grants for Operating Purposes	993	714	688
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	165	133	130
Total Operating Funding	1,158	847	818
Applications of Operating Funding			
Payments to Staff and Suppliers	305	313	303
Financial Costs	-	-	-
Internal Charges and Overheads Applied	557	486	472
Total Application of Operating Funding	862	799	775
Surplus (Deficit) of Operating Funding	296	48	43
Source of Capital Funding			
Subsidies and Grants for Operating Purposes for Capital Expenditure	-	1,378	1,330
Increase (Decrease) in Debt	-	-	-
Total Source of Capital Funding	-	1,378	1,330
Application of Capital Funding			
Capital Expenditure	-	-	-
-- to improve the level of service	-	-	-
-- to replace existing assets	12	1,426	1,341
Increase (Decrease) in Reserves	284	-	32
Total Applications of Capital Funding	296	1,426	1,373
Surplus (Deficit) of Capital Funding	(296)	(48)	(43)
Funding Balance	-	-	-
<i>Excludes depreciation</i>	9	14	13

INFRASTRUCTURE SERVICES – ROADING	Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
Source of Operating Funding			
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-
Targeted Rates	53	55	54
Subsidies and Grants for Operating Purposes	1,228	2,031	1,988
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	-	6	5
Total Operating Funding	1,281	2,093	2,047
Applications of Operating Funding			
Payments to Staff and Suppliers	1,393	1,819	1,723
Financial Costs	-	-	-
Internal Charges and Overheads Applied	-	-	-
Total Application of Operating Funding	1,393	1,819	1,723
Surplus (Deficit) of Operating Funding	(111)	274	324
Source of Capital Funding			
Subsidies and Grants for Capital Expenditure	2,085	2,285	2,913
Increase (Decrease) in Debt	-	-	-
Total Source of Capital Funding	2,085	2,285	2,913
Application of Capital Funding			
Capital Expenditure	-	-	-
-- to improve the level of service	-	127	745
-- to replace existing assets	2,368	2,413	2,491
Increase (Decrease) in Reserves	(394)	19	-
Total Applications of Capital Funding	1,974	2,559	3,237
Surplus (Deficit) of Capital Funding	111	(274)	(324)
Funding Balance	-	-	-
<i>Excludes depreciation</i>	1,399	2,297	2,050

Appendix 1 – Funding impact statements

INFRASTRUCTURE SERVICES – SEWERAGE				
Source of Operating Funding	Actual 2017/18 \$'000	Long-Term Plan 2017/18 \$'000	Long-Term Plan 2016/17 \$'000	
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-	-
Targeted Rates	65	68	67	67
Subsidies and Grants for Operating Purposes	78	80	80	80
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	13	37	36	36
Total Operating Funding	155	185	183	183
Applications of Operating Funding				
Payments to Staff and Suppliers	135	143	138	138
Financial Costs	-	-	-	-
Internal Charges and Overheads Applied	44	38	37	37
Total Application of Operating Funding	178	181	175	175
Surplus (Deficit) of Operating Funding	(23)	4	8	8
Source of Capital Funding				
Subsidies and Grants for Operating Purposes for Capital Expenditure	-	-	-	-
Increase (Decrease) in Debt	-	-	-	-
Total Source of Capital Funding	-	-	-	-
Application of Capital Funding				
Capital Expenditure				
-- to improve the level of service	-	-	-	-
-- to replace existing assets	1	-	-	-
Increase (Decrease) in Reserves	(24)	4	8	8
Total Applications of Capital Funding	(23)	4	8	8
Surplus (Deficit) of Capital Funding	23	(4)	(8)	(8)
Funding Balance	-	-	-	-
Excludes depreciation	53	67	78	78

INFRASTRUCTURE SERVICES – SOLID WASTE				
Source of Operating Funding	Actual 2017/18 \$'000	Long-Term Plan 2017/18 \$'000	Long-Term Plan 2016/17 \$'000	
General Rates, Uniform Annual General Charge, Rates Penalties	-	-	-	-
Targeted Rates	64	66	64	64
Subsidies and Grants for Operating Purposes	371	332	325	325
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	24	11	11	11
Total Operating Funding	459	409	400	400
Applications of Operating Funding				
Payments to Staff and Suppliers	364	368	355	355
Financial Costs	-	-	-	-
Internal Charges and Overheads Applied	29	25	25	25
Total Application of Operating Funding	393	393	380	380
Surplus (Deficit) of Operating Funding	66	16	20	20
Source of Capital Funding				
Subsidies and Grants for Capital Expenditure	-	-	-	-
Increase (Decrease) in Debt	-	-	-	-
Total Source of Capital Funding	-	-	-	-
Application of Capital Funding				
Capital Expenditure				
-- to improve the level of service	524	-	-	-
-- to replace existing assets	1	-	-	-
Increase (Decrease) in Reserves	(453)	15	20	20
Total Applications of Capital Funding	66	16	20	20
Surplus (Deficit) of Capital Funding	(66)	(16)	(20)	(20)
Funding Balance	-	-	-	-
Excludes depreciation	77	126	112	112

INFRASTRUCTURE SERVICES – WATER					Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
Source of Operating Funding							
General Rates, Uniform Annual General Charge, Rates Penalties					-	-	-
Targeted Rates					-	-	-
Subsidies and Grants for Operating Purposes					162	174	172
Fees, Charges					67	67	66
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts					12	9	9
Total Operating Funding					241	250	247
Applications of Operating Funding							
Payments to Staff and Suppliers					265	207	199
Financial Costs					-	-	-
Internal Charges and Overheads Applied					40	35	34
Total Application of Operating Funding					306	242	233
Surplus (Deficit) of Operating Funding					(64)	8	14
Source of Capital Funding							
Subsidies and Grants for Capital Expenditure					-	-	466
Increase (Decrease) in Debt					-	-	-
Total Source of Capital Funding					-	-	466
Application of Capital Funding							
Capital Expenditure							
-- to improve the level of service					-	-	466
-- to replace existing assets					1	-	-
Increase (Decrease) in Reserves					(95)	8	14
Total Applications of Capital Funding					(64)	8	480
Surplus (Deficit) of Capital Funding					64	(8)	(14)
Funding Balance					-	-	-
<i>Excludes depreciation</i>					43	71	63

INFRASTRUCTURE SERVICES – STORMWATER					Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
Source of Operating Funding							
General Rates, Uniform Annual General Charge, Rates Penalties					-	-	-
Targeted Rates					-	-	-
Subsidies and Grants for Operating Purposes					14	5	5
Fees, Charges					-	-	-
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts					2	2	2
Total Operating Funding					17	7	7
Applications of Operating Funding							
Payments to Staff and Suppliers					10	-	-
Financial Costs					-	-	-
Internal Charges and Overheads Applied					8	7	7
Total Application of Operating Funding					18	7	7
Surplus (Deficit) of Operating Funding					(1)	-	-
Source of Capital Funding							
Subsidies and Grants for Capital Expenditure					-	-	-
Increase (Decrease) in Debt					-	-	-
Total Source of Capital Funding					-	-	-
Application of Capital Funding							
Capital Expenditure							
-- to improve the level of service					-	-	-
-- to replace existing assets					-	-	-
Increase (Decrease) in Reserves					(1)	-	-
Total Applications of Capital Funding					(1)	-	-
Surplus (Deficit) of Capital Funding					1	-	-
Funding Balance					-	-	-
<i>Excludes depreciation</i>					4	6	5

Appendix 1 – Funding impact statements

COMMUNITY AND REGULATORY SERVICES				ENVIRONMENTAL SERVICES			
Source of Operating Funding	Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000	Source of Operating Funding	Actual 2017/18 \$000	Long-Term Plan 2017/18 \$000	Long-Term Plan 2016/17 \$000
General Rates, Uniform Annual Charge, Rates Penalties	307	390	284	General Rates, Uniform Annual Charge, Rates Penalties	-	-	-
Targeted Rates	-	-	-	Targeted Rates	-	-	-
Subsidies and Grants for Operating Purposes	995	356	351	Subsidies and Grants for Operating Purposes	222	896	888
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	282	318	311	Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts	39	74	73
Total Operating Funding	1,584	964	946	Total Operating Funding	261	970	961
Applications of Operating Funding				Applications of Operating Funding			
Payments to Staff and Suppliers	345	352	340	Payments to Staff and Suppliers	836	846	826
Financial Costs	10	13	15	Financial Costs	-	-	-
Internal Charges and Overheads Applied	546	478	466	Internal Charges and Overheads Applied	125	109	106
Total Application of Operating Funding	901	843	821	Total Application of Operating Funding	961	955	932
Surplus (Deficit) of Operating Funding	682	121	125	Surplus (Deficit) of Operating Funding	(700)	15	29
Source of Capital Funding				Source of Capital Funding			
Subsidies and Grants for Capital Expenditure	-	4,735	-	Subsidies and Grants for Operating Purposes for Capital Expenditure	-	-	-
Increase (Decrease) in Debt	(61)	-	-	Increase (Decrease) in Debt	-	-	-
Total Source of Capital Funding	(61)	4,735	-	Total Source of Capital Funding	-	-	-
Application of Capital Funding				Application of Capital Funding			
Capital Expenditure				Capital Expenditure			
-- to improve the level of service	-	4,735	-	-- to improve the level of service	-	-	-
-- to replace existing assets	11	34	31	-- to replace existing assets	3	-	-
Increase (Decrease) in Reserves	610	87	94	Increase (Decrease) in Reserves	(702)	15	29
Total Applications of Capital Funding	621	4,856	125	Total Applications of Capital Funding	(700)	15	29
Surplus (Deficit) of Capital Funding	(682)	(121)	(125)	Surplus (Deficit) of Capital Funding	700	(15)	(29)
Funding Balance	-	-	-	Funding Balance	-	-	-
Excludes depreciation	47	75	66	Excludes depreciation	2	3	3

EMERGENCY MANAGEMENT				Actual 2017/18 \$'000	Long-Term Plan 2017/18 \$'000	Long-Term Plan 2018/19 \$'000
Source of Operating Funding						
General Rates, Uniform Annual General Charge, Rates Penalties				-	-	-
Targeted Rates				-	-	-
Subsidies and Grants for Operating Purposes				345	328	325
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts				43	29	29
Total Operating Funding				388	357	354
Applications of Operating Funding						
Payments to Staff and Suppliers				364	244	236
Financial Costs				-	-	-
Internal Charges and Overheads Applied				121	106	103
Total Application of Operating Funding				485	350	339
Surplus (Deficit) of Operating Funding				(98)	7	15
Source of Capital Funding						
Subsidies and Grants for Operating Purposes for Capital Expenditure				-	-	1,025
Increase (Decrease) in Debt				-	-	-
Total Source of Capital Funding				-	-	1,025
Application of Capital Funding						
Capital Expenditure						
-- to improve the level of service				14	-	1,025
-- to replace existing assets				3	-	-
Increase (Decrease) in Reserves				(114)	7	15
Total Applications of Capital Funding				(98)	7	1,040
Surplus (Deficit) of Capital Funding				98	(7)	(15)
Funding Balance				-	-	-
<i>Excludes depreciation</i>				10	16	14

COASTS, HARBOURS AND NAVIGATION				Actual 2017/18 \$'000	Long-Term Plan 2017/18 \$'000	Long-Term Plan 2018/19 \$'000
Source of Operating Funding						
General Rates, Uniform Annual General Charge, Rates Penalties				-	-	-
Targeted Rates				-	-	-
Subsidies and Grants for Operating Purposes				260	123	122
Local Authorities Fuel Tax, Fines, Infringement Fees, and Other Receipts				65	59	58
Total Operating Funding				324	182	180
Applications of Operating Funding						
Payments to Staff and Suppliers				51	51	50
Financial Costs				-	-	-
Internal Charges and Overheads Applied				146	127	124
Total Application of Operating Funding				196	178	174
Surplus (Deficit) of Operating Funding				128	4	6
Source of Capital Funding						
Subsidies and Grants for Operating Purposes for Capital Expenditure				-	-	-
Increase (Decrease) in Debt				-	-	-
Total Source of Capital Funding				-	-	-
Application of Capital Funding						
Capital Expenditure						
-- to improve the level of service				-	-	-
-- to replace existing assets				3	-	-
Increase (Decrease) in Reserves				125	4	6
Total Applications of Capital Funding				128	4	6
Surplus (Deficit) of Capital Funding				(128)	(4)	(6)
Funding Balance				-	-	-
<i>Excludes depreciation</i>				34	56	50



Appendix 2 – Glossary of terms

These definitions are intended to define terms in this Annual Report in plain English. For legal definitions, refer to the Local Government Act 2002.

Activity

Groups of related services, projects or goods provided by or on behalf of the Council are combined into an activity. These activities are then put into groups of activities.

Annual Plan

The Annual Plan is produced in the intervening years between the Long-Term Plan. It includes an updated budget and explains variations to the Long-Term Plan. It also confirms arrangements for raising revenue for the next financial year. The community must be consulted on the Annual Plan.

Annual Report

The Annual Report reports on the performance of the Council against the objectives, policies, activities, performance measures, indicative costs, and sources of funds outlined in the Annual Plan and the Long-Term Plan.

Asset

Something of value that the Council owns on behalf of the people of the Chatham Islands, such as roads, drains, parks and buildings.

Asset management plan

A long-term plan for managing an asset to ensure that its capacity to provide a service is maintained and costs over the life of the asset are kept to a minimum.

Capital costs

These include transactions that have an effect on the longer-term financial position of the Council. Items include transfer of funds to reserve accounts, and the purchase or construction of assets.

Capital value

Value of land including improvements.

Community outcomes

A set of statements that describe the vision the Chatham Islands has for its future. The community outcomes of the Chatham Islands are outlined in the Long-Term Plan. The Council seeks to contribute to these outcomes through its various activities.

Current assets

Assets that can be readily converted to cash, or will be used up during the year. These include cash and debtors.

Current liabilities

Creditors and other liabilities due for payment within the financial year.

Depreciation

Depreciation is an accounting concept to recognise the consumption or loss of economic benefits embodied in items of property, plant and equipment. Depreciation spreads the cost of items such as property, plant and equipment over their useful lives as an operating expense.

Group of activities

Council groups all its services into categories of activities (which equates to group activities in the Local Government Act 2002).

Iwi/whānau

People or tribe.

Infrastructure assets

Infrastructure assets are utility service networks i.e. water, sewerage, storm water and roading. They also include associated assets such as water pump outlets, sewerage treatment plant, street lighting, and bridges.

Land value

Value of land excluding improvements.

Local Government Act 2002

The Local Government Act 2002 is the primary legislation that governs the Council's operations and actions.

Long-Term Plan (LTP)

A 10-year plan that sets out the Council's response to community outcomes and how the Council will manage its finances and the community's resources.



Operating expenditure

Expenditure through the Council's activities on such items as salaries, materials and electricity. All these inputs are consumed within the financial year.

Operating revenue

Money earned through the activities in return for a service provided, or by way of a grant or subsidy to ensure particular goods or services are provided. Examples include subsidies, rental revenue, permits, fees and council dues.

Operating surplus/(deficit)

Operating surplus and operating deficit are accounting terms meaning the excess of revenue over expenditure and excess expenditure over revenue respectively. Revenue and expenditure in this context exclude capital items such as the cost of capital works. An operating surplus/(deficit) is inclusive of non-cash items such as revenue and expenditure owing but not paid (debtors and creditors) and depreciation.

Performance measures

These have two parts: first, a simple explanation of the measure by which performance will be assessed; and second, performance targets. The Council uses these measures when reporting on how it has performed in its various activities.

Property, plant and equipment and intangible assets

These consist of software, hardware, land and buildings and infrastructure assets including sewerage and water systems, and roading. They are sometimes referred to as fixed assets and or capital assets.

Public equity

Public equity represents the net worth of Chatham Islands Council if all the assets were sold for the values recorded and the liabilities were extinguished.

Regulatory role

The Council has a regulatory role as it operates under and enforces a range of legislation.

Resources

These are the assets, staff and funds needed to contribute to the activities of the Council including goods, services and policy advice.

Service provider

The Council provides services as required by law e.g. sewerage services or by community mandate e.g. playgrounds.

Significance

Significance means the degree of importance of the issue, proposal or decision of matter before the Council in terms of its likely impact on or consequences for the current and future social, economic, environmental and cultural wellbeing.

Significance policy

This policy sets out the way in which the Council determines how significant a project or decision is and therefore the level of consultation and analysis required.

Statement of cash flows

This describes the cash effect of transactions and is broken down into three components: operating, investing and financing activities.

Statement of comprehensive revenue and expense

This can also be referred to as the profit and loss statement. It shows the financial results of the various Chatham Islands Council activities at the end of each period as either a surplus or a deficit. It does not include asset purchases or disposals.

Statement of financial position

This shows the financial state of affairs at a particular point in time. It can also be referred to as the Balance Sheet.

Sustainable development

Sustainable development is generally defined as development that meets the needs of the present without compromising the capacity of future generations to meet their own needs.

Wellbeing

In this document, wellbeing includes the social, economic, cultural and environmental aspects of a community. The community outcomes are factors of wellbeing.

The organisation

Council and Management Mayor Alfred W Preece alfred.preece@clc.govt.nz Deputy Mayor Jeffrey Clarke jeffrey.clarke@clc.govt.nz	Council Staff Chief Executive Owen Pickles owen@clc.govt.nz Corporate Services Manager Deborah Goomes deborah@clc.govt.nz Emergency Manager/Controller Rana Solomon rana@clc.govt.nz	Contractors Environment Canterbury Fulton Hogan Ltd Resource Management Beca Ltd Solicitors Wynn Williams	Bankers ANZ (Waitangi – Chatham Islands) Auditors Audit New Zealand (on behalf of the Auditor-General.)
Councillors Monique Croon monique.croon@clc.govt.nz Nigel Ryan nigel.ryan@clc.govt.nz Keri Day keri.day@clc.govt.nz Elon Chisholm elon.chisholm@clc.govt.nz Richard Joyce richard.joyce@clc.govt.nz Jason Seymour jason.seymour@clc.govt.nz Eva Tuck eva.tuck@clc.govt.nz	Engineers Stantec Ltd (Christchurch) (formerly Stantec New Zealand Ltd) Nigel Lister, Shaun Boshier, Ali Siddiqui Bryan Peters – Roads and bridges Richard Bennett, Kristen Norquay – Water and wastewater Phil Landmark – Waste management and minimisation		





chatham islands council

Chatham Islands Council
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R18/3

3. Finance

3.4 Financial Report to October 2018

Date of meeting	13 December 2018
Agenda item number	3.4
Author/s	Tanya Clifford

Purpose

To provide an update on financial position as at October 2018.

Recommendations

THAT the financial report as at 31 October 2018 be received.

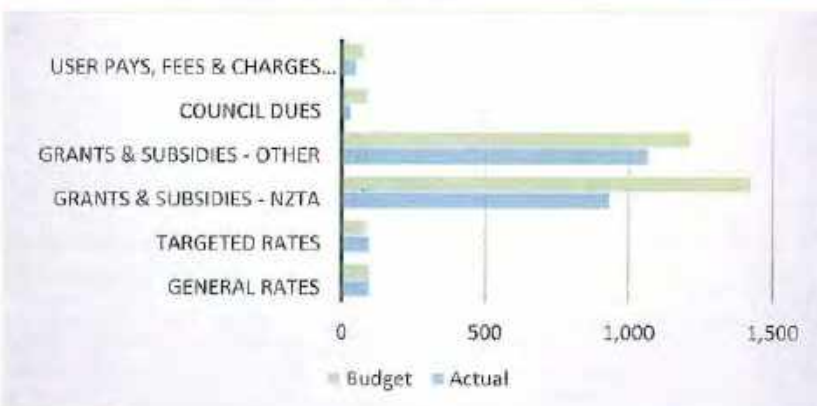
Graphical Financial Information

as at 31 October 2018



chatham islands council

Revenue

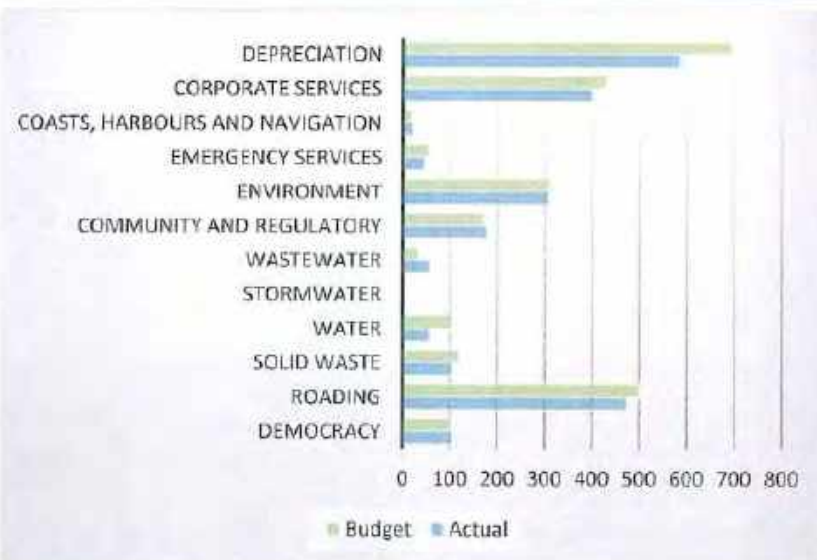


No significant items of concern related to revenue items. However, it is worth noting:

* NZTA subsidy is based on actual expenditure, which is not equally spread across the year, works tend to accelerate closer to December.

* DIA grant has been fully received, but apportioned across the year.

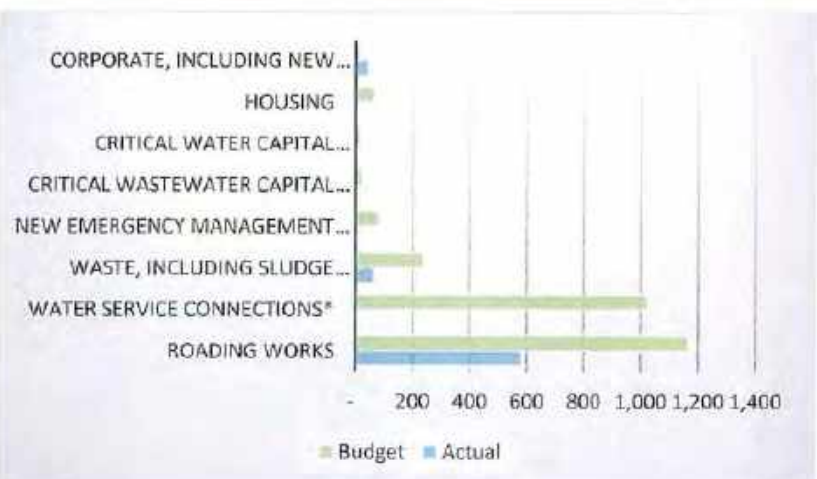
Expenditure



No significant items of concern related to expenditure.

There are some variances within classifications, but this is likely to relate inconsistencies in allocation between actual and budget figures.

Capital Expenditure



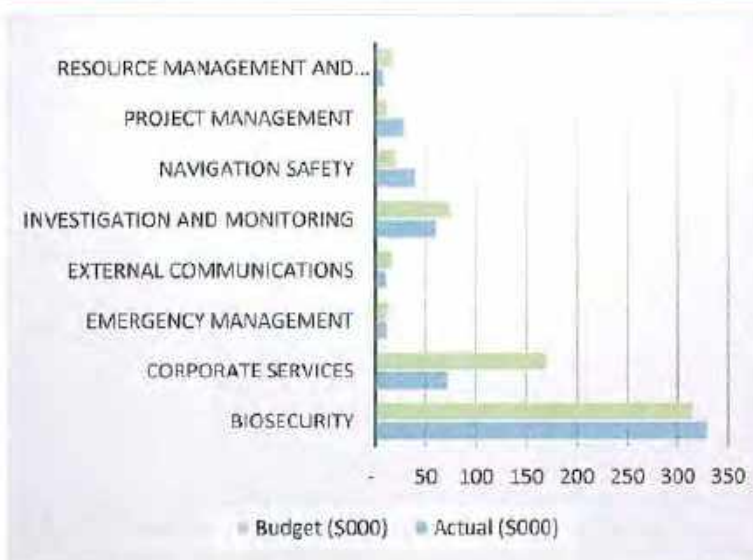
Key capital works have not yet progressed for the year.

Cashflow Forecast



The Council has an overdraft facility with their banking provider of \$500k. At the end of November, the expected cash balance was \$1,596k; actual cash was \$1,517k; although some of this figure was invested in term deposits. Council will need to manage it's cash carefully with a year end deficit of \$168k expected.

ECan Operational Expenditure



No significant variances of note, however:

* Biosecurity work assumes an equal spread over the year. Actual costs are weighted significantly to the month when helicopters are transported to the island to implement planned biosecurity eradication initiatives.

* The corporate services budget is primarily labour based and includes a proviso for additional operational support to the CIC CEO, which as yet has not been called for. Any unutilised project funds are held in reserve at ECan, for use in future projects.

Other Financial Information

as at 31 October 2018

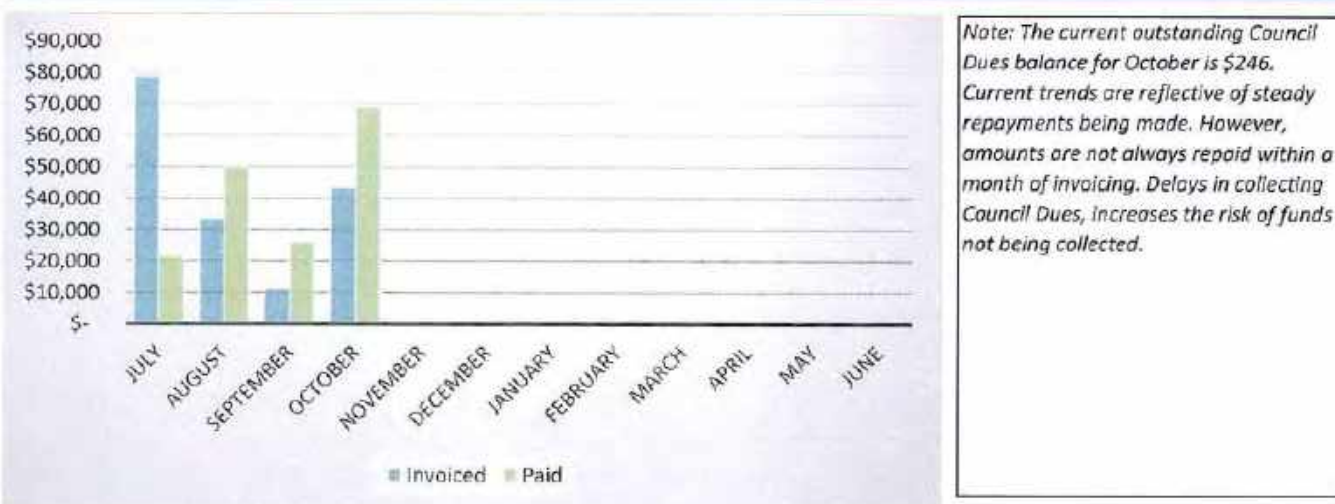


chatham islands council

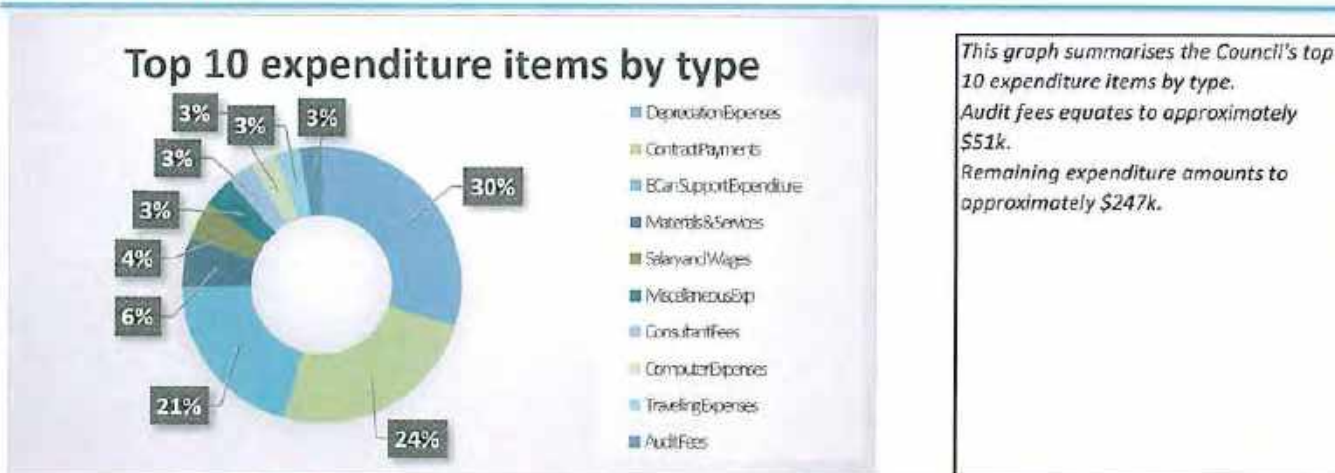
Revenue rates collectability



Revenue Council dues collectability



Expenditure by type



Statement of Comprehensive Revenue and Expense

	Actual \$000	Budget \$000	Variance	Note Reference
Revenue				
General rates	97	97	-	1
Targeted rates	98	85	13	1
Grants & subsidies - NZTA	932	1,424	(492)	2
Grants & subsidies - other	1,070	1,216	(147)	2
Council Dues	33	92	(58)	3
User pays, fees & charges and other income	53	80	(26)	
Total revenue	2,284	2,994	(710)	
Expenditure				
Democracy	105	104	1	
Roading	475	501	(27)	4
Solid waste	106	119	(13)	
Water	58	105	(47)	4
Stormwater	0	-	0	
Wastewater	58	32	26	4
Community and regulatory	179	170	9	
Environment	310	312	(2)	
Emergency services	46	56	(10)	
Coasts, harbours and navigation	20	17	4	
Corporate services	400	429	(29)	
Depreciation	586	693	(108)	5
Total expenditure by activity	2,343	2,538	(195)	
Total surplus/(loss)	(59)	456	(515)	

Variance explanations:

- 1 Rates are invoiced based on the Council approved rates strike. Note the budgeted targeted rates amount exclude collection of prior period outstanding balances and penalty payments. Actual figures also recognise repayment of warm home loans, which will be off-set against the loan at year-end.
- 2 NZTA subsidy is based on actual expenditure, which is not equally spread across the year, works tend to accelerate closer to December. DIA grant has been fully received, but apportioned across the year.
- 3 Council dues are a Council tax on island imports/exports. There is a notable relationship between works on-island and the income received from Dues. Transactions with on-island shipping/freight companies are current.
- 4 Budget figures apportioned on an equal basis across the year, actual works tend to increase closer to December.
- 5 Depreciation has been run till October, minor variances expected related to the timing of roading capital works in year.

Capital expenditure summary	Actual \$000	Budget \$000	Variance	Note Reference
Sources of capital funding				
Subsidies and grants for capital expenditure	513	1,138	(625)	1
Increase / (decrease) in debt	-	46	(46)	2
Total sources of capital funding	513	1,184	(671)	
Application of capital funding				
Roading works	583	1,165	(582)	1
Water service connections*	-	1,023	(1,023)	
Waste, including sludge lagoon project	65	237	(172)	3
New emergency management depo*	-	83	(83)	
Critical wastewater capital replacement*	-	22	(22)	
Critical water capital replacement*	-	16	(16)	
Housing	-	67	(67)	2
Corporate, including new office fit-out*	41	12	30	
Total application of capital funding	690	2,626	(39)	
Movement in reserves	(176)	(1,441)	(632)	

* Desired projects in the 2018/19 budget, removed due to lack of funding support

Variance explanations:

- 1 Budget figures apportioned on an equal basis across the year, actual works tend to increase closer to December.
- 2 Housing project expected to be progressed in year, funded by debt.
- 3 Sludge lagoon project delayed, pending scope and cost review.

Note, budget figures are allocated on an equal monthly apportionment

3. Finance

3.5 Chatham Islands 2018 Revaluation

Date of meeting	13 December 2018
Agenda item number	3.5
Author/s	Owen Pickles, Chief Executive

Purpose

Attached is the executive summary covering the 2018 revaluation.

Valuation notices were posted to property owners on 5 December 2018.

The last day for lodging objections is 26 January 2019.

Recommendations

THAT the information be received.



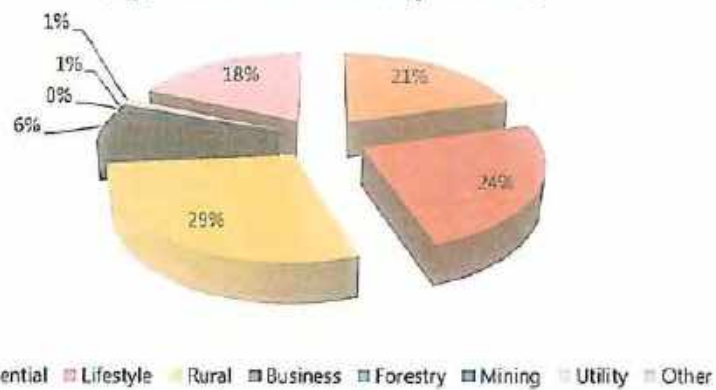
2 Executive Summary

2.1.1 Revaluation Summary by Sector

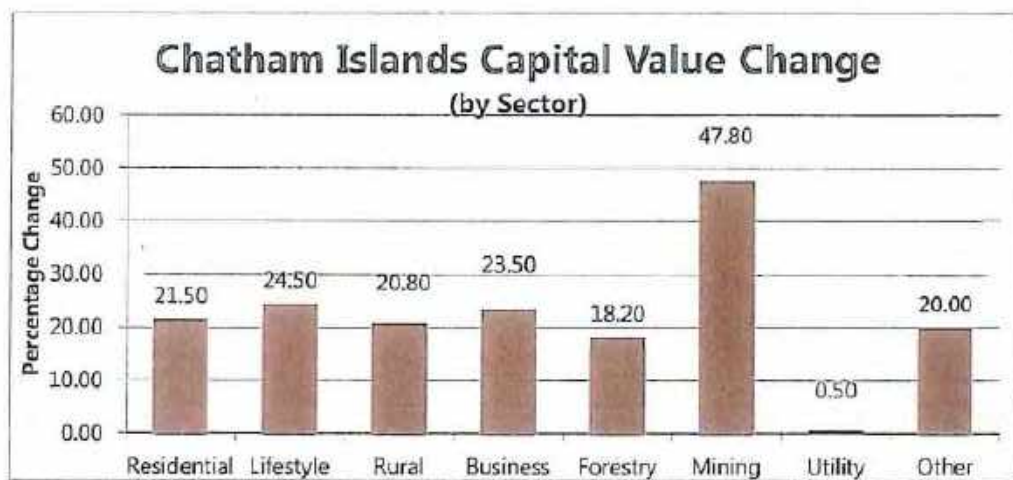
Sector	No. Assets	2018 GV (\$000)	% Change	2018 IV (\$000)	% Change
Farming	191	\$71,952	20.8%	\$54,278	23.4%
Forestry	1	\$130	18.2%	\$125	19.0%
Mining	2	\$34	47.8%	\$33	50.0%
Lifestyle	161	\$33,378	24.5%	\$14,287	34.1%
Residential	137	\$25,670	21.5%	\$7,196	46.9%
Commercial	16	\$8,557	18.6%	\$1,765	37.5%
Industrial	24	\$47,993	24.4%	\$2,176	14.2%
Other	122	\$20,757	20.0%	\$7,792	27.1%
Utilities	8	\$5,795	0.5%	\$91	37.9%
TOTAL	662	\$214,266	21.4%	\$87,742	27.1%

2.1.2 Chatham Islands Property Mix

**Chatham Islands Property Mix
(by Number of Properties)**

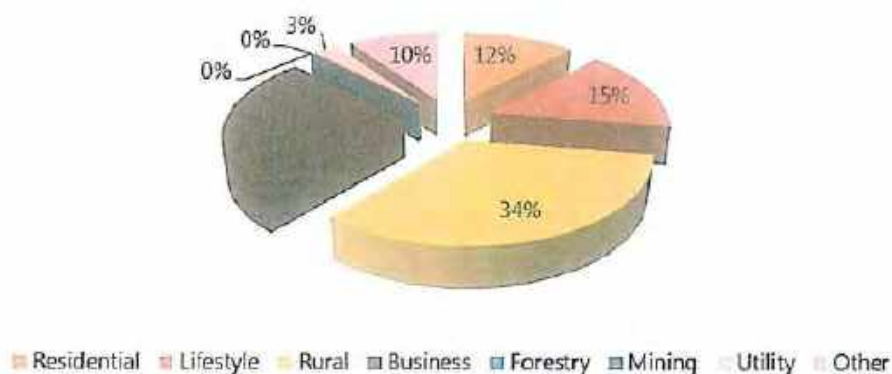


2.1.3 2018 Capital Value Change by Sector



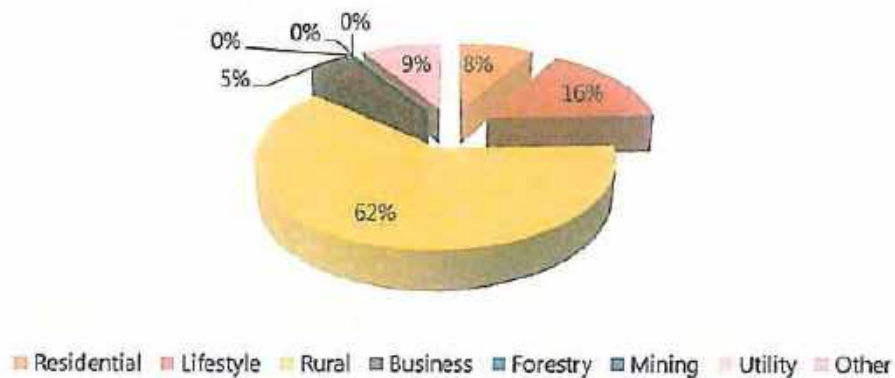
2.1.4 2018 Capital Value by Sector

**Chatham Islands Property Mix
(by Capital Value)**

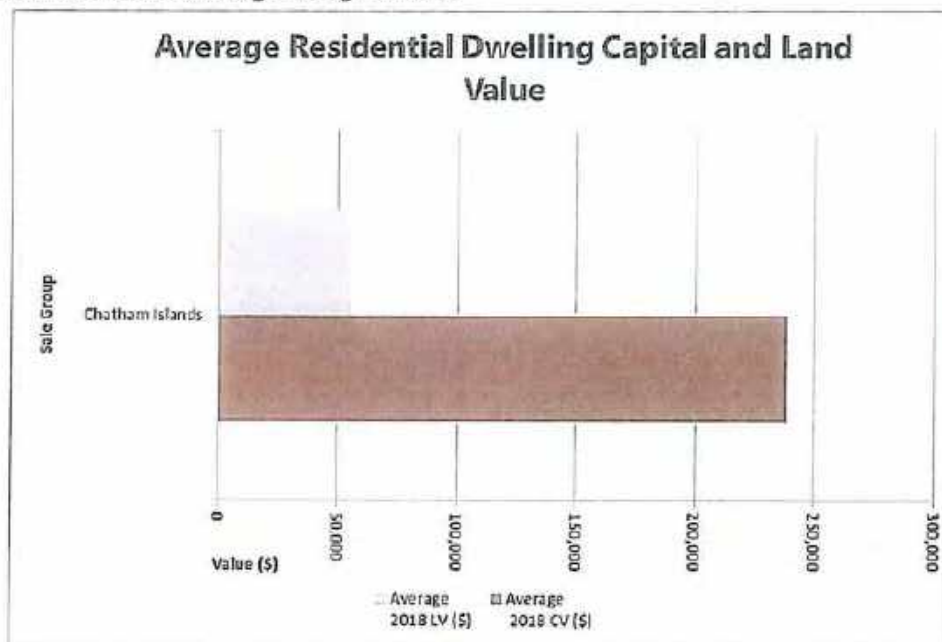


2.1.5 2018 Land Value by Sector

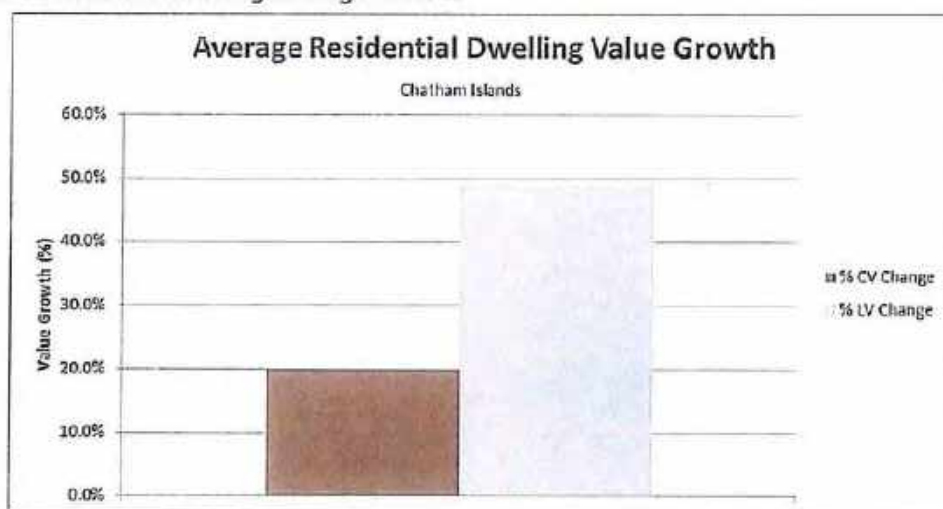
**Chatham Islands Property Mix
(by Land Value)**



2.1.6 Residential Dwelling Average Values



2.1.7 Residential Dwelling Average Growth





2.2 Key messages from the Revaluation

The key messages are:

- Very few market transactions in a small isolated market.
- No major changes in relativity
- Land values on Pitt Island have increased further than the main island.
- No changes in the District Plan
- Completion of the new Port at Waitangi.

4. WORKS & SERVICES

4. Works & Services

4.1 Fulton Hogan Road Maintenance Contract Monthly Report October 2018

Date of meeting	13 December 2018
Agenda item number	4.1
Author/s	Bill Lind – Fulton Hogan Maintenance Manager

Purpose

A monthly report to Chatham Islands Council on the Road Maintenance contract.

Recommendations

THAT the Report be received.



chatham islands council



CHATHAM ISLANDS ROAD
MAINTENANCE CONTRACT
MONTHLY REPORT
October 2018

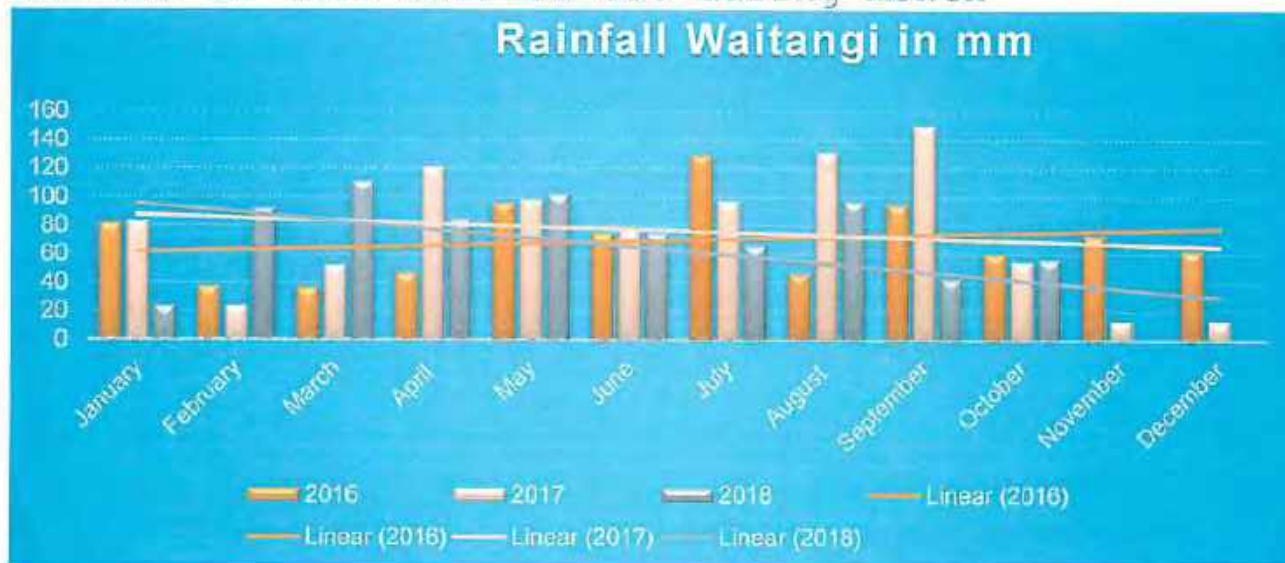


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Work Summary

Outline of work carried out during month



56.5mm of rain recorded in the Waitangi yard. Strengthening of North Road from Port Hutt Rd started early in the month, but mechanical problems with our large roller have meant that we have had to suspend this and continue with watertables on WWO until repairs are completed.

Routine Maintenance and Operations

Routine items all going well, with grading, metaling, mowing and spraying all up to date.

Pavement Renewals

North Road from Port Hutt turnoff for approx. 1.3km completed.

Sealed Road Resurfacing

None this month.

Drainage Renewals

Water tables started on Waitangi Wharf Owenga Road from Owenga end.

Bridge and Structure Renewals

None this month.

Traffic Services

A few EMP replacements this month. No sign vandalism.

Minor Improvements

None this month.

Vegetation Control

We have taken advantage of the few fine days we have had and started on the vegetation and gorse spraying.

Dayworks

Some minor digouts and culvert renewals.

Programmed Work for following month

Road strengthening, watertabling and new culverts.

Schedule of Work by Road Name

1. Maintenance Grading

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

Road ID	Disp	Road ID	Start RP	End RP	Quantity M
NORTH ROAD	2107	21	30990	48508	17518
KAINGAROA ROAD	2108	126	0	5994	5994
KAIWHATA ROAD	2109	31	0	1050	1050
TAIA HAPUPU ROAD	2110	41	0	5325	5325
WAITANGI WHARF - OWENGA ROAD	2111	11	4503	20796	16293
AIR BASE ROAD	2126	71	0	5871	5871
RAPANUI ROAD	2127	81	0	1155	1155
MAIPITO ROAD	2128	101	566	1672	1106
				TOTAL	54.3km

- 2 Unsealed Maintenance Metaling

- Carried out on the following roads using AP32 metal:

Road ID	Disp	Road ID	Start RP	End RP	Quantity	
NORTH ROAD	2160	21	38600	40800	24	
NORTH ROAD	2169	21	15000	25000	136	
NORTH ROAD	2122	21	5000	12000	120	
		Totals		This Month	280	m3
				Contract Target	17,000	m3
				Contract TD	17,316	m3

Next Month's Target

Patch metaling will continue where required.

Crash Damage Report Summary

Crash Damage Report

Date	Event	Action	Repaired Y/N
14/2/18?	Ute left road and rolled WWO Rd RP 4800	No report as yet	No damage to CIC asset
3/3/18	Car hit loading ramp WWO Road RP1039	Police investigation ongoing	No damage to CIC asset
29/5/18	Vehicle vrs calf cnr Maipito Waitangi Wharf Owenga Road	7: 30 am	Minor vehicle damage
25/6/18	Not accident as such but vandalism of new seal on Waitangi Wharf Owenga Road by 2 Quad bikes overnight.	Police investigation	Lucky to get away with little damage.
18/10/18	Vehicle rolled North Rd beyond Wharekauri Rd	Police attended. No report as yet	No damage to CIC asset
27/10/18	Vehicle left road and rolled down bank. Port Hutt Rd RP 4780 Approx.	No report	No damage to CIC asset

Network Inspections

Month	Inspection Type	Faults Identified	Inspected By
October 2017	Daytime	Done during Roadroid. Still a lot of areas requiring watertabling. Soft spots identified and programmed on Owenga Road	Bill Lind
November 2017	Night Time	Tuku Road mostly good but a lot of dirty EMP's at the town end. North Road ok but could still do with more EMP's on sealed section (awaiting Stantec safety inspection results)	Bill Lind
December 2017	Daytime 6 monthly	Waitangi West, Port Hutt and North Road mainly. Mostly drainage problems identified-high shoulder and watertabling.	
January 2018	Night Time	Waitangi Wharf Owenga Road. Signs all good, some EMP's require cleaning. Airbase road good but some vandalised signage needs replacing.	Bill Lind
February 2018	Daytime Roadroid	Still a lot of watertabling and drainage work required on most roads. Signage generally looking good with some needing cleaning	Bill Lind
March 2018	Night Time	Tuku Rd and North Road. Signage and delineation looking better, still some signs need cleaning. Serious lack of Street lighting in Waitangi	Bill Lind
April 2018	Daytime	WWO Road just graded. North Road needs grading. Water tabling needed on both roads.	Bill Lind
May 2018	Night Time	Watertabling still required on most roads, wet conditions highlight this. Lack of street lighting becoming very serious. Signs & EMP's dirty.	Bill Lind

June 2018	Daytime	North Road and Kaingaroa Road Potholes being repaired/graded. Wet conditions lack of metal in places. Airbase Road digout required.	Bill Lind
July 2018	Night Time	2 new culverts required on Airbase Road. EMP's needed sealed area North Rd (Done) most other signs all good.	Tomby
August 2018	Daytime	Roads in good condition. New watertabling helping a lot. Tuku Rd needs digout (since done)	Tomby
September 2018	Night Time	North Road and Airbase Road. All good but some minor dirty signs. Recent watertabling very effective.	Bill Lind
October 2018	Daytime	Owenga Road a few potholes appearing again. Signs and EMP's have been cleaned. Tuku Road all good, watertabling required in places.	Bill Lind

Monthly Safety Report and Statistics

Nothing to report.

1. Safety Engagements

Date	Near Miss	Incident	Lost Time Injury	Plant Damage	Depot/Worksite Inspections
20/9/17	N	N	N	N	Watertabling Maipito Road No unsafe acts observed work progressing well.
18/10/17	N	N	N	N	Digouts WWO Road Good traffic control. No items to address.
14/11/17	N	N	N	N	Repairing roof on workshop. Full Hazard ID completed along with a risk analysis and checklist. No problems encountered.
7/12/17	N	N	N	N	Grading of Waitangi Wharf Owenga Road. Very dusty but no other problems.
29/1/18	N	N	N	N	Installing formwork for K&C on North Road. All good but traffic speed still a problem.
14/2/18	N	N	N	N	Te One culvert carriageway lowering. No issues.
18/3/18	Y	Y	N	Y	Grader came off barge and completely submerged during unloading. Investigation underway.
30/4/18	Y	N	N	N	Manhole cover moved when excavating for K&C
22/5/18	N	N	N	N	Audit done at Highet Place Re-Hab site. No issues arising.
15/6/18	N	N	N	N	Fish Factory Road Sealing All safe and job running smoothly.
23/7/18	N	N	N	Y	Landfill site. Delivery of cover material. Front bumper of truck caught on debris and damaged.
9/8/18	N	N	N	N	Audit of guys doing EMP's North Rd. No problems found
20/9/18	N	N	N	N	Audit of culvert installation site on North Road. Good tidy site with good manual traffic control.
26/10/18	N	N	N	N	Watertabling WWO Rd all good no safety issues

Metal Stockpiles

Site	AP30 Schist	AP65	AP30 Basalt	AP100 Schist	AP100 Basalt	AP30 Blend	AP20
Waitaha Schist	783	0	0	12774	0	0	0
Waitaha Basalt	0	2146	5480	0	0	0	948
Paritu	3780	0	0	1060	0	0	0
Stoney Crossing	0	860	387	0	0	0	932
Yard	0	0	0	0	0	0	0
Ohinemama	0	0	2256	0	0	0	0
Yard	0	0	0	0	0	0	0
Muirsons Schist	2624	0	0	520	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
TOTALS	7187	3006	8123	14354	0	0	1880

CIC Owned Materials Signs

Stocktake of Chatham Islands Council Materials					
Item Description	Unit	Purchased	Used August 18	End Measure	Comments
<i>Signs</i>					
CS85 North Rd	ea.			1	
CS85 Port Hutt Rd	ea.			1	
RG1	ea.			1	
RG2	ea.			1	
RG6	ea.			1	
RM6 White	ea.			7	
RM6 Yellow	ea.			3	
RM7	ea.			5	
P66X242	ea.			7	
PW67	ea.			0	
PW2	ea.			0	
PW10	ea.			0	
PW11	ea.			1	
PW11.1L	ea.			1	
PW11.1R	ea.			1	
PW12L	ea.			1	
PW12R	ea.			1	
PW16L	ea.			0	

PW16R	ea.			1	
PW17L	ea.			0	
PW17R	ea.			0	
PW21L	ea.			0	
PW21R	ea.			0	
PW24	ea.			2	
PW25 65KM	ea.			1	
PW25 35KM	ea.			1	
PW25 45KM	ea.			0	
PW27	ea.			0	
PW28	ea.			1	
PW32	ea.			0	
PW34.1	ea.			2	
PW34.2	ea.			2	
PW37	ea.			2	
PW38	ea.			1	
PW39	ea.			0	
PW41	ea.			4	
PW41.3	ea.			0	
PW43.2	ea.			0	
PW44	ea.			2	
PW53	ea.			1	
PW49 FIRE ENGINE	ea.			2	
PW 50	ea.			1	
PW 67	ea.			0	
PW67 Rural	ea.			0	
PWSX1	ea.			2	
RH-4	ea.			2	
TS-3 ULTIMATE HIDEAWAY	ea.			0	
MH -12 500 X 350 X 509	ea.			0	
MH - 12 ENDS	ea.			0	
MH - SPILKES	ea.			0	
PW54	ea.			2	

Marker pegs

EMP	ea.		53	674	
CULVERT MARKERS	ea.			196	
WHITE RAPID MARKERS	ea.			16	

Misc. Items

ACROW PROPS	ea.	6		6	
ROAD COUNTER	ea.	2		2	
ROUGHOMETER	ea.	1		1	

Culvert Pipes

ALUFLOW

Item Description	Unit	Used Oct 18	Purchased	End Measure
375	m			12
300	m			12
450	m	6		24
525	m			0
600	m			18
750	m			30
825	m			0
900	m			23
1200	m			0
1500	m			0

CivilBOSS

225	m			63
300	m	12	0	100
450	m		0	36

PVC

225	m			0
-----	---	--	--	---

Builders Mix

CEMENT	T			0
GEOGRID	rolls			19
BIDIM CLOTH	rolls			2

Environmental Compliance & Feedback

Environmental Compliance

Date	Site Inspected	Compliant Y/N	Abatement Order Issued	Corrective Action Required	Completed By
30/10/17	Tiki Bore Head	Y	N	N	Bill Lind
23/11/17	Kaingaroa WTP	Y	N	N	Bill Lind
7/12/17	Waitangi Wharf Owenga Road	Y	N	N	Tomby
24/1/18	North Road Spraying	Y	N	N	Bill Lind
22/2/18	North Road Kerb & Channel	Y	N	N	Tomby
19/3/18	Pitt Island Grader incident	N	N	Y	Bill Lind
6/4/18	Highet Place K&C	Y	N	N	Bill Lind
18/5/18	Highet Place Re-Hab	Y	N	N	Bill Lind
21/6/18	Maipito Road OTTA Seal	Y	N	N	Tomby
25/7/18	North Road water tabling	Y	N	N	Tomby
9/8/18	Port Hutt Road Strengthening	Y	N	N	Bill Lind
20/9/18	North Road culvert install	Y	N	N	Pat Tinnelly

Stakeholder Complaints Register

Month	Council/ Public Complaint	Complaint	Repair Undertaken	Response Time
4/8/17	Public	Te Matarae Rd boggy	Bad spots metalled	1 day
15/9/17	CIC	Hotel sign request	Passed to Stantec	2hrs
21/9/17	CIC	Dead sheep Port Hutt Rd	Removed	3hrs
26/9/17	Public	Schist on Owenga Rd	Passed to Stantec for comment	4hrs
5/10/17	Public	Potholes and dust on roads	Grader out Owenga Road	2days
3/11/17	Public	Seal wanted on Owenga Road	Passed on to Stantec and CIC	1 day
21/11/17	Public	Dust on North road	Replied through CIC	2hrs
11/12/17	Public	Dust in general and too much grading	Public notice distributed asking people to drive to the conditions	1 day
19/1/18	Public	Speeding traffic on Maipito Road	Installed new sign	2 hrs
1/2/18	Public	Signage at Port Hutt / North Rd intersection	Passed to Stantec for investigation	1 hr

Month	Council/ Public Complaint	Complaint	Repair Undertaken	Response Time
8/2/18	Public	Poor condition of Pitt Island Roads	Timetable for work on Pitt Island submitted to Council	2 days
12/2/18	Public	Slippery conditions on Te Awainanga Hill	Metal spread	3hrs
29/5/18	Public	WWO Road needs graded	Awaiting favourable conditions	3 days
5/6/18	Public	Owenga Road needs graded and fish dump full	Road had been graded before complaint received	1hr
21/6/18	Public	North Road needs graded	Grader is on North Road now	1 day
25/6/18	Public	Loose chip on road at Cafe	Chip needs to be left on the road as long as possible to protect surface. Footpath swept today.	4 hrs
29/6/18	Public	Port Hutt Road slippery	Basalt spread on the hills	1day
9/7/18	Public	Tuku Road Scour	Metalled and minor water table built	1 day
12/9/18	Public	Potholes North Road	Filled some potholes and dispatched grader same day	4hrs
27/9/18	Public	New watertabling too deep	Passed to Stantec	1hr
10/10/18	Public	Gorse needs sprayed Te Matarae Rd	Sprayed 25/10/18	10days

Public Relations & Community Involvement

Sponsored Festival fundraising, pig hunting comp and the racing club

Innovation

Water table Material used for land fill rehab.

Summary of Monthly Progress Claim by Work Category

<u>Separable Portion One - Roading</u>					
<u>Item</u>	<u>Work Category</u>	<u>Value for Month</u>	<u>Value YTD</u>	<u>Annual Budget</u>	<u>% of Annual Budget</u>
1	P&G Other	\$90,600.65	\$342,574.84	\$805,782.09	42.5%
2	Routine Maintenance and Ops	\$57,015.22	\$235,610.23	\$1,273,716.65	18.4%
3	Pavement Renewals	\$170,288.52	\$275,507.52	\$389,340.50	70.8%
4	Sealed Road Resurfacing	\$0	\$1,175.16	\$108,129.00	0.1%
5	Drainage Renewals	\$24,521.75	\$24,521.75	\$119,480.00	20.5%
6	Bridge Renewals	\$0	\$0	\$60,000.00	0%

7	Traffic Services	\$7,526.41	\$11,534.45	\$13,485.75	85.5%
8	Minor Improvements	\$0	\$80	\$130,000.00	0%
9	Vegetation Control	\$6,127.52	\$22,352.75	\$19,968.75	112%
11	Dayworks	\$3,383.86	\$56,378.83	\$242,871.00	23.2%
Total		\$359,463.93	\$840,395.75	\$3,162,773.74	26.6%

1. Miscellaneous

2. Traffic Counting

Completed for 2018.

3. Pitt Island

Visit to check Pitt Island in November

4. Wind Damage

Nil.

Photos



North Road Strengthening



North Rd



North Rd

4. Works & Services

4.2 Fulton Hogan Road Maintenance Contract Monthly Report November 2018

Date of meeting	13 December 2018
Agenda item number	4.2
Author/s	Bill Lind – Fulton Hogan Maintenance Manager

Purpose

A monthly report to Chatham Islands Council on the Road Maintenance contract.

Recommendations

THAT the Report be received.



CHATHAM ISLANDS ROAD
MAINTENANCE CONTRACT
MONTHLY REPORT
November 2018

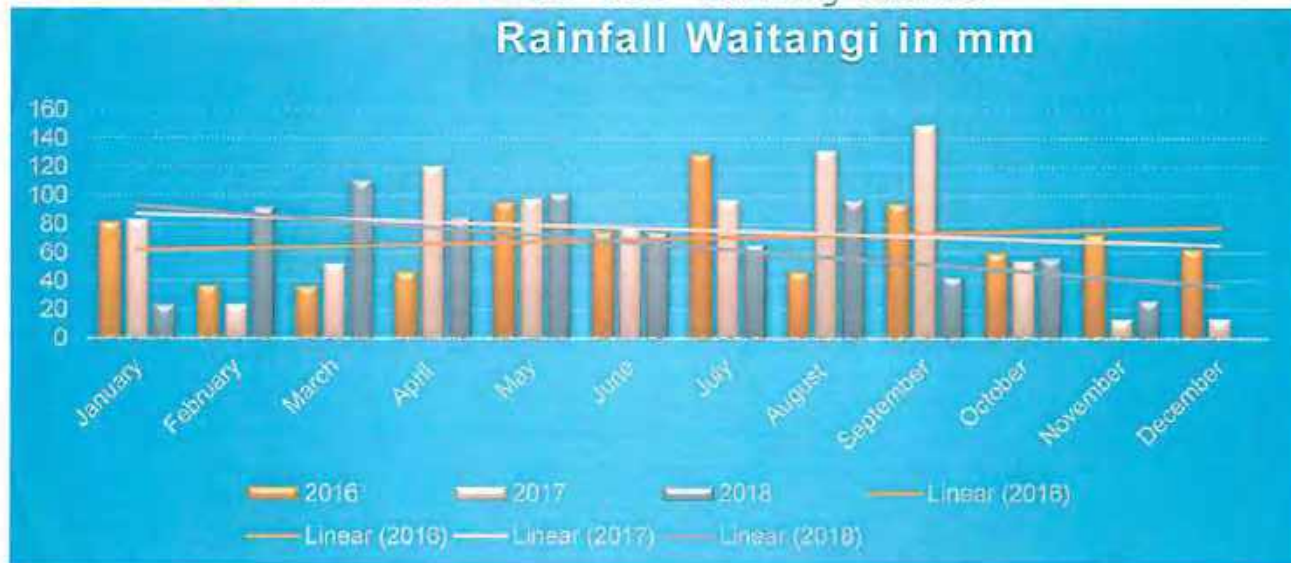


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Work Summary

Outline of work carried out during month



26.5mm of rain recorded in the Waitangi yard. Strengthening of North Road from Port Hutt Rd to Airbase Road completed. 1075m of high shoulder removed and 5129m of watertables constructed on Waitangi Wharf Owenga Road.

Routine Maintenance and Operations

Routine items all going well, with grading, metaling & mowing up to date. Spraying is lagging a little, waiting for calmer conditions.

Pavement Renewals

North Road from Port Hutt turnoff to Airbase Rd completed.

Sealed Road Resurfacing

None this month.

Drainage Renewals

Good progress on Waitangi Wharf Owenga Road from Owenga end, with nearly 3km completed.

Bridge and Structure Renewals

None this month.

Traffic Services

A few EMP replacements this month. No sign vandalism.

Minor Improvements

None this month.

Vegetation Control

Getting a little behind with gorse spraying.

Dayworks

Some minor digouts and culvert renewals.

Programmed Work for following month

Watertabling Waitangi Wharf Owenga Road, new culverts and digouts North Road.

Schedule of Work by Road Name

1. Maintenance Grading

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

Road ID	Disp	Road ID	Start RP	End RP	Quantity M
NORTH ROAD	2175	21	4589	25381	20792
WAITANGI WHARF - OWENGA ROAD	2182	11	4503	21000	16497
TUKU ROAD	2183	111	456	11063	10607
PORT HUTT ROAD	2184	51	0	15691	15691
WAITANGI WEST ROAD	2185	61	0	5600	5600
NORTH ROAD	2198	21	14000	25000	11000
				TOTAL	80.18km

- 2 Unsealed Maintenance Metaling

- Carried out on the following roads using AP32 metal:

Road ID	Disp	Road ID	Start RP	End RP	Quantity	
NORTH ROAD	2174	21	15000	24000	160	
WAITANGI WHARF - OWENGA ROAD	2180	11	4900	6500	104	
NORTH ROAD	2181	21	15600	24500	56	
NORTH ROAD	2194	21	14670	25381	144	
WHAREKAURI ROAD	2195	121	0	500	16	
		Totals		This Month	480	m3
				Contract Target	17,500	m3
				Contract TD	17,796	m3

Next Month's Target

Patch metaling will continue where required. Grading will slow down as conditions dry out.

Crash Damage Report Summary

Crash Damage Report

Date	Event	Action	Repaired Y/N
14/2/18?	Ute left road and rolled WWO Rd RP 4800	No report as yet	No damage to CIC asset
3/3/18	Car hit loading ramp WWO Road RP1039	Police investigation ongoing	No damage to CIC asset
29/5/18	Vehicle vrs calf cnr Maipito Waitangi Wharf Owenga Road	7: 30 am	Minor vehicle damage
25/6/18	Not accident as such but vandalism of new seal on Waitangi Wharf Owenga Road by 2 Quad bikes overnight.	Police investigation	Lucky to get away with little damage.
18/10/18	Vehicle rolled North Rd beyond Wharekauri Rd	Police attended. No report as yet	No damage to CIC asset
27/10/18	Vehicle left road and rolled down bank. Port Hutt Rd RP 4780 Approx.	No report	No damage to CIC asset

Network Inspections

Month	Inspection Type	Faults Identified	Inspected By
December 2017	Daytime 6 monthly	Waitangi West, Port Hutt and North Road mainly. Mostly drainage problems identified-high shoulder and watertabling.	
January 2018	Night Time	Waitangi Wharf Owenga Road. Signs all good, some EMP's require cleaning. Airbase road good but some vandalised signage needs replacing.	Bill Lind
February 2018	Daytime Roadroid	Still a lot of watertabling and drainage work required on most roads. Signage generally looking good with some needing cleaning	Bill Lind
March 2018	Night Time	Tuku Rd and North Road. Signage and delineation looking better, still some signs need cleaning. Serious lack of Street lighting in Waitangi	Bill Lind
April 2018	Daytime	WWO Road just graded. North Road needs grading. Water tabling needed on both roads.	Bill Lind
May 2018	Night Time	Watertabling still required on most roads, wet conditions highlight this. Lack of street lighting becoming very serious. Signs & EMP's dirty.	Bill Lind
June 2018	Daytime	North Road and Kaingaroa Road Potholes being repaired/graded. Wet conditions lack of metal in places. Airbase Road digout required.	Bill Lind
July 2018	Night Time	2 new culverts required on Airbase Road. EMP's needed sealed	Tomby

		area North Rd (Done) most other signs all good.	
August 2018	Daytime	Roads in good condition. New watertabling helping a lot. Tuku Rd needs digout (since done)	Tomby
September 2018	Night Time	North Road and Airbase Road. All good but some minor dirty signs. Recent watertabling very effective.	Bill Lind
October 2018	Daytime	Owenga Road a few potholes appearing again. Signs and EMP's have been cleaned. Tuku Road all good, watertabling required in places.	Bill Lind
November 2018	Night Time	Tuku Road looking ok some dirty signs programmed for cleaning. Waitangi Wharf Owenga Road, newly watertabled area all good with new EMP's very effective.	Bill lind

Monthly Safety Report and Statistics

Nothing to report.

1. Safety Engagements

Date	Near Miss	Incident	Lost Time Injury	Plant Damage	Depot/Worksite Inspections
14/11/17	N	N	N	N	Repairing roof on workshop. Full Hazard ID completed along with a risk analysis and checklist. No problems encountered.
7/12/17	N	N	N	N	Grading of Waitangi Wharf Owenga Road. Very dusty but no other problems.
29/1/18	N	N	N	N	Installing formwork for K&C on North Road. All good but traffic speed still a problem.
14/2/18	N	N	N	N	Te One culvert carriageway lowering. No issues.
18/3/18	Y	Y	N	Y	Grader came off barge and completely submerged during unloading. Investigation underway.
30/4/18	Y	N	N	N	Manhole cover moved when excavating for K&C
22/5/18	N	N	N	N	Audit done at Highet Place Re-Hab site. No issues arising.
15/6/18	N	N	N	N	Fish Factory Road Sealing All safe and job running smoothly.
23/7/18	N	N	N	Y	Landfill site. Delivery of cover material. Front bumper of truck caught on debris and damaged.
9/8/18	N	N	N	N	Audit of guys doing EMP's North Rd. No problems found
20/9/18	N	N	N	N	Audit of culvert installation site on North Road. Good tidy site with good manual traffic control.
26/10/18	N	N	N	N	Watertabling WWO Rd all good no safety issues
27/11/18	N	N	N	N	Road strengthening North Road, good TTM no safety issues.

Metal Stockpiles

Site	AP30 Schist	AP65	AP30 Basalt	AP100 Schist	AP100 Basalt	AP30 Blend	AP20
Waitaha Schist	783	0	0	12774	0	0	0
Waitaha Basalt	0	2146	5480	0	0	0	948
Paritu	3780	0	0	1060	0	0	0
Stoney Crossing	0	860	387	0	0	0	932
Yard	0	0	0	0	0	0	0
Ohinemama	0	0	2256	0	0	0	0
Yard	0	0	0	0	0	0	0
Muirsons Schist	2624	0	0	520	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
TOTALS	7187	3006	8123	14354	0	0	1880

CIC Owned Materials

Signs

Stocktake of Chatham Islands Council Materials					
Item Description	Unit	Purchased	Used November 18	End Measure	Comments
<i>Signs</i>					
CS85 North Rd	ea.			1	
CS85 Port Hutt Rd	ea.			1	
RG1	ea.			1	
RG2	ea.			1	
RG6	ea.			1	
RM6 White	ea.		2	5	
RM6 Yellow	ea.		2	1	
RM7	ea.			5	
P66X242	ea.			7	
PW11	ea.			1	
PW11.1L	ea.			1	
PW11.1R	ea.			1	
PW12L	ea.			1	
PW12R	ea.			1	
PW24	ea.			2	
PW25 65KM	ea.			1	
PW28	ea.			1	
PW34.1	ea.			2	

PW34.2	ea.			2	
PW37	ea.			2	
PW41	ea.			4	
PW44	ea.		1	1	
PW53	ea.			1	
PW49 FIRE ENGINE	ea.			2	
PW 50	ea.			1	
PWSX1	ea.			2	
RH-4	ea.			2	
PW54	ea.			2	

Marker pegs

EMP	ea.		46	628	
CULVERT MARKERS	ea.		4	192	
WHITE RAPID MARKERS	ea.			16	

Misc. Items

ACROW PROPS	ea.	6		6	
ROAD COUNTER	ea.	2		2	
ROUGHOMETER	ea.	1		1	

Culvert Pipes

ALUFLOW

Item Description	Unit	Used Oct 18	Purchased	End Measure
375	m			12
300	m			12
450	m			24
600	m			18
750	m			30
900	m			23

CivilBOSS

225	m			63
300	m		0	100
450	m		0	36

PVC

225	m			0
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<i>Builders Mix</i>				
CEMENT	T			0
GEOGRID	rolls			19
BIDIM CLOTH	rolls			2

Environmental Compliance & Feedback

Environmental Compliance

Date	Site Inspected	Compliant Y/N	Abatement Order Issued	Corrective Action Required	Completed By
30/10/17	Tiki Bore Head	Y	N	N	Bill Lind
23/11/17	Kaingaroa WTP	Y	N	N	Bill Lind
7/12/17	Waitangi Wharf Owenga Road	Y	N	N	Tomby
24/1/18	North Road Spraying	Y	N	N	Bill Lind
22/2/18	North Road Kerb & Channel	Y	N	N	Tomby
19/3/18	Pitt Island Grader incident	N	N	Y	Bill Lind
6/4/18	Highet Place K&C	Y	N	N	Bill Lind
18/5/18	Highet Place Re-Hab	Y	N	N	Bill Lind
21/6/18	Maipito Road OTTA Seal	Y	N	N	Tomby
25/7/18	North Road water tabling	Y	N	N	Tomby
9/8/18	Port Hutt Road Strengthening	Y	N	N	Bill Lind
20/9/18	North Road culvert install	Y	N	N	Pat Tinnelly
21/11/18	WWO Road watertabling	Y	N	N	Bill Lind

Stakeholder Complaints Register

Month	Council/ Public Complaint	Complaint	Repair Undertaken	Response Time
4/8/17	Public	Te Matarae Rd boggy	Bad spots metalled	1 day
15/9/17	CIC	Hotel sign request	Passed to Stantec	2hrs
21/9/17	CIC	Dead sheep Port Hutt Rd	Removed	3hrs
26/9/17	Public	Schist on Owenga Rd	Passed to Stantec for comment	4hrs
5/10/17	Public	Potholes and dust on roads	Grader out Owenga Road	2days
3/11/17	Public	Seal wanted on Owenga Road	Passed on to Stantec and CIC	1 day
21/11/17	Public	Dust on North road	Replied through CIC	2hrs
11/12/17	Public	Dust in general and too much grading	Public notice distributed asking people to drive to the conditions	1 day
19/1/18	Public	Speeding traffic on Maipito Road	Installed new sign	2 hrs

Month	Council/ Public Complaint	Complaint	Repair Undertaken	Response Time
1/2/18	Public	Signage at Port Hutt / North Rd intersection	Passed to Stantec for investigation	1 hr
8/2/18	Public	Poor condition of Pitt Island Roads	Timetable for work on Pitt Island submitted to Council	2 days
12/2/18	Public	Slippery conditions on Te Awainanga Hill	Metal spread	3hrs
29/5/18	Public	WWO Road needs graded	Awaiting favourable conditions	3 days
5/6/18	Public	Owenga Road needs graded and fish dump full	Road had been graded before complaint received	1hr
21/6/18	Public	North Road needs graded	Grader is on North Road now	1 day
25/6/18	Public	Loose chip on road at Cafe	Chip needs to be left on the road as long as possible to protect surface. Footpath swept today.	4 hrs
29/6/18	Public	Port Hutt Road slippery	Basalt spread on the hills	1day
9/7/18	Public	Tuku Road Scour	Metalled and minor water table built	1 day
12/9/18	Public	Potholes North Road	Filled some potholes and dispatched grader same day	4hrs
27/9/18	Public	New watertabling too deep	Passed to Stantec	1hr
10/10/18	Public	Gorse needs sprayed Te Matarae Rd	Sprayed 25/10/18	10days

Public Relations & Community Involvement

Sponsored Festival fundraising, pig hunting comp and the racing club

Innovation

Water table Material used for land fill rehab.

Summary of Monthly Progress Claim by Work Category

Separable Portion One - Roading					
Item	Work Category	Value for Month	Value YTD	Annual Budget	% of Annual Budget
1	P&G Other	\$103,002.72	\$445,577.56	\$805,782.09	55.3%
2	Routine Maintenance and Ops	\$57,235.22	\$92,845.45	\$1,273,716.65	23%
3	Pavement Renewals	\$106,615.56	\$382,123.08	\$389,340.50	98%
4	Sealed Road Resurfacing	\$0	\$1,175.16	\$108,129.00	0.1%

5	Drainage Renewals	\$32,794.04	\$57,315.79	\$119,480.00	47.9%
6	Bridge Renewals	\$0	\$0	\$60,000.00	0%
7	Traffic Services	\$1,773.47	\$13,307.92	\$13,485.75	98.7%
8	Minor Improvements	\$0	\$80	\$130,000.00	0%
9	Vegetation Control	\$5,907.52	\$28,260.27	\$19,968.75	141%
11	Dayworks	\$1,037.31	\$57,416.14	\$242,871.00	23.6%
Total		\$308,365.84	\$1,148,761.59	\$3,162,773.74	36.3%

1. Miscellaneous

2. Traffic Counting

Completed for 2018.

3. Pitt Island

Visit to check Pitt Island in December

4. Wind Damage

Nil.

Photos



North Road Strengthening



North Rd



North Rd

4. Works & Services

4.3 Fulton Hogan Water and Wastewater Contract Monthly Report October 2018

Date of meeting	13 December 2018
Agenda item number	4.3
Author/s	Bill Lind – Fulton Hogan Maintenance Manager

Purpose

A monthly report to Chatham Islands Council on the Road Maintenance contract.

Recommendations

THAT the Report be received.



chatham islands council



Fulton Hogan



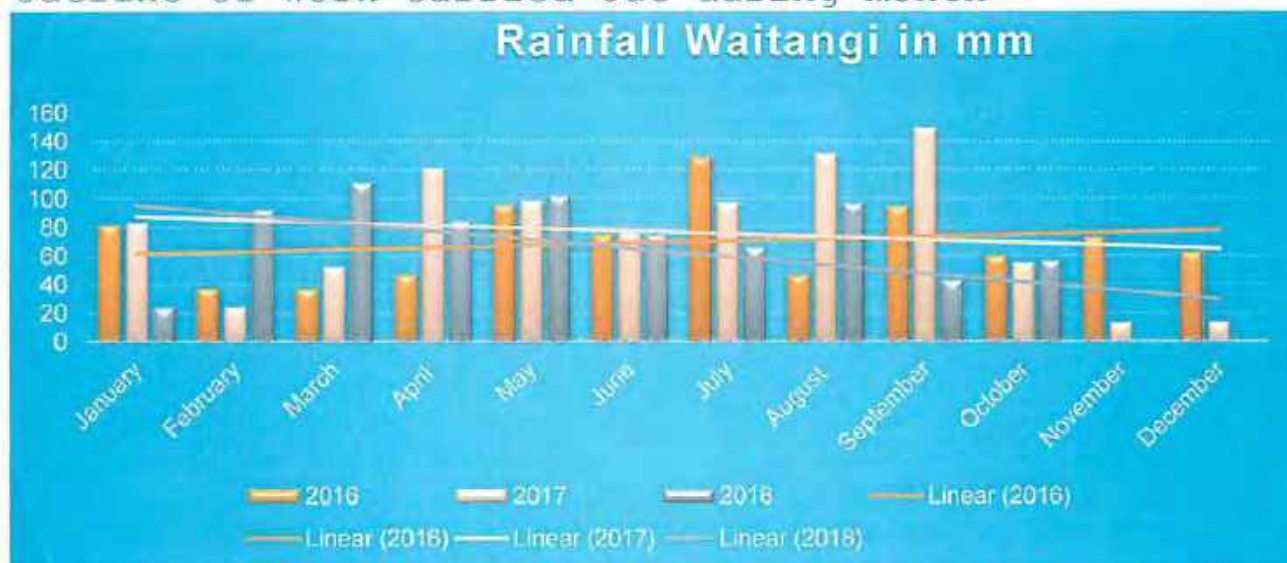
WATER AND
WASTEWATER
OPERATION CONTRACT
MONTHLY REPORT
October 2018

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Work Summary

Outline of work carried out during month



56.5mm rainfall recorded in the Waitangi yard. Only non - routine item this month was the water - blasting of a section of sewer main upstream of the pump station to remove fat

Water Supply Operation & Maintenance

All working well. Still to complete the draw-down testing at the MPA bore site. Awaiting Chatham Islands Electricity for generator and wiring.

Water Treatment

All going well but Turbidity readings on Kaingaroa raw water still seem a little high. This may be a result of several high wind events during the month.

Wastewater Treatment Plant at Waitangi

All running well.

Dayworks - Water

None this month.

Dayworks - Wastewater

Water - blasting of sewer main..

Water and Wastewater Reticulation Network

Water usage from the tank in the yard seems to be increasing early this year.

Water and Wastewater Treatment Plant: Monitoring

Plant monitoring all going well. Hardness tests being done on

Separable Portion Two - Water and
Wastewater

<u>Item</u>	<u>Work Category</u>	<u>Value for Month</u>	<u>Value YTD</u>	<u>Annual Budget</u>	<u>% of Annual Budget</u>
13	Preliminary and General	\$1,720.02	\$14,927.01	\$49,614.04	30%
14	Water Supply Ops and Maint	\$922.32	\$3,975.28	\$20,067.84	19.8%
15	Water Treatment	\$2,947.89	\$13,912.89	\$39,801.86	35%
16	WWTP Waitangi	\$922.32	\$37,175.58	\$35,580.63	104%
17	Dayworks - Water	\$0	\$220	\$9,519.14	2.3%
18	Dayworks - Wastewater	\$464.94	\$1,491.22	\$7,090.55	21%
19	Water and Wastewater Reticulation	\$0	\$	\$461.16	0%

Waitangi raw water late in the month.

Programmed Work for Following Month

Annual Filtec visit programmed for mid month.

Summary of Monthly Progress Claim by Work Category

20	Treatment Plant Monitoring	\$1,188.52	\$5,187.21	\$14,262.24	36.4%
	Total	\$7,939.87	\$76,663.05	\$176,397.46	43.5%

Schedule of Work

Water Meter Report

See appendix

Irrigation Dosing

Sprinkler locations all sprayed and identified, most of the field has been mowed.

Quality Assurance

No issues

Site Safety Report

Date	Near Miss	Incident	Lost Time Injury	Plant Damage	Depot/Worksite Inspections
20/10/17	N	N	N	N	Site tidy up around WWTP All good.
23/11/17	N	N	N	N	Kaingaroa WTP checked, cleaned and tidied out
15/12/17	N	N	N	N	WWTP Investigate/locate sprinkler heads and mark
15/1/18	N	N	N	N	Repairing leak @ CIC flats, no safety issues.
8/2/18	N	N	N	N	Replaced toby valve and repaired pipe Highet Place. No safety issues.
22/3/18	N	N	N	N	Spraying and mowing @ WWTP no issues or concerns
30/4/18	N	N	N	N	Replace dislodged manhole cover at Highet Pl / Tuku Rd intersection.

24/5/18	N	N	N	N	Clear area, digout drain and metal road WWTP
26/6/18	N	N	N	N	RBC removal and bearing replacement at WWTP no issues
9/7/18	N	N	N	N	Replace float switch at old septic tank. No safety issues.
23/8/18	N	Y	N	N	E.coli detected in Kaingaroa reticulation sample
20/9/18	N	N	N	N	3 consecutive complying results received for Kaingaroa reticulation
24/10/18	N	N	N	N	Water blasting of sewer. No problems.

Environmental Non Compliance
None this month.

Monthly Stocktake of Supplies

General Supplies Stockpile - Month Ending May 18

Stock Purchased	Stock End of Previous Month	Stock Used	Stock Remaining End of Month
--------------------	--------------------------------------	---------------	---------------------------------------

Salt	28 bags	10	18
Chlorine	30 L	10	20

PHOTOS



Kaingaroa Intake



Kaingaroa Intake

4. Works & Services

4.4 Fulton Hogan Water and Wastewater Contract Monthly Report November 2018

Date of meeting	13 December 2018
Agenda item number	4.4
Author/s	Bill Lind – Fulton Hogan Maintenance Manager

Purpose

A monthly report to Chatham Islands Council on the Road Maintenance contract.

Recommendations

THAT the Report be received.



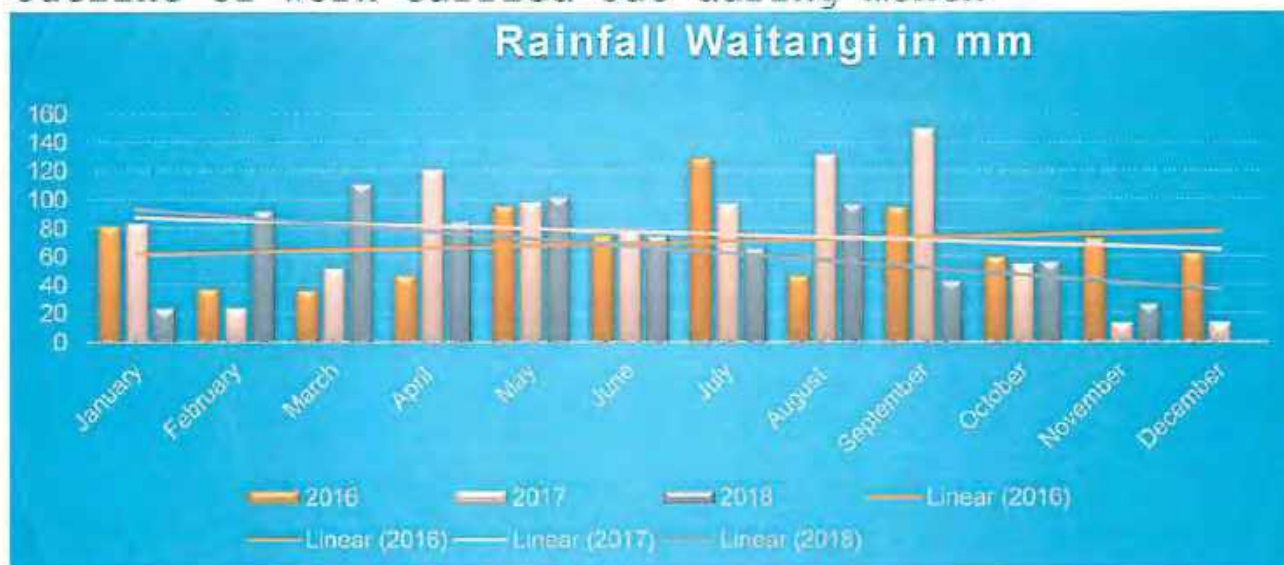
WATER AND
WASTEWATER
OPERATION CONTRACT
MONTHLY REPORT
November 2018

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Work Summary

Outline of work carried out during month



26.5mm rainfall recorded in the Waitangi yard. Only non - routine item this month was the water - blasting of a section of sewer main upstream of the pump station to remove fat

Water Supply Operation & Maintenance

All working well. Still to complete the draw-down testing at the MPA bore site. Awaiting Chatham Islands Electricity for generator and wiring.

Water Treatment

All going well. Filtec service visit complete, awaiting report.

Wastewater Treatment Plant at Waitangi

RBC 1 out of action again with shaft problems. We are currently working with Stantec on a solution.

Dayworks - Water

None this month.

Dayworks - Wastewater

Water - blasting and clearing of sewer main near pump station.

Water and Wastewater Reticulation Network

Water usage from the tank in the yard seems to be increasing early this year. We are now limiting hours in which water is available to the hours we are in the yard.

Water and Wastewater Treatment Plant: Monitoring

Plant monitoring all going well.

Programmed Work for Following Month

<u>Separable Portion Two - Water and Wastewater</u>					
<u>Item</u>	<u>Work Category</u>	<u>Value for Month</u>	<u>Value YTD</u>	<u>Annual Budget</u>	<u>% of Annual Budget</u>
13	Preliminary and General	\$4,195.65	\$19,122.66	\$49,614.04	38.5%
14	Water Supply Ops and Maint	\$922.32	\$4,897.60	\$20,067.84	24.4%
15	Water Treatment	\$2,947.89	\$16,860.78	\$39,801.86	42.3%
16	WWTP Waitangi	\$922.32	\$38,097.90	\$35,580.63	107%
17	Dayworks - Water	\$429	\$649	\$9,519.14	7%
18	Dayworks - Wastewater	\$452.6	\$1,943.82	\$7,090.55	217%
19	Water and Wastewater Reticulation	\$0	\$	\$461.16	0%
20	Treatment Plant Monitoring	\$1,188.52	\$6,375.73	\$14,262.24	44.7%

Repairs to RBC # 1

Summary of Monthly Progress Claim by Work Category

Total

\$11,058.30

\$87,721.35

\$176,397.46

49.7%

Schedule of Work

Water Meter Report

See appendix

Irrigation Dosing

Sprinkler locations all sprayed and identified, most of the field has been mowed.

Quality Assurance

No issues

Site Safety Report

Date	Near Miss	Incident	Lost Time Injury	Plant Damage	Depot/Worksite Inspections
23/11/17	N	N	N	N	Kaingaroa WTP checked, cleaned and tidied out
15/12/17	N	N	N	N	WWTP Investigate/locate sprinkler heads and mark
15/1/18	N	N	N	N	Repairing leak @ CIC flats, no safety issues.
8/2/18	N	N	N	N	Replaced toby valve and repaired pipe Highet Place. No safety issues.
22/3/18	N	N	N	N	Spraying and mowing @ WWTP no issues or concerns
30/4/18	N	N	N	N	Replace dislodged manhole cover at Highet Pl / Tuku Rd intersection.
24/5/18	N	N	N	N	Clear area, digout drain and metal road WWTP
26/6/18	N	N	N	N	RBC removal and

					bearing replacement at WWTP no issues
9/7/18	N	N	N	N	Replace float switch at old septic tank. No safety issues.
23/8/18	N	Y	N	N	E.coli detected in Kaingaroa reticulation sample
20/9/18	N	N	N	N	3 consecutive complying results received for Kaingaroa reticulation
24/10/18	N	N	N	N	Water blasting of sewer. No problems.
20/11/17	N	N	N	N	Site tidy up around WWTP All good.

Environmental Non Compliance
None this month.

Monthly Stocktake of Supplies

General Supplies Stockpile - Month Ending May 18

	Stock Purchased	Stock End of Previous Month	Stock Used	Stock Remaining End of Month
Salt	40	18 bags	10	58
Chlorine	40	20 L	10	40

PHOTOS



External view of bearing mount RBC 1



Internal view of new bearing mount RBC 1

4. Works & Services

4.5 Stantec Monthly Report October 2018

Date of meeting	13 December 2018
Agenda item number	4.5
Author/s	Ali Saddiqui – Projects Manager, Stantec New Zealand

Purpose

A monthly report to Chatham Islands Council for the Engineering Services contract.

Recommendations

THAT the Report be received.

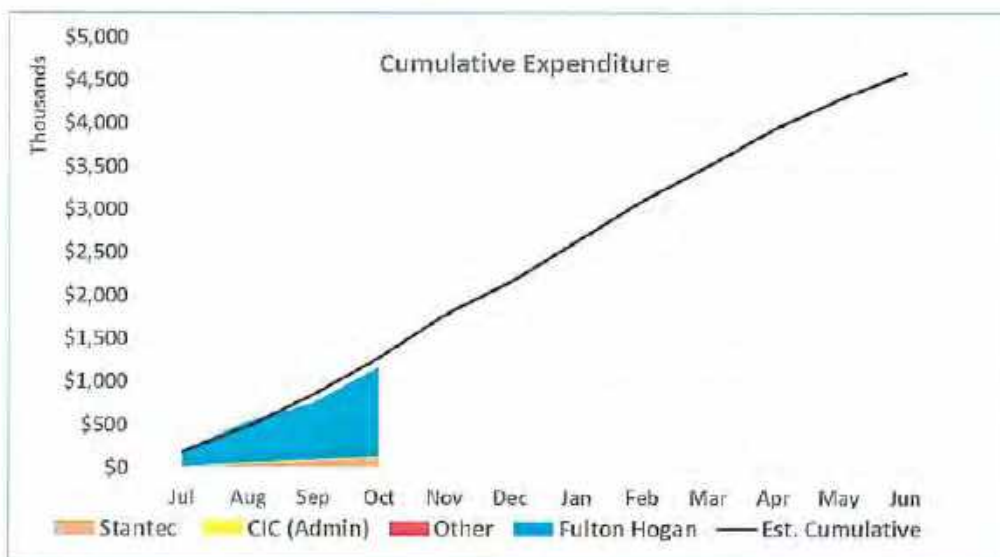
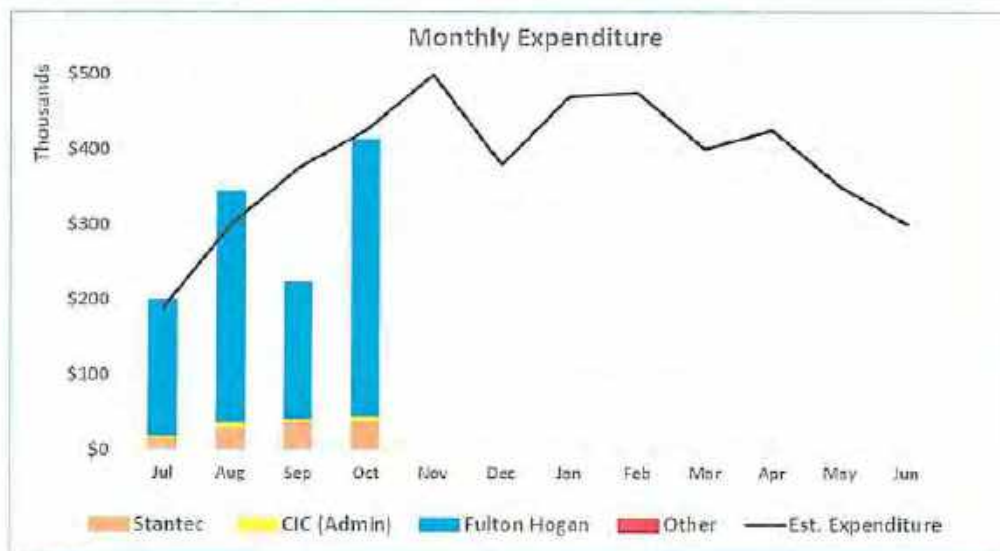
CIC Engineering Services Contract

Monthly Progress Report: October 2018

Financial Reporting

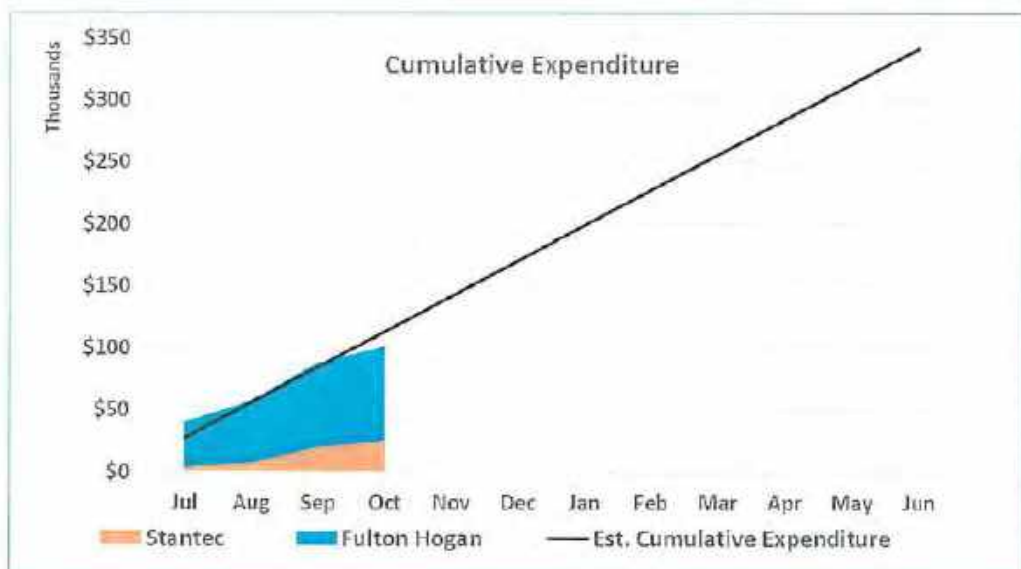
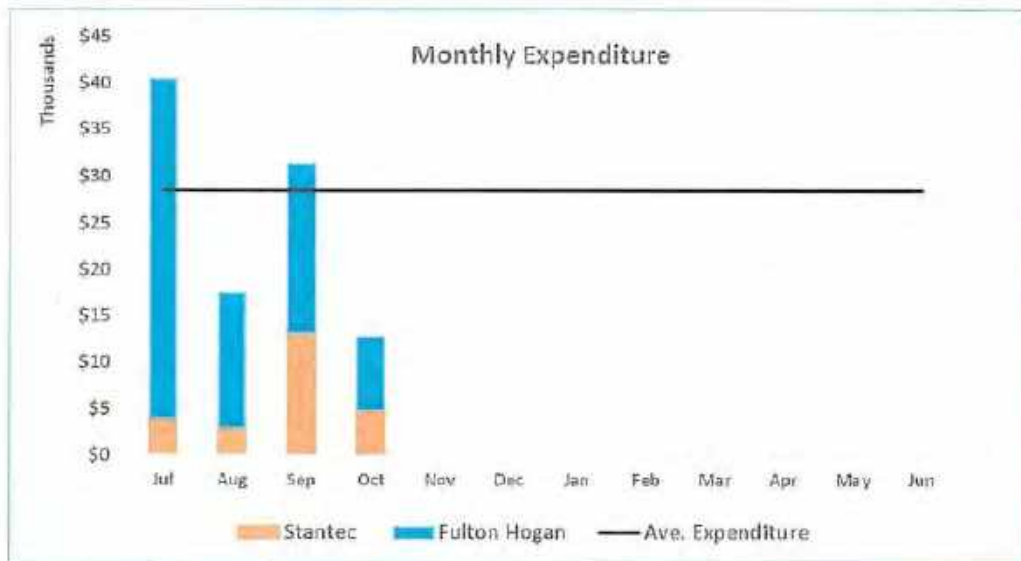
Contractor Claims (ex GST)	<p>The final payment for Fulton Hogan is split between Roading and WW+W as below:</p> <ul style="list-style-type: none"> o \$359,463.93 for Roading. o \$7,939.87 for Water and Wastewater.
Financial Position	<p>The roading budget spent to date is approximately \$1.04 M of the \$4.87 M allocated for the 2018/19 financial year. This equates to 21.4% of expenditure after four months (33%) of the financial year to date. The subsidised budget is higher than the usual approx. \$4 M as it includes the costs of Waikato Bridge construction. The percentage spent versus percentage of year past should catch up after Waikato Bridge construction is finished.</p>

Expenditure Tracking of NZTA Funding



NB: The CIC costs equate to the administration costs of processing a claim and other direct claims by Council.

Expenditure Tracking of 3 Water Funding



The budget line is based on the maintenance budgets forecast in the 2018-28 LTP for 2018/19.

Road Network updates

Stantec Site Visits

Previous Status:

- Nigel and Ali were initially booked to visit on Jan 23-26. Due to flight disruptions, only Nigel visited on 24-26 Jan.
- Shaun & Ali visited 20-23 March.
- Nigel and Ali visited in May 2018 with respect to the sealed road rehabs in Waitangi. A plane delay of one day, meant that the trip was shorter. However, they had to spend that day waiting at Christchurch airport.

Updates:

- Shaun visited during 25-28 Sept. He was accompanied by Senthuran Arulanantham, who conducted geotech investigations for a private client and the community pool.
- The next scheduled visit is 27-30 November 2018. Nigel and Ali will be attending, along with our surveyor Dave Annan. Dave will be drone surveying several projects on the island for us.
- This will be the first visit for Year 3 of the Professional Services Contract, which starts on 1 November.

Te One to Airport Roading Improvement Project

Previous Status:

- A request to review the previous seal extension design completed in 2009 was received from CIC. This was whether to see if seal extensions should be included in the next NLTP submission.
- The previous report appeared to use some creative engineering to get a positive benefit cost analysis, something that is unlikely to work with NZTA in the current climate.
- Shaun attended a meeting with NZTA during October about where to restart the investigations. NZTA would like Council to produce a 'Point of Entry' document, which outlines the project and the wider benefits.
- Once submitted, NZTA will then determine whether or not the project will proceed to further investigation.
- Shaun submitted a draft 'Point of Entry' document in Dec 2017.
- NZTA have additional questions regarding some of the claims in the document that they would like more information on.
- One thing NZTA didn't like was the title of 'Te One to Airport Seal Extension', which predetermines the solution before the full and proper assessment has taken place.
- Stantec and CIC to work together on finding some of the answers to the questions raised by NZTA. An action list has been created for both. Orrin has been assisting Shaun to pull together the missing pieces for this report.
- NZTA have stated they would intend to run it as a single stage business case for this project, if approved to move to that stage.
- While the additional money required to fund CIC's share of that might not be easily found, there could be the option to apply for that share from the Regional Economic Development Fund.
- The report was updated and sent to NZTA.
- On a positive note, NZTA do see that if the Airport is upgraded, there would be benefits in upgrading the road. For this reason, they await the outcome of the Airport Business Case Report before making any further decisions.

Updates:

- Stantec to finalise high-level estimate for a seal extension of the route for NZTA.
- NZTA have basically admitted that the only solution that would offer merit is a seal extension. Which was how we originally framed the Point of Entry document before being told to remove reference to seal extensions, as it was predetermining the solution.

Te Matarae Road Strengthening Complaint

Previous Status:

- A complaint was laid that the road strengthening on Te Matarae Road was not widening the road width in the same process. The Mayor and CEO have spoken with the complainant about the issue, while also talking to Stantec about why the road was not widened.
- Stantec informed Council that the road had very low traffic volumes that did not require the additional investment necessary to widen the road.
- The complainant rang Shaun (out of the blue) at the end of July. They were very disappointed with level of maintenance of Te Matarae Road and the fact that (in their mind) the road had been reverted from a Grade 2 to a Grade 3 road.
- Shaun to meet with complainant during his September visit. This meeting is likely to involve some Council staff/members in attendance.

Updates:

- The complainant was off-Island during Shaun's visit. Another attempt to meet up will be made during Stantec's November visit.

MPA Waitangi township road reinstatement

Previous Status:

- With the wharf project essentially complete, the reinstatement of the Waitangi roads can begin.
- With MPA decamping from the Island, it has been difficult to pin them down at times to agree terms.
- MPA have requested that FH do all the reinstatement, which has put pressure on our own maintenance sealing work, i.e. number of digouts FH might achieve.
- The sealing is occurring outside of a normal sealing season, however this was the case with the road rehabs last year. These will be even later though. Therefore, due to weather forecasts and most recent conditions, there is a possibility that work is deferred until the spring.
- FH have prepared the surface for sealing, but final testing has found that a section of Tuku Road past Hight Place has a weak pavement. FH were not initially engaged by MPA to provide a full-scale reinstatement, so it was appropriate that this was uncovered after they did the work asked of them. All costs to that point lies with MPA.
- FH need to digout approx. 125 m² of pavement and rebuild before the sealing takes place (as the sealing trucks may not be back for another couple of years). Shaun informed FH that CIC would cover their costs in the first instance and look to recover costs from MPA. MPA are aware of this, but I think will be hoping that CIC cover all this cost.
- Size of digout was 84m² in the end but will need to be done in the future when reconstruction occurs again on the island. It was too wet to provide a long-term repair.
- Cost of digout came to \$8,600. We recommend that Council follow up with MPA for payment of this amount and for costs to complete a permanent fix.
- MPA paid the \$8,600 payment for the digout.
- Dave Gedney (MPA), Bill Lind and Shaun all conducted a final joint road inspection of the sealed construction road section that was under MPA control during the project.
- There are several failures showing through in the pavement, which is a combination of: FH not having the time to address all digouts prior to sealing; failures growing beyond the digouts

Updates:

- Council to advise Stantec if MPA have made any decisions around further payments to repair the failures on the road.

<p>completed or the fact it was sealed at the start of winter and was not at ideal moisture levels.</p> <ul style="list-style-type: none"> • MPA to advise of their further involvement with the repairs. 	
NZTA Correspondence	
<p><i>Previous Status:</i></p> <ul style="list-style-type: none"> • The three-yearly NZTA audit of all contract administration procedures took place in early June. This involves both Stantec and ECAN. With the auditor based in the Stantec office. • NZTA Audit went well again from Stantec's point of view and the feedback we received from NZTA. • There may be a requirement for the auditor to visit the Island to see some account records. • Shaun & Nigel met with Mark Weeds (NZTA) on 28 July. • Mark was confident that Waikato Bridge would get funding approved, ahead of the final nationwide approval on 31 August. • He also indicated that a business case to look at the Te One to Airport corridor improvements was also likely to get a green light (pending a review of the Point of Entry report). • Shaun to attend the NLTP meeting in Christchurch with Owen on 12 September. • Waikato Bridge funding was approved (\$850k). • 	<p><i>Updates:</i></p> <ul style="list-style-type: none"> • Shaun, Nigel, Owen and Alfred met with Mark Weeds of NZTA at the end of October for a general quarterly catch-up. • Main discussion was around the upcoming technical audit in the first half of 2019 and also the Point of Entry document for the Te One to Airport improvements.
Te Awainanga Bridge approaches	
<p><i>Previous Status:</i></p> <ul style="list-style-type: none"> • Numerous public and Council complaints about the lack of traction and corrugations on this section of the network. • A short report on possible options was provided to Council, with a recommendation. • Council adopted the recommendation of the report to look at sealed options. • Need to wait for NZTA to confirm funding by the end of August. Then need to organise a survey of the road, so that some design options can be progressed for pricing. • Plan to get the area drone surveyed for the temporary bridge crossing work, so will extend this to capture the road and the wider corridor as well. 	<p><i>Updates:</i></p> <ul style="list-style-type: none"> • Drone survey set for November during Stantec visit.
Whangamoe Bridge Replacement	
<p><i>Previous Status:</i></p> <ul style="list-style-type: none"> • Stantec have sent a letter to the Maori Land Trustee to start engagement on the Whangamoe project. • The same Maori Land parcel is on both sides of the bridge, and land swap is one option proposed, to improve the alignment of the road. 	<p><i>Updates:</i></p> <ul style="list-style-type: none"> • Stantec have begun sizing the culvert/s necessary at this bridge. Early indications are that a similar culvert to that installed at Whangatete is necessary. • Drone survey of site to be conducted in November visit. • Stantec had contacted the Maori Land Trustee about the need for this project. They put us onto a local Ngati Mutunga contact to speak with instead.

Bridges	
<p><i>Previous Status:</i></p> <ul style="list-style-type: none"> • Stantec will soon start to look at options to extend Waikawa culvert on Port Hutt Road. • With the 2018/21 funding approved, Stantec has started the design process for the Whangamoe Bridge replacement for 2021. • Stantec has also started the design required for the temporary river crossings for Nairn and Te Awainanga bridges, in the unlikely event of bridge failure. 	<p><i>Updates:</i></p> <ul style="list-style-type: none"> • Drone survey of the locations of the proposed temporary bridge routes will take place in November. • That being Te Awainanga and Nairn.
Waikato Bridge Culvert Design	
<p><i>Previous Status:</i></p> <ul style="list-style-type: none"> • Historic Places were shown a very early alignment for the culvert, again they wanted us to speak with Susan Thorpe. Stantec asked her to assess on the potential upstream realignment necessary to allow the culverts to be placed perpendicular to the road. • Susan stated she has no concerns with any upstream realignment, provided that the work is taken with utmost care and does not adversely impact on the streambed. • Bryan Peters has estimated the cost of repairs to bring the bridge back to 100% of Class I to be \$106k-\$120k. He also estimated the cost to construct the culvert around \$550k excluding Engineer costs for construction monitoring. • Council approved Stantec to start the application process to NZTA for the design of replacement for Waikato Bridge. • Bryan rates the highest priority replacement structure as Waipapaku on Pitt Island, followed by Waikato Bridge. It may be possible to replace Waipapaku within existing funding allocations if the cost is not too high. This structure is just north of the airstrip on Pitt Island, therefore is a vital link for Pitt Islanders. • Stantec submitted a draft report for Owen to review before submission to NZTA. NZTA has accepted the report and approved funding for design. • Bryan Peters is the lead designer for the replacement structure. Detailed design began in Jan 2017. • Our Senior Planner has raised a major concern with the time that it has been taking to deal with DOC on other projects in freshwater. • Doc are now strongly applying the Freshwater Fisheries Regulation 1983, in relation to fish passage. They are particularly focusing on culverts, which is what we are proposing for Waikato. • DOC appears not to have a clear process for applying this, which has been learnt from similar projects that our Christchurch team has worked on. This had led to delays on those projects. • This creates an increased risk that we cannot secure the resource consent within a timely manner and may delay proceedings. • Draft design is complete. Design stage estimates have been requested from FH as a comparison to the Engineer's Estimate. • Mike Smith completed a design safety audit. He identified three issues that need to be accounted for during construction. • FH have provided an estimate to construct the bridge culvert. 	<p><i>Updates:</i></p> <ul style="list-style-type: none"> • Stantec has lodged the consent application for the stream diversion, via Owen. We await outcome of the review process. • FH have been requested to supply an updated quote based on the stream diversion.

- The resource consent application has been submitted, with key stakeholders also receiving a copy to see the proposal.
- The resource consent application only needs to apply for consent for the temporary road during construction, as the culvert structure is already a permitted activity.
- Hokotehi Morori Trust and DoC have both responded to the submission with no objections to the proposed works.
- The application sits with Paul Whyte (Beca) for assessment. The outcome of which is expected in the New Year.
- Resource consent to construct has been granted.
- Council approved FH to be able to use on-island staff/plant which would help to lower the costs of the project. Also given the likely cost to construct, direct negotiation with FH is the most logical approach to awarding the contract.
- FH to finalise quote to construct and identify the biggest risk items for discussion on a suitable contingency amount.
- Stantec to finalise quote to supply construction monitoring, which will include a couple of site visits by structural engineers.
- The plan again to purchase materials ahead of construction and reimburse FH the cost of the items so that they are not bankrolling the costs. The project costs will be balanced when the materials are installed.
- Stantec to finalise drawings, and make any changes necessary post resource consent approval. One condition was to lower the invert into the stream by 300mm more than was proposed, for improved fish passage.
- FH came back with a quoted price of just over \$900k, which was a 50% increase on the provided indicative price of \$600k, once CIC had permitted FH to use local resources to bring the costs down.
- The costs came down to approx. \$600k, but a reassessment of the cost to dewater the construction site, the cost of the culverts from the supplier and a couple of other matters meant that the final construction cost increased.
- Stantec have assessed their Construction Monitoring costs to be in the vicinity of \$20-25k. Which should hopefully cost less if we can coincide inspections with a quarterly visit from Nigel, Shaun or Ali.
- Stantec is working with FH to understand why the cost has significantly increased and what might be able to be done to reduce it (if possible). This would include looking at the risk in the project and whether it is prudent for CIC to accept more risk in order to reduce the price.
- At the current price the project is not viable, which is not a good outcome for the Island.
- Stantec and FH have been discussing how to reduce costs of the project and agree the construction methodology.
- Some additions to the consent will be applied for to allow for a back-up plan of diverting the stream water in a channel cut around the work site, if the cofferdam and dewatering plan is not working. This provides a back-up plan that allows construction to continue and no down time to retrospectively apply for consent. This small cost now, could save thousands if the dewatering does not work as hoped.
- Look at getting the lagoon lowered again prior to the construction to assist with dewatering.
- Reducing the size of the culverts used on the temporary road, to save costs. Does increase risk to a washout but should be

<p>relatively quick to reinstate. This would keep any possible disruption to a minimum.</p> <ul style="list-style-type: none"> • Some other discussions to occur over the risk remaining in the contract and how to minimise that for Council. • Construction period is now looking like summer 2019. • We have been instructed to move the funding application into 2018/19 by NZTA. • FH have completed the additional field work for the secondary consent. • Frances Lojkin (Stantec Planner) will contact DoC (Dave Carlton) to discuss the proposed construction methodology change and what that means for the ecology at the stream. • This will likely require more than a letter addendum to the existing consent and additional planning work to get the diversion option consented. • Nigel revised schedule of works for FH to provide an updated quote. This will be based on the known pumping requirements of the site (now known after the field investigations). • DoC reviewed new proposed construction methodology with a stream diversion. They had no concerns if fish passage was adequately allowed for. • With the NLTP budgets approved, we can now order the culverts for the project, so that they arrive on time for construction. 	
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Stantec Rooding Forward Work Programme – November

Network and Asset Management	<ul style="list-style-type: none"> More work on RAMM data quality to satisfy NZTA requirements.
Renewal work	<ul style="list-style-type: none"> Assist FH with drainage or unsealed pavement renewals.
Waikato Bridge Replacement Design	<ul style="list-style-type: none"> Await latest quote from FH and outcome of stream diversion consent application. If all is okay, then finalise drawings for construction and provide survey set out data to FH.
Whangamoe Bridge Replacement Design	<ul style="list-style-type: none"> Get a drone survey of the site and start engaging with the adjacent landowner. Continue with culvert sizing work.
Temporary Bridge plans	<ul style="list-style-type: none"> Drone survey of the two locations identified (Nairn and Te Awainanga)

Mid-Term Rooding Forward Work Programme

Renewals	<ul style="list-style-type: none"> Look into option to extend Waikawa culvert on Port Hutt Road. Design up option for FH to order materials and construct during the year.
Site visit	<ul style="list-style-type: none"> First site visit for 2019 likely to coincide with NZTA technical review in March 2019. There could be separate project monitoring visits for Waikato Bridge prior to that.
Waikato Bridge Replacement Design	<ul style="list-style-type: none"> Perform construction monitoring as required.
Whangamoe Bridge Replacement Design	<ul style="list-style-type: none"> Engage with Susan Thorpe for an archaeological assessment, once an indicative alignment has been established.
Temporary Bridge plans	<ul style="list-style-type: none"> Continue the catchment calculations to size the necessary culverts.

Long Term Rooding Forward Work Programme

Temporary Bridge plans	<ul style="list-style-type: none"> Stantec to develop plans for temporary bridge structures for Nairn and Te Awainanga bridges, in the case that the bridges are taken out of action by a natural disaster. The plans would be used by the Contractor to quickly reinstate a bridge. This would involve metal placed on a series of culverts to bridge the watercourse.
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Rooding Work Under Action

Tuku Road	<ul style="list-style-type: none"> Monitor the failed seal area of the MPA reinstatement (in Waitangi).
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Water and Wastewater updates	
Contract Documentation	
Project:	Current Status:
Water Safety Plans and Compliance	<ul style="list-style-type: none"> • Approved WSP in place for Waitangi and Kaingaroa. All parties to be familiar with the WSPs and be proactive in identifying issues and new risks. • Stantec to finalise draft CCPs and issue to FH and CIC for approval to issue to DWA as soon as possible. • Stantec to prepare table listing priority works that are required to maintain the wastewater and wastewater infrastructure under the following categories: <ul style="list-style-type: none"> ◦ public health, ◦ environmental protection, ◦ resilience / redundancy, ◦ asset life ◦ demand / tourism growth
Water Supply	
Project:	Current Status:
Waitangi	<ul style="list-style-type: none"> • 2018 central government funding application for water supply upgrades unsuccessful. Council seeking interim funding for new UV unit at existing plant (Tikitiki). To confirm CIC position on all funding applications.
Kaingaroa – Lake Rangitai	<ul style="list-style-type: none"> • 2018 central government funding application for water supply upgrades unsuccessful. Council seeking interim funding for extending intake pipeline into deeper water (allowed for new pipeline from shore). May comprise new PE pipeline (ie welded joints) laid in existing trench, with screen hanging out into mid water (so accessible), and buoys to mark the route/location • Investigations to take place next summer (if lake levels are low) to determine whether the suction line can be extended into deeper water. Trench between intake and deeper water widened again this month. • Fish factory has been dis-connected and demolished. FH has ordered 50mm valve so can isolate half of system if required and will straighten out pipeline around Fish Factory now it is demolished. Ongoing. Line to be flushed following valve installation and any pipe modifications. • FH trialled downloading turbidity meter data to SD card in May. Stantec reviewed data but did not include turbidity readings. Filtec to demonstrate procedure to FH during annual service scheduled to take place (subject to shipping) on 12 November. • Pipeline around lake to be held down with reinforcement u-bars.
Waitangi water supply upgrade	<ul style="list-style-type: none"> • Next steps are bore drawdown test and enabling works • For bore drawdown test: <ul style="list-style-type: none"> ◦ Awaiting connection of power supply by Ian Sanson prior to undertaking 7-day pump test. FH may have other electrician who can progress this work. Ongoing. ◦ Pump will be wasting at 2.5l/s during test so FH will keep a close eye on surface flooding. Richard has discussed with Paul Whyte who advised that consent for the test is not required. • FH to commence installation of rainwater collection tanks for washdown at the wharf mid-November. • CIC to consider introduction of rules for enforcement of repairs within a certain timeframe to minimise loss of water and ensure the supply network can be maintained. • CIC to consider introduction of rainwater collection tanks at the Hotel for washdown of rental vehicles. • CIC to consider whether charges are applied for taking water from the FH yard and/or if water is only able to be taken during hours when the yard is manned (ie locked at other times). Households connected to the Waitangi scheme pay for this service through their rates. Limiting access hours would provide some control over demand; if

	appears an increasing number of people are drawing from the tank during the day and an unknown number are drawing from the tank at other times.
Reporting/ Monitoring/ Sampling Oct 2018	<ul style="list-style-type: none"> • Waitangi Water Supply <ul style="list-style-type: none"> ◦ Complies with DWSNZ for bacteria based on WSP (E.coli not detected in raw, treated or network sample). ◦ Non-compliance with DWSNZ for protozoa as Tikifiki bore lost secure status and existing UV disinfection inadequate. Treatment upgrades recommended. ◦ No total coliforms detected in any sample. ◦ Raw and treated water turbidity inadvertently not analysed this month. ◦ Softener media likely requires replacing based on hardness results from 30 October 2018 (Filtac to confirm during annual servicing) • Kaingaroa Water Supply <ul style="list-style-type: none"> ◦ Complies with DWSNZ for bacteria based on WSP (E.coli not detected in treated or network sample). ◦ Complies with DWSNZ for protozoa 'as far as practicable' based on approved WSP. However, treatment upgrades are recommended to fully comply. ◦ No total coliforms detected in treated or network sample. ◦ E.coli and total coliforms detected in raw water. NB: Supports need to secure funding to extend intake into deeper part of lake ◦ Stantec drafted a record of the sequence of events associated with the Boil Water Notice (BWN) in place from 23 August to 21 September 2018 and appended it to October 2018 monthly update. Fulton Hogan has subsequently confirmed that this was a true record. • MPA Batching Bore (Potential Future Water Supply) <ul style="list-style-type: none"> ◦ MPA bore no longer in operation (or sampled). See June 2018 monthly update for results and conclusions.
Wastewater Treatment	
Project:	Current Status:
WWTP maintenance	<ul style="list-style-type: none"> • Repairs to boundary fence awaiting funding (not awarded 2018/19) and modifications to land application system to address boggiess a few years away • Stantec to consider legal requirements for commercial premises to install and maintain grease traps to mitigate against blockages within the reticulation network. Ongoing.
Reporting/ Monitoring/ Sampling 2018	<ul style="list-style-type: none"> • Waitangi Treated Wastewater Discharge <ul style="list-style-type: none"> ◦ October results generally consistent with previous month. Results for ammonia, COD, total suspended solids and E.coli were less than or of a similar order to annual consent limit, which is a median.

Solid Waste updates

Waste Minimisation Project (MfE Waste Minimisation Fund)

Current Status:

- Certificate of Practical Completion has been issued together with a Defects Liability Period "Snag List".
- An additional "Snag List" has been completed following a visit to the islands by Phil Landmark in the week of 15 to 19 October 2018.
- Six contract meetings have been held.
- 28 NTCs have been sent, and 36 NTEs received.
- The outstanding payments are the balance of retention monies which is \$17,574.66 plus GST due to be paid at the end of May 2019.
- The baler was delivered to the MPB on 15 October 2018.
- CIC has released the surety bond.

Actions - Stantec

- Follow up on completion of the "Snag List" which includes obtaining the Code of Compliance Certificate.
- Follow up on additional "Snag List" items noted at site visit on 16 October 2018. Most important matter is fixing the roller doors.

Actions - Council

- CIC to complete construction activities at the MPB as agreed with the Contractor (concrete work outside, internal painting).
- CIC to off-load baler and fix it in place.
- CIC to construct hopper and liaise with Matt Hunt of Engineering Repairs regarding commissioning of the baler.

Landfill Operation

Current Status:

- Stantec has reviewed the resource consents and identified milestones where information / plans are to be provided.
- Stantec has drafted a landfill operations guide, based on the Landfill Management Plan and resource consent requirements.
- CIC has reviewed the guide and accepts it covers essential areas of operation.
- Stantec has prepared a Leachate Treatment Plant O&M Manual.
- Stantec has visited site in the week of 15/10 to 19/10 to assist with commissioning the leachate treatment plant and provide advice about starting landfill disposal operations.

Actions - Stantec

- Finalise the Landfill Operations Guide.
- Stantec to complete a report on CIC Waste management following the visit to the island.

Actions - Council

- CIC to prepare relevant operating manuals and Health & Safety Plans.
- CIC to address outstanding matters highlighted in the Milestone report.
- CIC to complete check lists 1 and 2 (Appendix E of the Leachate Treatment Plant O&M Manual).
- CIC to arrange for base line monitoring of groundwater at G3, G4, G5, G6, G8a, G8b, G8c and G8d.

Sludge Lagoon Project

Current Status:

- No further progress this month.
- Stantec has done an estimation of the total project price which indicates it will be approximately \$710,000 plus GST. This is based on Fulton Hogan's price of \$644,000 plus GST, and Stantec's fee of \$66,000 plus GST, of which \$51,000 has already been spent. So balance is \$659,000 plus GST.
- The available budget is \$460,000, of which \$390,000 is a grant from MOH and it has paid for the first milestone of \$51,000.
- The shortfall is then \$710,000 - \$390,000 = \$320,000.
- CIC has met with MOH and has obtained approval to carry the available funding (\$339,000) over to next financial year.
- FH has indicated it cannot commit to additional earthworks this financial year, neither does it see opportunity to reduce its prices from those already submitted.
- Project is on hold until next construction season.

Actions - Stantec

- Stantec to obtain a quote for a lining specialist to undertake the pipe penetration installation at the leachate lagoon, and then determine how best to shed water from the lagoon into the untreated effluent disposal area.

Actions - Council

- Council to determine how the balance of funding for this project (approximately \$320,000) is to be sourced.

Other Matters	
<ul style="list-style-type: none"> No further progress this month. CIC has agreed with stakeholders on the scope of work needed to remediate the closed landfills. A demolition plan has been provided for demolishing the factory at Kaingaroa which will be disposed of in the old landfill and then it is to be closed. CIC has commenced with preparing Health & Safety Plans for the MPB and landfill operations. 	<p>Actions - Stantec</p> <ul style="list-style-type: none"> No outstanding actions. <p>Actions - Council</p> <ul style="list-style-type: none"> CIC is to keep a record of the Health & safety training that it carries out in connection with solid waste management activities.

4. Works & Services

4.6 Water and Wastewater – Operation and Maintenance Monthly Summary Report to June 2018

Date of meeting	13 December 2018
Agenda item number	4.6
Author/s	Stantec New Zealand

Purpose

A summary report to Chatham Islands Council for the period January 2018 to June 2018 on Water and Wastewater – Operation and Maintenance.

Recommendations

THAT the Report be received.

Water and Wastewater – Operation and Maintenance

Summary Report
January 2018 to June 2018



Prepared for
Chatham Islands Council

Prepared by:
Stantec New Zealand

October 2018

Sign-off Sheet

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Rev. No.	Date	Description	Prepared By	Checked By	Reviewed By	Approved By
1	31/10/18	Final	MC	KN	RB	KN

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Executive Summary

The Kaingaroa and Waitangi Water Schemes and the Waitangi Wastewater Scheme are owned by the Chatham Islands Council (the Council) and are operated and maintained under contract by Fulton Hogan.

The purpose of this six monthly report is to provide a summary of information recorded for the water and wastewater schemes under the contract for the period from 1 January 2018 to 30 June 2018 and recommend actions for the Council to consider to ensure the efficient and effective operation of the schemes.

Overall, the Kaingaroa and Waitangi Water Schemes and Waitangi Wastewater Scheme have generally continued to perform adequately over this reporting period. However, remedial or upgrade works are urgently required for the schemes to meet current best practice. Key conclusions are:

Waitangi Water Scheme:

- Scheme complying with approved WSP, however as Tikitiki bore no longer has secure status the Scheme is not fully complying with the DWSNZ. The Inquiry may also see 'secure' bore classification being abolished and mandatory treatment upgrades required.
- The Council included an allowance to upgrade Waitangi Scheme and extend reticulation to Te One to fully comply with the DWSNZ without relying on 'secure' bore status in its new LTP. However, the Council's application to central government for to fund this upgrade was unsuccessful.
- The Council subsequently applied for central government funding to upgrade the treatment¹ at Tikitiki to address existing public health risks and comply with the DWSNZ in the interim, however this has also been unsuccessful to date.

Kaingaroa Water Scheme:

- Scheme complying with approved WSP, which shows the Council is taking 'all practicable steps' to comply with DWSNZ. The Inquiry may see 'all practicable steps' test abolished with subsequent requirement for mandatory treatment.
- The Council included an allowance for scheme upgrades² to address existing public health risks and enable DWSNZ compliance in its new LTP. However, the Council's application to central government to fund these scheme upgrades has been unsuccessful to date.

Waitangi Wastewater Scheme:

- Despite only one treatment train being on-line, the scheme complied with annual resource consent limits for this reporting period. This train was returned to service after extensive maintenance on 29 June 2018.

¹ Upgrade is a new, validated UV disinfection system, that could be reused if the 'full' Waitangi Upgrade with Extension to Te One proceeds at some time in the future.

² Key upgrades are extending lake intake structure, installing carbon filter to improve effectiveness of existing UV disinfection system, and installing residual chlorination.

- The land application system requires remedial work to minimise adverse environmental effects. This work is in the LTP, however Council's funding application has been unsuccessful to date.
- The existing WWTP consent should be reviewed to align with current monitoring.

Abbreviations

Acronym	Meaning
Ammonia N	Ammonia Nitrogen
cfu	Coliform Forming Unit
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
DWA	Drinking Water Assessor
DWSNZ	Drinking-water Standards for New Zealand 2005 (Revised 2008)
E.coli	<i>Escherichia coliform</i> (<i>E. coli</i>)
FAC	Free Available Chlorine
LTP	Long Term Plan
MPN	Most Probable Number
O&M	Operation and Maintenance
PHRMP	Public Health Risk Management Plan (now called a Water Safety Plan)
RBC	Rotating Biological Contactor
TSS	Total Suspended Solids
UV	Ultraviolet
WSP	Water Safety Plan
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

1 Introduction

The Waitangi community on the Chatham Islands is served by a reticulated sewerage system and treatment plant, installed in 2005, and a treated, reticulated water supply, upgraded in the same year. The Kaingaroa community is served by a treated, reticulated water supply, upgraded in 2014.

The water and wastewater systems are owned by the Chatham Islands Council (the Council) and are operated and maintained under a combined water/wastewater and roading operations and maintenance contract (the O&M Contract). The O&M Contract was awarded to Fulton Hogan in late 2015 and commenced on 1 January 2016. It is a 5 year + 1 year + 1 year contract.

The key drivers in the operation and maintenance of the water and wastewater schemes are the protection of public health and ensuring the efficient and effective operation of the schemes.

The purpose of this six monthly report is to provide a summary of information recorded for the water and wastewater schemes under the O&M Contract for the period from 1 January 2018 to 30 June 2018 (the reporting period) and recommend actions for the Council to consider to protect public health and ensure the efficient and effective operation of these schemes.

1.1 Required Upgrades to Minimise Public Health Risks

The Government Inquiry into Havelock North Drinking Water (the Inquiry) has recommended significant, wide-reaching change to the water supply industry³. Even if only some of the recommendations are endorsed by the Government, it will have significant implications for Waitangi and Kaingaroa water supplies. Hence, the Council developed its new Long Term Plan (LTP) and sought Central Government funding to allow for capital upgrades to both water supplies enable full compliance with the current drinking water standards without relying on 'secure' bore water or the caveat of "all practicable steps". For Waitangi, the upgrade also included a new bore source as the current demand exceeds the sustainable yield of the existing aquifer during summer as well as extending the reticulation to Te One, the community where the main primary school for the Island is located.

In early May the Council was informed that its funding application to upgrade the water supplies was declined. Certain upgrades included in the application are considered by Stantec to be required to minimise public health risks in the interim until funding is secured to progress with the full upgrade. These interim upgrades are summarised in Stantec's memo titled "Chatham Island Water Supplies – Interim Measures to Minimise Public Health Risks" dated 31 May 2018 (memo provided in Appendix G). This memo was used to support the Council's request for alternative external funding from central government, however this has not been successful to date.

The Council has insufficient funds to progress required interim upgrades (or the full upgrade) and is waiting on a clear direction from central government on the best way forward.

³ Summary provided in Stantec's 6-monthly report titled "Water and Wastewater – Operation and Maintenance Summary Report: July 2017 – December 2017"

2 Water Supply

2.1 Waitangi Water Supply

2.1.1 Process Overview

Raw water is drawn from the Tikitiki Bore⁴ at Tikitiki Hill. The raw water enters the water treatment plant (WTP) and is pumped through a multimedia filter (rapid sand filtration) to remove any particulate matter. The water is softened to reduce scaling in pipes from excessive hardness in the water. Disinfection is provided via UV (for protozoa protection⁵) and sodium hypochlorite dosing (proposed Critical Control Point, CCP⁶, and providing residual disinfection in the reticulation). 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.

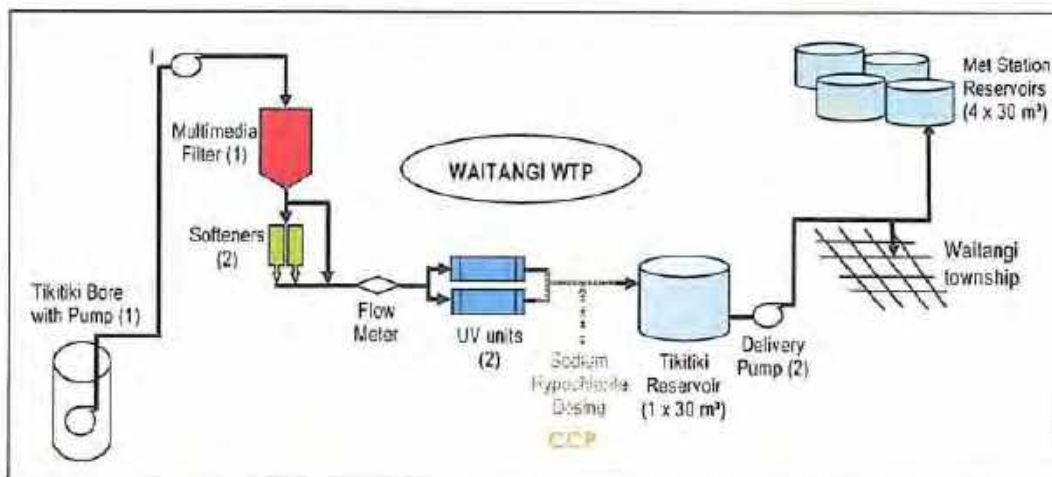


Figure 1: Schematic of the Waitangi Water Supply System showing proposed CCP

In June 2016, the Council obtained funding from the Ministry of Health to investigate an alternative bore source (including any necessary treatment) at Waitangi to supplement the Tikitiki bore as well as extend the reticulation to Te One. Stantec provided a summary report, outlining the investigations undertaken to date, options considered and the recommended upgrade option, to the Council in November 2017. The Council is currently seeking funding from Central Government for the recommended option.

2.1.1.1 DWSNZ Requirement

Water Supply Classification

The Waitangi Water Supply is classified as a small supply (i.e. less than 500 people) under the Drinking-water Standards for New Zealand 2005 (Revised 2008) (DWSNZ). As such the Council is required to take all practicable steps to comply with the DWSNZ from 1 July 2015.

⁴ The Tikitiki bore no longer has secure status. See discussion in Section 2.1.1.1.

⁵ The UV equipment is not validated and does not have any measurement of dose intensity and therefore the Waitangi unit would not be considered compliant for protozoa protection under section 5.16 of the DWSNZ. In addition, one of the two parallel UV units has failed and is unable to be repaired.

⁶ Stantec and Fulton Hogan discussed chlorination being the CCP for Waitangi with DWA during WSP Implementation Audit and are developing documentation around this CCP (required to be in place by August 2018).

The supply is recognised as a Participating Supply under section 10 of the DWSNZ. It is noted that the Tikitiki bore has lost secure status (see discussion below) so does not have appropriate protozoal treatment as per Table 10.1 in section 10 of the DWSNZ. However, the DWA considers⁷ that the Council has been working towards reinstating securing status and have made repairs to the borehead and therefore are compliant with the remedial actions requirement under Section 10.2 of the DWSNZ.

Water Safety Plan (WSP) and Implementation

The Council is required to have a WSP in place that is being implemented to be a Participating Supply under Section 10.

A WSP for the scheme was approved by the DWA on 29 July 2016. It includes the minimum monitoring required to be undertaken for ongoing DWSNZ compliance and operation. This report is based on that monitoring regime.

The DWA has carried out an WSP implementation audit, visiting the site on 6 December 2017 and providing a final report to Stantec on 8 March 2018 (report and cover letter provided in Appendix G). The report notes one non-conformance relating to bore head security (discussed further below) and one recommendation relating to staff training records (now included in Appendix F). Stantec's formal response to the DWA on 27 June 2018 is provided in Appendix G.

The DWA indicated that subsequent on-site WSP implementation inspections are likely to be undertaken at 3 yearly intervals to determine implementation progress.

Groundwater Security Status (Tikitiki Bore) and Protozoal Treatment

Tikitiki bore was granted secure status by the DWA on 27 July 2016, which meant that no treatment was required to be in place for protozoal compliance under the DWSNZ. Ongoing monitoring of the raw bore water was required to retain secure status.

Tikitiki bore lost secure status on 27 June 2018 following the DWA's WSP implementation audit in December 2017, despite Fulton Hogan carrying out remedial works to return the borehead to a similar condition as at the time of the initial borehead assessment in 2016 and the current DWSNZ only requiring a 5-yearly review of the borehead.

Without secure status, appropriate treatment is required to be in place for protozoal compliance under the DWSNZ. UV disinfection would provide protozoal treatment, however the existing UV units are not validated and now one of the two parallel units has failed and is unable to be repaired. Given this and that one of the Urgent and Early Recommendations of the Inquiry was to abolish the secure bore classification, the Council has sought funding from central government to install a new, validated UV system to address public health risks and enable DWSNZ compliance, however the funding application has been unsuccessful to date.

Despite losing secure status, the Council has continued to monitor the raw bore water as per the WSP.

Critical Control Points (CCPs)

The Council is required to have Critical Control Points (CCPs) in place for its supplies by August 2018. Stantec and Fulton Hogan discussed potential CCPs for Waitangi with the DWA during the WSP Implementation Audit and are currently developing CCP documentation for chlorination as agreed with DWA. It is not clear at this time if CCP monitoring will comprise part of DWSNZ compliance monitoring in the future.

⁷ DWA's 2017/18 annual compliance report for Waitangi Water Supply

2.1.1.2 Monitoring Regime

Overview

Monitoring is undertaken within the water supply for DWSNZ compliance as well as for WTP operation as per the WSP. This monitoring is summarised in Table 1.

Table 1: Current Water Quality Monitoring Regime

Sampling Requirement			DWSNZ Compliance		Operational Requirement	
	Frequency ⁸	Location ⁹	Parameter	Limit	Parameter	Target
Treatment Compliance						
Bacterial	Monthly	Treated water	E.coli	<1 MPN/100mL	Total coliform	<1 MPN/100mL
					Turbidity	<0.3 NTU
	Weekly	Treated water	-	-	FAC ¹⁰	0.2-0.6 mg/L
					pH	6-9
Protozoal (if 'secure' bore)	Monthly	Raw water	E.coli	<1 MPN/100mL	Total coliform	<1 MPN/100mL
					Turbidity	-
Distribution Compliance						
Bacterial	Monthly	Reticulation	E.coli	<1 MPN/100mL	Total coliform	<1 MPN/100mL

E.coli and Total Coliforms

Coliform bacteria are abundant in the faeces of warm-blooded animals, but can also be found in the aquatic environment, in soil and on vegetation. DWSNZ compliance for bacterial quality of drinking water leaving the treatment plant and within the distribution is based on a prevalence of the coliform bacteria *Escherichia coli* (E.Coli) of less than 1 MPN/100ml. DWSNZ compliance for protozoal quality of untreated water from a 'secure' bore is currently based on the same criteria and so, whilst Tikitiki bore no longer has 'secure' status, results from the raw water provide some perspective on the public health risk.

Whilst not currently required for DWSNZ compliance, total coliforms are also tested to monitor any potential contamination that may indicate a potential health risk as well as to provide evidence in support of any sampling or laboratory error. E.coli are a subset of total coliforms, and so an elevated E.coli result in the absence of an elevated total coliform result suggests a sampling or laboratory error.

FAC, pH and Turbidity

Free Available Chlorine (FAC), pH and turbidity monitoring is not currently required for DWSNZ compliance under the approved WSP. However these parameters provide an indication of the level of bacterial protection provided by residual chlorine in water leaving the WTP. Turbidity also provides an indication of the effectiveness

⁸ Maximum interval for parameters monitored monthly is 45 days and weekly is 11 days. Waitangi Water Supply is exempt from sampling on a minimum number of days of the week due to logistics of transporting samples to laboratory.

⁹ Sampling locations are: raw water - at the WTP, before the multimedia filter; treated water - at the WTP after the treated water reservoir (Tikitiki Reservoir), before entering the reticulation; reticulation - one of three locations within the reticulation (Works Yard, 10 Wilson Place, Council Building on Tuku Road), with location alternating each month.

¹⁰ Free Available Chlorine (FAC)

of the filtration process at removing any turbidity in the raw water as well as the level of bacterial and protozoal protection provided by the UV disinfection process.

FAC¹¹ and pH of the treated water has been measured with a hand-held meter on-site since the 2005 WTP upgrade. Turbidity of the raw and treated water has measured by laboratory analysis on the mainland since 26 July 2016.

Stantec and Fulton Hogan are currently developing CCP documentation for chlorination as agreed with DWA. It is not clear at this time if CCP monitoring will comprise part of DWSNZ compliance monitoring in the future.

2.1.3 E.coli and total Coliforms

The microbiological results available since 2008 are provided in Appendix B (Table B1), with the results from this reporting period shaded grey.

All required raw water, treated water and reticulation samples were collected and analysed for the required parameters, at the required frequency during this reporting period. No E.coli and Total coliforms were detected in any of the samples.

Overall, the microbiological monitoring carried out during the reporting period:

- Demonstrated bacterial compliance for treated water leaving the WTP and in the reticulation. All the required treated water and reticulation samples were analysed for E.coli at the required frequency as per the WSP and no E.coli was detected in any sample.
- Did not demonstrate protozoal compliance as the UV disinfection system is not adequate. See comments on groundwater security status and protozoal treatment in Section 2.1.1.1. However, if Tikitiki bore had retained bore water security status, the microbiological monitoring would have demonstrated bacterial compliance for bore water security (Tikitiki bore) and hence protozoal compliance for the supply based on current DWSNZ. All the required raw water samples were analysed for E.coli at the required frequency as per the WSP and no E.coli was detected in any sample.

2.1.4 pH, FAC and Turbidity

The pH, FAC and turbidity results available since 2008 are provided in Appendix B (Figure B-1, Figure B-2 and Figure B-3), with the results from this reporting period shaded grey.

All the required raw and treated water samples were collected and analysed for pH, FAC and turbidity at the required frequency during this reporting period.

The pH of the treated water has largely been within the target operational range of 6-9 since 2008. During this reporting period, the pH of the treated water has been within the DWSNZ guideline value of 7 – 8.5 for aesthetics and between 7 and 8, which is preferable for effective disinfection with chlorine. (Note that no chemicals are dosed at the WTP to control pH).

The FAC of the treated water has dropped below the target operational minimum of 0.2 mg/L for short periods from time to time since 2008, however, this has not occurred during this reporting period. Historically, to rectify

¹¹ Fulton Hogan (Chatham Islands) are authorised by South Island Drinking Water Assessment Unit to perform measurement of FAC by a hand-held meter. The authorisation is based on an assessment of Fulton Hogan staff carried by the Drinking Water Assessment on 6 December 2017 and is valid until January 2021.

the FAC during these periods, the operator typically adjusts the chlorine dose (either the dosed volume or concentration) to get a satisfactory FAC.¹²

The FAC has typically been lower than the DWSNZ guideline value (GV) of 0.6-1.0 mg/L for taste and odour since 2008, including during this reporting period.

The treated water turbidity has been lower than the operational limit of 0.3 NTU since analysis began in July 2016, and typically in the order of 0.1 NTU or less. The exception was during this reporting period in May when the treated and raw water turbidity were both abnormally high (respectively 1.23 NTU and 0.6 NTU). Operational checks did not identify a cause for the elevated turbidity and results for other parameters were consistent with previous months.

2.1.1.5 Summary

Table 2 summarises the monitoring results from the reporting period in the context of DWSNZ compliance and operational requirements as per the WSP.

Table 2: Current Water Quality Monitoring Regime

	DWSNZ Compliance	Operational Requirement
Treatment Compliance		
Bacterial	E.coli: All required treated water samples analysed and all less than limit. Compliant	Total coliform: All required treated water samples analysed and all less than limit. Compliant.
		pH and FAC: All required treated water samples analysed. pH: All results within expected bounds. FAC: All results above the target operational minimum of 0.2mg/L. Turbidity: All required raw and treated water samples analysed and all treated samples less than limit, except in May. Overall Satisfactory
Protozoa (if 'secure' bore)	E.coli: All required raw water samples analysed and all less than limit. Non-compliant as Tikitiki bore lost secure status and UV not adequate. (NB: Compliant if bore had retained 'secure' status)	Total coliform: All required raw water samples analysed and all less than limit. (NB: Compliant if bore had retained 'secure' status)
Distribution Compliance		
Bacterial	E.coli: All required reticulation samples analysed and all less than limit. Compliant	Total coliform: All required reticulation samples analysed and all less than limit. Satisfactory

2.1.2 Key Maintenance Works

¹² The most likely reason for the short-duration dips in FAC is due to an aged sodium hypochlorite solution; the effectiveness of the solution decreases as the mixture ages and so a greater dose is required to achieve the same FAC in the treated water.

Key maintenance and one-off works undertaken in the reporting period over and above routine works allowed for in the lump sum prices for the O&M Contract are summarised in Appendix A.

2.1.3 Water Conservation and Demand Management

The daily bore meter readings are shown in Figure 2. Key observations are as follows:

- The 30-day moving average for this reporting period has varied between 53 - 75 m³/day.
- The 30-day moving average exceeded the 65 m³/day sustainable yield for the aquifer during summer months in this reporting period. However of note is that the average for January to March this summer (2017/18) was higher than that for last summer (2016/17), being 70 m³/day and 61 m³/day respectively.
- The annual average usage at the end of this reporting period¹³ is 64 m³/day. Based on a population of 170 people, this equates to an average usage of 380 L/person/day.

The increase in demand observed during the past year more likely reflects the increase in population due to the Wharf Project, rather than a deterioration in water use behaviour. Whilst the majority of the Wharf Project was complete in April, the average flows seen in June 2018 (56 m³/day) are markedly higher than has been seen in June prior to the Wharf project (ie 2012, 2014 and 2015) with the exception of 2013.

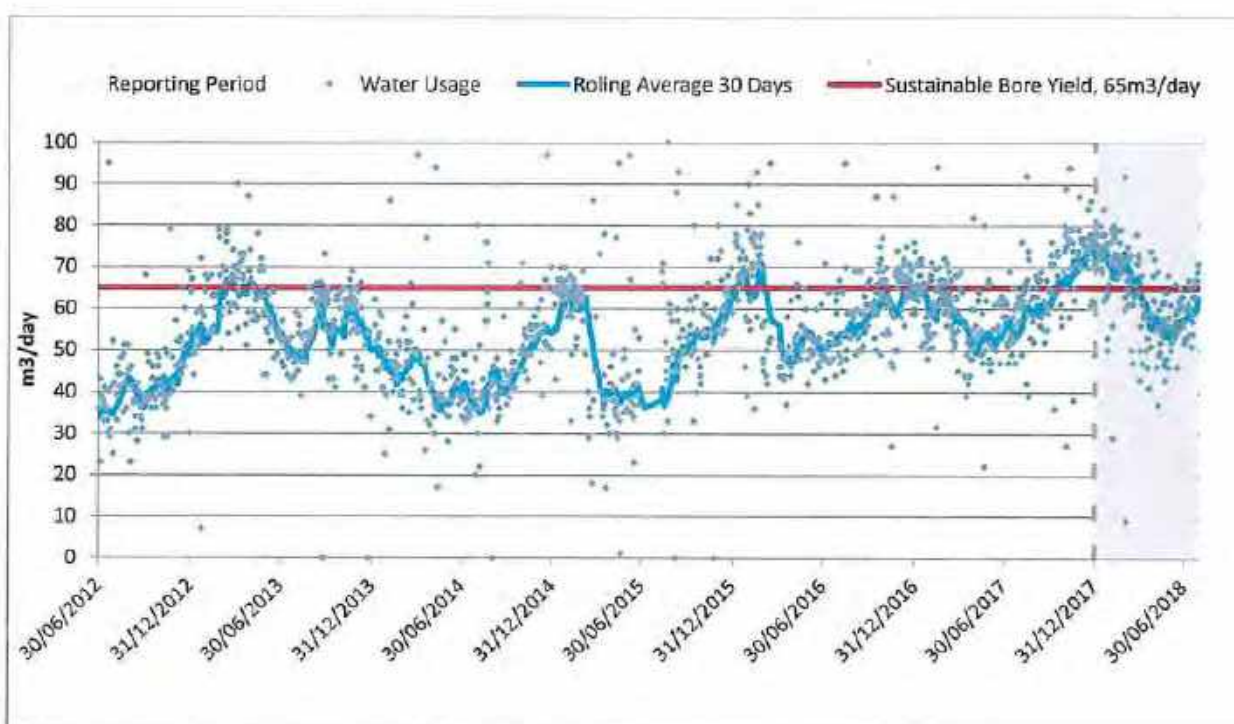


Figure 2: Daily Water Abstraction for last 5 year period

Meter readings are taken on a quarterly basis. The last meter readings were taken at the start of April 2018 with the next readings programmed for October 2018.

¹³ Based on the twelve month period from 1 July 2017 to 30 June 2018.

Figure 3 provides an overall summary of the average daily water use across the community in this reporting period. There are currently 66 active connections.

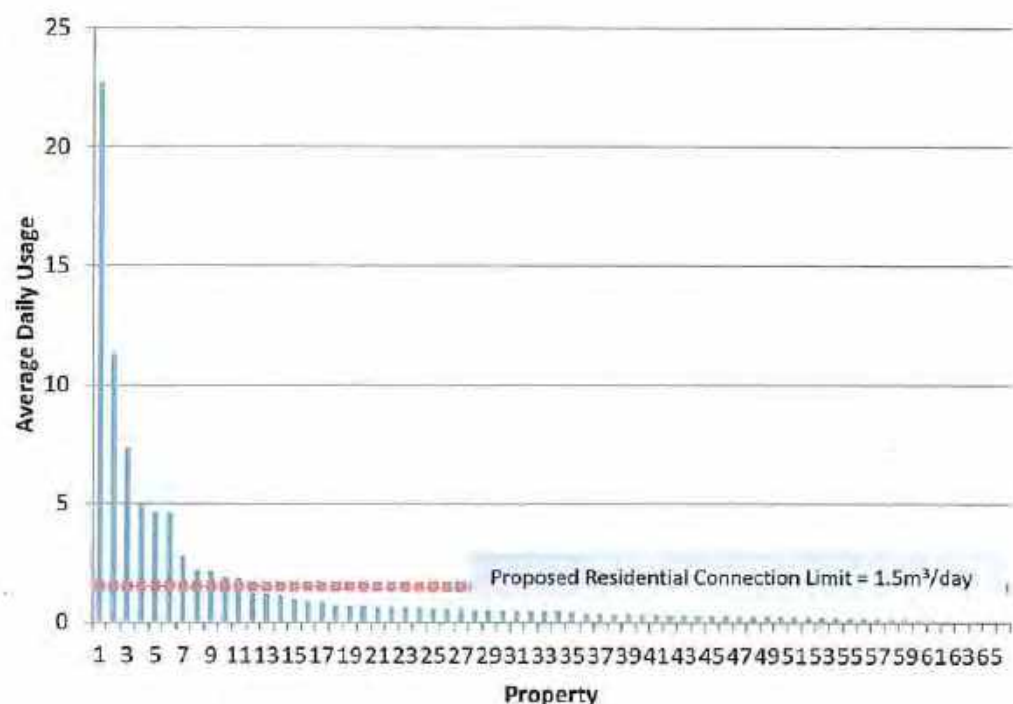


Figure 3: Ranked Average Daily Water Use in Waitangi

As shown in Figure 3, the majority of properties used significantly less than 1.5 m³/day (i.e. the proposed residential connection limit outlined in the Chatham Island Water Strategy, December 2010) in this reporting period. There were 9 exceptions, which are largely commercial connections.

2.2 Kaingaroa Water Supply

2.2.1 Process Overview

Raw water is drawn from Lake Rangitai via a screened inlet and pumped approximately 8km to the raw water reservoirs at the water treatment plant (WTP) located in Kaingaroa. There is also a rural supply connection off the raw water pumping main.

At the WTP, raw water is pumped through a multimedia filter (pre-filtration, sand and anthracite media) to remove particulate matter and protect the downstream filter from blinding, and a macrolite filter (filtration with ceramic media) to further remove particulate matter and for protozoa protection¹⁴ (proposed Critical Control Point, CCP¹⁵). The water is then softened to reduce scaling in pipes from excessive hardness in the water and

¹⁴ The macrolite filter is not currently recognised as providing protozoal protection under Section 5 or 10 of the DWSNZ, however has been verified independently by Massey University as providing 3 log protozoal treatment

¹⁵ Stantec and Fulton Hogan discussed macrolite filtration being the CCP for Kaingaroa with DWA during WSP Implementation Audit and have developed documentation around this CCP.

then disinfected via UV (for further protozoa protection¹⁶). Chlorine is not dosed due to the risk of forming disinfection by-products from the dissolved organics present in the raw water.

The raw and treated water reservoirs provide storage at the WTP site. Most properties also have a header tank and some have a booster pump. There is also a valved, piped connection from the raw water main upstream of the reservoirs to a private bulk storage tank.

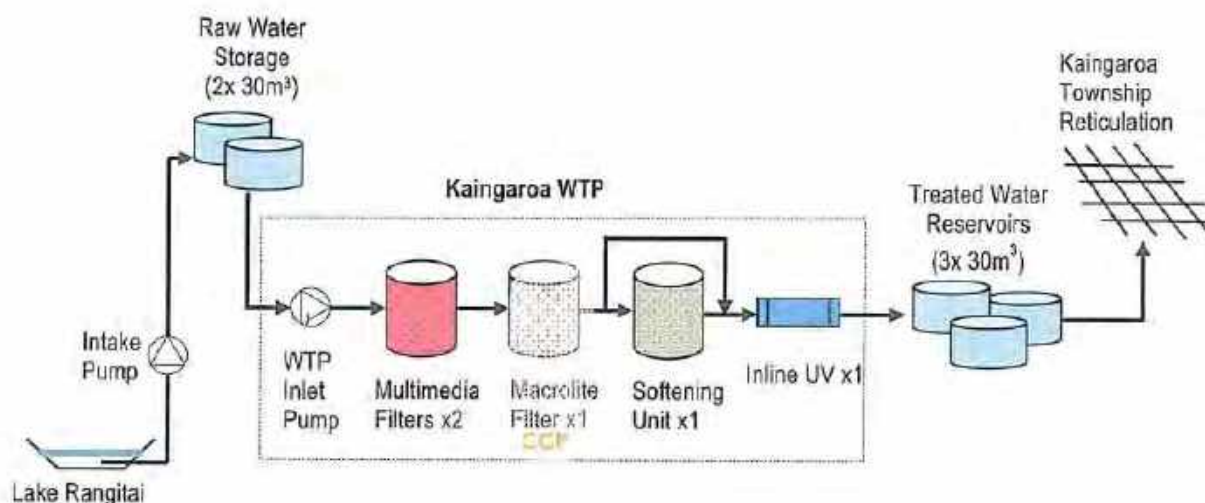


Figure 4: Schematic of the Kaingaroa Water Supply System showing proposed CCF

2.2.2 Water Quality

2.2.2.1 DWSNZ Requirements

Water Supply Classification

The Kaingaroa Water Supply is classified as a neighbourhood supply (i.e. less than 100 people) under the DWSNZ. As such the Council is required to take all practicable steps to comply with the DWSNZ from 1 July 2016.

The supply is not recognised as a Participating Supply due to not having appropriate protozoal treatment as per Table 10.1 in Section 10 of the DWSNZ. This means the supply is required to comply with Sections 4-9 of the DWSNZ.

Water Safety Plan (WSP)

The Council is not required to have a Water Safety Plan (WSP) in place, however have elected to do so¹⁷.

¹⁶ The UV disinfection unit would not be considered compliant for protozoal protection under section 5.1.6 of the DWSNZ due to insufficient validation. The extent of protozoan removal is not readily quantifiable as the filtered UV transmittance (UVT) of the lake water can be low (eg 50-60%) for extended periods. To maximise UV dose delivery, the UV disinfection unit was selected to be significantly oversized hydraulically, being validated for 3 log protozoal credits under the USEPA at 75% UVT for flows up to 189 L/min but the flow to the unit at Kaingaroa is restricted to 37 L/min.

¹⁷ This was originally as the Council understood that Kaingaroa would be recognised as a participating supply. In late 2017, the DWA highlighted this was not currently possible under Section 10.

A WSP for the scheme was approved by the Drinking Water Assessor on 5 August 2016. It includes the minimum monitoring required to be undertaken for ongoing WSP compliance and operation. This report is based on that monitoring regime.

The DWA has carried out an WSP implementation audit, visiting the site on 6 December 2017 and providing a final report to Stantec on 8 March 2018 (report and cover letter provided in Appendix G). The report notes one non-conformance relating to calibration of the turbidity meters and one recommendation relating to staff training records (now included in Appendix F). Stantec's formal response to the DWA on 27 June 2018 is provided in Appendix G.

The DWA indicated that subsequent on-site WSP implementation inspections are likely to be undertaken at 3 yearly intervals to determine implementation progress.

Protozoal Treatment

Appropriate treatment is required to be in place for protozoal compliance under the DWSNZ. UV disinfection would provide protozoal treatment, however the high level of dissolved organics often present in the lake water means that UV disinfection is not effective and precludes chlorination due to the risk of forming disinfection by-products. The Council has sought funding from central government to extend the lake intake structure into deeper water¹⁸ as well as to install a carbon filter¹⁹ and residual chlorination to address existing public health risks and enable DWSNZ compliance, however the funding application has been unsuccessful to date.

It is noted that whilst the current treatment process at Kaingaroa does not fully comply with the DWSNZ, prior to the upgrade it was agreed with the Ministry of Health that the current treatment process was the best practicable option to address the existing public health risks for Kaingaroa at that time. As the Ministry currently considers the Council is taking all practicable steps²⁰ to comply with the DWSNZ, the Council is currently complying with the Health (Drinking Water) Amendment Act 2007.

Critical Control Points (CCPs)

The Council is required to have Critical Control Points (CCPs) in place for its supplies by August 2018. Stantec and Fulton Hogan discussed potential CCPs for Kaingaroa with the DWA during the WSP Implementation Audit and are currently developing CCP documentation for chlorination as agreed with DWA. It is not clear at this time if CCP monitoring will comprise part of DWSNZ compliance monitoring in the future.

2.2.2.2 Monitoring Regime

Overview

Monitoring is undertaken within the water supply for WSP compliance as well as for WTP operation as per the WSP. This monitoring is summarised in Table 3.

¹⁸ Extension into deeper water proposed to ensure certainty of supply for Kaingaroa, It is hoped that this will also improve raw water quality (ie not so impacted by prevailing wind altering lake level and disturbing sediments).

¹⁹ Carbon filter proposed to remove organics and hence enable the existing UV disinfection to be effective as well as enable residual chlorination to be installed without the risk of forming disinfection by-products.

²⁰ One recommendation of the Inquiry is that the "all practicable steps" test will be removed, which would mean the Council is not complying with the Health Act.

Table 3: Current Water Quality Monitoring Regime

	Sampling Requirement		WSP Compliance		Operational Requirement	
	Frequency ²¹	Location ²²	Parameter	Limit	Parameter	Target
Source Compliance						
Bacterial	Monthly	Raw water	-	-	E.coli	-
					Total coliform	-
Treatment Compliance						
Bacterial	Monthly	Treated water	E.coli	<1 MPN/100mL	Total coliform	<1 MPN/100mL
Protozoal	Weekly ²³	Raw water	-	-	Turbidity	-
		Treated water			Turbidity	<0.3 NTU
Distribution Compliance						
Bacterial	Monthly	Reticulation	E.coli	<1 MPN/100mL	Total coliform	<1 MPN/100mL

E.coli and Total Coliforms

Coliform bacteria are abundant in the faeces of warm-blooded animals, but can also be found in the aquatic environment, in soil and on vegetation. DWSNZ compliance for bacterial quality of drinking water leaving the treatment plant and within the distribution is based on a prevalence of the coliform bacteria *Escherichia coli* (E.Coli) of less than 1 MPN/100mL.

E.coli is likely to be present in the raw water from time to time as it is a surface water source, however the WTP has been designed to provide removal of bacteria and protozoa. Whilst not required for DWSNZ compliance, E.coli testing of raw water is carried out to monitor contamination levels prior to treatment.

Whilst not required for DWSNZ compliance, total coliforms are also tested to monitor any potential contamination that may indicate a potential health risk as well as to provide evidence in support of any sampling or laboratory error. E.coli are a subset of total coliforms, and so an elevated E.coli result in the absence of an elevated total coliform result suggests a sampling or laboratory error.

Turbidity

Turbidity monitoring is not required for DWSNZ compliance under the WSP. However it provides an indication of the effectiveness of the filtration processes at removing turbidity in the raw water as well as the level of bacterial and protozoal protection provided by the UV disinfection process.

²¹ Maximum interval for parameters monitored monthly is 45 days and weekly is 11 days. Kaingaroa Water Supply is exempt from sampling on a minimum number of days of the week due to logistics of transporting samples to laboratory.

²² Manual sampling locations are: raw water - at the WTP, before the multimedia filter; treated water - at the WTP after the treated water reservoirs, before entering the reticulation; reticulation - one of two locations within the reticulation (Club, North Whaitiri), with location alternating each month. Turbidity sampling locations at the WTP are prior to multimedia filter (raw water) and after the softener but prior to the UV disinfection.

²³ Turbidity analysed continuously in raw and treated water by on-line instruments. Continuous dataset is not able to be downloaded. Displayed value is manually recorded each time the operator visits the site (at least once a week).

Turbidity is analysed in the raw and treated water by on-line instruments, with values recorded manually during operator WTP visits since 30 July 2017.

2.2.2.3 E.coli and Total Coliforms

The microbiological results since 2008 are provided in Appendix D (Table D1), with the results from this reporting period shaded grey.

All required raw water, treated water and reticulation samples were collected and analysed for the required parameters, at the required frequency during this reporting period.

E.coli and total coliforms were detected in almost all the raw water samples during this reporting period. This is expected with a surface water source.

No E.coli was detected in any treated water or reticulation samples. Whilst a reduction in coliforms was seen through the treatment process, total coliforms were detected in all treated water samples and the majority of reticulation samples. An increase in total coliforms (but not E.coli) was seen across the treatment process on 20 March. Fulton Hogan investigated and whilst treated turbidity was low, carried out a manual backwash of the filters and repeated the water quality testing on 27 March 2018, with some improvement seen in total coliforms in treated water and the network.

Overall, the microbiological monitoring carried out during the reporting period shows the Council is taking all practicable steps to comply with the DWSNZ for Kaingaroa water supply as follows.

- Demonstrated bacterial compliance for treated water leaving the WTP and in the reticulation. All the required treated water and reticulation samples were analysed for E.coli at the required frequency as per the WSP. No E.coli were detected in any sample.
- Demonstrated protozoal compliance as far as practicable as the treatment units are in place and operational as per the WSP. Noting that this treatment is not sufficient to comply with the DWSNZ.

2.2.2.4 Turbidity

Manual recording of the raw and treated water turbidity results from the on-line instruments begun during the last reporting period, with the results for treated turbidity presented in Appendix D (Figure D2).

The treated water turbidity has been lower than the operational limit of 0.3 NTU since analysis began in July 2016, and typically in the order of 0.15 NTU or less. The exception was during this reporting period on 16 and 18 May 2018 when the recorded treated water turbidity was similar to the operational limit as well as the raw water turbidity (about 0.3 NTU). This may have been due to operator recording error as raw and treated water turbidity values recorded on 21 May 2018 were of the same order as those recorded on 13 May 2018. Overall the turbidity results show the filtration units are providing adequate solids removal.

2.2.2.5 Other Monitoring

To better understand the state of the environment, Environment Canterbury analyse water from Lake Rangitai (i.e. raw water source) four times a year for range of parameters. The available data from 2005 to date is provided in Appendix C to augment raw water quality data obtained as part of the water supply monitoring. There has been no significant change in raw water quality since the last reporting period.

2.2.2.6 Summary

Table 4 summarises the monitoring results from the reporting period in the context of DWSNZ compliance and operational requirements as per the approved WSP.

Table 4: Summary of Kaingaroa WTP Monitoring Results from Reporting Period

	DWSNZ Compliance	Operational Requirement
Source		
Bacterial		E.coli and Total Coliforms: All required raw water samples analysed. Almost all above test detection limit for total coliforms and E.coli.
Treatment		
Bacterial	E.coli: All required treated water samples analysed and all less than limit. Compliant	Total coliform: All required treated water samples analysed. Total coliforms detected in all treated water samples.
		Turbidity: All treated water results less than, or similar to, limit. Monitor closely.
Distribution		
Bacterial	E.coli: All required samples analysed and all less than limit. Compliant	Total Coliforms: All required samples analysed. Total coliforms detected in five of seven reticulation samples. Monitor closely.

2.2.3 Key Maintenance Works

Key maintenance and one-off works undertaken in the reporting period over and above routine works allowed for in the lump sum prices for the O&M Contract are summarised in Appendix A.

2.2.4 Water Demand Management

There is a flow meter downstream of the UV reactors that records totalised flow. Manual recording of the totalised daily flow by the WTP Operator commenced on 30 July 2016.

The maximum daily flow observed during this reporting period was 44 m³/day, with the daily flows typically being between 5 and 25 m³/day.

The average daily flow for this reporting period was 17 m³/day. Based on a population of 60 people, this equates to an average usage of 280 L/person/day.

3 Wastewater Scheme

3.1 Waitangi Wastewater Scheme

3.1.1 Process Overview

Raw wastewater is collected from the Waitangi Township via a reticulated sewer network and pumped to the Waitangi Wastewater Treatment Plant (WWTP). At the WWTP (Figure 5), wastewater passes through an inlet screen into two flow balancing tanks, prior to being pumped to the Rotating Biological Contactor (RBC) unit 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 continues through into the final holding tank. The settled particles are pumped to a waste sludge tank, which is periodically cleaned and the accumulated sludge is disposed of, either to landfill or buried on site.

From the treated wastewater storage tank, the wastewater is pumped via the irrigation pump through two 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 disinfects the wastewater, which is then irrigated to land at the WWTP site.

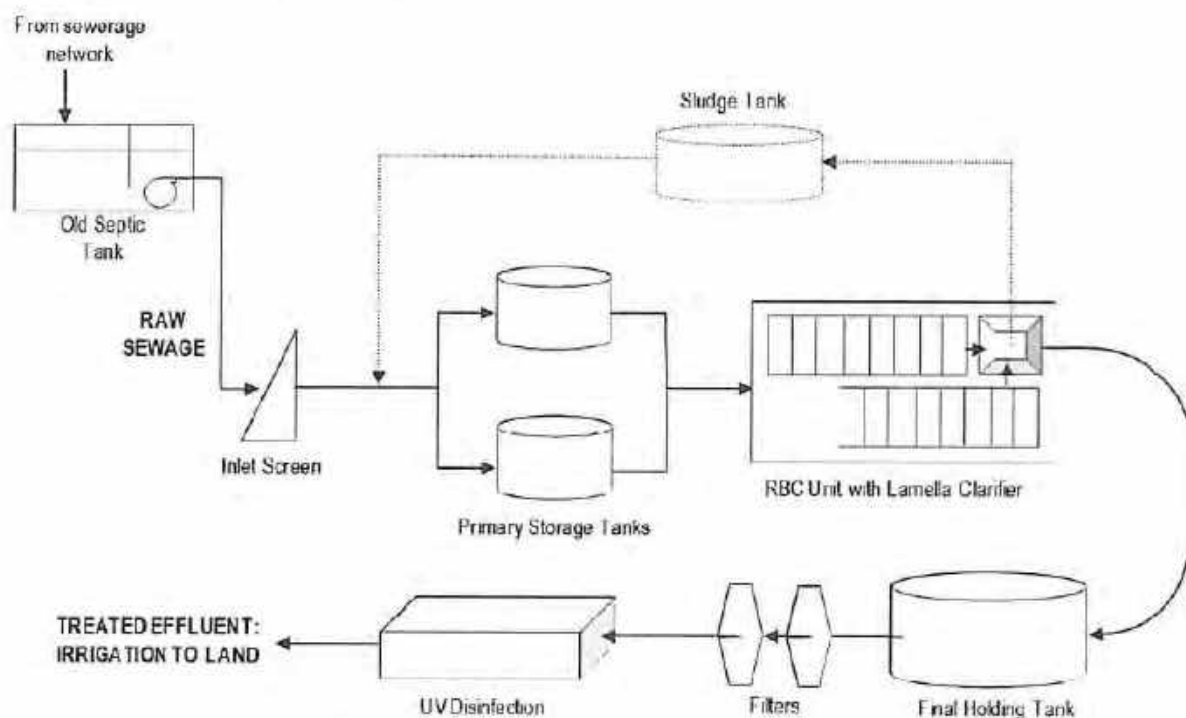


Figure 5: Waitangi Wastewater Treatment Plant Process Schematic

3.1.2 Resource Consent Requirements and Monitoring

3.1.2.1 Resource Consent Requirements

There are three resource consents for the Waitangi WWTP; discharge of treated wastewater to land, discharge of contaminants to air and discharge of contaminants into groundwater from monitoring bores. The first of these consents has monitoring and reporting requirements and the second has reporting requirements. All three consents were granted on 25 February 2005 for a period of 35 years (i.e. expire in 2040).

The current monitoring regime, including both resource consent requirements and operational requirements, is summarised in Table 5. As noted in the table, the current monitoring regime departs slightly from that outlined in the resource consent. For the purpose of this report, the WWTP operation is considered to comply with the resource consent if the consent limits given in the fourth column of Table 5 are not exceeded.

Table 5: Current Wastewater Monitoring Regime

Sampling Location	Sampling Frequency ¹	Parameter	Consent Limit ²	Operational Target	Comment
UV Reactor	Continuous (online)	UV intensity	-	-	Review data weekly
Treated Wastewater, prior to land discharge	Monthly ¹	TSS	25 mg/L	-	
		Ammonia N	25 mg/L	-	Consent limit of 30 mg/L for total nitrogen, assumed ammonia N limit informally adopted post consent award for compliance Consent also requires nitrate monitoring but no consent limit and not done
		Total COD	75 mg/L	-	Consent limit of 25 mg/L for BOD, assumed total COD limit informally adopted post consent award for compliance
		E.coli	500 cfu/100mL	-	
		Total Coliforms	-	-	Monitored but no consent limit or operational target
		pH	-	6-9	
		Electrical conductivity	-	<200 mS/m	
Discharge Meter	Daily	Volume	126 m ³ /d	-	Maximum daily volume
Irrigation Area	Daily	Irrigation depth	5mm	-	Average to individual irrigation area over 5 consecutive days
		Irrigation depth	8mm	-	Maximum depth of single application

Note

- 1 Consent requires two monthly sampling but monthly sampling is done for WWTP operation
- 2 All limits and targets are annual medians unless stated otherwise in column titled "comment"

In addition to the monitoring departures given in Table 5, the following monitoring is required under the consent but is not currently undertaken.

- Groundwater in bores upstream and downstream of the site twice annually for E.coli and nitrate nitrogen (Condition 15). This has not been carried out to date as groundwater is typically not seen in the bores. Surface water was sampled on some occasions but it is not an appropriate surrogate due to potential contamination from other sources (eg stock).
- Soil layers in the irrigation area once every two years for total phosphorous, major exchangeable ions, pH and conductivity (Condition 17). This has not been carried out. Existing treated wastewater discharge has appeared to enhance growth of vegetation in land application area.

We recommend that:

- Council re-request that Environment Canterbury review the appropriateness of the existing consent conditions and advise the Council whether an application to amend the consent conditions should be lodged so that the monitoring being carried out is consistent with consent requirements.

3.1.2.2 UV Performance

The WWTP Operator monitors the UV intensity and any UV disinfection system alarms as part of the routine WWTP operational inspection carried out at least once a week. The UV lamps are cleaned as required (e.g. on or prior to a low UV intensity alarm). The UV lamps were replaced in July 2016.

One of the RBCs was taken offline in December 2017, resulting in a deterioration in treated wastewater quality to the UV disinfection unit and potentially less removal through the UV unit (seen as higher concentrations of E.coli). Despite this, the rolling annual median at the end of this reporting period was less than the consent limit.

3.1.2.3 Treated Wastewater Quality

The treated wastewater quality data available since 2008 are provided in Appendix E with the results from this reporting period shaded grey.

All required treated water samples were collected and analysed for the required parameters during this reporting period.

One of the RBCs was taken off line in December 2017 to prevent further damage to the shaft. This resulted in a significant deterioration in treated wastewater quality in December 2017, with some acclimatisation to the new load in January and fairly similar results in February and March. April saw a significant improvement in treated wastewater quality, most likely due to the reduced load into the plant (ie coincides with completion of Wharf Project). The second RBC unit was returned to service on 29 June 2018, which should see an improvement in wastewater quality in the next reporting period.

Overall the monitoring of the treated wastewater carried out during the reporting period shows:

- Despite only one RBC being on line, the annual median treated wastewater discharge from the WWTP was complying with the resource consent limits (annual medians either in the consent or informally adopted post consent award as discussed in Section 3.1.2.1) at the end of the reporting period.
- For ammonia nitrogen, the rolling annual median at the end of this reporting period was 28 mg/L, which is slightly more than the informally adopted limit of 25 mg/L. This is largely due to reduction in performance seen with only RBC being on line. It is noted that the resource consent has a total nitrogen limit as an annual median of 30 mg/L. Total nitrogen is not measured, however based on the observed ammonia concentrations, the total nitrogen concentration may have approached or marginally

exceeded this limit. The WWTP operators currently have no ability to control the ammonia reduction achieved at the WWTP.

- The observed total coliform concentrations are typically more variable than the E.coli concentrations, however in this reporting period exceeded the test detection limit in five of the six monthly samples. As there is no consent limit for total coliforms, it is recommended that total coliform monitoring is discontinued.

3.1.2.4 Treated Wastewater Volume and Irrigation Rate

Appendix E (Figure E-8) shows the daily volume of treated wastewater discharged from the WWTP to the land irrigation area since 2008, with this reporting period shaded grey.

The daily volume exceeded the consent limit of 126 m³/day on five occasions during this reporting period. This was likely due to wet weather. No data was recorded between 4 December 2017 and 2 February 2018, in part due to maintenance (meter dismantled and cleaned).

Data required to assess the average and maximum irrigation rates, including size frequency of dosing to individual areas and irrigation volume, was not available for this reporting period. of current irrigation areas. This information would enable a comparison with the consented limits.

3.1.2.5 Complaints Received

Neither the Council nor Fulton Hogan received any public complaints about the operation of the wastewater system (e.g. ponding, overflows) or odour from the WWTP during this reporting period.

However, it is noted that Stantec and Fulton Hogan have identified options to mitigate surface water ponding and runoff associated with the land application system following a complaint from the landowner adjacent to the WWTP site last reporting period. The Council has included an allowance for this work in its Long Term Plan (LTP), however has been unsuccessful to date in securing funding for this work.

3.1.2.6 Summary

Table 6 summarises the monitoring results from the reporting period in the context of consent compliance and operational requirements.

Table 6: Summary of Wallangí WWTP Monitoring Results from Reporting Period

Item	Consent Compliance	Operational Requirement
UV intensity	UV intensity and UV alarms reviewed several times a week.	
Treated wastewater Quality	All required samples analysed. Annual median TSS, COD and E.coli less than limit and ammonia slightly greater than limit (either in consent or informally adopted) at end of reporting period. <i>Note: One RBC was taken offline in December, which has seen a deterioration in treated wastewater quality. Returned to service on 29 June.</i>	Electrical conductivity and pH within operational targets. No target for total coliforms.
Treated wastewater volume	All daily flows less than the limit, except for five days (likely due to rain)	
Irrigation Rate	Insufficient data to determine irrigation rates for reporting period.	
Complaints Log	Allowance to address surface water ponding/runoff from land application system within LTP (requires external funding). No other operational or odour complaints from public.	

3.1.3 Key Maintenance Works

Key maintenance and one-off works undertaken in the reporting period over and above routine works allowed for in the lump sum prices for the O&M Contract are summarised in Appendix A.

4 Conclusion and Recommendations

Overall, the Kaingaroa and Waitangi Water Schemes and Waitangi Wastewater Scheme have generally continued to perform adequately over this reporting period. However, remedial or upgrade works are urgently required for the schemes to meet current best practice. Key conclusions are:

Waitangi Water Scheme:

- Scheme complying with approved WSP, however as Tikitiki bore no longer has secure status the Scheme is not fully complying with the DWSNZ. The Inquiry may also see 'secure' bore classification being abolished and mandatory treatment upgrades required.
- The Council included an allowance to upgrade Waitangi Scheme and extend reticulation to Te One to fully comply with the DWSNZ without relying on 'secure' bore status in its new LTP. However, the Council's application to central government for to fund this upgrade was unsuccessful.
- The Council subsequently applied for central government funding to upgrade the treatment²⁴ at Tikitiki to address existing public health risks and comply with the DWSNZ in the interim, however this has also been unsuccessful to date.

Kaingaroa Water Scheme:

- Scheme complying with approved WSP, which shows the Council is taking 'all practicable steps' to comply with DWSNZ. The Inquiry may see 'all practicable steps' test abolished with subsequent requirement for mandatory treatment.
- The Council included an allowance for scheme upgrades²⁵ to address existing public health risks and enable DWSNZ compliance in its new LTP. However, the Council's application to central government to fund these scheme upgrades has been unsuccessful to date.

Waitangi Wastewater Scheme:

- Despite only one treatment train being on-line, the scheme complied with annual resource consent limits for this reporting period. This train was returned to service after extensive maintenance on 29 June 2018.
- The land application system requires remedial work to minimise adverse environmental effects. This work is in the LTP, however Council's funding application has been unsuccessful to date.
- The existing WWTP consent should be reviewed to align with current monitoring.

²⁴ Upgrade is a new, validated UV disinfection system, that could be reused if the 'full' Waitangi Upgrade with Extension to Te One proceeds at some time in the future.

²⁵ Key upgrades are extending lake intake structure, installing carbon filter to improve effectiveness of existing UV disinfection system, and installing residual chlorination.

APPENDICES

Appendix A: Summary of Monthly Meetings and Approved Dayworks Items

Table A-1 Minutes of Monthly Meeting as at end of Reporting Period

Chatham Islands Water & Wastewater Maintenance Contract

Record of monthly contract meeting for June 2018.

Present: Richard Bennett, Kirsten Norquay, Bill Lind

Water and Wastewater update for June 2018	
Contract Documentation	
Project:	Current Status:
Water Safety Plans	<ul style="list-style-type: none"> All parties to be familiar with requirements of the WSPs and be proactive in terms of water supply management and monitoring to ensure compliance, risk assessments and identification of new risks, Improvement planning and contingency planning. Stantec provided formal response to DWA on WSP implementation audit recommendations on 28 June 2018. Stantec to finalise draft CCPs and issue to FH and CIC for approval to issue to DWA. Before August 2018. MoH assessed Bill, Russell and Bruce on use of FAC meter on 6 December 2017. Stantec have MoH report and will include it in next 6 monthly report.
Water Supply	
Project:	Current Status:
Waitangi	<ul style="list-style-type: none"> 2018 central government funding application for water supply upgrades unsuccessful. Council seeking interim funding for new UV unit at existing plant (Tikitiki).
Kaingaroa – Lake Rangitai	<ul style="list-style-type: none"> 2018 central government funding application for water supply upgrades unsuccessful. Council seeking interim funding for extending intake pipeline into deeper water (allowed for new pipeline from shore). May comprise new PE pipeline (ie welded joints) laid in existing trench, with screen hanging out into mid water (so accessible), and buoys to mark the route/location Investigations to take place next summer (if lake levels are low) to determine whether the suction line can be extended into deeper water. Trench between intake and deeper water widened again this month. Old Kaingaroa intake pump motor will be stripped down and reconditioned ongoing. Fish factory has been dis-connected and will be demolished within the next few months. FH has ordered 50mm valve so can isolate half of system if required, and will straighten out pipeline around Fish Factory once it is demolished. Ongoing. FH to record system maintenance activities. Ongoing. FH trialled downloading turbidity meter data to SD card in May. Stantec reviewed data but did not include turbidity readings. FH to try download again.
Waitangi water supply upgrade	<ul style="list-style-type: none"> Next steps are bore drawdown test and enabling works For bore drawdown test:

	<ul style="list-style-type: none"> ○ Awaiting connection of power supply by Ian Sanson prior to undertaking 7-day pump test. Ongoing. ○ Pump will be wasting at 2.5l/s during test so FH will keep a close eye on surface flooding. Richard has discussed with Paul Whyte who advised that consent for the test is not required. Note. • For enabling works: <ul style="list-style-type: none"> ○ MPA did not complete enabling work prior to disestablishing from the Island. CIC have requested financial compensation. • CIET is keen to use MPA site as a secondary site for generators etc. • From preliminary conversations with Underground Brown, it appears directional drilling is an option for majority of pipeline between Waitangi and Te One. This would mitigate risk of archeological discovery (and hence construction delays) along pipeline route. Note. • FH and Stantec need to manage demand from Tikitiki to new wharf. Agreed with MPA that wharf would have a 30,000L tank with trickle fed/restricted supply from new bore (ie MPA batching bore). Additional take not sustainable from Tikitiki (ie need new bore online). Preliminary design report also recommended wharf collect and store rainwater from washdown to reduce potable demand. Currently no tankage or collection of rainwater at wharf. • As part of detailed design for upgrade, also need to look at practicable demand management from other commercial users from Tikitiki/new bore (restricted valves/use of Tikitiki). Bill noted that once commercial users are connected, it is too easy to use town supply. • New motel development proposal in Waitangi: <ul style="list-style-type: none"> ○ Stage 1, late 2018 – 9 units (2 people/unit). ○ Stage 2, 2019 – 8 units (2 people/unit), Managers Flat (2 people), Admin (2 people). ○ Council monitors new development. Currently any new development in area of MPA bore will be serviced by on-site wastewater systems. These would require connecting to reticulated scheme when Waitangi Water Supply Upgrade Project goes ahead.
Reporting/ Monitoring/ Sampling	<ul style="list-style-type: none"> • All Supplies – As a back-stop, Sharon to notify Bill when water supply operational targets for FAC (Waitangi) and turbidity (Kaingaroa) are not met. (Sharon manually enters the operational log book data into Water Outlook). Sharon getting training in Water Outlook soon. • Waitangi Water Supply <ul style="list-style-type: none"> ○ Complies with DWSNZ based on WSP (E.coli not detected in raw, treated or network sample). ○ No total coliforms detected in any sample. ○ Raw and treated water turbidity both are back to the normal (0.05 NTU and 0.10 NTU respectively). The high turbidity last month may be due to lab error because backwash was operational, and no other parameter was high. • Kaingaroa Water Supply <ul style="list-style-type: none"> ○ Complies with DWSNZ as per WSP (E.coli not detected in treated or network sample). ○ E.coli and total coliforms detected in raw water this month, coinciding with low level of the lake for this time of the year, therefore more likely to become more turbid during windy conditions. NB: Supports need to secure funding to extend intake into deeper part of lake. ○ Total coliforms present in treated water and detected in network. Treatment process provided adequate disinfection of E.coli (not detected post treatment) but little if any removal of total coliforms. • MPA Batching Bore (Potential Future Water Supply) <ul style="list-style-type: none"> ○ MPA bore no longer in operation. Last sample taken April 2018.

	<ul style="list-style-type: none"> Results to April 2018 support inclusion of a protozoal barrier as per proposed treatment concept (i.e. UV disinfection) for Waitangi Water Upgrade.
Wastewater Treatment	
Project:	Current Status:
WWTP maintenance	<ul style="list-style-type: none"> All bearing work complete week ending 29 June 2018. Repairs to boundary fence awaiting funding (not awarded 2018/19) and modifications to land application system to address bogginess a few years away FH understands sludge from WWTP goes to new landfill site, to leachate pond. Kirsten to raise this with Phil Landmark
Reporting/ Monitoring/ Sampling	<ul style="list-style-type: none"> Waitangi Treated Wastewater Discharge <ul style="list-style-type: none"> All wastewater flow is being diverted through one RBC unit to minimise further physical damage to the other RBC unit. This resulted in a significant deterioration in treated wastewater quality in December 2017, with some acclimatisation to the new load in January and fairly similar results in February and March. April saw a significant improvement in treated wastewater quality, most likely due to the reduced load into the plant (ie coincides with completion of Wharf Project). June results are similar to May results. That is all parameters less than or of a similar order to annual consent limit, which is a median, except for elevated E.coli, which seems to be due to sludge sitting in irrigation pipeline between UV chamber and sampling point. Stantec and FH will continue to monitor WWTP performance to better understand likely long-term treated wastewater quality with one RBC unit online and with both online following RBC repair.

Table A-2 Approved Day works Items

Note: These are items over and above those allowed for in lump sum prices in Operation and Maintenance contract.

Scheme	Date	Comment
Waitangi WWTP	June 2018	<ul style="list-style-type: none">Reaman Industries repaired RBC shaft.

Appendix B: Waitangi WTP Monitoring Data

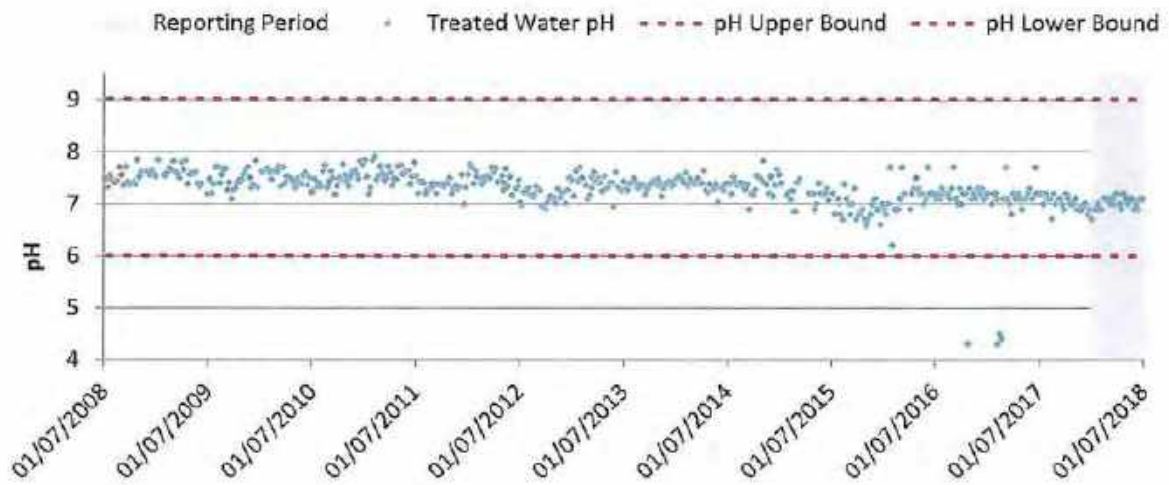


Figure B-1 Waitangi Water pH Data from January 2008

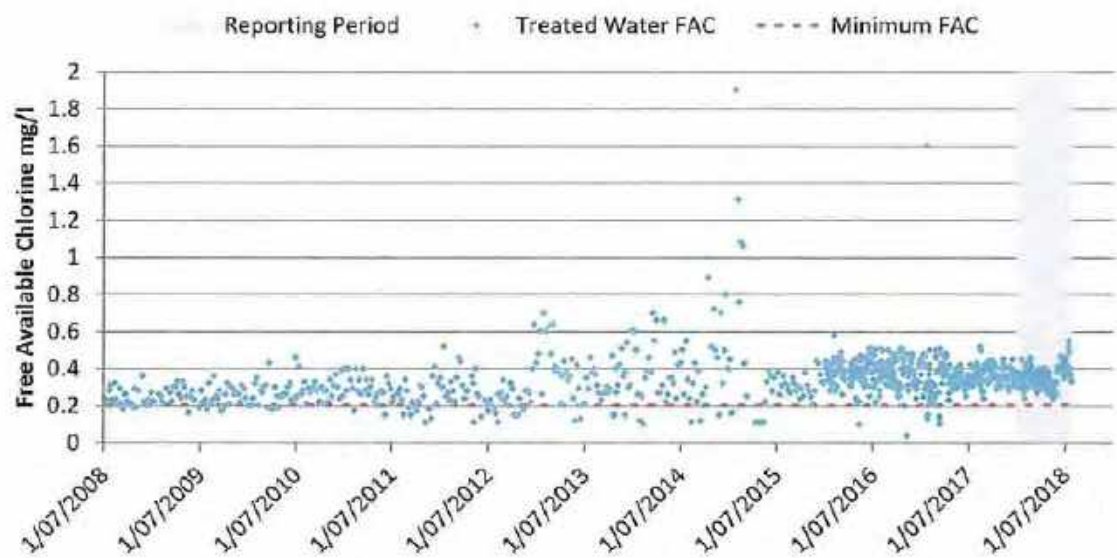


Figure B-2 Waitangi Water FAC Data from January 2008

(Note: Result on 3 January 2016 of 6.32 mg/L not shown)

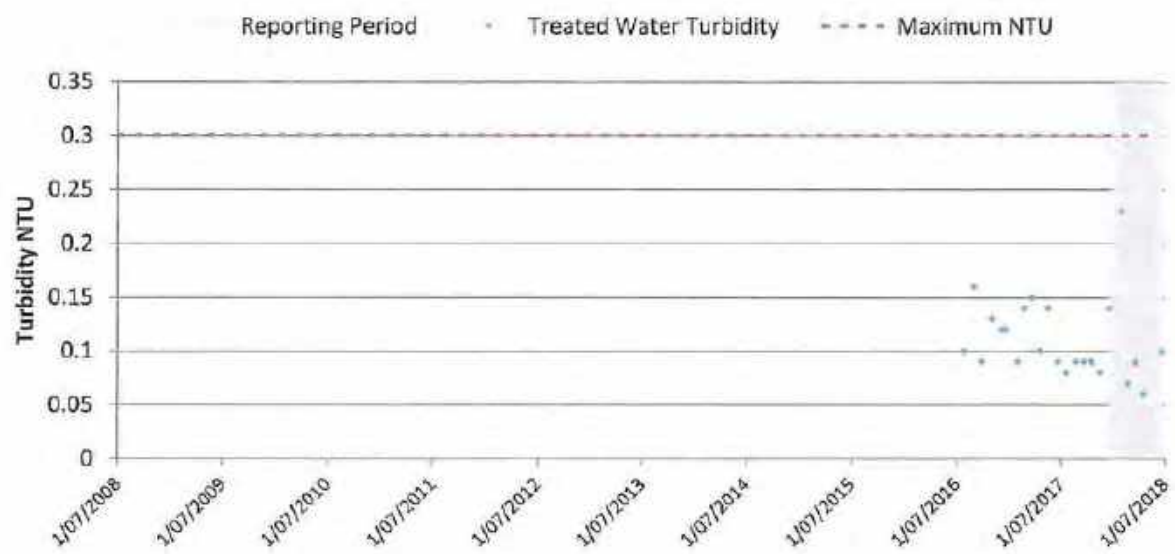


Figure B-3 Waitangi Treated Water Turbidity Data from January 2008

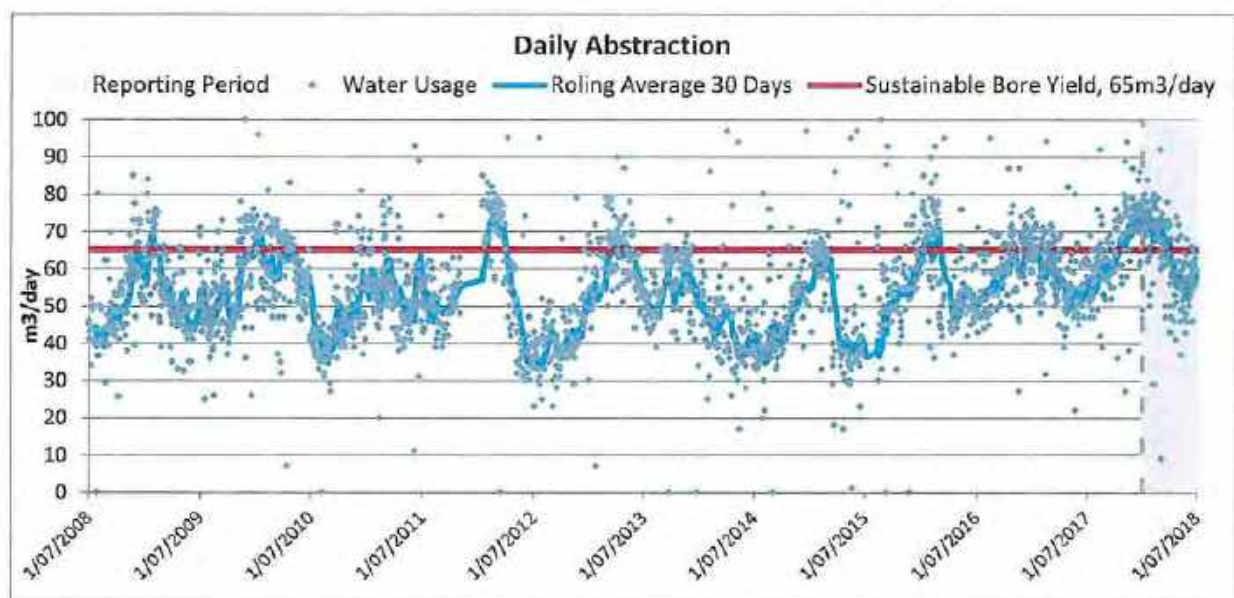


Figure B-4 Tikitiki Bore Meter Readings from July 2008

Table B-1 Waitangi WTP Microbiological Data From 2008

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)		
		Raw	Treated	Network
01/02/2008		<1		<1
26/02/2008	25	<1		<1
25/03/2008	28	<1		<1
27/05/2008	63	<1		<1
01/07/2008	35	<1		<1
29/09/2008	90	<1		<1
29/10/2008	30	<1		<1
25/11/2008	27	<1		<1
23/12/2008	28	<1		<1
27/01/2009	35	<1		<1
24/02/2009	28	<1		<1
31/03/2009	35	<1		<1
30/04/2009	30	<1		<1
29/05/2009	29	<1		<1
30/06/2009	32	<1		<1
30/07/2009	30	<1		<1
27/08/2009	28	<1		<1
29/09/2009	33	<1	<1	
29/10/2009	30	<1	<1	
24/11/2009	26	<1	<1	
22/12/2009	28	<1	<1	
26/01/2010	35	<1	<1	
23/02/2010	28	<1	<1	<1
30/03/2010	35	<1	<1	
27/04/2010	28	<1	<1	
28/05/2010	31	<1		
29/06/2010	32	<1	<1	<1
20/07/2010	21	<1	<1	
27/07/2010	7	<1		
04/08/2010	8	<1		
10/08/2010	6	<1		
17/08/2010	7	<1		
24/08/2010	7	<1		
02/09/2010	9	<1	<1	<1
07/09/2010	5	<1		
14/09/2010	7	<1		
21/09/2010	7	<1		
28/09/2010	7	<1	<1	
05/10/2010	7	<1		
12/10/2010	7	<1		
02/11/2010	21	<1	<1	
30/11/2010	28	<1	<1	
29/12/2010	29	<1	<1	<1
02/02/2011	35	<1	<1	<1
01/03/2011	27	<1	<1	
26/04/2011	56	<1	<1	<1
31/05/2011	35	<1	<1	<1
07/06/2011	7	<1	<1	<1
14/06/2011	7	<1		
28/06/2011	14	<1	<1	<1
05/07/2011	7	<1	<1	
27/07/2011	22	<1	<1	<1
30/08/2011	34	<1	<1	<1
15/09/2011	16	<1	<1	
27/09/2011	12	<1	<1	<1

Date of Sampling	Days between samples	Total (MPN/100mL)		Coliforms
		Raw	Treated	Network
29/09/2008			<1	
29/10/2008	30	<1	<1	<1
25/11/2008	27	<1	<1	<1
23/12/2008	28	<1	<1	<1
27/01/2009	35	<1	<1	<1
24/02/2009	28	<1		<1
31/03/2009	35	<1		<1
30/04/2009	30	<1		<1
29/05/2009	29	<1		<1
30/06/2009	32	<1		<1
30/07/2009	30	<1		<1
27/08/2009	28	<1		<1
29/09/2009	33	<1		
29/10/2009	30	<1		
24/11/2009	26	<1		
22/12/2009	28	<1		
26/01/2010	35	<1		
23/02/2010	28	<1	1	<1
30/03/2010	35	<1	<1	
27/04/2010	28	<1	<1	
28/05/2010	31	<1		
29/06/2010	32	<1	<1	
27/07/2010			<1	
02/09/2010	37	<1	<1	<1
28/09/2010	26		<1	
02/11/2010	35	1	<1	
30/11/2010	28	<1	<1	
29/12/2010	29	<1	<1	<1
02/02/2011	35	<1	<1	<1
01/03/2011	27	<1	<1	
26/04/2011	56	<1	<1	<1
31/05/2011	35	38	<1	1
07/06/2011	7	>201	<1	<1
14/06/2011	7	4		
28/06/2011	14	1	1	<1
05/07/2011	7	<1	<1	
27/07/2011	22	<1	<1	<1
30/08/2011	34	<1	<1	<1
15/09/2011	16	<1	<1	
27/09/2011	12	<1	<1	<1

Table B-1 Waitangi WTP Microbiological Data (Continued)

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Date of Sampling	Days between samples	Total (MPN/100mL)		Coliforms
		Raw	Treated	Network			Raw	Treated	
05/10/2011	8	<1	<1		05/10/2011	8	<1	<1	
11/10/2011	6	<1	<1		11/10/2011	6	<1	<1	
25/10/2011	14	<1	<1	<1	25/10/2011	14	<1	<1	<1
29/11/2011	35	<1	<1	1	29/11/2011	35	9	<1	1
06/12/2011	3	<1	<1	<1	06/12/2011	3	<1	<1	<1
20/12/2011	14	<1	<1	<1	20/12/2011	14	2	<1	<1
31/01/2012	42		<1	<1	31/01/2012	42		<1	1
07/02/2012	7	<1			07/02/2012	7	<1		
29/02/2012	22	<1	<1	<1	29/02/2012	22	<1	<1	<1
27/03/2012	27	<1	<1		27/03/2012	27	<1	<1	<1
24/04/2012	28	<1	<1	<1	24/04/2012	28	<1		>201
08/05/2012	13	NT	NT	<1	08/05/2012	14	NT	NT	<1
29/05/2012	21	<1	<1		29/05/2012	21	<1	<1	<1
26/06/2012	28	<1	<1	<1	26/06/2012	28	<1	<1	<1
31/07/2012	35	<1	<1	<1	31/07/2012	35	<1	<1	<1
20/12/2012	142		<1	<1	20/12/2012	142		<1	<1
29/01/2013	40	<1	<1	<1	29/01/2013	40	<1	<1	1
12/02/2013	14	NT	NT	1	12/02/2013	14	NT	NT	2
19/02/2013	7	NT	NT	<1	19/02/2013	7	NT	NT	<1
26/02/2013	7	<1	<1	<1	26/02/2013	7	<1	<1	<1
26/03/2013	28	<1	<1	<1	26/03/2013	28	<1	<1	<1
30/04/2013	35	<1	<1	<1	30/04/2013	35		<1	<1
29/05/2013	29	<1	<1	<1	29/05/2013	29	<1	<1	<1
25/06/2013	27	<1	<1	<1	25/06/2013	27	<1	<1	<1
30/07/2013	35	<1	<1	<1	30/07/2013	35	<1	<1	<1
27/08/2013	28	<1	<1	<1	27/08/2013	28	<1	<1	<1
24/09/2013	28	<1	<1	<1	24/09/2013	28	<1	<1	<1
29/10/2013	35	<1	<1	<1	29/10/2013	35	<1	<1	<1
26/11/2013	28	<1	<1		26/11/2013	28	<1	<1	<1
17/12/2013	21	<1	<1		17/12/2013	21	<1	<1	<1
28/01/2014	42	<1	<1	<1	28/01/2014	42	<1	<1	<1
25/02/2014	28	2	<1	<1	25/02/2014	28	5	<1	<1
04/03/2014	7	<1	<1	NT	04/03/2014	7	4	<1	NT
11/03/2014	7	<1			11/03/2014	7	<1		
29/04/2014	49	>201	<1	<1	29/04/2014	49	<1	<1	<1
06/05/2014	7	<1	<1	NT	06/05/2014	7	<1	<1	NT
28/05/2014	22	<1	<1	<1	28/05/2014	29	<1	<1	<1
24/06/2014	27	<1	<1	<1	24/06/2014	27	<1	<1	<1
29/07/2014	35	<1	<1	<1	29/07/2014	35	<1	<1	<1
26/08/2014	28	<1	<1	<1	26/08/2014	28	<1	<1	<1
30/09/2014	35	<1	<1	<1	30/09/2014	35	<1	<1	<1
28/10/2014	28	<1	<1	<1	28/10/2014	28	<1	<1	<1
02/12/2014	35	<1	<1	<1	02/12/2014	35	<1	<1	<1
23/12/2014	21	<1	<1	<1	23/12/2014	21	<1	<1	<1
27/01/2015	35	<1	<1	<1	27/01/2015	35	<1	<1	<1
24/02/2015	28	<1	<1	<1	24/02/2015	28	<1	<1	<1
31/03/2015	35	<1	<1	<1	31/03/2015	35	<1	<1	<1
28/04/2015	28	<1	<1	<1	28/04/2015	28	<1	<1	<1
26/05/2015	28	<1	<1	<1	26/05/2015	28	<1	<1	<1
7/07/2015	42	<1	<1	<1	7/07/2015	42	<1	<1	<1
28/07/2015	21	<1	<1	<1	28/07/2015	21	<1	<1	<1
25/08/2015	28	<1	<1	<1	25/08/2015	28	<1	<1	<1
29/09/2015	35	<1	<1	<1	29/09/2015	35	<1	<1	<1
27/10/2015	28	<1	<1	<1	27/10/2015	28	<1	<1	<1
24/11/2015	28	<1	<1	<1	24/11/2015	28	<1	<1	<1
22/12/2015	28	<1	<1	<1	22/12/2015	28	<1	<1	<1

* Reticulation samples taken from following locations: Works Yard, Wilson Place, Council House

Table B-1 Waitangi WTP Microbiological Data (Continued)

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
26/01/2016	35	<1	<1	<1	26/01/2016	35	<1	<1	<1
23/02/2016	28	<1	<1	<1	23/02/2016	28	<1	<1	<1
29/03/2016	35	<1	<1	<1	29/03/2016	35	<1	<1	<1
26/04/2016	28	<1	<1	<1	26/04/2016	28	<1	<1	<1
31/05/2016	35	<1	<1	<1	31/05/2016	35	<1	<1	<1
5/07/2016	35	<1	<1	<1	5/07/2016	35	<1	<1	<1
26/07/2016	21	<1	<1	<1	26/07/2016	21	<1	<1	<1
30/08/2016	35	<1	<1	<1	30/08/2016	35	<1	<1	<1
27/09/2016	28	<1	<1	<1	27/09/2016	28	<1	<1	<1
1/11/2016	35	<1	<1	<1	1/11/2016	35	<1	<1	<1
6/12/2016	35	<1	<1	<1	6/12/2016	35	<1	<1	<1
30/12/2016	24	<1	<1	<1	30/12/2016	24	<1	<1	<1
31/01/2017	32	<1	<1	<1	31/01/2017	32	<1	<1	<1
21/02/2017	21	<1	<1	<1	21/02/2017	21	<1	<1	<1
21/03/2017	28	<1	<1	<1	21/03/2017	28	<1	<1	<1
18/04/2017	28	<1	<1	<1	18/04/2017	28	4	<1	<1
16/05/2017	28	<1	<1	<1	16/05/2017	28	16	<1	<1
20/06/2017	35	<1	<1	<1	20/06/2017	35	3	<1	<1
24/07/2017	34	<1	<1	<1	24/07/2017	34	1	<1	<1
22/08/2017	29	<1	<1	<1	22/08/2017	29	<1	<1	<1
19/09/2017	28	<1	<1	<1	19/09/2017	28	<1	<1	<1
17/10/2017	28	<1	<1	<1	17/10/2017	28	<1	<1	<1
14/11/2017	28	<1	<1	<1	14/11/2017	28	1	<1	<1
19/12/2017	35	<1	<1	<1	19/12/2017	35	<1	<1	<1
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

* Reticulation samples taken from following locations: Works Yard, Wilson Place, Council House.

Appendix C: Lake Rangitai Water Quality Data

Source: Environment Canterbury

Year	Month	Day	Time	Location	Activity	Duration	Frequency	Intensity	Notes	Remarks	Signature	Date
2018	Jan	01	10:00	Room 101	Meeting	15	1	Low	Initial meeting with team.			2018-01-01
2018	Jan	05	14:30	Room 101	Meeting	15	1	Low	Follow-up meeting.			2018-01-05
2018	Jan	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-01-10
2018	Jan	15	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-01-15
2018	Jan	20	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-01-20
2018	Jan	25	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-01-25
2018	Jan	30	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-01-30
2018	Feb	05	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-02-05
2018	Feb	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-02-10
2018	Feb	15	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-02-15
2018	Feb	20	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-02-20
2018	Feb	25	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-02-25
2018	Feb	28	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-02-28
2018	Mar	05	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-03-05
2018	Mar	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-03-10
2018	Mar	15	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-03-15
2018	Mar	20	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-03-20
2018	Mar	25	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-03-25
2018	Mar	30	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-03-30
2018	Apr	05	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-04-05
2018	Apr	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-04-10
2018	Apr	15	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-04-15
2018	Apr	20	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-04-20
2018	Apr	25	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-04-25
2018	Apr	30	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-04-30
2018	May	05	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-05-05
2018	May	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-05-10
2018	May	15	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-05-15
2018	May	20	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-05-20
2018	May	25	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-05-25
2018	May	30	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-05-30
2018	Jun	05	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-06-05
2018	Jun	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-06-10
2018	Jun	15	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-06-15
2018	Jun	20	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-06-20
2018	Jun	25	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-06-25
2018	Jun	30	10:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-06-30
2018	Jul	05	14:30	Room 101	Meeting	15	1	Low	Regular meeting.			2018-07-05
2018	Jul	10	09:00	Room 101	Meeting	15	1	Low	Regular meeting.			2018-07-10
2018	Jul											

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Appendix D: Kaingaroa WTP Monitoring Data

Table D-1 Kaingaroa WTP Microbiological Data From 2013

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Total Coliforms (MPN/100mL)		
		Raw	Treated	Network*	Raw	Treated	Network*
30/07/2013		<1			<1		
27/08/2013	28	<1			<1		
24/09/2013	28	<1			<1		
29/10/2013	35	<1			<1		
26/11/2013	28	<1			<1		
17/12/2013	21	<1			<1		
28/01/2014	42	1			2		
4/02/2014	7	<1			2		
11/02/2014	7	<1			12		
11/02/2014	0	<1			8		
11/02/2014	0	<1			18		
11/02/2014	0	<1			12		
18/02/2014	7	<1			>201		
25/02/2014	7	<1			201		
29/04/2014	63	<1			3		
6/05/2014	7	<1			19		
28/05/2014	22	<1			<1		
24/06/2014	27	<1			<1		
29/07/2014	35	<1	<1	NT	<1	<1	NT
26/08/2014	28	1	<1	NT	5	<1	NT
30/09/2014	35	<1	<1	NT	2	<1	NT
26/10/2014	28	<1	<1	<1	1	<1	NT
2/12/2014	35	<1	<1	<1	<1	<1	NT
23/12/2014	21	2	<1	<1	9	<1	NT
27/01/2015	35	NT	<1	<1	NT	<1	<1
24/02/2015	28	NT	<1	<1	NT	1	<1
31/03/2015	35	2	<1	<1	11	<1	<1

NT – sample Not Taken

* Reticulation samples taken from the following locations: Club and North Whaitiri

Table D-1 Kaingaroa WTP Microbiological Data From 2013 continued

Date of Sampling	Days between samples	E.coli (MPN/ 100mL)			Total Coliforms (MPN/100mL)		
		Raw	Treated	Network*	Raw	Treated	Network*
28/04/2015	28	12	<1	<1	41	<1	<1
26/05/2015	28	5	<1	<1	14	<1	<1
7/07/2015	42	<1	<1	<1	24	<1	<1
28/07/2015	21	<1	<1	<1	6	<1	<1
25/08/2015	28	<1	<1	<1	1	<1	1
29/09/2015	35	<1	<1	<1	1	<1	<1
27/10/2015	28	<1	<1	<1	<1	<1	<1
24/11/2015	28	1	<1	<1	2	<1	<1
22/12/2015	28	<1	<1	<1	3	<1	<1
26/01/2016	35	<1	<1	<1	4	<1	15
2/02/2016	7	1	<1	<1	9	<1	4
23/02/2016	21	6	<1	<1	62	1	1
29/03/2016	35	4	<1	<1	6	1	1
26/04/2016	28	94	<1	<1	118	18	6
31/05/2016	35	56	<1	<1	70	1	3
5/07/2016	35	3	<1	<1	17	<1	2
26/07/2016	21	9	<1	<1	15	<1	<1
30/08/2016	35	1	<1	<1	1	<1	<1
27/09/2016	28	<1	<1	<1	11	1	<1
1/11/2016	35	8	<1	<1	15	<1	1
6/12/2016	35	<1*	1*	<1	<1*	2*	<1
13/12/2016	7	<1	<1	<1	<1	<1	1
20/12/2016	7	3	<1	<1	10	<1	<1
31/01/2017	42	1	<1	<1	8	<1	<1
21/02/2017	21	3	<1	<1	43	4	<1
21/03/2017	28	21	<1	<1	165	6	50
18/04/2017	28	14	<1	<1	62	29	25
16/05/2017	28	1	<1	<1	94	19	48
20/06/2017	35	<1	<1	<1	15	8	4
24/07/2017	34	1	<1	<1	4	<1	2
22/08/2017	29	6	<1	<1	21	<1	11
29/08/2017	7	2	N/A	N/A	6	N/A	N/A
19/09/2017	21	1	<1	<1	5	<1	<1
17/10/2017	28	11	<1	<1	53	5	8
14/11/2017	28	<1	<1	<1	3	1	<1
19/12/2017	35	<1	<1	<1	15	<1	<1
30/01/2018	42	14	<1	<1	109	3	2
20/02/2018	21	12	<1	<1	>200	1	<1
20/03/2018	28	1	<1	<1	16	31	19
27/03/2018	7	1	<1	<1	15	16	3
17/04/2018	21	8	<1	<1	36	16	12
15/05/2018	28	<1	<1	<1	<1	1	<1
20/06/2018	36	2	<1	<1	9	9	6

NT – sample Not Taken

* Reticulation samples taken from the following locations: Club and North Whaitiri

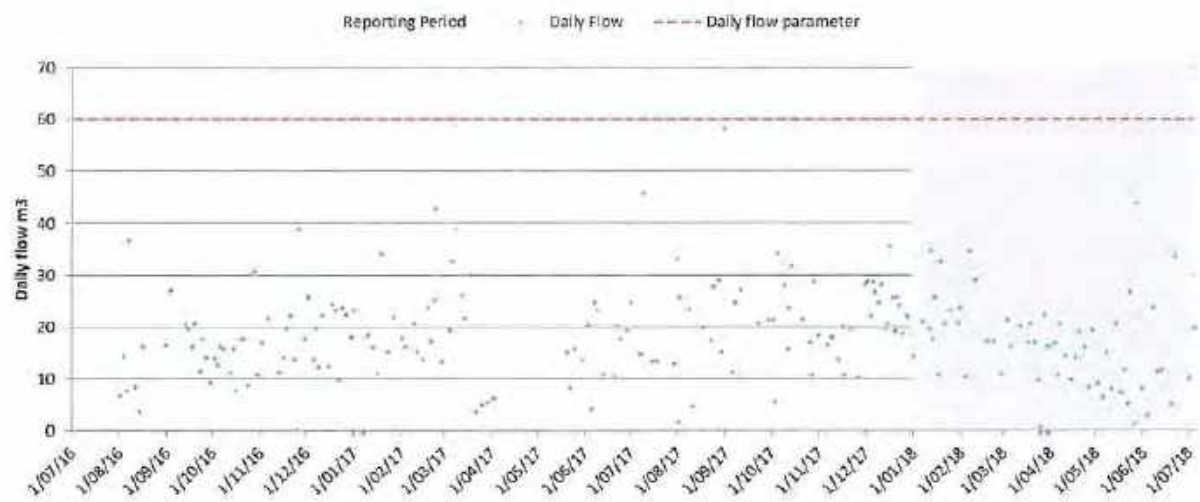


Figure D-1 Kalngaroo Water Daily Flow Data from July 2016

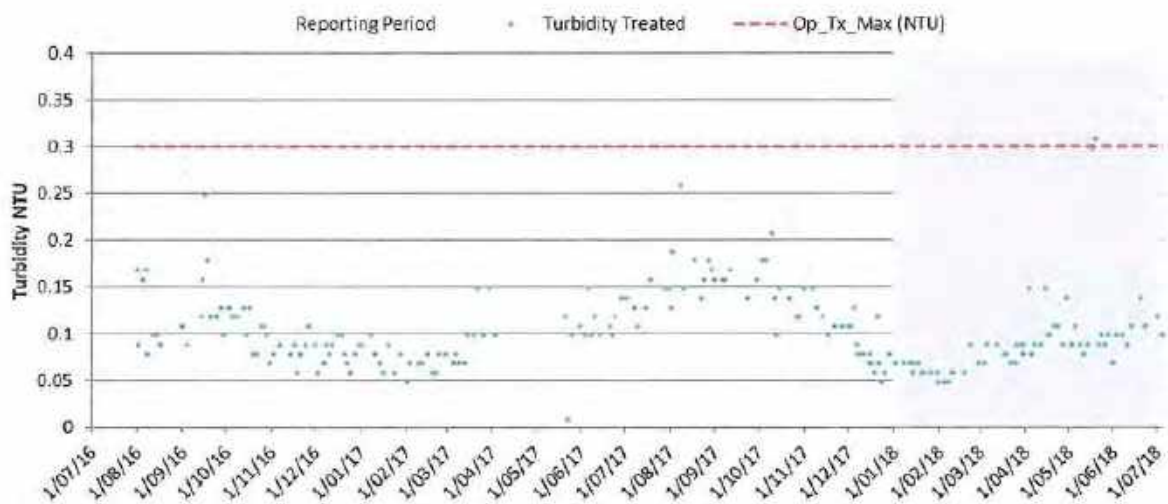


Figure D-2 Kalngaroo Water Treated Turbidity Data from July 2016

Appendix E: Waitangi WWTP Monitoring Data

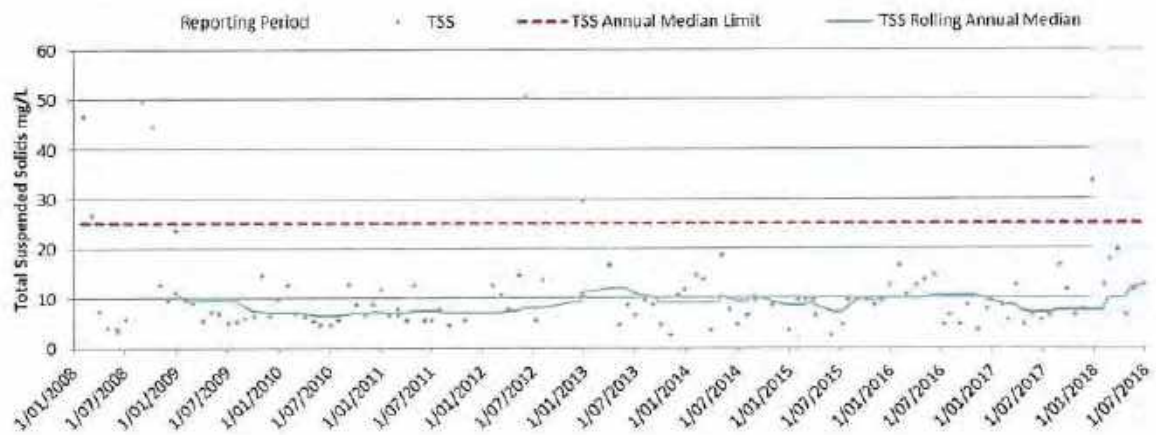


Figure E-1 Total Suspended Solids Concentrations from 2008

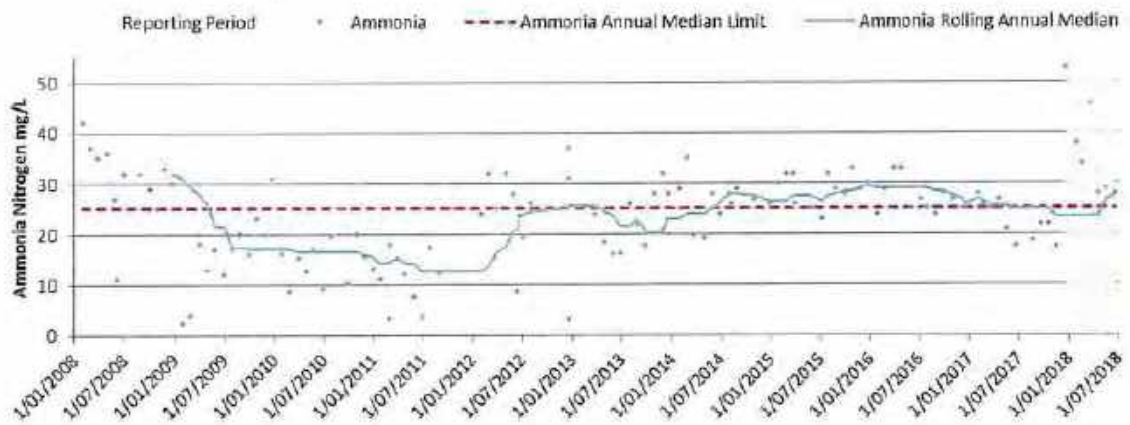


Figure E-2 Ammonia Nitrogen Concentrations from 2008.

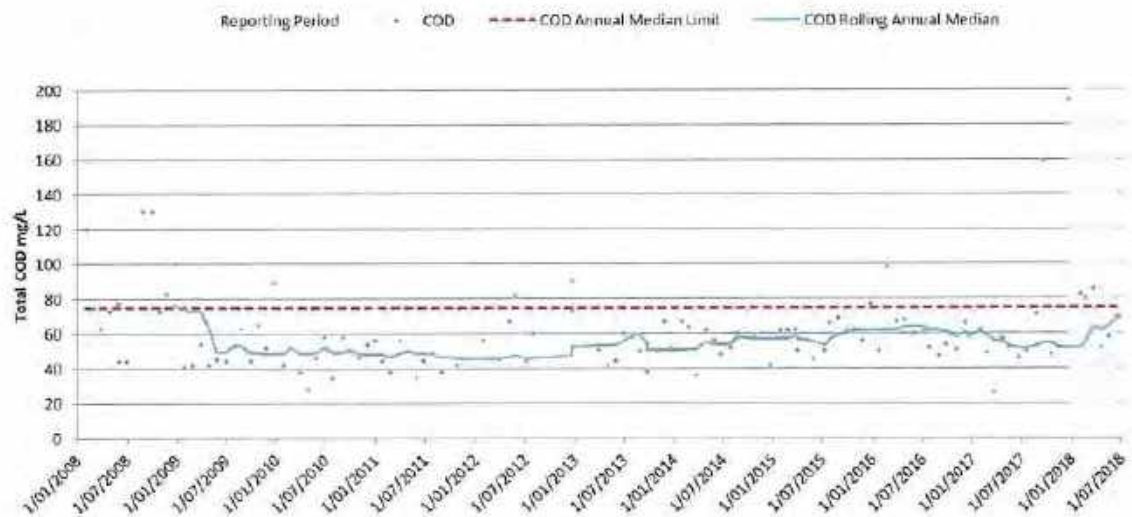


Figure E-3 Treated Wastewater Total Chemical Oxygen Demand Concentrations from 2008

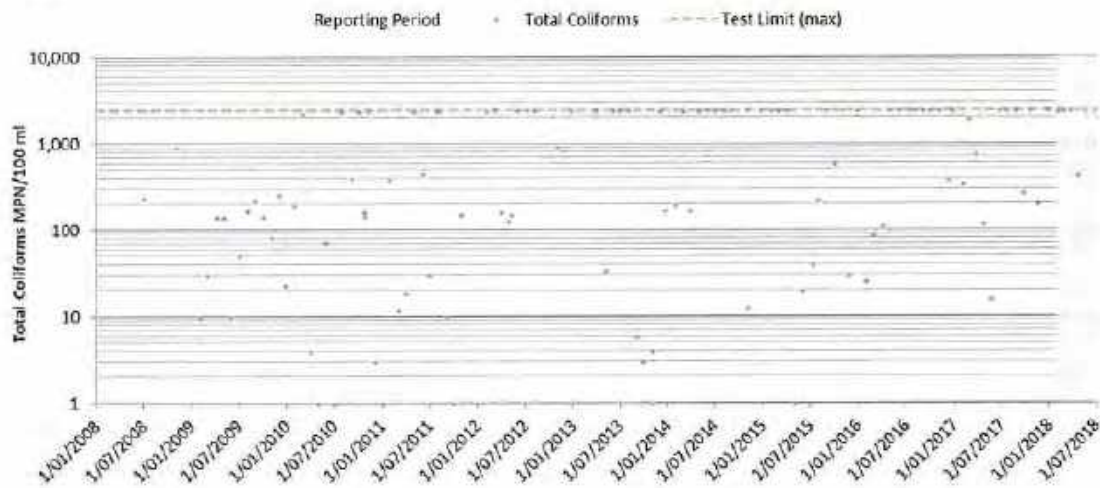


Figure E-4 Total Coliform Concentrations from 2008

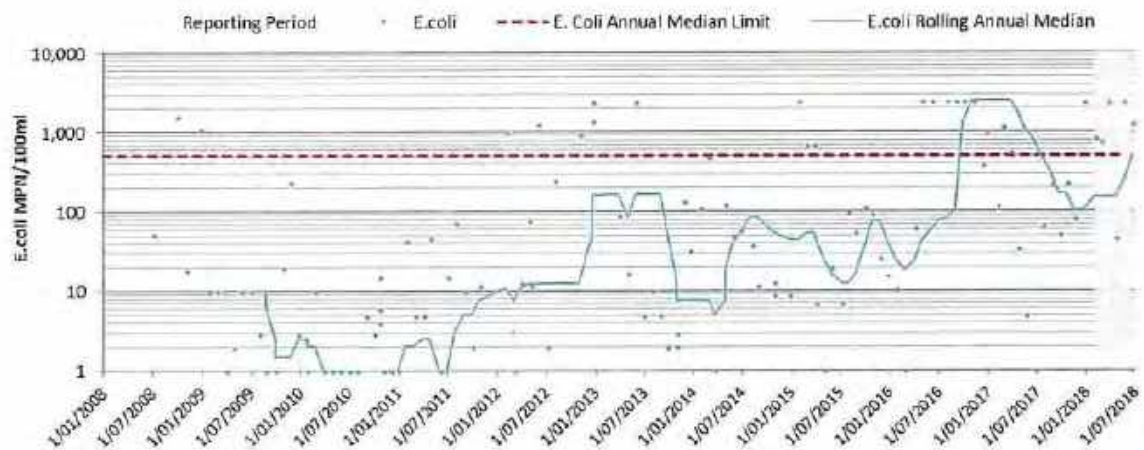


Figure E-5 E.coli Concentrations from 2008

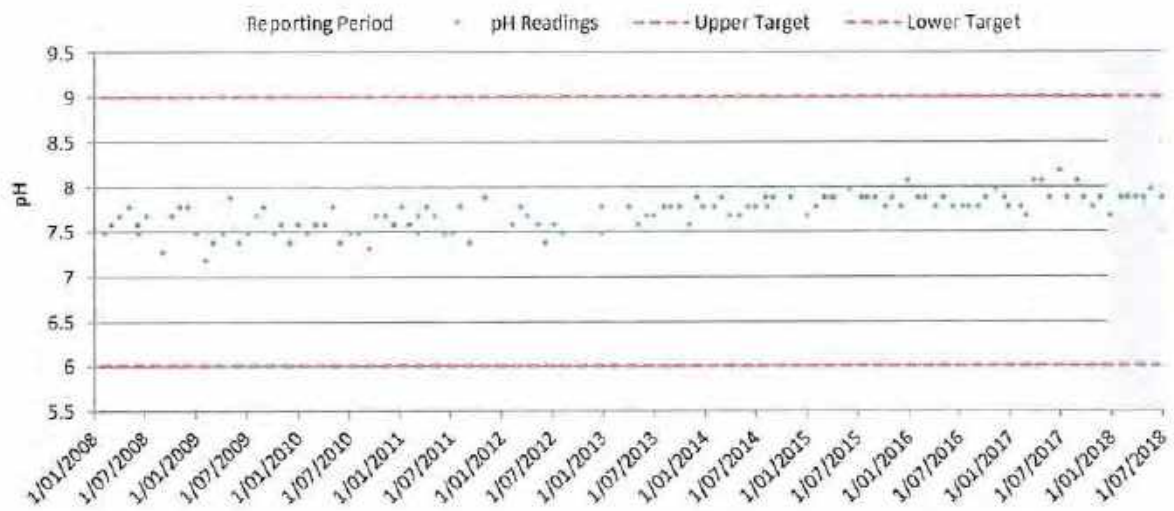


Figure E-6 pH from 2008

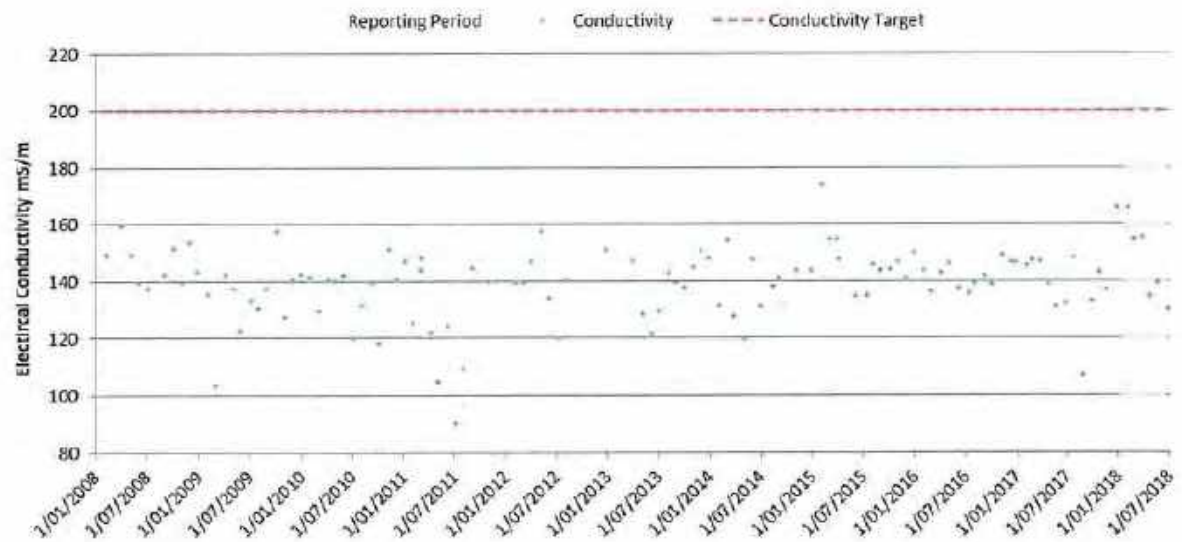


Figure E-7 Electrical Conductivity from 2008

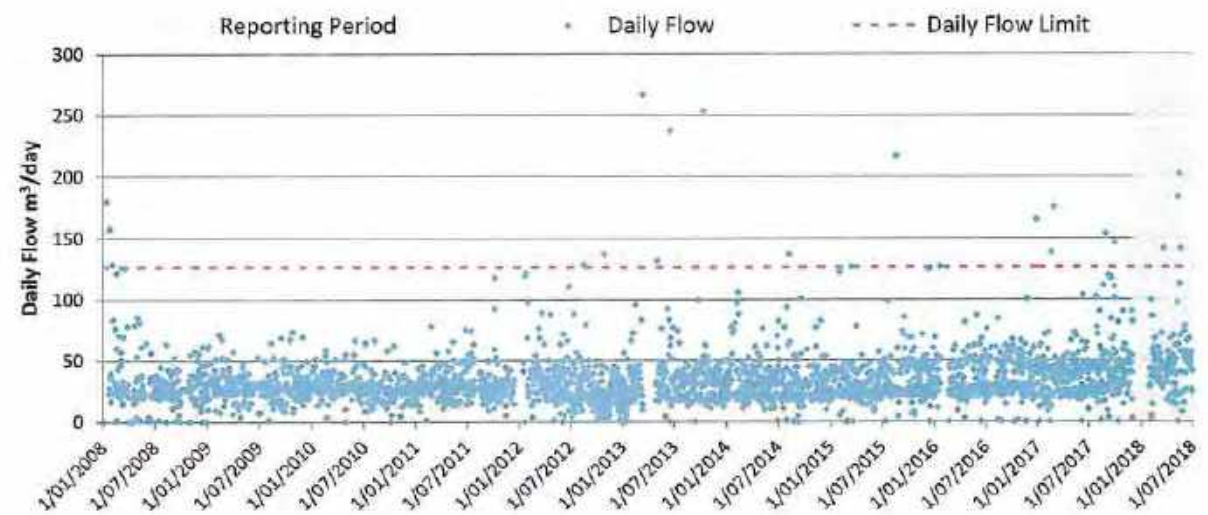
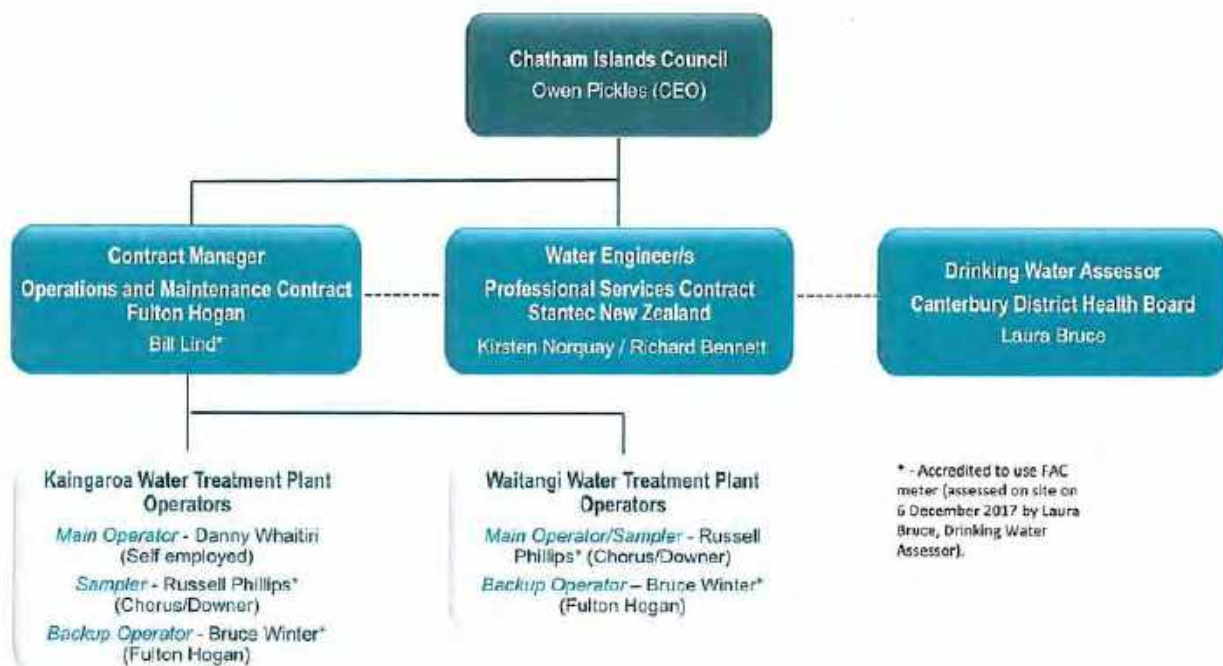


Figure E-8 Irrigation flow from 2008

Appendix F: Organisation Chart, CVs and Training Register



Qualifications/Experience Chart







Name / Biochemistry / (s)	Qualifications / Experience	Contact Details
 Kirsten Norquay Stantec NZ Water Engineer	<p>Kirsten is a chartered civil and environmental engineer who has been with Stantec for 15 years. Her qualifications include:</p> <ul style="list-style-type: none"> • BSc (Hons), Biochemistry, • BE (Hons), Civil, • Chartered Professional Engineer of Engineering New Zealand (CPEng) • Chartered Member of Engineering New Zealand (CMEngNZ). <p>Prior to joining Stantec she worked as a Biochemistry Teaching Fellow at the University of Otago. Kirsten is a versatile engineer, whose experience includes water, wastewater and solid waste management. Kirsten has worked on various projects, ranging from investigation, feasibility & consenting to design, tendering, construction & commissioning. Many of these projects have been re-consenting or plant upgrades to meet more stringent resource consent requirements or drinking water standards. Some relevant water projects include:</p> <ul style="list-style-type: none"> • Water and Wastewater Engineer, Chatham Islands Council, 2014 to present • Water Safety Plans, Chatham Islands Council, 2015-16 • Water Safety Plans, Dunedin City Council, 2016 to 2018, • Waitangi Water Scheme Upgrade, Chatham Islands Council, 2015-2017 • Outram Water Treatment upgrade, Dunedin City Council, 2009 to 2018, • Riverton Water Treatment Plant Upgrade, Southland District Council, 2013 to 2016, • Maitai Alternative Water Source, Nelson City Council, 2014 to 2015, • Kyogle Water Treatment Plant Upgrade, Kyogle Council, 2013 • Richmond Water Treatment Plant, Tasman District Council, 2012 to 2013 • Rural Water Scheme Upgrades, Waimate District Council, 2012, • Port Chalmers Water Treatment Plant, Dunedin City Council 2007 to 2010, • Rotary Park Distribution Watermain, Dunedin City Council, 2007 to 2008 <p>Kirsten is a founding member of Stantec's Water Safety Group, formed in 2016 to ensure Stantec is proactive in implementing best practice for management of safe drinking water supplied throughout NZ. Kirsten attended the WaterNZ Drinking Water Workshop in September 2017 and the WaterNZ Havelock North Inquiry Outcomes Seminar in February 2018.</p>	<p>Email: Kirsten.Norquay@stantec.com Work Phone: +64 3 474 3097 Mobile Phone: +64 27 582 5171</p>

Photo	Name / Organisation / Qualification / Experience	Contact Detail
	Richard Bennett Stantec NZ <i>Water Engineer</i>	<p>Richard has over 25 years' experience as a civil engineer and has worked on complex infrastructure projects throughout his career. He has managed all the stages of water and wastewater projects from conception through to completion or commissioning. His qualifications include:</p> <ul style="list-style-type: none"> • BEng, Civil Engineering, University of Newcastle upon Tyne, 1993. • Chartered Engineer, Institution of Civil Engineers (ICE), UK. • Member, Institution of Civil Engineers, UK (MICE). • Project Management Professional (PMP), International Management Institute, 2008.
		<p>He understands the need to provide robust proven treatment solutions, but through his role as Technical Discipline Leader for Stantec Asia Pacific Civil Water, he is also familiar with new products and industry capabilities.</p>
		<p>Richard is also a member of Stantec's Water Safety Group and is proactive in implementing best practice for management of safe drinking water supplied throughout NZ. He also attended the WaterNZ Drinking Water Workshop in Hamilton in September 2017.</p>
		<p>Richard is skilled at focusing on critical problems and finding the best possible outcome. He is proud that all treatment plants that he has had an involvement with recently have been commissioned and operate in accordance with the design expectations.</p>
		<p>He has extensive experience managing contracts under FIDIC including Design and Build contracts.</p>
	Bill Lind Fulton Hogan <i>Contract Manager</i>	<p>Bill Lind has been involved in the contracting industry for over 34 years with the last 20 of them directly involved with water utilities, hands on, supervisory, managerial and for over 10 years, in a technical advisory, troubleshooting and pricing capacity. Bill managed the Upper Clutha area of the QLDC infrastructure for nearly 10 years before managing the Lake Hayes Water and Wastewater scheme. He also had, until recently, a technical advisory and pricing role with the Clutha District Council Three Waters Contract, as well as the Southland District Council when Fulton Hogan held the contract. Other relevant qualifications and experience include:</p>
		<p>Email: Bill.Lind@fulthohogan.com Work Phone: +64 3 305 0791 Mobile Phone: +64 27 433 5728</p>

Profile / Organisation / CV Note	Qualifications / Experience	Contact Details
	<ul style="list-style-type: none"> • NZIM Executive Management Diploma. • STMS Level 1. • Workplace First Aid. • Forklift Operator Certificate. • Rural Fire Officer. • Various NZQA Level 5 subjects relevant to the water industry including First Aid, Health and Safety, Civil Works and Services. • NZQA Certificates in Civil Engineering Works Supervisors – Reading, Civil Engineering Works – Senior Supervisor. • Fittec Training on water treatment plant operation in Nov 2017. 	
 <p>Danny Whaliki Self Employed + Kaingaroa WTP – Main Operator</p>	<p>Danny has been the Kaingaroa WTP Operator since 2013. He previously operated the Kaingaroa Fish Factory Filtration Water Treatment Plant since 1981. Other relevant experience, qualifications and skills include:</p> <ul style="list-style-type: none"> • Operates and maintains the Kaingaroa Electricity Board and diesel generation plant. • Refrigeration technician who manages most of the refrigeration infrastructure on the Chatham Island. • Certified Fitter and Turner Engineer. • Apprenticeship training and Fitter and Turner at Bluff Engineering and Welding from 1969 to 1976. • Served in the NZ Army for 3 months under National Service 31st (and last) intake in 1972. • Involved in boat maintenance/engineering of various vessel in Chatham Islands. • Fittec Training on water treatment plant operation in Nov 2017. 	<p>Email: dandale@xtra.co.nz Work Phone: N/a Home phone: 03 305 0251 Mobile Phone: N/a</p>
 <p>Russell Phillips Chorus/Downer + Waitangi WTP – Main Operator & Sampler + Kaingaroa WTP – Sampler</p>	<p>Russell has been the WTP and WWTP operator at Waitangi since it was built in 2004. Other relevant experience, qualifications and skills include:</p> <ul style="list-style-type: none"> • Telecommunication technician for all the telecom work on the Chatham Islands including Chorus and Spark. Farmside satellite and their infrastructure. • Traineeship at Telecom New Zealand from 1987 to 1990. • St Johns First Aid Certificate. 	<p>Email: russell.phillips@downer.co.nz Work Phone: 03 305 0055 Home phone: 03 305 0150 Mobile Phone: N/a</p>

Name / Organisation / Role	Qualifications / Experience	Contact Details
	<ul style="list-style-type: none"> • National Certificate in Water Reticulation Level (Service Person) Level 3 Wastewater, 2013. • National Certificate in Water Reticulation Level (Service Person) Level 3 Water. • National Certificate in Telecommunications (Maintenance and Repair) Level 4, Mechanical, 2013. • Volunteer Fireman. • Filtec Training on water treatment plant operation in Nov 2017. 	
 <p>Bruce Winter Fulton Hogan Backup WTP Operator</p>	<p>Bruce has been the backup operator for the Waitangi WTP and Kaitangaroa WTP operator since October 2016. Other relevant experience, qualifications and skills include:</p> <ul style="list-style-type: none"> • Factory/Compliance Manager of fish factory at Rekohu/Waitangi Seafood's between 2007 to 2011. Duties included staff coordination, organising and documentation of processing, storage and shipment of product, and also included management of the company's Risk Management Programme (MAF Food Safety). • Experience in building and installing pivot irrigation units for PGG Plumbing and Irrigation, NZ between 2003-2004. • Various other experience as fuel tanker driver, bar manager, fishing boat deckhand and farmhand on dairy farm including skills in building, landscaping, chemical spraying, operating machinery and commercial fishing. • Qualified fire fighter volunteering at the Chatham Island's Fire Brigade and operating the New Zealand Fire Service electronic certification system. Passed NZFS courses in basic rural firefighting, breathing apparatus recertification, MYA pump rescue tender and Volunteer recruit Fire TMS. • Filtec Training on water treatment plant operation in Nov 2017. 	<p>Email: brucewinter@hotmail.co.nz Work Phone: 03 305 0652 Home phone: 03 305 0747 Mobile Phone: N/a</p>

Training Activities

Name / Organisation / Role	Training Activity	Trainer	Date	Duration
Kirsten Norquay Stantec NZ <i>Water Engineer</i>	• Water NZ Conference	Water NZ	19-21 Sept 2018	3 days
	• Water NZ Drinking Water Workshop	Water NZ	19 Sept 2017	1 day
	• Borehead Security Training	Stu Clarke	8 Sept 2017	5 hours
	• Site Safe Consultants Passport	Site Safe	6 April 2016	4 hours
	• Ethics and Business Conduct for Global Employees	Stantec	14 Dec 2017	1 hour
	• Process Control and Instrumentation Modules 1-3	MWH	2015	3 hours
	• Safety in Design Training	MWH	2015	1 day
Richard Bennett Stantec NZ <i>Water Engineer</i>	• Water NZ Conference	Water NZ	Sept 2015 & Sept 2017	3 days per conference
	• Water NZ Drinking Water Workshop	Water NZ	19 Sept 2017	1 day
	• Borehead Security Training	Stu Clarke	8 Sept 2017	5 hours
	• Ethics and Business Conduct for Global Employees	Stantec	14 Dec 2017	1 hour
	• Safety in Design Training	MWH	2015	1 day
Bill Lind Fulton Hogan <i>Contract Manager</i>	• Filtec Onsite Training at Waitangi and Kaingaroa WTPs	Filtec	7 & 8 Nov 2017	2 hours
	• Site Traffic Management Supervisor Refresher STMS Level 1	NZ Transport Agency	28 April 2015	1 day
	• Skills for Life Workplace First Aid Recertification	MediTrain	19 Nov 2014	1 day
	• Forklift Operator's Certificate	DriveTech Ltd, Invercargill	14 Jan 2014	1 day
	• Quality Start to Finish Course	Fulton Hogan	11 and 12 July 2011	2 days
	• Esco Executive staff course the discovery	NZ Institute of Management	20-27 Sept 2003	7 days

Name / Organisation / Role	Training Activity	Trainer	Date	Duration
Danny Whaitiri Self Employed • Kaingaroa WTP – Main Operator	• Leadership, Motivation and Team Building course	NZ Institute of Management	13-16 May 2003	4 days
	• Management – the skills and Process	NZ Institute of Management	August 2002	3 weeks
	• The New Manager Course	NZ Institute of Management	31 October 2000	1 day
	• Understanding NZ3910 Conditions of Contract	NZ Institute of Highway Technology Ltd	9 July 1996	1 day
	• Filtec Onsite Training at Kaingaroa	Filtec	7 Nov 2017	2 hours
Russell Phillips Chorus/Downer • Waitangi WTP – Main Operator & Sampler • Kaingaroa WTP – Sampler	• Filtec Onsite Training at Waitangi and Kaingaroa WTPs	Filtec	7 & 8 Nov 2017	2 hours
	• NZQA unit 6401 and 6402 – Provide First Aid and Provide Basic Life Support	NZQA	21 Jan 2017	Not specified
	• NZQA Unit 5627 Operate as a Traffic Controller (TC) for low volume and Level 1 roads	NZQA	1 Nov 2015	Not specified
	• National Certificate in Water Reticulation (Service Person) Level 3 Wastewater and also Level 3 Water	NZQA	18 June 2013	Not specified
Bruce Winter Fulton Hogan Backup Operator	• Filtec Onsite Training at Waitangi and Kaingaroa WTPs	Filtec	7 & 8 Nov 2017	2 hours
	• Growsafe Introductory Certificate – for Management of Agrichemicals	NZ Agrichemical Education Trust	19 Sep 2017	
	• St Johns First Aid Recertification	St John	2 Sept 2017	3 hours
	• Accelerated Business Growth Programme, NZ Trade and Enterprise	Aoraki Development Trust	July 2012	8 hours

Name / Organization / Role	Training Activity	Trainer	Date	Duration
	<ul style="list-style-type: none"> NZQA unit 3288 - Load Water and Additives for Aerial Operations and NZQA 20388 – Work Safely with Aircraft at Emergency Incidents 	PF Olsen Ltd	6 Sept 2009	Not known
	<ul style="list-style-type: none"> Work Safely in the Construction Industry 	Elmo Accredited	2012	6 hours
	<ul style="list-style-type: none"> MVA PRT Rev4602 firefighting qualification 	NZ Fire Service	9/5/2009	1 day
	<ul style="list-style-type: none"> TAPs Qualified Firefighter 	NZ Fire Service	7-10 Sept 2007	3 days

Appendix G: Supporting Reports

This Appendix includes:

- Stantec's memo to Council titled "Chatham Island Water Supplies – Interim Measures to Minimise Public Health Risks", dated 31 May 2018.
- DWA's letter to Council regarding "Verification of Water Safety Plan Implementation – Waitangi and Kaingaroa Drinking Water Supplies", dated 8 March 2018
- DWA's report titled "*Final report on implementation of a Drinking Water Supply's Water Safety Plan – Water Supply – Waitangi (WAI158, Chatham Islands Council)*", which states assessment date as 9/1/18
- Stantec's letter to DWA regarding "*Water Safety Plan Implementation – Waitangi and Kaingaroa Drinking Water Supplies*", dated 27 June 2018
- DWA's report titled "*Report on the authorisation of persons/organisation to perform drinking-water analyses/calibration – Organisation: Fulton Hogan, Chatham Islands - Authorisation for Free Available Chlorine Analysis*", which states assessment date as 6/12/18
- DWA's report titled "*Final report on implementation of a Drinking Water Supply's Water Safety Plan – Water Supply – Kaingaroa (KAI041, Chatham Islands Council)*", which states assessment date as 9/1/18

Chatham Island Water Supplies

Interim Measures to Minimise Public Health Risks

1 Introduction

The Chatham Islands Council (Council) provides a treated, reticulated water supply in Waitangi and Kaingaroa.

The Government Inquiry into Havelock North Drinking Water (the Inquiry) has recommended significant, wide-reaching change to the water supply industry. Even if only some of the recommendations are endorsed by the Government, it will have significant implications for Waitangi and Kaingaroa water supplies. Hence, the Council sought Central Government funding to allow for capital upgrades to both water supplies enable full compliance with the current drinking water standard without relying on 'secure' bore water or the caveat of "all practicable steps". For Waitangi, the upgrade also included a new bore source as the current demand exceeds the sustainable yield of the existing aquifer during summer as well as extending the reticulation to Te One, the community where the main primary school for the Island is located.

In early May the Council was informed that its funding application to upgrade the water supplies was declined. Certain upgrades included in the application are considered by Stantec to be required to minimise public health risks in the interim until funding is secured to progress with the full upgrade. These interim upgrades are summarised in this memo to support the Council obtaining alternative external funding.

2 Interim Upgrades

Relevant background about each supply and identified interim upgrades (with reason why they are required and indicative capital costs) are summarised in Table 1.

Table 1 – Interim Upgrades for Chatham Island Water Supplies

Supply	Background	Interim Upgrades	Reason	Cost
Waitangi	<ul style="list-style-type: none"> 'secure' bore water but DWA may revoke status Filtration, softening, UV disinfection (ineffective), chlorination One UV unit is not operational and other is at the end of its life Demand exceeds sustainable yield of aquifer 	<p>New UV unit that complies with the drinking water standards</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. UV unit sized to be reused in the full upgrade. 2. Capital cost assumes installation coincides with Filtec's annual servicing visit 3. Full upgrade addresses demand issues 	Provide effective protozoal barrier	\$20,000, excl GST
Kaingaroa	<ul style="list-style-type: none"> Ministry of Health funded 2014 upgrade; accepted as "best practicable option" but non-complying Lake water source with intake close to shore. See higher total coliforms in summer when prevailing winds reduce lake levels at intake Filtration, macro-life filter, UV disinfection (ineffective) Total coliforms can be >10 MPN/100mL in treated water in summer Lower total coliforms seen prior to 2014 upgrade when intake was in deeper water. High organics impacts UV disinfection and poses risk of disinfection byproducts if chlorinate 	<p>Extend intake into deeper water</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. Capital cost allows for full length of new pipeline; some sections of existing pipeline may be able to be reused. 2. Full upgrade aims to reduce organics to enable effective UV disinfection and chlorination 	Minimise microbiological contaminants in raw water, particularly during summer	\$150,000, excl GST

Canterbury

District Health Board

Te Poari Hauora o Waitaha

March 8 2018

Attention: Owen Pickles
General Manager
Chatham Islands Council

Dear Owen

VERIFICATION OF WATER SAFETY PLAN IMPLEMENTATION WAITANGI AND KAINGAROA DRINKING WATER SUPPLIES

Please find attached the final implementation reports for Waitangi and Kaingaroa drinking water supplies.

The implementation reports outline the extent to which the drinking-water supplies were found to be operating in conformance with the approved Water Safety Plan (WSP). The reports are based on the inspection carried out by Laura Bruce and Fiona Humpheson on December 6 2017.

It was pleasing to see implementation of the WSP was well under way. Subsequent on-site implementation inspections are likely to be undertaken at 3 yearly intervals to determine implementation progress.

There was one non-conformance noted for Waitangi and one non-conformance noted for Kaingaroa.

Yours sincerely



Laura Bruce
Trainee Drinking Water Assessor
South Island Drinking Water Assessment Unit

Final Report on implementation of a Drinking Water Supply's Water Safety Plan

Water Supply

**Waitangi (WAI158)
Chatham Islands Council**

**South Island Drinking Water Assessment Unit
PO Box 1475
Christchurch**

**Report Identifier
WAI158_Waitangi_WSPImplementationFinal_080318_v1**

Executive Summary

The Waitangi Water Safety Plan (WSP) was approved for Chatham Islands Council (CIC) in July 2016. This was the first implementation visit following the approval of this WSP.

The implementation visit was carried out 6 December 2017 with Kirsten Norquay (Stantec), Bill Lind, Russell Phillips and Bruce Winter (Fulton Hogan) and Laura Bruce and Fiona Humpheson (Community and Public Health (CPH)). The assessment included a review of selected records at Fulton Hogan's office, following this a site visit was carried out at Tikitiki Hill Bore and Waitangi treatment plant.

Non-conformances relate to DWA findings where requirements of the approved WSP were not met or where the on-site visit has identified critical inadequacies in the approved WSP

Recommendations are suggestions where the DWA believes improvement could be made relating to good practice.

One non-conformance and one recommendation were identified and are summarised below. An agreement sheet was sent to CIC for sign off, however it was not returned within the 20 day timeframe as stated in the provisional report. The recommended timeframes for completion of recommendations and non-conformances were discussed with Stantec and Fulton Hogan representatives at the time of the implementation.

Outline of Supply

Waitangi has a registered population of 125 and is classified as a small drinking water supply. The WSP states that the supply is sourced from the Tikitiki Hill bore which was granted secure status in July 2016. A proposal to develop a backup bore is currently awaiting approval.

The water passes through one multimedia filter before being treated with ultra violet (UV) and chlorine. There is one treated water reservoir at the site of the treatment plant and four additional reservoirs within the network. Most properties on the supply have a 1000 litre storage tank with ballcock and air gap separation. There is approximately three to four days storage available.

WSP Implementation

Catchment and Bores

The WSP states that the water is abstracted from a bore drilled 29 metres down, possibly into fine grained volcanic rock or limestone and sand sediments. A catchment risk assessment was carried out by Stantec in 2016 and overall the risk of microbiological contamination was assessed to be low. As the Chatham Islands is a small community, changes in the catchment would be communicated by word of mouth or from operator's observations of the area. According to the operator there have been no changes in the catchment since the WSP was approved.

The operator stated that the bore heads are checked once a month and maintenance is carried out once a year. It was noted during the implementation that the lid of the bore head has a hole and there appeared to be leaking around the bore head. The operator stated that the leaking was due to an incorrect pipe fitting which will be replaced. The operators agreed that the hole could be temporarily filled with silicone immediately and fixed permanently within three months.

Non-conformance 1:

The borehead does not appear to be secure, there are large gaps where the cabling goes into the bore. The lid on the bore head must be sealed and the incorrect pipe fitting replaced in order to provide adequate bore head protection. An engineer should reassess to check for compliance against Criteria 2 of Section Four Drinking Water Standards for New Zealand 2005 (Revised 2008) (DWSNZ).

Treatment Plant**Filters**

The water passes through a multimedia pressure filter to remove bacteria and particulate matter larger than ten to fifteen microns. The operator stated that backwash for filters is automatic based on the volume of water which has passed through.

UV

There are two UV units operating in parallel. These units are not validated and UVI and UVT are not measured, however the UV unit is an additional barrier and is not used for compliance. The units were reported as being serviced by Filtec however because of their age the units are becoming difficult to maintain and will be decommissioned when they can no longer be maintained.

Chlorine

The operator described how the chlorine dosing system at the plant works. There is an on-demand dosing pump and operators check the FAC at the plant daily with an eXact Micro 20 Photometer. The dose is manually adjusted if the dose is getting outside of the guideline parameters (0.2. – 0.6 mg/L). There is a sufficient stock of sodium hypochlorite, twenty litres at the plant and an additional twenty litres kept at Fulton Hogan's yards.

Documentation

Documentation was viewed at Fulton Hogan's office prior to the site visit. Evidence reviewed included the complaints register, Operations and Maintenance Manual, safe work method statements, six monthly report for CIC and results for FAC and E.coli monitoring. All documentation reviewed was satisfactory.

Log books and operational manuals were also viewed at the treatment plant.

Training

Because of the isolation of the Chatham Islands, no operators working at these plants have formal drinking water treatment qualifications with the exception of the Contract Manager who has several drinking water unit standards. All operators have many years working in the water industry and receive annual training from Filtec. There is no formal register of these Filtec training sessions.

Recommendation 1:

Records of all staff training should be recorded on a training register and included in the 6 monthly report to Chatham Islands Council.

Conclusion

Sufficient evidence was provided during the implementation to show that Waitangi drinking-water supply is being implemented. One Non-conformance was identified, please address the non-conformance and send photographic evidence within one month of receiving this report.

Please be aware that under the Health Act, this water supply is not legally required to have an approved and implemented WSP. The supplier must however be taking all practicable steps to comply with the DWSNZ by 1 July 2015. As you have elected to seek compliance under Section 10 of the DWSNZ, having an approved and implemented WSP is a mandatory requirement.

These results relate only to Waitangi drinking-water supply.

Information in this report may be provided to the Ministry of Health at their request. With the exception of the Ministry of Health, this report shall not be reproduced without the approval of the Drinking Water Assessment Unit and Chatham Islands Council.

Attachments

Nil

Laura Bruce
Trainee Drinking Water Assessor
South Island Drinking Water Assessment Unit
PO Box 1475 Christchurch

Assessment Report Information

Report identifier	WAI158_Waitangi_WSPImplementationFinal_080318_v1
Drinking Water Assessment Unit (Inspection Body)	South Island Drinking Water Assessment Unit PO Box 1475 Christchurch
Drinking Water Assessor	Laura Bruce (Trainee Drinking Water Assessor) Fiona Humpheson (Drinking Water Assessor)
Assessment Date	09/01/2018
Description of assessment work	Assessment of implementation of Water Safety Plan for Waitangi (WAI158), source (G01394), treatment plant (TP02307) and distribution zone (WAI158WA)
Equipment Used	Water in New Zealand (WINZ) version 6 was used to assess compliance data for this supply.
Water Supply Owner / Person Responsible	Owen Pickles, Chatham Islands Council
Assessment method	Standard assessment as per Scope Procedure 4 Standard specified in Part 2A of Health Act 1956
Documents and Information	Water Safety Plan, Waitangi Water Supply, June 2016. Water in New Zealand (WINZ) version 6 was used to assess compliance data for this supply. Chatham Islands Council Six-Monthly Report Operations and Maintenance Manual Complaints Register FAC and microbiological results.
Site of Assessment	Fulton Hogan Office, Waitangi Tikitiki Hill Bore Waitangi treatment plant
Omissions from proposed assessment	Nil
Sub-contracted work	Nil
Document checked by:	
Release of report authorised by:	

If you do not agree with the findings of this report a written appeal must be lodged with the Technical Manager South Island Drinking Water Assessment Unit, PO Box 1475, Christchurch within 2 months of receipt of this report. The Technical Manager will arrange for a review to be undertaken using the Ministry of Health appeals procedure.

27 June 2018

Canterbury District Health Board

CHRISTCHURCH

Attention: Laura Bruce
Drinking Water Assessor

Dear Laura

**Water Safety Plan Implementation
Waitangi and Kaingaroa Drinking Water Supplies**

The purpose of this letter is to provide you, as the Drinking Water Assessor (DWA) for Waitangi and Kaingaroa Drinking Water Supplies, with an update on the progress the Chatham Islands Council (the Council) has made since the Water Safety Plan (WSP) implementation audits, carried out by yourself and Fiona Humpheson on 6 December 2017.

1. Final WSP Implementation Reports

Thank-you for your letter dated 8 March 2018 with the final implementation report for each supply as well as your subsequent email dated 24 April 2018.

We note the non-conformances and recommendations in the reports, however we wish to reiterate some of the unique challenges facing the Council, including the remote location and almost sole reliance on Central Government funding (eg from the Ministry of Health and Department of Internal Affairs) to implement any improvements to the existing water supplies. To provide perspective on the financial challenges facing the Chatham Islands, a 5% rates rise only equates to an increase in total revenue of about \$30,000.

For Waitangi we note this supply is only legally required to have an approved and implemented WSP as the Council has elected to seek compliance under Section 10 of the DWSNZ.

For Kaingaroa we note that this supply is not legally required to have an approved and implemented WSP. Whilst the Council was of the understanding that it was able to seek compliance for this water supply under Section 10 of the DWSNZ, the DWA decision in November 2017 (letter from Judy Williamson, DWA, 7 November 2017) was that this was not possible. It is further noted that the 2014 upgrade funded by the Ministry of Health (MoH) was noted in the letter as being such that although it *"did not meet the treatment requirements detailed in section 10 that it was a good pragmatic approach to a difficult source water and that in adopting this the water supplier would be considered to be taking all practicable steps to comply with the DWSNZ and meeting their obligations under the Health Act"*.

The final WSP implementation reports noted one non-conformance and one recommendation for each supply. This letter provides Council's response to each.

2. Waitangi Water Supply WSP Audit 1 Non-conformance and 1 Recommendation

Waitangi Water Supply: Implementation Report Non-conformance 1

The non-conformance noted in the final implementation report for Waitangi Water Supply is as follows:

"The borehead does not appear to be secure, there are large gaps where the cabling goes into the bore. The lid on the bore head must be sealed and the incorrect pipe fitting replaced in order to provide adequate bore head protection. An engineer should reassess to check for compliance against Criteria 2 of Section Four Drinking Water Standards for New Zealand 2005 (Revised 2008) (DWSNZ)."

Following your site visit, Fulton Hogan, the Operations and Maintenance Contractor for the Council's water supplies, determined the cause of the leak in the bore head chamber was failed O-rings in the elbow joiner (rather than an incorrect pipe fitting as noted in the DWA's report). The failed O-rings were replaced in February 2018 and the concrete apron inside (and outside when not raining) the bore head chamber is now dry. Fulton Hogan have also sealed the lid on the bore head by placing a PVC cap over the original metal plate, sealing around the joint and sealing the holes in the borehead lid (ie for pumping line, cables) with expander foam. Such a seal will enable the pump and level sensor to be lifted for maintenance. Fulton Hogan provided photographs to the DWA via email on 27 March 2018. These photographs are reproduced in Attachment A.

Stantec (Richard Bennett and Kirsten Norquay) have discussed the work carried out with Fulton Hogan (Bill Lind) and reviewed the photographs. Based on this information, Stantec believes that the borehead has been returned to a similar condition as at time of the initial bore head assessment (summarised in Stantec's letter to Denise Tully, DWA, dated 30 June 2016), which was given 'secure' status by the Ministry of Health on 29 July 2016. Stantec further notes that the borehead is raised above ground with a concrete apron, is located within a wooden enclosure in a grassed paddock, with a perimeter fence and cutoff drains to divert surface water runoff drain around the fenced area. The current DWSNZ requires a 5-yearly review of the bore head so, based on this requirement, the Council propose to reassess the bore head security before June 2021 if the Tikitiki bore is still in use at that time.

With respect to the two other Criterion around secure status Stantec notes:

- Criterion 1: Not required for Tikitiki due to its depth. See our letter to Denise on 30 June 2016
- Criterion 3: No E.coli has been found since our secure status was granted (see Attachment B). Data prior to June 2016 was provided in the Waitangi Water Safety Plan submitted for approval at the same time as bore secure status was applied for.

The Council plans to upgrade the Waitangi Water Supply and to extend the reticulated supply to Te One (the Upgrade). The primary driver is to better meet the current and future demand as well as providing 'safe' water to Te One, which is currently serviced by a combination of private bores and roof-water and is the location of the main primary school (about 70 pupils). The upgraded supply uses a new bore (located near the existing network storage tanks), a new treatment plant (including softener, partial greensand filtration with pre chlorination, UV disinfection and chlorination), new treated water storage reservoirs, reticulation upgrades and relocation of existing network storage tanks to provide off-line storage for fire-fighting. Following the upgrade, the Tikitiki bore will become an emergency supply only.

The Council successfully obtained Ministry of Health funding for the preliminary design phase for the Upgrade in mid 2016, with the preliminary design report and associated investigations completed in November 2016. Following this the Council, supported by Department of Internal Affairs, sought Central Government funding to carry out the upgrade in 2018/19. Unfortunately the Council have recently been informed funding has been declined for the next financial year. The Council remain optimistic funding may be approved for the following

year, however, in the interim plan to seek external funding to install a new UV disinfection unit at Waitangi to replace the existing UV units, one of which is no longer functioning and the other uses lamps that are no longer being manufactured.

Waitangi Water Supply: Recommendation 1

The recommendation noted in the final implementation report for Waitangi Water Supply is as follows:

"Records of all staff training should be recorded on a training register and included in the 6 monthly report to Chatham Islands Council."

Records of staff training are now being kept as recommended by the DWA and will be included in the next 6 monthly report, which covers 1 January 2018 to 30 June 2018.

3. Kaingaroa Water Supply WSP Audit 1 Non-conformance and 1 Recommendation

Kaingaroa Water Supply: Implementation Report Non-conformance 1

The non-conformance noted in the final implementation report for Kaingaroa Water Supply is as follows:

"The turbidimeter should be standardised in accordance with the manufacturers specified procedures and frequency or three monthly whichever is more frequent. To verify that the performance of the instrument has not changed, standardisation must be carried out weekly or after any interruption to continuous reading as per Appendix 2 of the DWSNZ."

To provide a context on turbidity monitoring at Kaingaroa, raw and treated water turbidity is measured continuously, however the data is able to be polled to a central system. The data is currently recorded manually when the operator visits the site. The manually recorded turbidity results to date show good removal across the filters at Kaingaroa and there is no obvious sign of "drift" in turbidity values (ie an indication of instrument fouling). Filtec check the readings from the Council's meter with their meter as part of Filtec's annual WTP servicing. Stantec purchased an SD card in April 2018 for the turbidity meters, however attempts by Fulton Hogan to download data from the turbidity meters to date have been unsuccessful. Filtec will look at this as part of their service visit this year. If successful, the data from both meters will be reviewed regularly to monitor trends and instrument "drift".

Stantec (Kirsten Norquay) has discussed calibration options with the party that carries out the annual servicing for the water treatment plants, Filtec (Craig Freeman) in the context of:

- the scheme's inability to currently comply with the DWSNZ. The UV disinfection system is unable to comply with Section 5.16 due to dissolved organics causing low UV transmittance. The macrolit filter, whilst demonstrated by university testing as removing protozoa, is not recognised under the DWSNZ. Chlorine is not currently dosed as the risk of forming disinfection by-products (as well as taste and odour issues) due to high organics was considered too great at the time of the 2014 upgrade.
- the risks associated with incorrect calibration. If the meter is incorrectly calibrated by local operators, there is a risk of the instrument providing inaccurate readings and possibly the need to fly the instruments to the mainland (or fly Filtec staff in to Chatham Island) to re-calibrate the instrument.

Based on the above, a pragmatic, robust approach for turbidity meter verification/calibration on Chatham Island appears to be as follows:

- monthly verification by Fulton Hogan using a Hach ICE-PIC. The cost of this portable unit is about \$1,200 and would be included as part of the Waitangi Upgrade, which includes online turbidity meters. Until this project proceeds, there is insufficient funding to purchase this unit. In the meantime,

Bill Lind, Sharon Lind and Kirsten Norquay have received training using ICE-PIC from DCC operators on 17 April 2018 at Mt Grand WTP, Dunedin.

- annual calibration by Filtec using StablCal as part of Filtec's annual WTP servicing. The cost of this is about \$200/calibration solution (Hach).

This is a departure from DWSNZ, however it avoids the risk of incorrect calibration. We welcome feedback from the DWA on this approach.

Kaingaroo Water Supply: Recommendation 1

The recommendation noted in the final implementation report for Kaingaroo Water Supply is as follows:

"Staff training should be recorded on a training register and included in the 6 monthly report to Chatham Islands Council."

As noted earlier, records of staff training are now being kept as recommended by the DWA and will be included in the next 6 monthly report, which covers 1 January 2018 to 30 June 2018.

4. Authorisation for Free Available Chlorine (FAC) Analysis

We acknowledge receipt of the authorisation report, which authorises Fulton Hogan staff to carry out FAC analysis on the Chatham Islands with an eXact Micro 20 Photometer until January 2021. We note that chlorine is currently only dosed at Waitangi, but understand that this authorisation would extend to other plants on the Chatham Islands should dosing be implemented at Kaingaroo or a new plant be constructed.

The recommendations noted in the authorisation report for FAC analysis area:

"Records of all staff training should be recorded on a training register and included in the 6 monthly report to Chatham Islands Council."

"The DWSNZ state that the equipment should be calibrated 6 monthly against the referee method. It is recommended that Fulton Hogan get their photometer calibrated every 6 months and keep records of this calibration."

As noted earlier, records of staff training are now being kept as recommended by the DWA.

With respect to calibration, the supplier's information for the eXact Micro 20 Photometer states that meter is factory calibrated and that the fixed calibrations in the meter are valid for the life of the meter. In addition, the Council only owns one FAC meter, so the WTP operators would be without a meter for an extended period if it was flown to the mainland for any verification. To verify FAC readings, Stantec/Fulton Hogan will arrange for Filtec to compare the readings from the Council's meter with their meter as part of Filtec's annual WTP servicing. Fulton Hogan will also investigate the possibility of using FAC meters owned by private organisations on the island.

5. 6 Monthly Report

Stanlec will provide the DWA with the next 6 monthly report, which covers 1 January 2018 to 30 June 2018, when it is available (likely to be in August). This report will include a copy of the WSP Implementation Audit Reports, FAC Authorisation Report, the staff training register (as recommended by the DWA), staff CV's, organisation chart, and Council's Critical Control Point (CCP) documentation for Waitangi and Kaingaroa WTPs.

Yours sincerely

Norquay, Kirsten

Stanlec New Zealand

Copy to: Owen Pickles, Chatham Islands Council

Attachment A: Tikiliki Borehead Following Remedial Works



Attachment B: Waitangi WTP E.coli Results From 31 May 2016

Waitangi WTP – Microbiological Results

Date of Sampling	Days between samples	E.coli (MPN/100mL)		
		Raw	Treated	Retreatment
31/05/2016	35	<1	<1	
5/07/2016	35	<1	<1	<1
26/07/2016	21	<1	<1	<1
30/08/2016	35	<1	<1	
27/09/2016	28	<1	<1	<1
1/11/2016	35	<1	<1	<1
6/12/2016	35	<1	<1	
30/12/2016	24	<1	<1	<1
31/01/2017	32	<1	<1	<1
21/02/2017	21	<1	<1	<1
21/03/2017	28	<1	<1	<1
18/04/2017	28	<1	<1	
16/05/2017	28	<1	<1	<1
20/06/2017	35	<1	<1	<1
24/07/2017	34	<1	<1	
22/08/2017	29	<1	<1	<1
19/09/2017	28	<1	<1	<1
17/10/2017	28	<1	<1	
14/11/2017	28	<1	<1	<1
19/12/2017	35	<1	<1	<1
30/01/2018	42	<1	<1	<1
20/02/2018	21	<1	<1	
20/03/2018	28	<1	<1	<1
17/04/2018	28	<1	<1	<1
15/05/2018	28	<1	<1	<1
20/06/2018	35	<1	<1	

Legend:

Works Yard

Wilson Place

Council House

Report on the authorisation of persons/organisation to perform drinking-water analyses/calibration

Organisation:

Fulton Hogan, Chatham Islands

Authorisation for:

Free Available Chlorine Analysis

**South Island Drinking Water Assessment Unit
PO Box 1475
Christchurch**

**Report Identifier
FultonHoganChathamIslands_AnalystAuthorisation_080118_v1**

Outline of analysis/calibration assessed

Fulton Hogan are contracted to operate the Waitangi and Kaingaroa drinking water supplies and carry out Free Available Chlorine (FAC) analysis on the Chatham Islands. FAC is not used as a compliance parameter and is used as a secondary barrier to provide residual in the distribution system. The authorisation of Fulton Hogan (Chatham Islands) to perform drinking water analysis for FAC was undertaken at the Waitangi Treatment Plant on 6 December 2017.

During the assessment Fulton Hogan were assessed against the requirements of Appendix 2 of the Drinking Water Standards New Zealand 2005 (Revised 2008) (DWSNZ) and the National Drinking Water Assessors' Technical Manual (Scope 2). The assessment is undertaken in accordance with the functions of a Drinking Water Assessor, as outlined in Section 69ZL of the Health Act 1956.

The authorisation assessment covered analysis of:

- **Measurement of Free Available Chlorine** with an eXact Micro 20 Photometer (utilising DPD colorimetry, USEPA method 4500-CL G).

Prior to the on-site assessment, the following documentation was viewed

- eXact Micro 20 Photometer Instruction Manual

Non-conformances – These are areas where the individual did not follow the required audit standard (e.g Drinking Water Standards / Manufacturer's Instructions / Organisation's Quality Assurance Procedure).

Recommendations – These are areas where improvement to practice could be made.

Two recommendations are identified in this report.

Assessment of personnel competency in undertaking the procedure

During the assessment, three staff members were observed performing the analysis with the eXact Micro 20 Photometer. Two staff members perform these measurements on a weekly basis, the third individual does not use the equipment as often but has a lot of experience using it.

All tests that were observed were performed in accordance with the manufacturer's instructions. The operators were observed rinsing the cell three times and filling the cell to the correct capacity and the correct technique of moving the strip gently back and forth through the cell until the countdown finished. All three individuals were knowledgeable regarding potential instrument or measurement technique errors, were familiar with the range of readings to be expected, what would constitute an unusual result and where to find the troubleshooting section of the manual.

All individuals were found to be competent to undertake the procedure observed.

Findings relating to organisation's competency / quality assurance procedures

Fulton Hogan have good documentation in terms of standard procedures, operating instructions and recording systems. All staff have years of experience in the water industry and receive annual refresher training from Filtec on their yearly visits to the Chatham Islands, however there is no

formal procedure for recording staff training. One staff member has formal drinking water industry unit standards, the other two operators do not due to the Chatham Islands isolation.

Recommendation 1:

Records of all staff training should be kept on a training register and included in the 6 monthly report to Chatham Islands Council.

On-site there were copies of the Operation and Maintenance manual, the instruction manual for the eXact Micro 20 Photometer and a log book containing the results of FAC testing. All staff members knew to record the results in the log book at the treatment plant. Once a month all the results are taken back to the office and recorded in Water Outlook.

The eXact Micro 20 Photometer is calibrated once a year when Filtec visit the Chatham Islands on their annual visit.

Recommendation 2:

The DWSNZ state that the equipment should be calibrated 6 monthly against the referee method. It is recommended that Fulton Hogan get their photometer calibrated every 6 months and keep records of this calibration.

The photometer was kept in good order in a plastic case with foam for protection. The reagents used were within their expiry date, expiring in May 2020.

Result of assessment

Fulton Hogan, Chatham Islands is authorised to perform the following analysis

- Measurement of Free Available Chlorine (FAC) with eXact Micro 20 Photometer

Authorisation is valid until January 2021 unless there are significant changes to personnel/analyses/calibrations undertaken by your organisation.


Information in this report may be provided to the Ministry of Health at their request. With the exception of the Ministry of Health, this report shall not be reproduced without the approval of the Drinking Water Assessment Unit and Fulton Hogan, Chatham Islands.

Completed 08/01/2018



Laura Bruce
Trainee Drinking Water Assessor
South Island Drinking Water Assessment Unit

Assessment Report Information

Report identifier	FultonHoganChathamIslands_AnalystsAuthorisation_080118_v1
Drinking Water Assessment Unit (Inspection Body)	South Island Drinking Water Assessment Unit 310 Manchester Street, PO Box 1475 Christchurch Ph 364 1777
Drinking Water Assessor	Laura Bruce (Trainee) Fiona Humpheson (Mentor)
Assessment Date	06/12/2017
Description of assessment work	Authorisation of Fulton Hogan to perform water quality analysis specified in report for Chatham Islands Council drinking water supplies.
Equipment Used	Nil
Organisation assessed	Fulton Hogan, Chatham Islands
Assessment method	Standard assessment as per Scope Procedure 2 Standard specified in Part 2A Health Act 1956
Documents and Information	eXact micro 20 instruction manual Fulton Hogan measurement record forms Drinking Water Standards for New Zealand 2005 (revised 2008)
Site of Assessment	Waitangi drinking water treatment plant
Omissions from proposed assessment	Nil
Sub-contracted work	Nil
Document checked by:	Judy Williamson IANZ Accredited Drinking Water Assessor 09/01/2018
Release of report authorised by:	Denise Tully IANZ Accredited Drinking Water Assessor  10/01/18

If you do not agree with the findings of this report a written appeal must be lodged with the Technical Manager South Island Drinking Water Assessment Unit within 2 months of receipt of this report. The Technical Manager will arrange for a review to be undertaken using the Ministry of Health appeals procedure.

Final Report on implementation of a Drinking Water Supply's Water Safety Plan

Water Supply

Kaingaroa (KAI041)

Chatham Islands Council

**South Island Drinking Water Assessment Unit
PO Box 1475
Christchurch**

**Report Identifier
KAI041_Kaingaroa_WSPImplementationFinal_080318_v1**

Executive Summary

The Kaingaroa Water Safety Plan (WSP) was approved for Chatham Islands Council (CIC) in August 2016. This was the first implementation visit following the approval of this WSP.

The implementation visit was carried out 6 December 2017 with consultant Kirsten Norquay, (Stantec), Bill Lind, and Bruce Winter (Fulton Hogan) and Laura Bruce and Fiona Humpheson (Community and Public Health (CPH)). The assessment included a review of selected records at Fulton Hogan's office, following this a site visit was carried out at the Kaingaroa intake and treatment plant.

Non-conformances relate to DWA findings where requirements of the approved WSP were not met or where the on-site visit has identified critical inadequacies in the approved WSP

Recommendations are suggestions where the DWA believes improvement could be made relating to good practice.

One non-conformance and one recommendation were identified and are summarised below. An agreement sheet was sent to CIC for sign off, however it was not returned within the 20 day timeframe as stated in the provisional report. The recommended timeframes for completion of recommendations and non-conformances were discussed with Stantec and Fulton Hogan representatives at the time of the implementation.

Outline of Supply

Kaingaroa has a registered population of 60 and is classified as a neighbourhood supply. They have opted to develop a WSP to achieve compliance with Section 10 of the Drinking Water Standards for New Zealand 2005 (Revised 2008) (DWSNZ). Kaingaroa is not currently achieving compliance with Section 10 but is taking all practicable steps to comply with the DWSNZ. An agreement has been made with the Ministry of Health (MoH) to address existing health risks using a multiple barrier treatment process including pre-filtration, filtration, water softening and ultra-violet (UV) disinfection.

The WSP states that the supply is sourced from Lake Rangitai and pumped eight kilometres to the treatment plant close to the Kaingaroa township where it is stored in two high density polyethylene (HDPE) raw water storage tanks.

At the treatment plant the water passes through two multimedia filters and one macrolite filter before passing through a validated ultra violet (UV) unit.

There are three treated water storage tanks on site and most private properties have header tanks with ballcock valve and air gap separation.

WSP Implementation

Catchment and Intake

According to the WSP the Kaingaroa catchment is marginally productive upland pasture with low stock rates and the area is very remote with no commercial, industrial premises or human habitation. As the Chatham Islands is a small community changes to the catchment would be communicated by word of mouth or from operator's observations of the area. There have been no changes since the WSP was

approved. Environment Canterbury monitors the chemical, microbiological and aesthetic water quality of Lake Rangitai quarterly and shares this information with Council.

A catchment risk assessment was completed by Stantec and the catchment fits the description "Partially protected catchment with no sewage discharges or human habitations and no intensive livestock operations harbouring gatherings of pre-weaned and juvenile stock". They are assigned a requirement to treat to a level that removes bacteria and 3 Logs of protozoa.

The intake comprises a screened inlet in Lake Rangitai and is inspected when the lake level gets low approximately once per year. Consideration has been given to extending the intake to the deepest part of the lake by 2020.

Treatment Plant

Filters

The water passes through two multimedia pressure filters to remove bacteria and particulate matter larger than ten to fifteen microns. Following this is a macrolite filter which is used for removing suspended solids, bacteria and protozoa. The macrolite filter is not currently listed as an approved treatment in Table 10.1 of the DWSNZ, however Stantec are working towards applying for this. Backwash for all three filters is automatic based on the volume of water which has passed through.

Turbidity meter

The treatment plant has online continuous turbidity monitoring. If turbidity is too high the entire system shuts down so turbid water cannot get into the reticulation. There have been no high turbidity events but the operator stated that if there was they would do a manual back wash and investigate the cause. The turbidity meter is serviced and calibrated once a year on Filtec's annual visit to the island.

Non-conformance 1:

The turbidimeter should be standardised in accordance with the manufacturers specified procedures and frequency or three monthly whichever is more frequent. To verify that the performance of the instrument has not changed, standardisation must be carried out weekly or after any interruption to continuous reading as per Appendix 2 of the DWSNZ.

Ultra-Violet

A validated UV unit provides a dose of at least 40mJ/cm² for flows up to 189L/min with a UVT (ultra-violet transmittance) of at least 75%. However because of high levels of organics in the source water the UVT never reaches 75% and is usually around the 50 – 60% range. This has been deemed acceptable by the MoH as part of the multiple barrier treatment process mentioned earlier.

The unit has a control panel where the operator can see a green light (operating normally) or red light (alarm). There are alarms for power supply failure, lamp failure and sensor failure. There is also an alarm for low UV dose but this is typically red because of the low UVT of the water.

Several spare lamps are kept on site.

Storage and Reticulation

Two HDPE treated water storage tanks are located at the treatment plant, they have a capacity of 30m³ and hold three to four days storage. When the probe detects low water levels an alarm is raised, this is a pole mounted visual alarm which can be seen by the community. The Kaingaroa community know to contact the operator if they see the alarm. There has been one low water level event and this system was effective.

There are no high risk premises in the community that pose a backflow risk so there is no backflow register. Private properties have their own header tanks with a ballcock valve and air gap separation.

Sampling points are located at the treatment plant, the Kaingaroa Club and at the far end of the reticulation. Currently there is no chlorine being dosed so there is no residual in the reticulation. This is because of the high organics in the water and the potential for disinfection by-products from chlorine dosing. Options to solve this issue are currently being investigated.

Documentation

Documentation was viewed at Fulton Hogan's office prior to the site visit. Evidence received included the complaints register, Operations and Maintenance Manual, safe work method statements, six monthly report for CIC and results for turbidity and E.coli monitoring. All documentation reviewed was satisfactory.

Log books and operational manuals were also viewed at the treatment plant.

Training

Because of the isolation of the Chatham Islands, no operators working at these plants have formal drinking water treatment qualifications with the exception of the Contract Manager who has several drinking water unit standards. All operators have many years working in the water industry and receive annual training from Filtec. There is no formal register of these Filtec training sessions.

Recommendation 1:

Staff training should be recorded on a training register and included in the 6 monthly report to Chatham Islands Council.

Conclusion

Sufficient evidence was provided during the implementation to show that Kaingaroa drinking-water supply is being implemented.

Please be aware that under the Health Act, this water supply is not legally required to have an approved and implemented WSP. The supplier must however have taken all practicable steps to comply with the Drinking Water Standards for New Zealand by 1 July 2015. As you have elected to seek compliance under Section 10 of the Drinking Water Standards, having an approved and implemented WSP is a mandatory requirement.

These results relate only to Kaingaroa drinking-water supply.

Information in this report may be provided to the Ministry of Health at their request. With the exception of the Ministry of Health, this report shall not be reproduced without the approval of the Drinking Water Assessment Unit and Chatham Islands Council

Attachments

Nil

Laura Bruce
Trainee Health Protection Officer
South Island Drinking Water Assessment Unit
PO Box 1475 Christchurch

Assessment Report Information

Report identifier	KAI041_Kaingaroa_WSPImplementationFinal_080318_v1
Drinking Water Assessment Unit (Inspection Body)	South Island Drinking Water Assessment Unit PO Box 1475 Christchurch
Drinking Water Assessor	Laura Bruce (Trainee Drinking Water Assessor) Fiona Humpheson (Drinking Water Assessor)
Assessment Date	09/01/2018
Description of assessment work	Assessment of implementation of Water Safety Plan for Kaingaroa (KAI041), source (S00858), treatment plant (TP02306) and distribution zone (KAI041KA)
Equipment Used	Nil
Water Supply Owner / Person Responsible	Owen Pickles, Chatham Islands Council
Assessment method	Standard assessment as per Scope Procedure 4 Standard specified in Part 2A of Health Act 1956
Documents and Information	Water in New Zealand (WINZ) version 6 was used to assess compliance data for this supply. Kaingaroa Water Safety Plan Version 3 August 2016 Drinking Water Standards for New Zealand 2005 (Revised 2008)
Site of Assessment	Fulton Hogan Office, Waitangi Kaingaroa intake, Lake Rangitai Kaingaroa treatment plant
Omissions from proposed assessment	Nil
Sub-contracted work	Nil
Document checked by:	
Release of report authorised by:	

If you do not agree with the findings of this report a written appeal must be lodged with the Technical Manager South Island Drinking Water Assessment Unit, PO Box 1475, Christchurch within 2 months of receipt of this report. The Technical Manager will arrange for a review to be undertaken using the Ministry of Health appeals procedure.

4. Works & Services

4.7 2018 Traffic Count Report

Date of meeting	13 December 2018
Agenda item number	4.7
Author/s	Shaun Bosher - Stantec New Zealand

Purpose

A traffic count report to Chatham Islands Council for 2018.

Recommendations

THAT the Report be received.

2018 TRAFFIC COUNT REPORT

PREPARED FOR CHATHAM ISLANDS COUNCIL

October 2018



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REVISION SCHEDULE

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1		Version 1	SB	LG	NL	AS

Chatham Islands Council

2018 Traffic Count Report

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1. Introduction

The Chatham Islands Council adopted a traffic counting strategy in mid-2008 to shape and analyse all phases of planning, design, and operation of their traffic network. A four-yearly cycle of count sites was created to record traffic counts, with two full cycles completed by mid-2016. There is a mixture of sites counted annually, every two years or every four years, based on road category.

In late 2016, a review of the traffic count procedure was undertaken to ascertain whether there should be changes made to the programme for the next four-year period. Several changes to the count locations were made, and the count site numbering system was updated to reflect this.

2018 is the tenth year of the traffic counts in the Chatham Islands. Therefore, the count sites have now gone through two and a half rotations of the original four-yearly cycle.

2. 2018 Traffic Counts

Table 2-1 presents the average daily traffic (ADT) results for 2018. The alphanumeric count ID references identify the road ID (from the Road Assessment and Maintenance Management (RAMM) database) and the count location along that particular road, e.g., 111D Tuku Road is the fourth count site along Tuku Road. The physical locations of the traffic counting sites are indicated in Figure 2-1 and Figure 2-2.

Table 2-1: Results from the 2018 Traffic Counts

Count ID	Route Position	Road Name	ADT
011A	150	Waitangi Wharf - Owenga Road	390
011E	920	Waitangi Wharf - Owenga Road	805
011I	2,700	Waitangi Wharf - Owenga Road	153
011J	6,104	Waitangi Wharf - Owenga Road	107
011M	21,473	Waitangi Wharf - Owenga Road	126
021A	40	North Road	617
021B	4,559	North Road	198
021C	18,955	North Road	114
051A	4,400	Port Hutt Road	40
061A	2,400	Waitangi West Road	17
071A	3,356	Airbase Road	61
091A	30	Hospital Road	108
095A	15	Fish Factory Road	112
111A	75	Tuku Road	706
111D	400	Tuku Road	425
126A	3,400	Kaingaroa Road	23

A manual check traffic count was conducted (at 011E) over a one-hour period and then compared to the results from the tube counter for that period. The manual count reported 158 vehicles, while 152 strikes were recorded on the counter. Therefore, all 2018 counts have been increased by a factor of 1.0395 due to the counter underreporting the number of vehicles.

The Waitangi Township count results for 2018 are shown in Figure 2-1. At count ID 011E (Waitangi Wharf-Owenga Road between Hotel Road and Hospital Road) there was a 55% decrease in traffic volumes from those in 2017. This may be due to a reduction in traffic generated by the construction of the Waitangi Wharf Upgrade Project (WWUP) (vehicles tending to go between Tuku Road and the wharf, rather than

over the Naim Bridge and beyond). The 2018 volume of 805 ADT is much more closely aligned with historical count volumes than the 1,736 ADT counted in 2017.

In 2017, two new count sites were established just east of Pages Corner, one on North Road (ID 021A) and one on Waitangi Wharf – Owenga Road (ID 011C). The purpose of these counts is to determine the split of traffic movements at this intersection. The 2018 counts found that the volume of traffic turning onto North Road is approximately four times that of traffic continuing along Waitangi Wharf-Owenga Road (617 vs 153 ADT). In 2017 this ratio was only approximately two times (800 vs 368 ADT).

There has been a large increase (315%) in traffic volumes at Waitangi Wharf (ID 011A), which is likely to be related to the final construction work at the wharf, where work was more exclusively located at the wharf vicinity (rather than heavy vehicles carting materials from Tuku Road as in 2017).



Figure 2-1: 2018 Waitangi Township Count Locations

2018 Chatham Islands Council Traffic Count Results

Table 2-2 details the count results from the previous five years, including 2018. Orange coloured count IDs are counted annually, yellow IDs are counted every two years, and green every four years. The grey coloured road names indicate the count site is a sealed location, brown is an unsealed location.

The five-year growth rate is reported for each road. Sites with only one record in the last five years cannot generate a growth rate. Sites with two or three records are more likely to present unrealistic or exaggerated growth rates than sites with four or five records, as there are less counts for the linear regression model to provide a stronger result.

Based on the last five years, the 'Island wide' annual traffic growth rate is 2.3% p.a. This was coarsely calculated by combining the count numbers of the annually counted sites¹ to get an average growth rate across the network.

Table 2-2: Results from the previous five years – 2018 Update

Count ID	Route Position	Road Grade	Road Name	AADT					5-year Growth Rate
				2014	2015	2016	2017	2018	
011A	150	1	WW-O Road	140			94	390	15.8%
011E	920	1	WW-O Road	818	1,115	879	1,736	805	5.0%
011I	2,700	1	WW-O Road				365	153	-138.6%
011M	21,473	1	WW-O Road	64	103	132	104	126	9.5%
111A	75	1	Tuku Road	619	466	680	676	706	5.4%
111D	400	1	Tuku Road	329	401	333	454	425	5.6%
021A	40	1	North Road				794	617	-28.7%
021B	4,559	1	North Road	341	369	377	441	198	-7.1%
071A	3,356	1	Airbase Road	80	206	78	94	61	-20.2%
051A	4,400	1	Port Hutt Road	37	83	62	82	40	0.9%
011J	6,104	1	WW-O Road	197	215	221		107	-18.4%
111E	7,719	2	Tuku Road		18		26		13.3%
021C	8,662	1	North Road	205	309	264		114	-19.9%
021E	18,955	2	North Road		57		34		-50.0%
126A	3,400	2	Kaingaroa Road	30		61		23	-4.8%
126D	6,135	2	Kaingaroa Road		56		20		-900.0%
081A	50	2	Rapanui Road				63		
133A	7,500	2	Te Matauae Road	19		25			9.9%
061A	2,400	3	Waitangi West Road					17	
092A	15	1	Hotel Road			1,042	732		-73.5%
095A	15	1	Fish Factory Road					112	
121A	1,700	3	Wharekauri Road	14					
096A	300	1	Tiki Tiki Road			91			
101A	40	2	Maipito Road				178		
091A	30	1	Hospital Road					108	
093A	15	1	Higbet Place	94					
094A	15	1	Wilson Place			83			
130A	15	2	Met Lane		70				
Total of annual sites				1,470	1,628	1,662	1,851	1,556	2.3%

¹ Except for count 011E (WW-O Road), where an erroneously high count recorded in 2017 would distort the calculation.

Figure 2-3 shows the ten-year historical trend of the sites that are counted annually. The general trend is a slight increase of traffic volumes across the Chatham Islands over the long term, with a slight decrease in the short-term. This could be due to the end of the WWUP, though some of the roads with reductions would not expect to be overly affected by the WWUP.

Note the orange and pink lines with only two counts are the two new sites beyond Pages Corner on North Road and on Waitangi Wharf-Owenga Road.

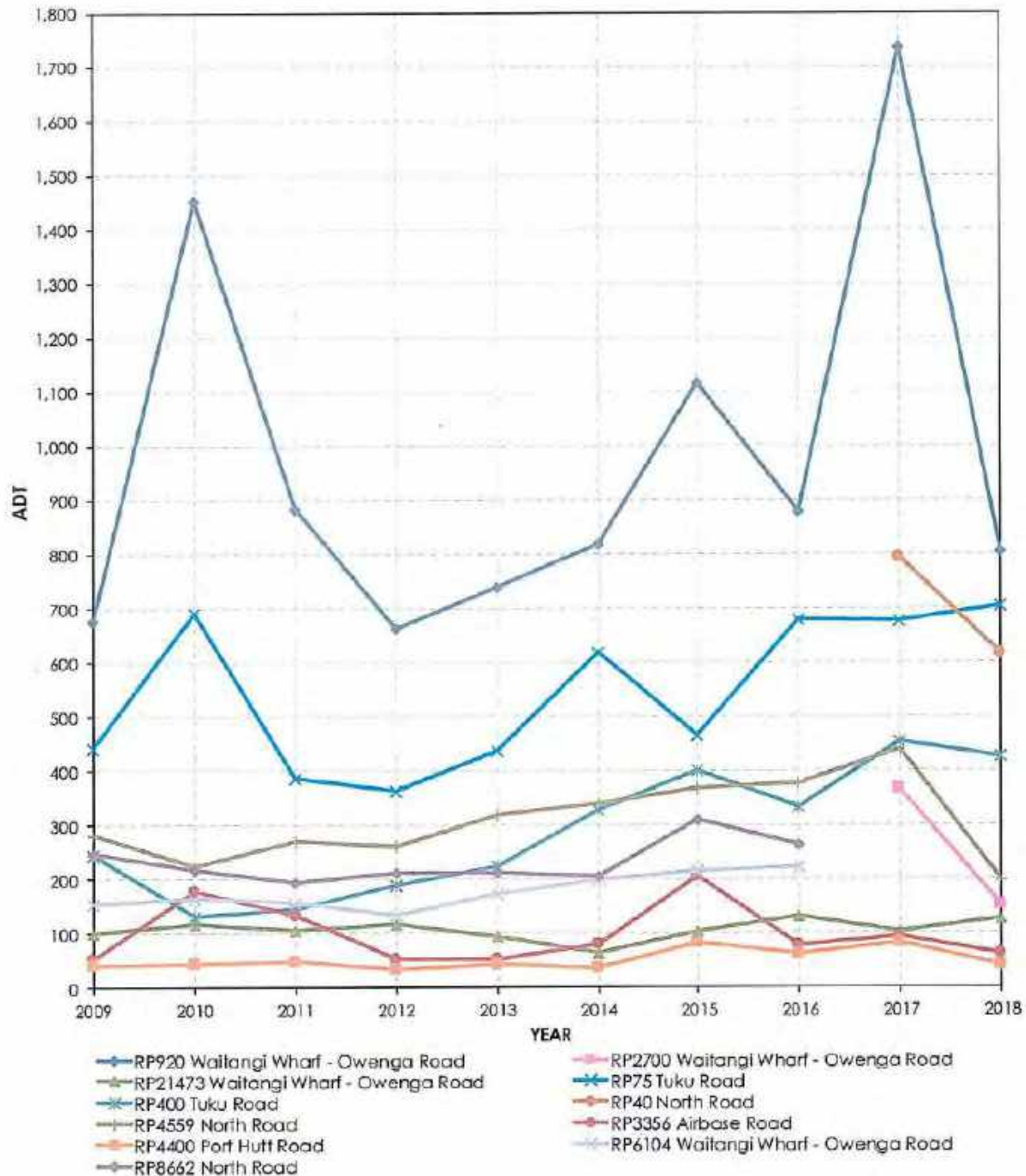


Figure 2-3: Historical Trends of Annual Traffic Count Sites

There has been a sharp decline, back to historic levels, in the volume of vehicles travelling on Waitangi Wharf - Owenga Road in Waitangi Township (RP920 - at Nairn Bridge) and in Owenga (RP21473), as well as at the two counts past Pages Corner on North Road (RP40) and Waitangi Wharf - Owenga Road (RP2700).

This drop is reflected in Te One as well, with the 2018 count of 198 being the lowest ever recorded. The reason for this reduction cannot be explained.

Figure 2-4 displays the counts captured every two years, while

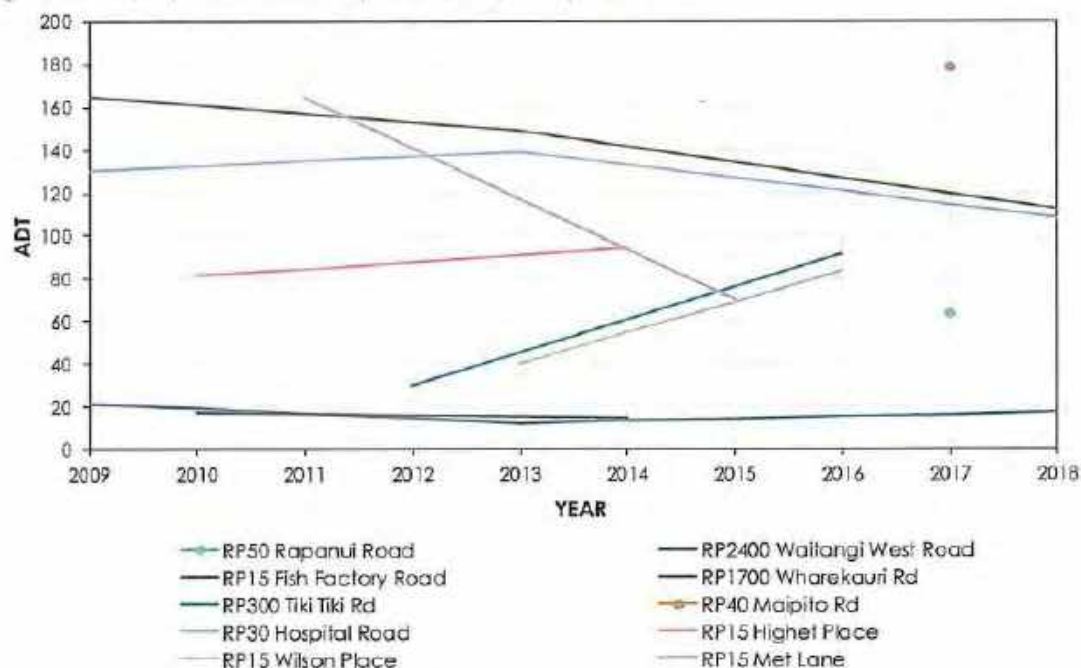


Figure 2-5 displays the counts that are captured once every four years².

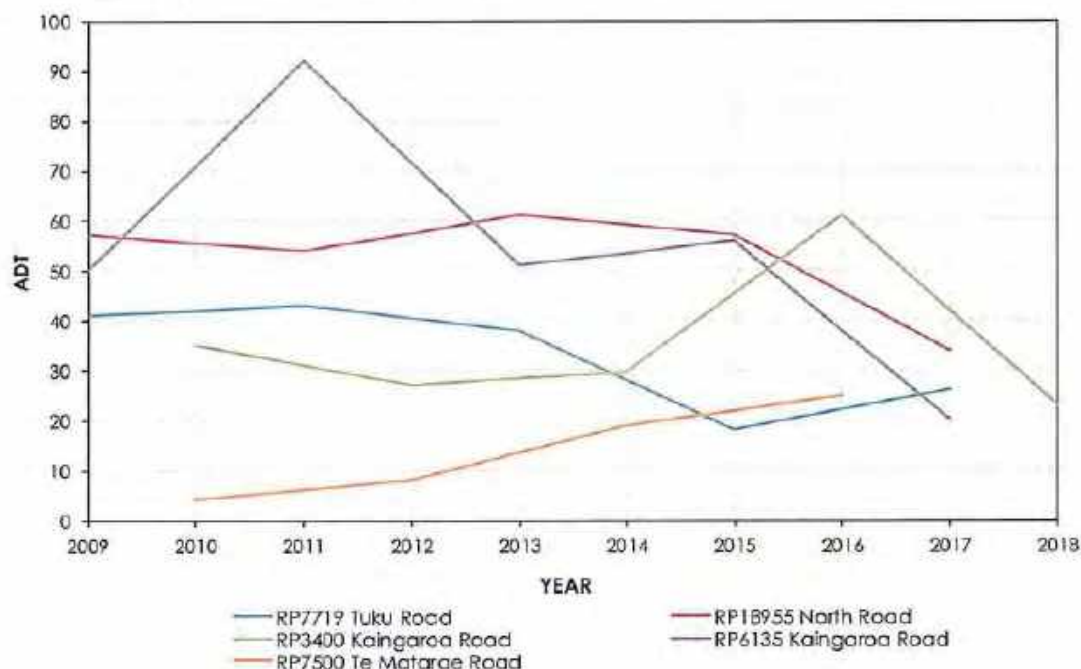


Figure 2-4: Historical Results for Traffic Count Sites counted on Two-yearly Cycles

² This excludes Hotel Road, which increases the y-axis scale above 1,000 ADT making the other count sites changes harder to distinguish.

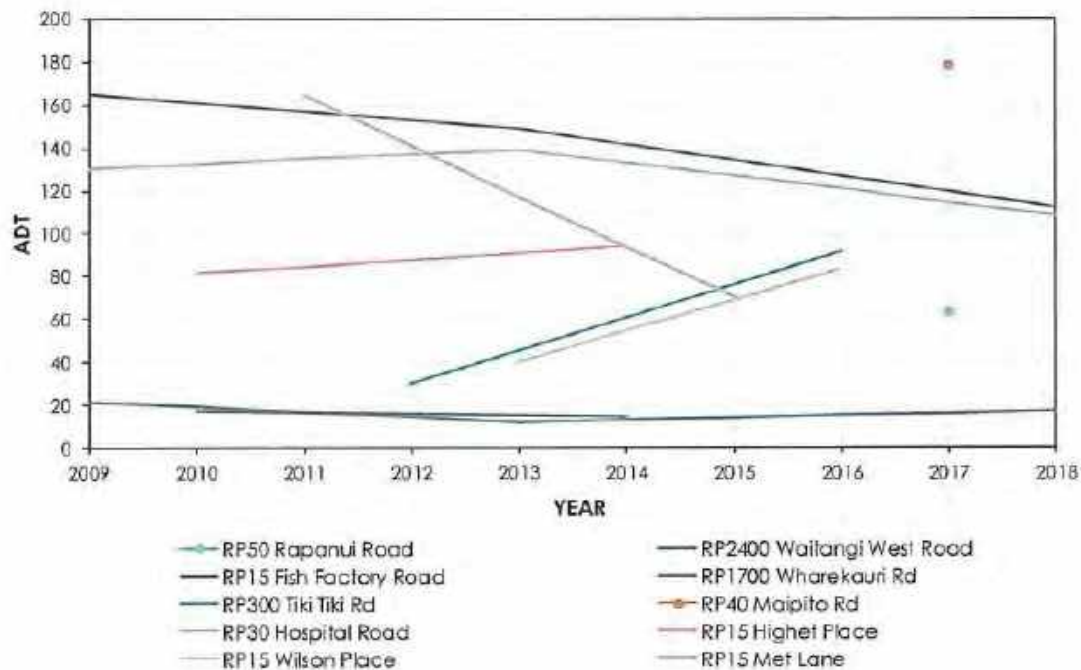


Figure 2-5: Historical Results for Traffic Count Sites counted on Four-yearly Cycles

Three of the four sites counted in 2018 had a reduction in volumes based on their previous count, except for Waitangi West Rd, which had a marginal increase in volume when compared to the previous count from 2013.

Figure 2-4 shows the reduction in traffic volumes on Kaingaroa Road (RP 6135) and the North Road count near Blind Jim's Corner (RP18,955) since the counts began in 2009. This indicates there appears to be a reducing level of activity in the northern reaches of the Island.

Figure 2-5 displays Maipito Road and Rapanui Road only as 'dots' in 2017, as these were the first counts conducted at each location.

3. Additional traffic counts

From time to time additional traffic counts may be required that are outside of the four-year programme. Any such counts will be agreed with the Contractor and claimed under dayworks.

In the past year there were additional counts conducted on Airbase Road and North Road (south of Airbase Road). These counts were captured to try and get a better understanding of volumes in case they were required for the 'Te One to Airport' investigation report. These were captured over a six-week period (three counts each) prior to Christmas 2017. The hope was that these counts would indicate a seasonal variation in traffic pattern, when compared to counts captured in the earlier part of the year, but the volumes were much the same.

4. Annual vehicle kilometres travelled

Table 4-1 presents the latest annual vehicle kilometres travelled (VKT) estimation for the Island. VKT is an important measure to know for the network as it assists Council Engineers to classify each road under the One Network Road Classification (ONRC). VKT is calculated by using a 'five-year ADT'³ calculated from recorded or estimated volumes, and then multiplied by the length of road being considered. At this point in time, the frequency the VKT and ONRC need to be updated to satisfy NZTA is unknown.

In January 2017 the following roads were upgraded to Secondary Collectors as allowed for under the ONRC. These roads provide critical connectivity to link the Island communities where no alternative roads exist.

- North Road: from Airbase Road to Kaingaroa Road
- Port Hutt Road: from North Road to Port Hutt (end of road)
- Kaingaroa Road: from North Road to Kaingaroa (end of seal)
- Waitangi Wharf-Owenga Road: from North Road to Owenga (end of seal).

At the time of writing, the Chatham Islands Council ONRC was still yet to be formally endorsed by NZTA, despite enquires by Stantec. As nothing has happened in the past 12 months and there have been no requests for more information, we assume that the ratings have been accepted.

Updating the total annual VKT calculation for the Chatham Islands to include the 2018 counts has seen a reduction compared to 2017. We believe that the reduction in construction activity around the WWUP would have been a key aspect in this reduction. 2017 estimated that 6.12 million VKT occurred, whereas 2018 has reduced by one million to 5.49 million VKT. Figure 4-1 shows the change in VKT since it was first estimated in 2016.

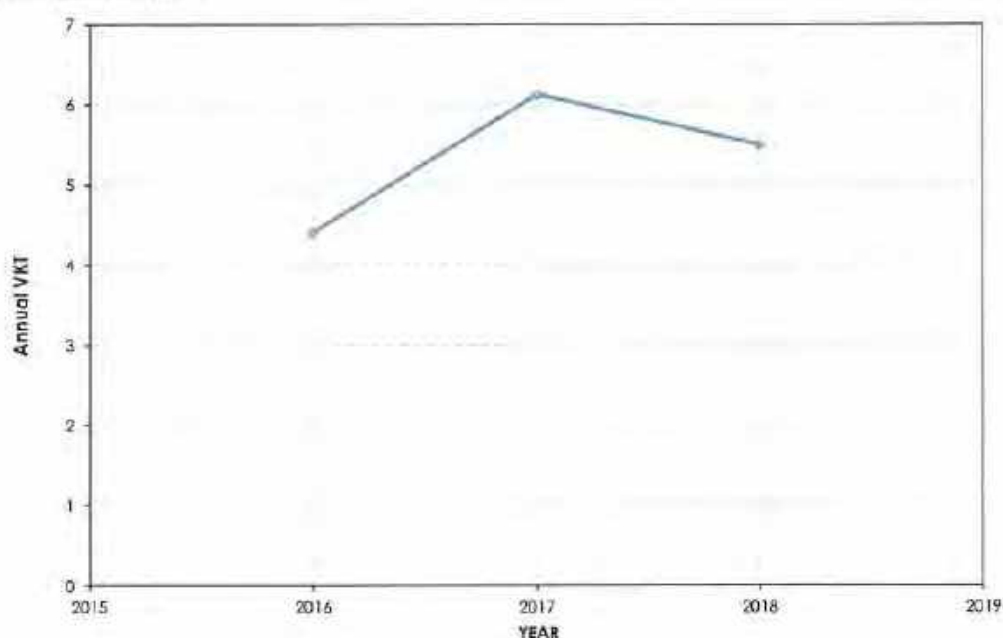


Figure 4-1: Change in annual VKT since it was first estimated

The 2019 traffic count data will help to provide a firmer estimate of the total annual VKT, which is expected to remain relatively close to the 2018 value. The jump from 2016 to 2017 was mainly attributed to an underestimation of ADT in the sections of the network where no traffic counts exist and the likely increased traffic volumes from the WWUP.

Additional survey counts might be conducted to close out some other gaps in the network to help better understand the volume of traffic certain minor roads on the network are carrying.

³ Due to the infrequent counts conducted and the volatility of these counts, an averaging ADT has been adopted.

2018 Chatham Island Council Traffic Count Results

Table 1: Network Volume Estimates (Travel Time and Daily Average Speed) - Chatham Island

Road Name	Grade	Width (m)	Length (m)	One Network Road Classification	VKT	Comments
AIR BASE ROAD	1	R	5,926	Secondary Collector	224,951	Key Island Connection - Wharf to Airport
BEACH ROAD	3	R	130	Low Volume	285	
COMFLAT ROAD	4	R	187	Low Volume	819	
DONALDSON ROAD	3	R	300	Low Volume	1,095	
FISH FACTORY ROAD	1	U	103	Access Road	4,211	
FLOWER POT TO GLORY ROAD (PI)	3	R	11,600	Low Volume	42,340	Pitt Island - Main road to airport
HIGHET PLACE	1	U	229	Low Volume	7,857	
HOLMES LANE	2	R	160	Low Volume	818	
HOSPITAL ROAD (0-166m)	1	U	166	Secondary Collector	6,544	
HOSPITAL ROAD (166-373m)	1	U	207	Low Volume	3,022	
HOSPITAL ROAD NORTH	1	R	350	Low Volume	767	
HOTEL ROAD	1	U	124	Access Road	33,130	
KAIKAROA ROAD	2	R	6,475	Secondary Collector	94,234	Critical community connection
KAIKAROA SETTLEMENT ROAD	2	U	67	Low Volume	245	
KAIWHATA ROAD	3	R	1,050	Low Volume	3,833	
KAPITO ROAD	2	R	332	Low Volume	1,212	
MAIPITO ROAD	2	R	1,672	Access Road	73,124	
MET LANE	4	U	170	Low Volume	4,344	
NORMAN KIRK ROAD	2	U	90	Low Volume	329	
NORTH HEAD ROAD (P2)	3	R	2,600	Low Volume	9,490	
NORTH ROAD (0-12,506m)	1	U	12,506	Secondary Collector	1,591,216	Key Island Connection - Wharf to Airport
NORTH ROAD (12,506-14,670m)	1	R	2,164	Secondary Collector	176,594	Critical community connection
NORTH ROAD (14,670-48,508m)	2	R	33,838	Secondary Collector	384,825	Critical community connection
OWENGA WHARF ROAD	3	R	350	Low Volume	2,044	
PAYNTER PLACE	2	U	56	Low Volume	204	
PENI LANE	2	U	117	Low Volume	854	
PORT HUTT ROAD	1	R	16,615	Secondary Collector	369,933	Critical community connection
PREECES ACCESS (P4)	3	R	500	Low Volume	1,825	Pitt Island
RAPANUI ROAD	2	R	2,858	Low Volume	65,720	
RAUCEBY ACCESS (P3)	3	R	400	Low Volume	1,460	Pitt Island
SCHOOL ACCESS (P5)	3	R	100	Low Volume	365	Pitt Island
TAIA HAPUPU ROAD	3	R	5,325	Low Volume	19,436	

Table 1: Network Volume Estimates (Travel Time and Daily Average Speed) - Chatham Island

Page 1

2018 Grafton Islands Council Traffic Count Results

Road Name	Grade	Rural/Urban	Length	One Network Road Classification	VKT	Comments
TE MATARAE ROAD	3	R	8,174	Low Volume	65,637	
TIKI TIKI ROAD	1	R	665	Low Volume	22,088	
TUKU ROAD (0-456m)	1	U	456	Secondary Collector	73,771	Waitangi town centre
TUKU ROAD (456-22,160m)	2	R	18,041	Low Volume	126,454	
WAITANGI WEST ROAD	3	R	11,185	Low Volume	69,403	
WAITANGI WHARF - OWENGA ROAD (0-1,941m)	1	U	1,941	Secondary Collector	530,710	Key Island Connection - Wharf to Airport
WAITANGI WHARF - OWENGA ROAD (1,941-22,381m)	1	R	20,440	Secondary Collector	1,361,812	Critical community connection
WAITANGI WHARF - OWENGA ROAD (22,381-24,305m)	3	R	1,924	Low Volume	84,665	
WHARECAURI ROAD	3	R	4,829	Low Volume	24,676	
WILSON PLACE	1	U	86	Low Volume	2,605	
TOTAL Est. VKT					5,489,184	

Christchurch

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Fax: +64 3 366 7780

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5. COMMUNITY SERVICES

5. Community Services

5.1 Chatham Islands Museum & Cultural Heritage Charitable Trust

Date of meeting	13 December 2018
Agenda item number	5.1
Author/s	

Purpose

The attached letter informs the Council that the Chatham Islands Museum & Cultural Heritage Charitable Trust have agreed to appoint a representative of Hokotehi Moriori Trust as a Trustee on the Museum Trust.

Recommendations

THAT the letter be received.



The Chatham Islands Museum & Cultural Heritage Charitable Trust

"Working towards a culturally enriched community"

PO Box 40, Waitangi, Chatham Islands, 8942
Telephone 03 3050 033 ext. 3, email: museum@chathamislands.net.nz

26 November 2018

Dear Alfred

On 23rd November, 2018 the following special resolution was passed by the Museum Trustees:

'The Chatham Islands Museum & Cultural Heritage Charitable Trust agrees to accept a Hokotehi Moriori Trustee as a representative of Chatham Islands Imi on the Museum Trust.'

Moved: Bob Weston; seconded: Jocelyn Powell. Passed.

Please note that we will be seeking to amend the Museum Trust's Deed to include representatives of both Chatham Islands Iwi and Imi Trustees on the Trust Board.

Regards

Bob Weston

5.2 Sport NZ Travel Fund 2017/18

Date of meeting	13 December 2018
Agenda item number	5.2
Author/s	Orrin Kapua

Purpose

To update Council on the allocation of funding for the Sport NZ Travel Fund 2017/18.

Recommendations

1. THAT the information be received.
2. THAT the accountability report for Weka Walk Pitt Island School be accepted.

Key Points

1. Sport NZ Travel Fund 2017/18

Accountability report

Weka Walk Pitt Island School

The weka walk is an educational tour designed to provide a range of activities and challenges to intermediate school aged children to challenge them mentally physically and they received \$8,897.50 in funding to help with their trip to NZ. It was a successful trip because it gave the students the opportunity to try swimming lessons, rock climbing and attend a training session with the hurricanes. The accountability report is completed and they have invoices showing how the funding was spent.

<u>Funding received</u>	<u>Amount</u>
Sport NZ travel fund 2017/2018	8,897.50
<u>Breakdown of funding spent</u>	<u>Amount</u>
Air tickets	
Children	8,589.68
Adults	3,412.20
Total air travel	11,998.88
Total Funding spent	\$11,998.88



5. Community Services

5.3 Report to the Ministry of Culture & Heritage

Date of meeting	13 December 2018
Agenda item number	5.3
Author/s	Deborah Goomes - Consultant

Purpose

The purpose of the attached report is the compliance with the funding agreement with the Council and the Ministry on progress towards the Museum Project.

Recommendations

THAT the report be received.



Chatham Islands Council

Museum, War Memorial and Council Administration Complex

Report to the Ministry of Culture and Heritage
on the Development of the
Chatham Islands Museum
to 29 February 2016

Background

The Chatham Islands Council was awarded a grant from the Vote Arts, Culture, and Heritage ("Grant") Fund for \$1,076,000 on 30 June 2014 for the purpose of establishing a museum on the Island as part of the planned Chatham Islands War Memorial and Community Centre.

A considerable body of work has been undertaken on this project to October 2015, however, for the reasons explained below a review of the project was undertaken and Council concluded that an 'option B' would be more achievable.

Reasons:

- Funding applications were considered for both the Lottery Community Facilities Fund and the Lottery Environment War Memorial Commemorations Fund. These applications were declined largely due to the inability to find the third share threshold funding for the project.
- Deterioration of the current Council facility

Significant Challenges to Achieving the Proposed Community Complex project as outlined in the Feasibility Study

- Local third Share – As previously mentioned and also conveyed in the Report to the Ministry for the year ended 30 June 2015 the issue of securing a local third share of funds required to meet the criteria for major capital funding in relation to the other community components of the complex, remains challenging and unresolved. The Island simply cannot raise the third local share needed having a population base of approximately 600 people. Council had continued to lobby central government for support to waive the requirement in terms of consideration as a 'special and unique' case for the Chatham Islands
- The support of the Chatham Islands Enterprise Trust in terms of a partnership arrangement for the establishment of a shared administration facility as a component of the complex had been uncertain.

Developments since 30 June 2015

- No further developments had occurred in terms of Council's continual lobbying with central government.
- Work had continued in relation to sourcing alternative funding for the original proposed project.
- During August 2015 a correspondence had been received from the Chatham Islands Enterprise Trust confirming they could not offer any support for the complex in terms of funding a new administration facility.
- In September 2015, the War Memorial Hall had subsided further. This subsidence affected half of Council's administration building as the Hall is adjacent to the facility. The Hall for sometime had been closed to the public as a result of an earlier

subsidence issue and has been deemed 'condemned'. Due to the continual deterioration of the Hall a 'fit for purpose' administration facility has become a matter of urgency in terms of health and safety and compliance for Council. The current facility has an estimated life time of approximately two years.

- A draft 'Agreement for the Management of the Chatham Islands Museum' has progressed and will be finalised prior to 30 June 2016. ***See Draft Arrangements for the Management of the Chatham Islands Museum attached.***
- A Best Practice Review of the Museum had been undertaken early this year. ***See Chathams Report V2.1 attached.***

Actions and Expectations

- As a result of the issues relating to the inability to secure a third local share, confirmation from the Chatham Islands Enterprise Trust and the urgency of a new administration facility, it was timely for Council to consider a more achievable option.
- In October 2015 a letter had been sent to the Hon. Maggie Barry regarding a more achievable option and the potential of an 'Option B' in which a 'variance to the funding arrangements' would need to be considered. ***See Hon. Maggie Barry Oct 2015 attached.***
- Investigations into an alternative 'Option B' concept plan had been undertaken in November 2015. ***See Proposed Chatham Islands Council Building attached.***
- The Museum Trust has been consulted, though the two parties are yet to formally meet to discuss the concept plan and working towards the design stage of the Museum component. It is expected that the Museum component will remain within the boundaries as outlined in the feasibility study.
- It is expected that a War Memorial component will be included in the new Museum and Council Administration Complex.
- It is expected that the other community aspects of the original proposed complex remain considerations for the future as funds become available.
- Investigations into funding sources for the administration component has began with the potential of a favourable outcome.
- Investigations into flexible pathways in the use of the Museum funding. Query - Email sent to Ministry of Culture and Heritage. ***See Query Email Feb 2016.***

Actions in Moving Forward

- Development of a Project plan for the option B approach
- Seek confirmation from the Ministry of Culture and Heritage as to a potential variance to the Funding Agreement
- Finalising the Arrangements to the Management of the Chatham Islands Museum

- Completion of the costing relating to the concept plans
- Design work – Museum component
- Funding Application – War Memorial component
- Secure funding for the Administration component

Council is confident that an option B approach would be realistic more achievable for its community and understands that while there has been a large body of work completed to date there is still a large body of work to be undertaken.

On behalf of its community, the Council believes the Museum will become a facility of national significance, housing displays found in no other around New Zealand. The Museum will display the unique cultural histories of the Chatham Islands, the rich maritime history and many other stories relative to this small isolated community.

Additional Information Attached

- Arrangements for the Management of the Chatham Islands Museum
- Chathams Report
- Hon. Maggie Barry Oct 2015
- Proposed Chatham Islands Council Building
- Query Email Feb 2016.

6. REGULATORY

6. Regulatory

6.1 Activity Report from Environment Canterbury

Date of meeting	13 December 2018
Agenda item number	6.1
Author/s	Environment Canterbury Staff

Purpose

To provide an update on the services being performed by ECan for the Chatham Islands Council contract.

Recommendations

THAT the report be received.

5. Action Reports

5.1. CIC Corporate update

Chatham Islands Council Steering Group

Date of meeting	29 November 2018
Activity	CIC Corporate Services update
Author/s	Tanya Clifford

Purpose

1. To provide an update on the services being performed under the corporate services umbrella for the Chatham Islands Council Regional Council contract.
2. This paper is informative only, no decision required.

Background

3. *Annual Report:* The Chatham Islands Council (CIC) Annual Report 2017/18 is complete; but not adopted pending approval from Audit New Zealand. The auditors are awaiting approval from their technical team prior to issuing an audit opinion, authorisation relates to a minor disclosure non-compliance with the Local Government Act 2002 related to salary banding and a significant roading revaluation increase, some of which may relate to the prior period. As approval has not been received, Council have missed the statutory reporting deadline. Indications from audit are that technical approval will be issued by late November. In addition, the audit has also focused on resolving legacy system inconsistencies, which have been aggregated over time. This has resulted in an expenditure write-off in year of \$134k. We are working with the auditors to ensure all disclosure requirements are appropriate and authorisation is as swift as possible.
4. *The Chatham Islands Mayoral Disaster Relief Fund Trust:* the Chatham Islands Council has recently established this Trust. Council may exempt the organisation from reporting as a Council Controlled Organisation under section 7 of the Local Government Act 2002 (also negating the requirement for Council to prepare group accounts). For this to occur, a resolution from the Chatham Islands Council is required. This exemption can be granted for up to three years.
5. *On-going funding support:* The confirmed level of support from the annual crown contribution for the 2018/19 budget was at the 'status quo' level of funding. This means, the Council will need to self-fund the 12% NZTA funding shortfall and any other unfunded capital projects. Going forward, it has been assumed that funding support from 2019/20 onwards will include sufficient coverage for all operating projects, support for a capital investment program and cover the NZTA shortfall. This additional support is not guaranteed and amounts to an approximate \$1.4 million increase in funding per annum. The financial assistance package was independently reviewed by McGredy

Winder, with the Government electing to fund the status quo, as opposed to suggested assistance packages. The level of support is now being reviewed by an independent consultant. The current confirmed level of funding support (and lack of infrastructural investment) may potentially impact on the Annual Report's audit opinion in terms of financial stability ("going concern") or asset management.

6. *Payroll:* Environment Canterbury (ECan) are now providing additional assistance processing payroll for all CIC staff, including PAYE reporting. In addition, we have been working with Council to assist with updating staff contracts and policies.
7. *Reporting:* ECan is in the process of updating the current CIC steering group dashboard report and DIA quarterly report. This provides an opportunity to refresh the information currently being presented. We would appreciate receiving feedback on desired information for inclusion within these reports.

Attachments

5.2.1 Monthly Steering group financial report, for October

File reference	[SharePoint link for this paper]
Peer reviewers	[Names of two peer reviewers who have reviewed this paper]

5.2. CIC Compliance Monitoring

Chatham Islands Council Steering Group

Date of meeting	21 November 2018
Activity	CIC compliance monitoring
Author/s	Gillian Jenkins

CIC compliance monitoring

- Plans are being made to send two officers to the island in early 2019. They will follow up on the 2015 industrial/commercial compliance report. We are currently organising warrants for the officers to allow them the power to undertake inspections.

File reference	[SharePoint link for this paper]
Peer reviewers	[Names of two peer reviewers who have reviewed this paper]

5.3. CIC Communications

Chatham Islands Council Steering Group

Date of meeting	21 November 2018
Author/s	Hayley Lilley

Updates

1. A water quality data page has been added to the website – worked with Helen Shaw and the web team to add water quality reports and links to data for each of the 22 Chathams monitoring sites.
2. Two monthly news stories have been added to the website for October and November: *Chatham Islands gets world-leading IoT network* and *Applications open for Creative Communities funding*.
3. Upon closer inspection the web team has determined that there's no way for us to see if website users are on the Chathams or not – Google Analytics does not segment audiences to that extent.
As an alternative way to gather this data, the web team added a pop-up survey to the website on 31 October, asking users whether they're on the Chathams as well as a few other questions about their user experience of the new site.
Initial results suggest that 32% (7 out of 22) website users are based on the Chathams. This will increase as we use Facebook more to drive the local audience to the website (see next item).
4. The Facebook page has successfully been re-branded to an official CIC branded page while maintaining the existing local following. Currently working on a Facebook guide/strategy for CIC staff, to support their use of Facebook. The key strategic purpose of Facebook is to drive traffic to the website as the primary source of knowledge.
5. A designer is currently working on three 'Important things to know' flyers for dogs, stock and fencing, and roads.
6. See website report attached.

Recommendations

Attachments

1. Chatham Islands Council website report 11.10.18-18.11.18 [5.3.1]

Chatham Islands Council website report

For the period: Thursday 11 October-Sunday 18 November 2018

Summary/key findings:

- **70% of visitors** were new to the site
- Users visited **three different pages** on average per visit
- New **Water Quality Data** page has been visited **176 times** already

Work ons:

- 2nd most visited page is 404 error (again). Likely to be bookmarks/favourites to old site pages. Awaiting results of further investigation into this so we can reduce occurrences.

Snapshots:

Most viewed pages:

	Page Title	Page Views ▾	Δ
1.	Home » Chatham Islands Council	1,004	37 ↑
2.	Page Not Found » Chatham Islands Council	360	-66 ↓
3.	Search all Documents » Chatham Islands Council	208	-111 ↓
4.	Meet the Team » Chatham Islands Council	184	5 ↑
5.	Water Quality Data » Chatham Islands Council	176	-
6.	Visit the Chatham Islands » Chatham Islands Council	163	28 ↑
7.	Your Council » Chatham Islands Council	143	-21 ↓
8.	Contact » Chatham Islands Council	116	-34 ↓
9.	News and Events » Chatham Islands Council	116	-19 ↓
10.	Documents » Chatham Islands Council	67	-20 ↓
	Grand total	3,965	-27 ↓
			1 - 10 / 192 >

How have visitors used the website?

How many times was the website visited?

Sessions
1,343
± 108

How many users visited the website?

Users
1,018
± 86

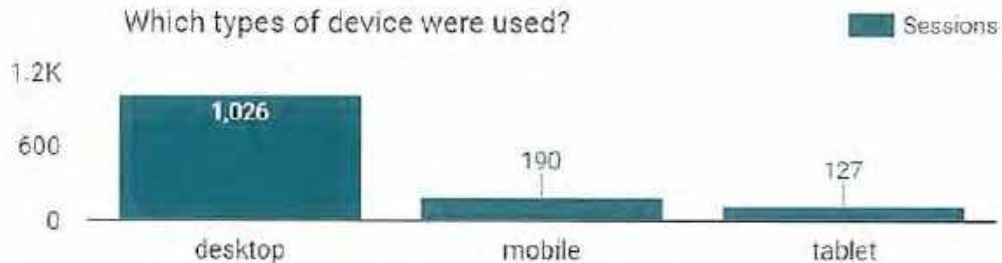
How many pages were viewed on the website per visit?

Pages/Session
2.95
± 0.38

How many visits were from new vs returning visitors?



Which types of device were used?



Where was the website traffic coming from?

"(direct)/(none)" is from typing into browser address bar, or via bookmark/favourite.

"organic" is from search results. | "referral" is a link from another website.

	Source/Medium	Sessions ▾	Δ
1.	google / organic	760	88 ±
2.	(direct) / (none)	354	47 ±
3.	civildefence.govt.nz / referral	28	-
4.	localcouncils.govt.nz / referral	28	-2 ±
5.	lgnz.co.nz / referral	22	3 ±
	Grand total	1,343	108 ±

1 - 5 / 34

5.4. CIC Biosecurity

Chatham Islands Council Steering Group

Date of meeting	29 November 2018
Author	Steve Palmer Biosecurity Advisor Special Projects

Purpose

1. Biosecurity activity update for October/November 2018 and proposed activities for December 2018.

Recommendations

That the Chatham Islands Council Steering Group:

1. **Confirm Council approval to purchase thermal imaging scope as per the previous meeting agenda item. Approximate cost is \$7,900.**
2. **Approve to fund travel, labour and accommodation for a specialist dog/handler to visit the Island early in the new year to determine the presence/absence of Argentine Ants. Cost is approximately \$4,000.**

Key points

2. To carry out surveillance and control programmes on terrestrial and marine pests in accordance with the Chatham Islands Pest Management Plan. This includes maintaining effective border control activities between New Zealand and the Chatham Islands and the internal border between main Chatham and Pitt Island.
3. Staff; Robin Seymour took un-paid leave for most of October but made himself available to assist Mt Hutt Helicopters with Goat and Geese control. Kerri Moir was off Island for nine days at the end of October. Jacqui Neilsen has been assisting on a "as required" basis.
4. Kerri's time off Island was spent on Mercury Island in the Whitianga Harbour as part of a joint specialist dog programme targeting Rodents, Plague Skinks and Argentine Ants. At the end of the project Kerri achieved full Certification for herself and Moki as Specialist Rat dog and Handler. This co-ordinated project has (and will have) positive spinoffs for Chatham Islands projects. (See below).
5. Mt Hutt Helicopters arrived and departed the Island over the October/November period. Despite some unsettled weather the Gorse spraying project was completed with a total of 193 hectares being controlled. A further 27 goats were culled along with three more Canada geese. The total hectares sprayed is down on the last two years, primarily due

to the increase in price, which Mt Hutt Helicopters had to address after running at a significant loss for the past four years.

6. Environment Canterbury staff, Kennedy Lange and Jason Butt were on the Island in early November and spent most of their time on Pitt Island meeting locals and having a good look around. As with their previous visits, Kennedy and Jason come more from a Biodiversity standpoint and how/where plant pests affect the unique flora on the Chathams in specific areas. A summary of their visit will be available at the next Steering Group meeting. Unfortunately, they also confirmed the presence on one Canada goose with potentially 25+ viewed from a distance on Pitt Island. Robin Seymour will be following up on this as soon as possible.
7. The big news in early November was the confirmed find of one Plague Skink. This was handed in (via photographs) by a member of the public, Nick Cameron. Nick found the solitary skink on his boat and put it in a container overnight. It was dead the next morning, so he threw it out but had the forethought to take some photos which he provided to DoC. Once confirmed, Environment Canterbury notified MPI as required for "Unwanted organisms". The response from MPI was very efficient and prompt. Lisa Maria from MPI was on the Island on the first available plane along with 1,000 "sticky board" traps. Nick and Abby confirmed that the skink was likely to have arrived via some hessian sacks Nick had received from the Coromandel via Air Chathams. Fortunately, the sacks had only been at the Air Chathams depot in Te One for one night and then Nick's property for five days before the discovery. Lisa assisted with putting out the intensive trapping on 14 November around Nick's property and the Air Chathams Depot. These traps will be checked daily by Environment Canterbury staff for 20 consecutive days. We are also complementing this with the arrival of a specialist Plague Skink dog/Handler in the week commencing 19 November. They will be able to search a much wider area and incorporate a few other areas for good measure. This prompt action was in no small way attributable to Kerri's collaboration with other specialists' dogs/handlers on Mercury Island. After six days of trapping no other Skinks have been found and we are hopeful it was just a solitary male hitch-hiker.
8. This incursion highlighted our need for vigilance and reports from the public. We will be carrying out a media "blitz" over the next three months with emphasis on Plague Skinks, Chilean Needle Grass and Argentine Ants. With the latter, I propose that we get another specialist dog to the Island to do a quick whip around of risk sites (Recommendation above). I do not want to overwhelm people with a never-ending list of unwanted pest species but there is a real concern the above three could make it to the Chathams.

File reference	[SharePoint link for this paper]
Peer reviewers	[Names of two peer reviewers who have reviewed this paper]

5.5. CIC Resource Management

Chatham Islands Council Steering Group

Date of meeting	21 November 2018
Activity	Resource Management - Planning
Author/s	Lisa Jenkins

Purpose

1. To seek approval for Environment Canterbury staff to work with the Department of Conservation to identify an appropriate process to resolve issues so that Ministerial approval can be given to the Chatham islands Resource Management Document.

Recommendations

That the Chatham Islands Council Steering Group:

1. Approves Environment Canterbury staff negotiating a process with Department of Conservation staff, by which Ministerial approval of the Chatham Islands Resource Management Document can be gained; and
2. Notes that contact has been made with a planner in the Department of Conservation Christchurch office who will work with us to pursue Ministerial approval of those parts of the Chatham Islands Resource Management Plan that are currently not operative. The Department of Conservation have indicated they will:
 - Review the relevant parts of the plan to determine if changes are needed for the Minister to give approval;
 - Seek advice as to the jurisdiction of the Minister to make changes outside of an RMA Schedule 1 process; and
 - Work with the CIC (or Environment Canterbury staff on behalf of the CIC) to identify an appropriate process for gaining Ministerial approval.

Background

2. The Chatham Islands Resource Management Document (CIRMD) was made partially operative in December 2017. Since then, we have been attempting to make progress with advisors at the Department of Conservation on the matter of Ministerial approval of those parts of the CIRMD that remain in a "proposed" state. We have not been able to make progress working with advisors in Wellington. The Wellington DoC office has passed the work on to Nardia Yozin in the Christchurch office.

3. I have had a phone conversation with Nardia where we discussed options for progressing the approval process. Nardia has indicated she will seek some further advice around process.
4. There was some discussion regarding undertaking a Plan Variation (RMA Schedule 1 process) to make necessary changes. I indicated that if changes are of limited scope the preference would be for the Minister to insert the changes without a schedule 1 process. If the Department seek changes of more extensive scope (i.e. where stakeholders would be affected in ways not anticipated through the original plan development 1 process), it may be necessary to follow through a plan variation process.
5. The Department of Internal Affairs are currently considering funding requirements for work needed to establish a planning framework that gives full effect to all national policy (including the National Policy Statement for Freshwater Management). Once a process is agreed between the Council and the Department of Conservation for progressing towards Ministerial approval, it will be necessary to discuss that with DIA to ensure the appropriate funding is available.
6. To ensure momentum is maintained, Nardia has agreed to regularly meet with Environment Canterbury staff. To that end, we will meet on 5 December.

Cost, compliance and communication

Financial implications

7. Currently, we are working within existing budgets. I understand the Department of Internal Affairs are considering funding options should plan variations be required via a Schedule 1 process. DIA will be contacted to ensure appropriate funding is available.

Risk assessment and legal compliance

8. There are no likely legal risks with regard to pursuing an approval process with the Department.
9. The approval process will consider the legal risks of making plan changes directly using the Minister's powers. The level of risk will be directly related to the types of changes the Department identifies.

Significance and engagement

10. CIRMD stakeholders may be affected by changes sought by the Department of conservation. Depending on the changes the Department consider are necessary, some targeted stakeholder engagement may be needed. If changes are significant, wider stakeholder engagement may also be necessary.
11. Prior to any alterations to the Plan being agreed to, Council will be asked to approve an engagement plan.

Next steps

12. If Council agrees to Environment Canterbury staff pursuing this line of enquiry with the Department of Conservation, the next steps will be for Environment Canterbury and Department of Conservation staff to meet and identify some draft principles for the process.
13. Environment Canterbury staff will report back to the CIC monthly and seek approval prior to any agreements being made.

File reference	[SharePoint link for this paper]
Peer reviewers	[Names of two peer reviewers who have reviewed this paper]

5.6. CIC Water quality and hydrology

Chatham Islands Council Steering Group

Date of meeting	21 November 2018
Activity	
Author/s	Helen Shaw

Purpose

1. Update on water quality and hydrology monitoring and reporting for Chatham Islands.

Recommendations

- None. Report for information only.

Hydrology

1. Hydrology contractor is on the island currently. All equipment is working well. We are assessing the sites with respect to the National Environmental Monitoring Standards – many of ECan's rainfall sites are not meeting NEMS for 'good' quality data; it is likely that some small changes / upgrades to Chathams sites will also be required to meet the new national standards for good data.
2. Rainfall has been quite low for the last 3 months, and the lagoon mouth is currently open.
3. The telemetry has been reprogrammed to send data less often, which should reduce the cost of satellite transmission (eg soil moisture data now being sent twice/day). We are also looking into alternatives to reduce costs (but maintain reliability).

Water Quality

2. Water quality reports are now on the CIC website, with a link to the raw data. Data is only available up until September 2017; ECan has recently upgraded its water quality database, and the link more recent data is not yet fixed on the website.
3. We are currently scoping up a request for proposal to undertake analysis of the long term water quality and quantity data.
4. Eleven new sites have been proposed for monitoring at the sanitary landfill. Kerri Moir has been asked to do this sampling, but it has a significant time implication. The budget does not specifically have funds allocated for this work, so will need to be adjusted.

Financial implications

5. Funding for the collection and analysis of landfill groundwater and leachate samples needs to be confirmed.

File reference	[SharePoint link for this paper]
Peer reviewers	[Names of two peer reviewers who have reviewed this paper]

5.7. CIC Civil Defence Emergency Management

Chatham Islands Council Steering Group

Date of meeting	21 November 2018
Author/s	James Thompson

Purpose

1. To report of Civil Defence Emergency Management support provided to the Chatham Islands Council in October/ November 2018

Recommendations

That the Chatham Islands Council Steering Group:

1. Note the Civil Defence Emergency Management report

Background

2. Planned EOC and Welfare management training that was planned for early October did not go ahead as the Canterbury CDEM Group trainer ended up with a tooth infection and could not fly to the Islands.
3. This will now be rescheduled for February or April 2019. Confirmation will be provided by Rana Solomon.
4. There have been no further activities of CDEM support to the Chatham Island Council in this period.

Next steps

5. To arrange new times to deliver EOC training and Welfare support to the Chatham Islands in February or April 2019.

File reference	[SharePoint link for this paper]
Peer reviewers	[Names of two peer reviewers who have reviewed this paper]

5.8. Chathams Island Pest Management Strategy Review

Chatham Islands Council

Date of meeting	29 November 2018
Author/s	Verity Halkett Senior Strategy Advisor

Purpose

1. Environment Canterbury is assisting the Chatham Islands Council to review its Regional Pest Management Strategy (RPMS).
2. A tender process has occurred to engage a contractor to deliver the majority of the review. Estimated costs have been provided by the contractor.
3. We seek confirmation of the option package to enable the project to commence.

Recommendations

That the Chatham Islands Council:

1. **decide which option is to be delivered**
2. **agree that phase one of the project can commence**

Background

4. The Steering Group was last briefed in March on the Chatham Islands Regional Pest Management Strategy. This included an outline of the changes to national legislation and the requirement for Chatham Islands Council to update the current document.
5. Four options were presented, consisting of a range of planning tools for pest management. The scope of work which was put out for tender reflected the options previously presented to the Steering Group. See attachment for further information.
 - Option 1: development of a Regional Pest Management Plan
 - Option 2: development of a Regional Pest Management Plan and *integrated* Pathway Management Plan
 - Option 3: development of a Regional Pest Management Plan and *standalone* Pathway Management Plan
 - Option 4: development of a Regional Pest Management Plan, and Pathway Management Plan (either *integrated* or *standalone*), and a Regional Biosecurity Strategy. This provides a comprehensive pest management framework for the Chatham Islands.

Project Approach

6. The contractor has proposed to approach the project in three phases, with a review point after each phase. These phases are required regardless of which option is selected.
 - Phase one: scoping of requirements, including stakeholder engagement planning
 - Phase two: pre-proposal consultation, development of draft documents
 - Phase three: finalisation of documents.
7. There is a fourth phase, which is only necessary if formal consultation for the Regional Pest Management Plan and Pathway Management Plan is required.
8. Note, phase four is **not** included in the costings. Stakeholder engagement is a key part of phase one and two, to enable legislative consultation requirements to be met without a formal consultation process. Formal consultation may significantly increase time and cost.

Cost

9. Costs for delivery of phase one – three (inclusive) is set out below

Option 1	Option 2	Option 3	Option 4
\$97,000	\$120,000	\$140,000	\$165,000

10. The cost for delivery for phase one only is \$55,000.
11. There are further costs beyond those above
 - a. Travel for consultants – estimated at \$10,450
 - b. Cost benefit analysis (as required by the NPD¹)
 - c. Legal services
 - d. Communications / engagement material
 - e. Planning support for the review process (Council papers, documents to support formal decision making, appeal process).

Financial implications

12. It is anticipated that the review will be completed July 2019. This may enable costs to be managed over two financial years.

¹ National Policy Direction for Pest Management

Risk assessment and legal compliance

Selection of option

13. Option 4 includes development of a Pest Management Strategy. This is significant as it will detail the non-regulatory approaches to pest management on Chatham Islands.
14. If this is not developed, there is a risk the community may consider that the regulatory documents² do not effectively address pest concerns and may request a formal consultation process.

Costs

15. Potential legal costs are not currently known. Review of regulatory provisions in the Pathway Management Plan may be required, Environment Canterbury Staff do not have experience in the preparation of documents for regulatory pathway management.

Next steps

16. Consultant to commence on phase one
17. Report to the Steering Group on the outputs of phase one³

Attachments

Chatham Islands Pest Management Review 2018 A3

File reference	[SharePoint link for this paper]
Peer reviewers	Zoe Buxton

² Regional Pest Management Plan and the Pathway Management Plan

³ Requirements document, project plan and consultation and engagement plan.

Chatham Islands Pest Management Review – Process overview and options

TOOLS



CONSULTATION

Regional pest and pathway management plans do not need to go through a full consultation process (public submissions and hearings), should the Council determine that sufficient consultation has been undertaken in advance. This includes ensuring that all those affected by the plan/s have been consulted (Ministers, local authorities, iwi, other persons).

DIRECT CONSULTATION

Direct consultation prior to and/or after notifying the proposal can be undertaken with the community, iwi government agencies and other stakeholder groups (Fisheries and Enterprise Trust etc). This could include public community events, as well as targeted meetings with stakeholders and community groups.

Direct consultation may mean that hearing processes are not required.

PUBLIC NOTIFICATION

Public notification (full consultation by means of formally notifying the proposal for feedback) may be required if it is not possible to consult with everyone that may be affected by the plan through direct consultation.

This would involve hearing public submissions and may require a hearing panel to be established to consider the submissions.

Chatham Islands Council 2018-11-20

PROCESS

The process varies from a Resource Management Act Plan process, there are similarities but also key differences. Significantly, that a Proposal is developed (rather than a Draft Plan). Consultation is not required in every case, but where it is required it is the Proposal that public provide feedback on.



PROGRAMMES

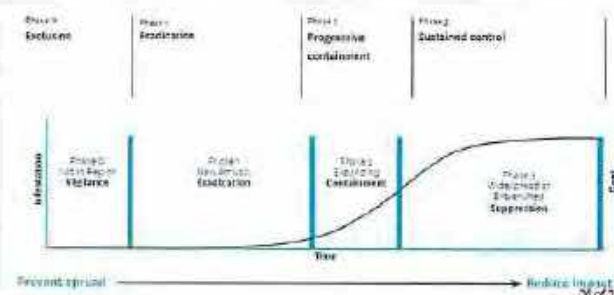
Pests in an RMP must be managed under one of five programmes:

Exclusion	To prevent the establishment of the pests that are present in New Zealand, but not yet established in an area.
Eradication	To reduce the level of infestation of the pest to zero levels in the short to medium term.
Progressive Containment	To contain or reduce the geographic distribution of a pest to an area over time.
Sustained Control	To provide ongoing control of a pest to reduce its impacts on values and spread to other properties.
Site-led	That a pest, that is capable of causing damage to a place, is excluded or eradicated from that place, or is contained, reduced, or controlled within the place to an extent that protects the values of that place.

Pest Infestation Model

This model shows pest infestation curve and the corresponding RMP Programmes.

The model demonstrates the benefit in managing pests in Phase 0 or 1 before they become widespread.



OPTIONS COMPARISON

	Option 1	Option 2	Option 3	Option 4
	Revised Pest Management Plan	Revised Pest Management Plan & Integrated Pathway Management Plan	Revised Pest Management Plan & Pathway Management Plan	Revised Pest Management Plan & Pathway Management Plan & Strategy
Details	<ul style="list-style-type: none"> Undertake review to ensure that the requirements of the Act and the NPD are met 2017 Snapshot Report provides the basis for the review Cost benefit analysis required for all pests listed in the RPMP 	<ul style="list-style-type: none"> Undertake review to ensure that the requirements of the Act and the NPD are met 2017 Snapshot Report provides some pest information for the review Include pathway management plan details within the pest management plan document Cost benefit analysis required for all pests listed in the RPMP and the PMP 	<ul style="list-style-type: none"> Undertake review to ensure that the requirements of the Act and the NPD are met 2017 Snapshot Report provides some pest information for the review Standalone pathway management plan Cost benefit analysis required for all pests listed in the RPMP and the PMP 	<ul style="list-style-type: none"> Undertake review to ensure that the requirements of the Act and the NPD are met 2017 Snapshot Report provides some pest information for the review and some wider strategy information Include pathway management plan details within the pest management plan document Produce strategy document compiling all biosecurity activities Cost benefit analysis required for all pests listed in the RPMP and the PMP (not required for the Strategy)
Pros	<ul style="list-style-type: none"> This is the minimum to ensure that Biosecurity Officers can use legal powers to manage biosecurity threats present in Chatham Islands Assuming there are no significant departures from the Environment Canterbury approach, the legal opinions sought from that process can be applied Lowest cost option 	<ul style="list-style-type: none"> This is a cost-effective way of providing regulatory controls for both pests and pathways 	<ul style="list-style-type: none"> Enables the pest and pathway plans to be reviewed independently 	<ul style="list-style-type: none"> This is a cost-effective way of providing regulatory controls for both pests and pathways Developing a strategy to sit alongside the plans provides the full view of reducing biosecurity risk, not just the regulatory tools
Cons	<ul style="list-style-type: none"> No regulatory provision for actions to prevent introduction of harmful organisms; no pathway management 	<ul style="list-style-type: none"> Greater legal support is likely to be required to develop pathway provisions, increasing costs 	<ul style="list-style-type: none"> Greater legal support is likely to be required to develop pathway provisions, increasing costs Producing two plans rather than one increases the effort and cost 	<ul style="list-style-type: none"> Greater legal support is likely to be required to develop pathway provisions, increasing costs Increased effort to produce the strategy as well as the plan
Caution		<ul style="list-style-type: none"> Further investigation is needed to ensure that this combined structure meets the legal requirements 		<ul style="list-style-type: none"> Further investigation is needed to ensure that this combined structure meets the legal requirements

6. Regulatory

6.2 Application for Subdivision Consent – S Norman and A Turner

Date of meeting	13 December 2018
Agenda item number	6.2
Author/s	Adrianne Tisch – Baseline Group Paul Whyte - BECA

Purpose

An application for subdivision consent has been received from Baseline Group on behalf of Simon Norman and Alison Turner. The applicants seek subdivision consent to undertake a three lot subdivision of Lot 6 DP 68352 Waitangi Wharf Owenga Road, as a restricted discretionary activity.

A report on the application prepared by Paul Whyte (BECA) is attached.

Recommendations

THAT pursuant to Section 104B of the Act Council grants consent to:

Subdivide Lot 6 DP 68352 (CT WN46C/459) into three allotments, being Lot 1 (4048m²), Lot 2 (4048m²) and Lot 3 (3,2614ha) in accordance with the plan submitted with the application subject to the following condition:

- 1. The vehicle crossing places to Lots 1-3 shall be constructed in accordance with Council standards.**

Application for Subdivision Consent

Waitangi Wharf Owenga Road



CLIENT

S Norman

ADDRESS

Waitangi Wharf Owenga Road

REFERENCE

6343

Report Information

Reference:	6343
Title:	Application for Subdivision Consent
Client:	S Norman
Filename:	6343 - App - Subdivision
Version:	1
Date:	06/11/2018
Prepared by:	Adrianne Tisch 
Reviewed by:	Sally Elford 

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Appendix 1: Certificate of Title

Appendix 2: Subdivision Scheme Plan

1 Summary of application details

1.1 Report purpose

This report is an application for subdivision consent (including an assessment of the actual and potential effects on the environment) to create three fee simple allotments at the site on Waitangi Wharf Owenga Road. This application has been prepared in accordance with Schedule 4 of the Resource Management Act 1991 ("the Act").

Applicant:	S Norman
Land Owner:	Simon Fraser Norman and Alison Louise Turner
Owner's Address:	Waitangi Wharf Owenga Road
Site Address:	Waitangi Wharf Owenga Road
Legal Description:	Lot 6 DP 68352
Certificate of Title:	WN46C/459
Site Area:	4.0710 ha
District Plan Zoning:	<i>Chatham Islands Resource Management Document (partially operative) ("the CIRMD"):</i> Zone: Rural
Proposed Activity:	The applicant seeks subdivision consent to undertake a three lot subdivision as a restricted discretionary activity .

2 Application site and surrounding environment

2.1 Application site

The application site is located on Waitangi Wharf Owenga Road. It is legally described as Lot 6 DP 68352 and contained in WN460/459, which is attached as Appendix 1 to this application. The application site has a total area of 4.0710 ha. The site is mainly flat and contains areas of forestry and farmland. The site has approximately 340 m of road frontage with Waitangi Wharf Owenga Road.

The application site is shown in Figure 1 below.



Figure 1: Aerial image of application site taken from Google Maps, October 2018, with the application site in red

2.2 Surrounding area

The surrounding area consists of extensive rural land and intermittent residential dwellings. Adjacent to the site is a large area of forestry. The site is approximately 7 km south east of the township of Waitangi, and approximately 11 km north west of the township of Owenga.

3 Description of the proposed activity

It is proposed to subdivide the site into three fee simple allotments. A copy of the Subdivision Scheme Plan is attached in Appendix 2.

3.1 Proposed allotments

The net areas of the proposed allotments are as follows.

Lot 1—0.4048 ha

Lot 2—0.4048 ha

Lot 3—3.261ha

3.2 Access

The site does not currently have any formed vehicle access via Waitangi Wharf – Owenga Road. Each proposed allotments will be accessed via a new vehicle crossing, created as part of this consent.

3.3 Servicing

All of the proposed allotments will be sufficient in size to accommodate on-site servicing.

3.4 Earthworks

No earthworks are required as part of the subdivision.

3.5 Buildings

No residential dwellings are proposed as part of this subdivision consent.

3.6 Other matters

There are no other matters relating to the proposal which would require resource consent.

4 Planning framework

The Chatham Islands Resource Management Document ("the CIRMD") contains the relevant planning framework relating to the proposed subdivision on the application site. It is noted this plan became partially operative 31 January 2018 and any provisions that do not relate to the Coastal Marine Area are operative.

4.1 Zoning

The application site is zoned **Rural** in the Plan, as shown in Figure 2 below. There are no other zoning matters related to the site.



Figure 2: Excerpt from the CIRMD Map 4 with the application site identified in red

4.2 Subdivision

Under Rule 5.3.4. 12(i) any subdivision is a restricted discretionary activity if the following standards are met:

- a) *The proposed allotments contain a suitable complying building site, which includes adequate provision for effluent disposal, unless the allotment is solely for the purpose of access, a network utility, conservation covenant or the number of titles remain the same as prior to the subdivision; and*
- b) *Any allotment or part of the allotment of the subdivision is located more than 100 m from Mean High Water Springs (MHWS).*

Each of the proposed allotments will be sufficient in size to accommodate a suitable and complying building site. Each site will have sufficient area and dimension to accommodate on-site wastewater. None of the proposed allotments will be within 100 m of the MHWS.

Pursuant to Rule 5.3.4. 12(i), any subdivision that meets the standards is a restricted discretionary activity. As the proposed subdivision meets all of the standards, it is assessed as a **restricted discretionary activity**.

4.3 Activity status

Overall, subdivision consent is sought for a **restricted discretionary activity** under Rule 5.3.4. 12(i) of the CIRMD. The matters of discretion are listed in Rule 5.3.4. 12(a)–(j).

5 Assessment of environmental effects

In accordance with section 88 of the Act and the Fourth Schedule, the following is an assessment of the actual and potential effects on the environment arising from the proposed . This assessment includes consideration of the relevant matters set out in Clauses 6 and 7 of the Fourth Schedule. The below is an assessment of the matters of discretion listed in Rule 5.3.4.12.

5.1 Subdivision

The following are the matters of discretion under Rule 5.3.4.12:

- a) *The imposition of development contributions as provided for in Section 4.13*
- b) *The design and layout of subdivisions;*
- c) *Protection of features such as rural amenity, outstanding landscapes, heritage items, significant indigenous vegetation and habitats and imi/iwi values;*
- d) *Creation of esplanade reserves/strips*
- e) *Transfer or amalgamation of parcels of land, whether they are adjoining or not in accordance with Section 220(2) of the Act;*
- f) *The siting of buildings;*
- g) *The filling and compaction of the land and earthworks;*
- h) *The provision of services including access, water supply, power supply, telephone stormwater and sewage disposal, the New Zealand Fire Service Firefighting Water services Code of Practice SNZ PAS 4509:2008 must be used as a guide regarding firefighting water supply and access;*
- i) *The provision to be made for the protection of land or any part thereof or of any land not forming part of the subdivision against erosion, subsidence, slippage or inundation from any source; and*
- j) *The vesting of beds of lakes and rivers.*

The design and layout of the proposed allotments will be able to accommodate complying building sites. All the proposed allotments will be sufficient in size to accommodate on-site servicing. The site does not contain any identified areas of significance, heritage items and will not affect the rural amenity. No esplanade reserves or strips are being created as part of this subdivision and no allotments will be amalgamated. No earthworks are required to create the allotments. This proposal does not include any vesting of rivers or lakes. Taking into account the above, any adverse effects arising from the subdivision are considered to be less than minor.

5.2 Positive effects

The application will increase the rating base on Chatham Islands. It will enable land to be used for rural-residential purposes, in a way that does not adversely affect the environment. All allotments will be sufficient in size to accommodate a building platform and on-site servicing.

5.3 Potentially affected parties

Under Schedule 4, clause 6(1)(f) of the Act, an application for resource consent must identify the persons affected by the activity, any consultation undertaken and any response to the views of any person consulted. In this case, as all actual and potential adverse effects are considered to be less than minor, no person is considered to be affected and no person has been consulted.

5.4 Effects summary

In summary, and taking into account the assessment above, all actual and potential adverse effects are considered to be less than minor. The proposed subdivision will not adversely affect the natural character and amenity of the area.

6 Assessment of relevant objectives and policies

Under Schedule 4 Clause 2(g) of the Act, the following is an assessment of the activity against the relevant objectives and policies of the CIRMD.

6.1 Chatham Islands Resource Management Document

Objective or Policy	Proposal	Assessment
Subdivision and Development		
Objective 4.12.1 Subsequent uses	It is considered the proposed sites created by this subdivision would be able to be used in a manner that would not result in adverse effects that cannot be avoided, remedied or mitigated. Each allotment would be able to contain a complying building site and accommodate on-site servicing.	Consistent
Policies 4.12.1.1	The proposal will enable the proposed allotments to be used in a manner that does not adversely affect the character and amenity of the rural environment and can be used in a way that is consistent with the rural environment. The site does not contain any identified significant indigenous vegetation and habitats, outstanding landscape features or historic heritage. The site is not located near any water bodies, the coastal environment, or in an area identified with a natural hazard.	Consistent
Objective 4.12.2 – Provision of services and Policy 4.12.2.1	Each proposed allotment will be sufficient in size to accommodate on-site servicing, connections to utilities, and vehicle access. It is considered any adverse effects arising from servicing the sites can be avoided.	Consistent
Rural Zone		
Objective 5.3.2 – Management of Resources	The subdivision will enable the 3.261ha allotment to be utilised for farming or production purposes, while the two 4.048 m ² allotments can be utilised for rural-residential purposes or production purposes.	Consistent
Policies 5.3.2.1	The subdivision will not reduce the availability of natural or physical resources as the site is within an area with intermitted dwellings as well as parcels used for farming.	Consistent
Objective 5.3.3 – Amenities and Policies 5.3.3.1	The proposed subdivision will retain the amenity of the rural environment, by providing 4,048 m ² , ensuring any dwellings, residential activity, or farming buildings can be setback from Waitangi Wharf Owenga Road in a manner that will not intrude on the amenity of the rural zone.	Consistent

6.2 Summary

On balance, it is considered the proposed subdivision is consistent with the relevant objectives and policies of the CIRMD.

7 Statutory framework

7.1 Part 2 of the Act

The Resource Management Act ("the Act") is the principal legislation for the management of the natural and physical resources of New Zealand. All resource consent applications are subject to the provisions of Part 2 of the Act, which sets out the purpose and principles that guide this legislation.

Section 5 of the Act states that the purpose of the Act is "to promote the sustainable management of natural and physical resources".

Section 6 of the Act requires certain matters to be recognised and provided for in relation to managing the use, development and protection of natural and physical resources. None of these matters of national importance are considered to be relevant to this proposal.

Section 7 of the Act lists other matters for which particular regard shall be given to, including the efficient use and development of natural and physical resources and the maintenance and enhancement of amenity values and the quality of the environment.

The proposal is considered to be consistent with the matters set out in Section 5-7 of the Act. The proposed allotments will be sufficient in size to accommodate rural or rural-residential activities, while maintaining the amenity values of the surrounding area. The subdivision is a sustainable use of the land as farming and rural activities can be retained on the allotments.

Section 8 requires the Council to take into account principles of the Treaty of Waitangi. It states:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

It is considered that the proposal will not be inconsistent with the principles of the Treaty of Waitangi.

7.2 Other relevant documents

Under Schedule 4, Clause 2(g) of the Act, the following is an assessment of the subdivision against the relevant provisions of any other relevant statutory documents (other than district plans or proposed district plans).

National Environmental Standards—Soil Contamination

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) requires sites subject to a change of land use to be assessed to determine if:

- (a) an activity or industry described in the HAIL is being undertaken on it; and/or
- (b) an activity or industry described in the HAIL has been undertaken on it; and/or
- (c) it is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it.

The owner of the application site has confirmed that to the best of their knowledge, a HAIL activity is not being carried out on the site currently. It is considered that the obligations under clause 6 of the NES have been met and that the site does not require further investigation to enable its subdivision under clause 8(4) of that standard.

Consideration of applications (Section 104-104D)

Section 104 sets out those matters that must be considered when assessing an application for a resource consent. Subject to Part 2 of the Act, Section 104(1) requires a consent authority to have regard to the following matters:

- (a) *any actual and potential effects on the environment of allowing the activity; and*
- (ab) *any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and*
- (b) *any relevant standards of-*
 - (i) *a national environment standard;*
 - (ii) *other regulations;*
 - (iii) *a national policy statement;*
 - (iv) *a New Zealand coastal policy statement;*
 - (v) *regional policy statement or proposed regional policy statement;*
 - (iv) *a plan or proposed plan; and*
- (c) *any other matter the consent authority considers relevant and reasonably necessary to determine the application.*

Assessment against these matters has been provided within this application above.

Section 104C of the Act states in relation to the determination of applications for restricted discretionary activities:

- (1) *When considering an application for a resource consent for a restricted discretionary activity, a consent authority must consider only those matters over which—*
 - (a) *a discretion is restricted in national environmental standards or other regulations;*
 - (b) *it has restricted the exercise of its discretion in its plan or proposed plan.*
- (2) *The consent authority may grant or refuse the application.*
- (3) *However, if it grants the application, the consent authority may impose conditions under section 108 only for those matters over which—*
 - (a) *a discretion is restricted in national environmental standards or other regulations;*
 - (b) *it has restricted the exercise of its discretion in its plan or proposed plan.*

As a restricted discretionary activity, subdivision consent may be granted.

Section 106 assessment

Section 106 of the Act sets out circumstances where a consent authority can refuse a subdivision consent. Section 106 states:

- (1) *A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considered that –*
 - (a) *there is a significant risk from natural hazards; or*
 - (b)
 - (c) *Sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.*

The application site is not within any natural hazard overlays and therefore, it is considered there is no significant risk from natural hazards. Each proposed allotment has sufficient road frontage with Waitangi Wharf – Owenga Road to accommodate physical and legal access.

7.3 Notification

Public notification assessment

Under section 95A(3) of the Resource Management Act, a consent authority must publicly notify the application if the Applicant requests public notification; it is required under section 95C; or the application is made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977. The Applicant has not requested public notification; Section 95C is not relevant to this application; and the application has not been made jointly with an application to exchange recreation reserve land.

Under section 95A(5) of the Act, public notification is precluded in certain circumstances, if the following criteria are met:

- (a) *the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification;*
- (b) *the application is for a resource consent for 1 or more of the following, but no other, activities:*
 - (i). *a controlled activity;*
 - (ii). *a restricted discretionary or discretionary activity, but only if the activity is a subdivision of land or a residential activity;*
 - (iii). *a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity;*
 - (iv). *or if the activity is prescribed by section 360H(1)(a)(i).*

The proposal is a restricted discretionary subdivision and therefore, public notification is precluded. There are no special circumstances in relation to this application that warrant public notification. Therefore, pursuant to section 95(A)(9)(b) of the Act, Council must not notify this application.

Limited notification

Under section 95B(3), notice must be served on affected persons if there are any affected protected customary rights groups, affected customary marine title groups, if the activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11, or whether the person to whom the statutory acknowledgement is made is an affected person under section 95E. None of the persons listed above are considered to be affected persons in relation with this application.

Under section 95B(6) the application must not be limited notified if the activity is subject to a rule or national environmental standard that precludes limited notification; the application is for a controlled activity (other than the subdivision of land); or the activity is a prescribed activity under section 360H(1)(a)(ii). None of the above situation apply to the proposal.

Under section 95B(7) and in accordance with section 95E, the application must be limited notified in the case of a boundary activity, to the owner/s of an allotment with an infringed boundary; and in the case of an activity prescribed under section 360H(1)(b), a prescribed person in respect of the proposed activity. In the case of any other activity, under section 95B(8), the application must be limited notified to any other person who is an affected person in accordance with section 95E. As discussed previously in this report, no persons are considered to be adverse effected by the proposal as any actual or potential adverse effects are considered to be less than minor.

Under section 95B(10), a determination must be made as to whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under section 95E as not being affected

persons). There are considered to be no special circumstances that warrant notification, and therefore pursuant to section 95B(10)(b), the application has not been notified to any other persons.

8 Conclusion

This application seeks subdivision consent to subdivide the application site into three fee simple allotments.

The proposed activity is a **restricted discretionary activity** under Rule 5.3.4.12(i) of the CIRMD.

It has been demonstrated by the preceding assessment that the effects on the environment as a result of this proposal will be less than minor.

Therefore, subdivision consent may be granted without the need for notification.

Appendix 1: Certificate of Title



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**



R. W. Muir
Registrar General
of Land

Search Copy

Identifier **WN46C/459**
Land Registration District **Wellington**
Date Issued **11 April 1995**

Prior References
WN656/79

Estate	Fee Simple
Area	4.0710 hectares more or less
Legal Description	Lot 6 Deposited Plan 68352

Proprietors
Simon Fraser Norman and Alison Louise Turner

Interests
10644033.2 Mortgage to Bank of New Zealand - 19.12.2016 at 1:24 pm

Appendix 2: Subdivision Scheme Plan

Next steps

- 1) Discussions from the workshop will inform the paper prepared by the TAG implications project in response to the TAG Report recommendation that the government “invests in technology to ensure a fit-for-purpose Common Operating Picture”.
- 2) Further discussion to be held with Jeremy Holmes regarding the suggestion that the 4x CDEM Group Managers working across Operational Systems could drive work to join up the initiatives to build IT solutions for Welfare Registration and Needs Assessment.

After the workshop on 29 May, there was a follow-up session between Jeremy and MCDEM representatives to progress action 2. Above and collectively agreed that it was highly desirable to achieve a joined-up effort across the CDEM Groups to determine requirements and develop/test an “app” for Welfare Registration and Needs Assessment. It makes good sense for the CDEM Group Managers assigned to Operational Systems to lead this work. Jeremy has socialised this with the other members of the Operational Systems Group (Rana Solomon, Chris Hawker, Craig Campbell-Smart). They have nominated Rana Solomon to be the primary lead for this initiative. She will be supported by the other 3 Operational Systems Group Managers.

Jeremy undertook to send Rana the information the team had already gathered about the various initiative being undertaken across CDEM and the requirements gathered by the earlier Welfare project that was led by MCDEM. Rana will form a team to progress this, which includes representatives across CDEM, MCDEM and potentially Welfare Agencies. The team will look to leverage the good work already undertaken by various parties. We noted that a formal assessment of the option to hold data centrally vs decentralised should be treated as a high priority for this team. This is a change of direction from the earlier Welfare project, so should be formally documented.

Director gave an update on the general emergency management system reform discussion which will no longer be referred to as the TAG Report.

EMIS Replacement Project

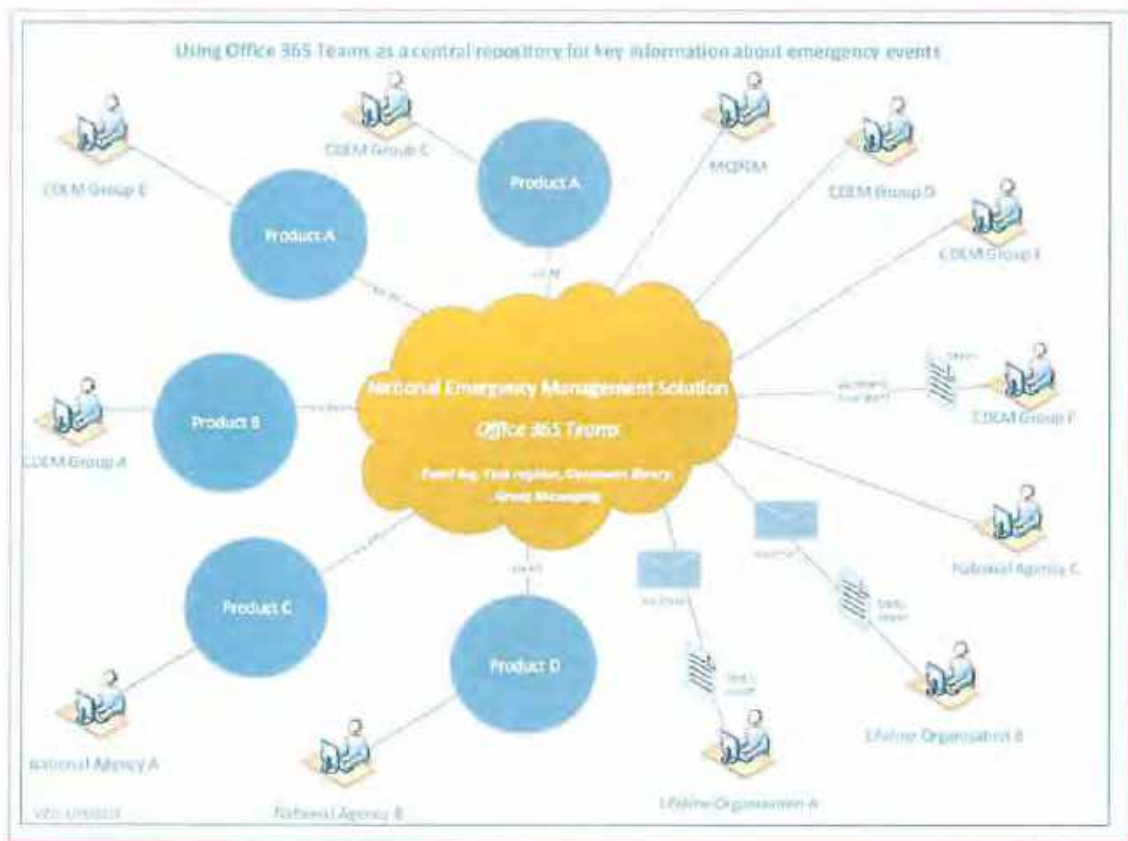
Microsoft Teams demo as part of the Microsoft Office 365 demo of a platform being considered to replace EMIS. In August the Minister announced the government's response to the technical advisory group report on better responses to natural disasters and other emergencies. Funding for the development of a business case for a Common Operating Picture to improving situational awareness across the emergency management sector to enable informed decision making. EMIS replacement project is within the COP work and aims to address two gaps in the emergency sector.

Collaboration and core event information, decision-makers have an urgent need for centralised information. This information will provide decision makers with a comprehensive awareness of the impacts of an event and the actions being taken from all emergency management organisations involved in the response or recovery.

Welfare registration and needs assessment, the sector-wide solution is required that streamlines the end to end welfare registration and needs assessment process to ensure people's needs are swiftly and securely passed to the agency that will fulfil the need — the replacement is necessary to BAU a business-as-usual tool or a BAU tool that is familiar, intuitive and easy to use.

A tool the organisations could have the discretion to choose in an emergency as they may have specific needs. Microsoft Office 365 toolset as a potential solution meets the collaboration and core event information requirement of the EMIS replacement project and office 365 is increasingly regarded as a BAU tool by organisations in the emergency management sector and may other agencies either using this platform already or moving to this platform soon.

The proof of concept was presented to the NEMDG and a unanimous decision to endorse MCDEMs proposal to proceed with the Office 365 solution along with a similar endorsement from the Ministry of Health.



National Emergency Management Solution Office 365 Teams Event log, Task register, Document library, Group Messaging CDEM Group B CDEM Group C CDEM Group A Lifeline Organisation A Product D Product C Product A Product B via Email National Agency C National Agency B National Agency A CDEM Group D Status report MCDEM Product A CDEM Group E Lifeline Organisation B via Email Status report Using Office 365 Teams as a central repository for key information about emergency events V2.0, 1/11/2018 CDEM Group F sitrep

Next Steps for the Office 365 Solution

Following the endorsements received, MCDEM has issued a Request for Quote to two vendors specialising in Microsoft products for the solution detailed-design and build, drawing on the earlier EMIS 3.0 requirements. We aim to have the new solution ready for implementation by July 2019.

Alongside the procurement process, we will establish a Project Advisory Group with representatives from the CDEM sector and partner agencies. Key functions of the Project Advisory Group include providing input into the:

- detailed requirements and system design to ensure the target outcomes are met
- change management approach to ensure modifications introduced by the project are successfully embedded.
- processes, guidelines and standards to enhance interoperability.

National Welfare Managers Forum

Update from MCDEM

- National Update: emergency management system reforms and MCDEM business plan. (copy available on request)
- Registration and needs assessment
- Psychosocial support – MOH
- Inquiry – NZ Police restoring family link (RFL)
- Animal welfare MPI
- MFAT – continued international assistance work coordinated via MCDEM
- MSD – has a business continuity in resilience programme which uses major earthquake scenario in Wellington to look at impacts on agency ability to deliver core services.
- Red Cross to exercise with NI welfare teams

Vulnerability workshop

- Vulnerability mapping undertaken by some groups
- Assessing vulnerability
- Get ready guidelines
- Individual needs
- What makes a community vulnerable
- Community development people need to be involved in the process
- Vulnerable verse resilient

- Lifeline and welfare service functions, role and responsibility
- Interdependencies and opportunities
- What is the impact of lifelines and welfare services
- Where do we start planning?
- How do you link together?
- How many welfare managers sit on the local lifeline's groups
- Terminology is different, and, in some cases, the same word has a different meaning to various agencies.

There was a discussion on rural needs and animal welfare, including MPI responsibility for primary production, and council and other agencies responsible for non-primary production.

EM ACE Fund

MCDEM has worked with the Ministry of Education and the Tertiary Education Commission to try to make it easier to use the funding operationally. The funding will no longer be paid directly to providers - Currently, TEC gives it to providers this is based on a funding model where providers are paid based on the numbers of credits per unit standard and the numbers of learners who complete those credits. TEC has officially informed providers that they will no longer receive the funding directly. MCDEM will additionally contact the providers to discuss future training and how we can work together for the more significant benefit of the CDEM sector.

From 1 January 2019, TEC will provide the funding directly to MCDEM, and this will not be called EM ACE, which means that as from the end of 2018, the EM ACE Governance Group will cease to exist. There will be a need to have a new oversight structure, and this will be worked through with the NEMDG Capability Sub-committee. MCDEM, with guidance from the new oversight group, will work with all 16 CDEM Groups to use the funding to develop the skills of CDEM volunteers in the sector.

We will be able to utilise a wider provider/ contractor/ organisation pool as the training does not have to be unit standard based. Courses will be approved and funded based on the training requirements of the CDEM Groups and not based on numbers of credits/learners. Note: Whereas in the past, courses were based on a list of unit standards, the new course approval process will be based on relevant courses that match the identified skills gaps – including refresher training

where needed. There will be a Quality Assurance process in place to ensure the courses meet the outcomes required and are fit-for-purpose for the sector.

Following consultation with the two Group Managers on the current EM ACE Governance Group and additional operational representatives, are currently working through finalising processes and will advise in due course.

Rana Solomon
Emergency Manager, Controller
Chatham Islands Council
rana@cic.govt.nz

8. GOVERNMENT

8. Government

8.1 Rural Sector Meeting Report – November 2018

Date of meeting	13 December 2018
Agenda item number	8.1
Author/s	Cr Keri Lea Day / Owen Pickles

Purpose

A verbal update from Cr Keri Lea Day and the Chief Executive on the Rural Sector Meeting held on 22 & 23 November 2018.

Recommendations

THAT the reports be received.

8. Government

8.2 Report to the Department of Internal Affairs to September 2018

Date of meeting	13 December 2018
Agenda item number	8.2
Author/s	Owen Pickles

Purpose

Attached is the first report in terms of Section 7 of the Deed of Funding covering the 2018/2019 financial year.

Recommendations

THAT the report be received.

CHATHAM ISLANDS COUNCIL
Report to the Department of Internal Affairs
July 2018 to September 2018

This is the first report in terms of Section 7 of the Deed of Funding covering the 2018/19 financial year.

Finance

This will be a very tight year for the Council due to the need to live within the same level of Government Support funding as applied in 2017/18.

The two big pressure points are:

- The cost of roading caused by the reduction in the NZTA financial assistance reduction. –and
- The completion/ operation of the waste management strategy.

The Council continues to operate with the support of a \$500k bank overdraft provided by its banker the ANZ bank.

The Council is still working with the Ministry for the Environment on a variation of funding deed that when completed will release up to \$570k. This covers works within the Solid Waste Management Strategy that have been completed.

Good progress is being made with the recovery of rate arrears with at the time of writing \$64k still owing from 2017/18 and beyond.

Council dues are substantially up to date.

Other accounts are being followed up including a big push around dog registration fees.

The Financial Reports are attached.

Democracy

The Council continues to function well with Councillor Tuck joining most meetings by telephone conference.

Councillor Chisholm is on leave of absence due to ill health.

The review of the basis for election proposal has been out for public consultation with no submissions being received. The Council is therefore likely to confirm the status quo at its next meeting.

New Council Office

The Ngati Mutunga O Wharikauri Iwi Trust Asset Holding Company has presented a design and feasibility report to Council, Chatham Islands Enterprise Trust and Chatham Islands Museum.

The report provides for accommodation for these entities and also includes accommodation for Heartlands Office, Chatham Community Focus Trust and Environment Canterbury.

The estimated cost of the Complex is \$5,094,496 plus GST with the museum part estimated to cost \$1,781,500.

These estimated costs are within what was included in the funding review carried out in 2017 by McGredy Winder..

The concern is the cost of the Museum which is about \$800k over the Government Grant provided via Ministry of Culture and Heritage.

At a meeting of all parties held on 29th September it was agreed to ask for a fixed price from the contractor Apollo Projects Limited.

The timeframe presented has construction beginning in May 2019 finishing in December 2019.

Airport Project

The airport is an essential lifeline for the Chatham Islands community. It is the only gateway for people transport and also for much of the Islands fishing catch.

The runway is in need of strengthening and lengthening to allow for class 4 aircraft to operate safely.

It was good to see a strong commitment from the Airport Company with the provision of fully compliant lighting.

The Council continues to offer support where it for this essential project.

Roading

Roading is the Council's biggest spend in any year with a core maintenance budget of \$3.5m to \$4m

Roading is supported by NZTA as part of the Land Transport Programme

- **Policy-** The Chatham Islands Regional Land Transport plan 2018 to 2028 has been completed.
All roads related assets have been revalued
The Council continues to work on the “Port to Airport” highway project with a lot of the supporting social and economic information required being collected.
- **Financial Assistance Rate**
The continuance of the reduced NZTA financial assistance rate from 91% down to 88% continues to put a strain on the Council’s finances and sustainability. It may only be 3% or \$120k but it buys \$1m he worth or work. As the Councils programme is essential maintenance it is impossible to reduce the programme to accommodate this reduction.
Council’s attempts to rectify this has gone all the way to the Minister of Transport without success.
- **Stantec**
Stantec continues to work well with the Council and contractors with the provision of engineering services.
- **Fulton Hogan**
Fulton Hogan is well into its third year of a ten year contract and continues to meet the Council’s expectations.

Water Supplies

The Council operates public water supply schemes at Waitangi and Kaingaroa. Both schemes are operated by Fulton Hogan and supported by Stantec with professional services.

- **Kaingaroega** This scheme is not captured by the NZ Drinking Water Standard due to its small size.
The scheme operates well though its supply is often tested during dry weather.
Water testing is carried out monthly usually with good results.
However in September a bad sample caused a month long boil water notice to be applied. This has since been cleared with the bad sample being caused by a contaminated container.
- **Waitangi** This scheme is captured by the NZ Drinking Water standards and while all water tests achieve compliance the system is non-compliant due to concerns about the security of the bore head. This has been rectified.

The Waitangi scheme is also tested during the dry times and has been critically short during recent summers.

➤ **Proposed Waitangi Upgrade/Extension**

A proposed upgrade utilising the water bore established by the Memorial Park Alliance at the time of the Waitangi port development is currently on hold due to a lack of funding.

With financial assistance from the Ministry of Health the scheme has been progressed to tender stage.

Waste Water/ Sewarge

Another facility under the care of Stantec/Fulton Hogan The Waitangi waste water system functions well but is requiring more maintenance each year.

The proposed disposal system for septic waste is another on hold pending funding becoming available.

It should be noted that the Canterbury District Health Board have made enquiries about the current unsustainable disposal to ground.

Waste Management

Work on completing the waste management strategy is nearing completion. Transfer facilities are operating in Kaingaroa and Owenga and the processing facilities at Te One are close to being finished.

Still to be done is the installation of the waste compaction machine and the rehabilitation of the old rubbish dump sites.

The compaction machine is due to arrive mid-October 2018 and should be operational soon after.

Bales of waste will be compacted for export (recycling) with residual waste being baled and deposited into the sanitary landfill at near Owenga.

Rehabilitation of the Te One site will involve a tree planting project for the Corrections Department.

We have a quote from Hokotehi Moriori Trust for the rehab at Kaingaroa.

We are still to receive money from the Ministry for the Environment with some \$570k being available. E.Can is assisting with obtaining the release of these funds.

Civil Defence & Emergency Management

Work is progressing on the CDEM Group plan including:

- Developing consultation with the public
- Workshops with the group on hazard risk management
- Working with MCDEM during the review

The Council's Emergency Manager is working with 15 other group managers and CDEM to set up a terms of reference for the group and sub groups.

Chatham's is part of the operational sub group working with MCDEM on Welfare Assessment Needs.

Training has been provided covering

- Welfare
- Radio communications

Maritime Safety Oil Spill

Exercises continue to be held under guidance from Maritime New Zealand.

Mayors Disaster Relief Fund Trust

The Mayors Disaster Relief Fund Trust is now a legal entity having been incorporated and registered as a trust.

Emergency Services Depot Project

The site for the emergency services depot is now back in the Council's hands following the departure of Memorial in 2019.

Kaingaroa Wharf

The Council is working through a process with Hokotehi Moriori Trust which will see the Kaingaroa Wharf transfer into Council ownership.

Stakeholders have been approached to see if there is a willingness to share the cost of works required to make the wharf safe. Several positive returns have been received.

Statement of Comprehensive Revenue and Expense

	Actual \$000	Budget \$000	Variance	Note Reference
Revenue				
General rates	73	73	-	1
Targeted rates	74	64	10	1
Grants & subsidies	1,395	1,980	(586)	2
Council Dues	88	69	20	3
User pays, fees & charges and other income	97	60	38	
Total revenue	1,727	2,246	(519)	
Expenditure				
Democracy	21	78	(57)	4
Roading	349	376	(27)	5
Solid waste	68	89	(21)	
Water	45	79	(34)	5
Stormwater	0	-	0	
Wastewater	52	24	28	
Community and regulatory	102	128	(26)	
Environment	170	234	(64)	4
Emergency services	34	42	(8)	
Coasts, harbours and navigation	7	13	(5)	
Corporate services	285	322	(36)	
Depreciation	520	520	-	6
Total expenditure by activity	1,654	1,904	(250)	
Total surplus/(loss)	73	342	(269)	

Variance explanations:

- 1 Rates are invoiced based on the Council approved rates strike. Note the budgeted targeted rates amount exclude collection of prior period outstanding balances and penalty payments.
- 2 NZTA subsidy is based on actual expenditure, which is not equally spread across the year, works tend to accelerate closer to December. DIA grant has been fully received, but apportioned across the year.
- 3 Council dues are a Council tax on island imports/exports. There is a notable relationship between works on-island and the income received from Dues. Transactions with the majority of on-island shipping/freight companies are current.
- 4 No notable areas of underspend, variance likely to realign as the year progresses.
- 5 Budget figures apportioned on an equal basis across the year, actual works tend to increase closer to December.
- 6 Fixed asset module has not been rolled over, pending completion of the annual audit and therefore depreciation for the period has been estimated.

Capital expenditure summary	Actual \$000	Budget \$000	Variance	Note Reference
Sources of capital funding				
Subsidies and grants for capital expenditure	275	854	(579)	1
Increase / (decrease) in debt	-	35	(35)	2
Total sources of capital funding	275	888	(613)	
Application of capital funding				
Roading works	312	874	(562)	1
Water service connections*	-	768	(768)	
Waste, including sludge lagoon project	57	178	(120)	3
New emergency management depo*	-	63	(63)	
Critical wastewater capital replacement*	-	17	(17)	
Critical water capital replacement*	-	12	(12)	
Housing	-	50	(50)	2
Corporate, including new office fit-out*	41	9	32	
Total application of capital funding	410	1,969	(29)	
Movement in reserves	(135)	(1,081)	(585)	

* Desired projects in the 2018/19 budget, removed due to lack of funding support

Variance explanations:

- 1 Budget figures apportioned on an equal basis across the year, actual works tend to increase closer to December.
- 2 Housing project expected to be progressed in year, funded by debt.
- 3 Sludge lagoon project behind budget, pending scope and cost review.

Note, budget figures are allocated on an equal monthly apportionment

Liquidity Report

	Actual* 30-Jun-18 \$000s	Annual Plan 30-Jun-19 \$000s	Actual 30-Sep-18 \$000s	Actual 31-Dec-18 \$000s	Actual 31-Mar-19 \$000s	Actual 30-Jun-19 \$000s
Opening cash			(352)	(397)		
cash inflow per bank statements			5,281			
cash outflow per bank statements			(5,326)			
Closing cash	(332)	106	(397)			
Other earmarked cash balances^	1,563	25	1,881			
Debtor accounts	744	919	318			
Creditor accounts	(2,705)	(1,103)	694			
Working capital	(730)	(53)	2,496			
Long term target	200	200	200	200	200	200

Liquidity Notes

* Actual figures are currently being audited. Consequently, the system has not been rolled over and therefore some opening balances have not been transferred.

^ This includes the DIA term deposits, but not other earmarked funds, due to the system not being rolled over, and therefore opening balances have not been transferred.

The Council has an overdraft facility with their banking provider of \$500k. The Council's closing cash balance is \$240k at the end of September. This excludes earmarked funds, such as the \$1m set aside for the museum element of the proposed Council building.

Rates Collection Report

	Actual 30-Sep-18	Actual 30-Sep-17
Arrears at beginning of year	86,877	94,269
Rates invoiced YTD	191,855	186,921
Penalties applied	7,018	11,718
Less remissions	(790)	(518)
Rates collected	166,717	236,376
Rates outstanding	119,823	55,914
% outstanding	62.45%	29.91%

Rates Collection notes

The identified balances exclude GST.

The due dates for instalments are 1 September 2018, 1 January 2019 and 1 May 2019.

The "Rates Invoiced YTD" figure includes the rates due for the first instalment date of 1 September 2018.

Council Dues Collection Report

	Actual* 30-Sep-18	Actual 30-Sep-17
Balance at commencement of year	26,066	35,050
Dues assessed	64,528	79,150
Dues paid	97,234	96,477
Rates Collection Report	(6,639)	17,723
Balance more than 30 days overdue	(6,787)	(62)

Council Dues Collection notes

Council dues is a Council tax on island imports/exports. There is a notable relationship between works on-island and the income received from Dues.

For the first quarter collection rates have been very positive, outstanding figure is negative, with some invoices still to be raised and processed for September.

Quarterly Report Part B: THE SERVICES

Desired Outcomes			KPI	Targets	Service Provided	
Resource Management	The high air, water, and land qualities of the Chatham Islands are maintained to protect human health and ecological systems.	Resource management document is current and administered.	Review of CIRMD is completed. All consent applications are processed within RMA timelines. Progress is made on implementing the NPS on freshwater management.	An updated draft resource management document is prepared. Assistance is provided to the CIC to hear submissions and finalise the CIRMD. The consent application process is administered. Assist CIC with Iwi matters in relation to the upcoming review of the RMA. The upcoming review of the RMA will cover historic places, and the new landfill.	The Resource Management Document has been made partially operative pending Ministerial approval of the parts of the document that relate to the Coastal Marine Area	
Resource Management Investigations and Monitoring	The use of natural and physical resources contributes to the Chatham Islands economy in a sustainable manner.	Resource consents and permitted activities are exercised in accordance with their conditions.	100% compliance	Compliance monitoring is carried out as required.	An Implementation Programme for the NPS is developed.	A progressive implementation programme for the NPSFM was adopted in 2015.
	The high intrinsic values of the biodiversity and natural ecosystems of the Chatham Islands are recognised and protected. People may carry out a wide range of activities taking into account natural hazards.	State of the Environment monitoring is carried out in accordance with CIRMD requirements. Information on natural hazards is available.	• Effects of sea level rise on coastal development are assessed • Other services completed as requested	Report on mapping of sea level rise	Preliminary investigation commenced.	No further monitoring undertaken this quarter.
Investigations & Monitoring	Any changes in the biodiversity and natural ecosystems of the Chatham Islands are recognised and causal mechanisms understood.	Statutory monitoring requirements are met.	SOE long term water quality monitoring programme completed and reports are published.	• Long term water quality monitoring programme of lakes, rivers and Te Whanga lagoon • Trends reported annually • Information available on web site	Monitoring completed as scheduled. Three field sampling runs completed and data compiled in database	

Desired Outcomes					KPI		Targets	Service Provided	
	People of the Chatham Islands have access to a wide range of cultural, commercial and recreational activities.	Microbiological and chlorophyll information is collected for resource management purposes.	Microbiological monitoring and assessments of algal bloom activity at sites in Te Whanga lagoon.	Monitoring work completed as required.				<ul style="list-style-type: none"> Microbiology & Chlorophyll-a monitoring at 3 lagoon sites. Fortnightly monitoring of common recreational sites (locations to be agreed with CIC) during the summer. Results available on web site. 	
	Flow regimes in Chatham Island rivers and streams are understood for water allocation purposes and flood warning	Hydrological information is available to all community	River flows are monitored.	Sites all working well and data available on CIC website				<ul style="list-style-type: none"> Monitoring at 4 flow recorder sites, 2 rainfall sites and 2 water level recorders in Te Whanga. Data is collected on levels, flow, salinity, pH, and oxygen. Near real-time water level and flow data (within 1-2 hours) are available on website. 	
	Water quality and/or quantify investigations carried out to understand water resource issues raised by community	Investigations carried out within proposed timeframes and costs		Potable water supply investigations are on-going.				<ul style="list-style-type: none"> Water quality of possible areas for future potable supply (eg: Owenga) is investigated. 	
Contaminated Sites / Hazardous Substances and Waste	Exposure to contaminated land and the environmental effects of hazardous substance releases are minimised.	<p>HAIL sites are identified.</p> <p>NES for contaminants in soil to protect human health is implemented.</p> <p>An agrichemical collection is undertaken.</p> <p>Hazardous waste is managed according to national protocols.</p>	<p>Advice is provided on contaminated sites, hazardous substances and waste management.</p>	<p>Advice on waste management expected to increase as the landfill project progresses. Support provided on an as required basis.</p>				<ul style="list-style-type: none"> HAIL identification methodology is provided to enable CIC to identify potentially contaminated sites. Assistance in establishing protocols for NES implementation is provided. Provide advice on how to set up an Agrichemical Collection. Advice on establishment of waste management protocols is provided. 	
Emergency Management	CIC is prepared for an emergency and complies with CDEM Act requirements.	Requests for assistance with CDEM planning and preparedness are met.	<p>Provide policy and planning support as required.</p> <p>Provide advice on Resilience Initiatives.</p>	No Activity in this period				<p>Provide advice on National and Regional CDEM Policies.</p> <p>Support CIC Resilience initiatives as appropriate.</p>	<p>While not community resilience focused advice has been provided to Rana to set up Office 365 accounts for CDEM in the Chatham Islands. This has allowed Rana to now set up Office 365 providing more resilience in the</p>

Desired Outcomes			KPI	Targets	Service Provided	
				CDEM group plan continues in operation and is up to date.	<ul style="list-style-type: none">CDEM second generation plans due 2010/11. Risk based foundation to be established for review of 4 R's within the CDEM Group Plan.Public Information Manager training session provided and one workshop exercise is provided.	computer / IT space. This will also allow for more collaboration between Chatham Island and Canterbury CDEM in the future.
				Provide training support	<ul style="list-style-type: none">Provide advice on professional development for CIC CDEM staff, including a development needs analysis (DNA) of key staff.Support CDEM exercises and courses. Focus to be on training for Response Team and EOC staff. Two activities supported on island each yearSupport implementation of national emergency management information system (EMIS)	Welfare and Radio training was provided in August.
Navigation Safety	Navigation safety is enhanced.	Requests are met and proactive assistance is provided.	Advice and support is provided re navigation safety.	<ul style="list-style-type: none">Support is provided to the CIC HarbourmasterNavigation safety risk assessment is carried out, documented and maintained.The Navigation Safety Bylaws are reviewed	Completed as required. Provide technical support for the planning of the proposed Waitangi Wharf replacement. Ongoing. Investigate provision of AIS monitoring at Chatham Islands. Underway. Onsite review of Safety Management System and Risk Assessment. Undertaken	

Desired Outcomes			KPI	Targets	Service Provided
Corporate Services	Services to the community are improved through the provision of timely and accurate information.	Requests are met or referred to appropriate providers.	Annual report is produced and audited with no qualification.	Annual report is produced and audited with no qualification.	The 2017/18 Annual Report has been prepared and is currently being audited. This report, including financial and performance information is expected to be approved for issue on 31 October 2018.
				Long Term Plan/Annual Plan is produced and audited with no qualification.	2018-28 Long Term Plan was adopted on 28 June 2018, the audit opinion issued was unmodified, with an emphasis of matter in relation to reliance on grant funding.
				Financial reports to Councillors and Department of Internal Affairs completed at least quarterly.	Reports to Council and Quarterly financial reports for DIA reporting purposes have been provided at least quarterly.
				Assistance is provided with rates, invoicing, and other technical issues.	All requests for assistance have been met. No issues arising in the quarter.
Communications	Council complies with legislative requirements.	No breaches of legislation.	Advice is provided as required for: HR; Council; Democracy; Legal; Finance; and IT.	Requests are met promptly. Training and support is provided for democracy services.	Legal advice provided as requested. No noted breaches of legislation noted.
				Requests are met within 5 working days.	All activities completed as required.
				Training support and information is provided re democracy services.	All activities completed as required.
Surveillance – Chatham Islands	Communication services support the dissemination and exchange of information to Council and the community. Council's information is protected, developed and maintained effectively and efficiently.	Community and Iwi are well informed about Council activities and performance.	Communications services are provided.	Inserts to the Chatham Islander are produced on environmental, RMA and other Council issues.	
				Web site is kept up to date.	
				Other communications projects (e.g. leaflets, brochures, signs) discussed and undertaken as required.	
Surveillance – Chatham Islands	There is no introduction, sale, propagation and distribution of the 140 pests listed as Surveillance – Chatham Islands pests.	Incidence of these 140 pests on the Chatham Islands.	Report on the presence of Surveillance – Chatham Islands annually or as required for specific incidences	Undertake enforcement action to ensure that landowners and occupiers do not introduce, sell, propagate or distribute pests listed as Surveillance – Chatham Islands pests.	No enforcement actions undertaken. Aggregate was imported and used in the Kaiangaroa area which has since had Broom seedlings appear. This has been dealt with by Biosecurity staff and the site programmed for annual surveillance.
					One shipment of 50/50 topsoil / compost was impounded and then

Desired Outcomes		KPI	Targets	Service Provided
Surveillance – Chatham Islands	Maintaining an internal border between Chatham Island, Pitt Island and New Zealand.	Number of breaches of the internal border.	<p>Year 1 Publish and distribute a scoping report addressing marine biosecurity as part of establishing an internal border.</p> <p>Years 2-4 In partnership with Biosecurity New Zealand implement a marine biosecurity plan as part of establishing an internal border.</p>	<p>sent back to NZ due to the high biosecurity risk</p> <p>Under contract to Environment Canterbury, SPS prepared a Chatham Islands Marine Biosecurity Partnership Action Plan in 2010. Progress on its implementation has been limited. We have trained 5 staff to meet WorkSafe NZ diving requirements with a view to carrying out twice annual underwater surveys of the 4 ports on Chatham Island. The intent is to determine the presence or absence of the 10 “most likely” to arrive marine pests.</p> <p>To date, survey dives have been carried out at Owenga, Kaiangaroa Waitangi and Port Hutt.</p> <p>No marine pests were found at Owenga or Kaiangaroa but the previous distribution of Undaria at Port Hutt has expanded within the harbour.</p> <p>In September 2017, several vessels associated with the Waitangi Wharf rebuild arrived and were found to carrying at least 4 marine pests that are not known to be present in Chatham's waters. Prompt action by our Biosecurity staff and newly formed dive squad (along with voluntary compliance of the vessel owners) resulted in the risk being minimized if not eradicated.</p> <p>3 of the Chatham's dive squad were involved with a boat hull inspection in Lyttleton in early April. More marine pests were found and the team continue to gain experience in this field</p>

Desired Outcomes			KPI	Targets	Service Provided
Surveillance – Chatham Islands	Preventing the arrival and establishment on the Chatham Islands of the 140 listed Surveillance – Chatham Islands pests.	Incidence of these 140 pests on the Chatham Islands.	Identify, map and maintain a database of high risk sites for surveillance – Chatham Islands pests. Continue a surveillance programme sampling sites (ha) at high risk from Surveillance – Chatham Islands pests.	Inspect at risk sites for pests listed as Surveillance – Chatham Islands pests	At risk sites inspected at least twice annually by SPS Bio-security staff and resident Biosecurity Officer. Active control on several "low incidence" plant pests has taken place ie: Veidt Grass, Glycyeria maxima, Argentinean Ice Plant, Wilding Conifers and Sycamore has been ongoing. New sites of Old Man's Beard and Banana Passionfruit have been found and total control is underway, although both new sites have found to be more extensive than originally thought.
Surveillance – Chatham Islands pests	Subject to availability of resources, undertake Biosecurity Act 1993 Section 100 control of Chatham Islands Surveillance pests.	There are no successful incursions.	Report on the number of potential and actual incursion responses of Chatham Islands surveillance pests per annum.	Undertake incursion responses for pests listed as Surveillance – Chatham Islands pests as required.	Black Ants and German Wasps are recent incursions but hopefully the immediate control response has eliminated their establishment. A 8mm ant was found on the South coast in early April (in response to landowners calling in) and this has been sent to Landcare Research for ID
Surveillance – Pitt Island	Five pests listed as Surveillance – Pitt Island pests are not introduced to Pitt Island	Incidence of these five pests on Pitt Island.	Identify, map and maintain a database of high risk sites for pests listed as Surveillance – Pitt Island pests. Continue a surveillance programme sampling at risk sites for pests listed as Surveillance – Pitt Island pests.	Inspect at-risk properties for Surveillance – Pitt Island pests. Undertake enforcement action where necessary to ensure that landowners and occupiers carry out control for Surveillance – Pitt Island pests. Search 100% of high-risk sites for pests listed as Surveillance – Pitt Island pests annually	We have increased the number of Rodent Bait stations at possible departure points to Pitt Island. Sheds used by fishermen storing goods bound for Pitt. Rodent activity tends to peak in February/March/ April and then stabilizes. We have now recieved a trained "Rat dog" that is resident on the Chatham Islands being "handled" by our resident Biosecurity Officer Kerri Moir. This will dramatically improve our detection capability.

Desired Outcomes			KPI	Targets	Service Provided
Total Pest Control	The Chatham Islands Pest Management Strategy is reviewed with specific reference to the Total Control suite of pests	The remaining 5 years of the Pest Management Strategy more accurately reflects community expectation and professional opinion	Chatham's wide customer survey carried out with specific emphasis on Total Control pests. Survey results matched with expert opinion.	Formal review of current Pest Management Strategy	A Pest Management Strategy survey was sent out in early 2013. 51 responses were received. A formal review of the current Pest Management Strategy is proposed within a year with draft discussions commencing in late October 2017.
Total Pest Control	One total control pest animal – feral goats is controlled.	Progress made in eliminating feral goats.	Undertake structured aerial cull of feral goats on properties adjoining the source infestation.	Work alongside landowners to voluntarily eradicate feral goats Undertake enforcement action to ensure that landowners and occupiers carry out control of feral goats.	By late 2014 Environment Canterbury staff had culled 977 goats from the Airport Road area. With the approval of the Landowner, our resident staff member culled 46 in late 2014 which appears to be the last of them. Two fly-overs by helicopter seemed to confirm this. An additional 192 goats were shot from a geographically separate area in 2017 where we believe the remaining feral goat population numbers less than 30.
Total Pest Control	Control of all total control plant pests.	The incidence of all total control plant pests.	A report on the effectiveness of pest control operations is prepared. The incidence of Total Control pest plants is consistent with estimates of target densities.	All known Total Control plant pest sites, both historical and active, are inspected and / or controlled annually. Summarise and interpret data collated from pest control operations.	Following the completion of the "Total Pest Control" plant database, all 3 species of Broom are deemed to be controlled as is, Gunnera. Wild Ginger (2 species) is down to one site. Sycamore control has increased recently. Control in several Cotoneaster sites is on-going. The remaining 2 Total control plants, Montbretia and Buddleia are so widespread that Total Control is not that realistic. This was confirmed in the PMS survey results.

Desired Outcomes			KPI	Targets	Service Provided
					Although not on the Total Pest Control list the following plant pests have also been controlled to a level where eradication is achievable. A lone site of South American Ice Plant was controlled in April 2013. The only known site of a water weed (Glyseria maxima) was controlled in 2012 and any re-growth sprayed 2013, 2014, 2015 and 2016. The only known site of "Veldt Grass" was sprayed in late 2012 and resprayed in October 2014. The control of these low incidence plants was also strongly supported in the responses to the PMS Survey.
Total Pest Control	Control of all pests listed as total control pest plants.	The incidence of all pest plants on Chatham Island or Pitt Island.	Identify, map and maintain a database of the incidence (e.g. of the density and distribution) of total control pests plants on Chatham Island and Pitt Island. Estimate (e.g. identify, map and maintain a database of) the control area over which the total control pest plants on Chatham Island and Pitt Island occurs.	Progress towards eradicating total control pest plants is made to reduce their impact on the economy, particularly on land production, and on biodiversity. Inspect at risk properties for total control pests and issuing inspection notices.	A database of all known historical and active "Total Pest Control" plant sites has now been completed. Other low-incidence plant pests are also being recorded
Containment control	Control of pests listed as containment control pest plants.	Incidence of pests listed as containment control.	Undertake enforcement action where necessary on properties identified as non-compliant with Strategy rules.	Work alongside landowners to voluntarily carry out control of Containment pest plants Undertake enforcement action to ensure that landowners and occupiers carry out control of Containment Control pest plants.	No properties noted with pest plants, therefore no enforcement action undertaken to date. Voluntary control has certainly increased and this was enhanced with a helicopter on the Island in February 2013, February 2014, November 2014, October 2015, November 2016 and

Desired Outcomes			KPI	Targets	Service Provided	
Containment Control	Control of pests listed as containment control.	Incidence of pests listed as containment control.	<p>All at risk sites are inspected every 2 years.</p> <p>All gorse is eradicated annually from Gorse Management Area 1.</p> <p>The area of gorse (ha) in Gorse Management Area 2 does not increase as from a baseline date of 2001 (this target is subject to the availability of aerial maps of the Chatham Islands).</p> <p>Report that identifies and maps distribution and density of Californian Thistle.</p>	<p>Inspect and search at risk sites for Containment Control pests and issuing inspection notices.</p>	<p>again in December 2017. An aerial survey conducted after the helicopter control in March 2013 produced a "Baseline" gorse distribution map, this has been updated since the December 2017 programme was completed.</p> <p>No properties noted with pest plants, therefore no enforcement action undertaken to date. Voluntary control has certainly increased and this was enhanced with a helicopter on the Island in 2013, 2014, 2015, 2016 and 2017.</p> <p>The Helicopter is due back on the Island by 10 October 2018</p> <p>An aerial survey conducted after the helicopter control in March 2013 produced a "Baseline" gorse distribution map and this is updated after each helicopter visit to the Islands.</p>	<p>Regular articles relating to Chatham Islands Pests are placed in the Chatham Islander Newspaper and the quarterly "Uniquely Chathams" paper and the Chatham Islands Community Focus email newspaper.</p>
Public awareness	Public become vigilant for new pests and do not introduce, sell or propagate pests.	Public awareness.	<p>Articles on pest and biosecurity in the Chatham Islander and Uniquely Chathams news publications.</p> <p>Pamphlets on pests and biosecurity issues are readily available at the airport and other tourist venues</p> <p>90% of landowners understand their obligations under the Strategy.</p>	<p>Regular media coverage of pest and biosecurity issues.</p> <p>Conduct a customer survey to gauge the understanding of landowner Strategy obligations.</p>	<p>Regular articles relating to Chatham Islands Pests are placed in the Chatham Islander Newspaper and the quarterly "Uniquely Chathams" paper and the Chatham Islands Community Focus email newspaper.</p>	