CLUTHA DISTRICT COUNCIL

Notice is hereby given that a Meeting of the Infrastructure Strategy & Operations Committee will be held in the Council Chambers, 1 Rosebank Terrace, Balclutha on Wednesday 5 February 2025, following the Corporate & Property Committee meeting.

Steve Hill CHIEF EXECUTIVE OFFICER

Committee Members

Councillor Bruce Graham (Chairman) Councillor Alison Ludemann Councillor Dane Catherwood Councillor Wayne Felts Councillor Gaynor Finch Councillor John Herbert Councillor Michele Kennedy Mayor Bryan Cadogan Councillor Simon McAtamney Councillor Dean McCrostie Councillor Brent Mackie Councillor Jock Martin Councillor Ken Payne Councillor Bruce Vollweiler

INFRASTRUCTURE STRATEGY & OPERATIONS COMMITTEE

5 February 2025

APOLOGIES

There were no apologies at the time of publishing this agenda.

DECLARATIONS OF INTEREST

No declarations of interest advised at the time of publishing this agenda.

Item	Page #	Title
1.	3	Operations Update – Transportation (For the Committee's Information) Reports on the progress of transportation items within the department.
2.	6	Operations Update – Greenspace and Waste (For the Committee's Information) Reports on the progress of greenspace and waste matters within the department.
3.	16	Operations Update – Three Waters (For the Committee's Information) Reports on the progress of Three Waters matters within the department.
4.	22	Compliance Update Report (For the Committee's Information) The report provides updates on compliance-related issues across the Service Delivery Department.
5.	48	Infrastructure Strategy & Delivery Update (For the Committee's Information) The report provides information on various Projects/Contracts that are in progress at this time.

Infrastructure Strategy & Operations Committee Item for INFORMATION

Report	Operations Update – Transportation
Meeting Date	5 February 2025
ltem Number	1
Prepared By	James Allison – Transportation Operations Manager
File Reference	927901

REPORT SUMMARY

The report details items from the Operations Transportation Team that are for information only.

RECOMMENDATIONS

1. That the Infrastructure Strategy & Operations Committee receives the 'Operations Update – Transportation' report dated 5 February 2025.

REPORT

1. Roading

The cost of repairs from the flooding event of October 2024 currently total \$810k. Our contractor continues to work their way through them as well as working on other essential work for the district. NZTA have been keep informed of this work and we expect a supplementary claim to be approved for emergency work. We will need to consider where we fund our share from – this could include the emergency fund or the deferred roading maintenance fund.

We have recently completed metalling in West Otago area and have moved to the Clinton/Clydevale area using metal from Andersons Quarry.

There have been two incidences of trees falling over Rongahere road. An arborist report has been done to assess trees with a potential to fall on the road. Any trees that have been identified as a significant risk have been programmed for removal.

SouthRoads have a new initiative for disposing of green waste from trees that they have previously stockpiled and burnt when conditions suited. They now have the option of taking this waste to Azwood's site at Milburn for them to chip for biofuel for their customers.

The council-approved dust suppression site on Water Street Kaitangata will have to be moved to the next financial year as Otago Regional Council are undertaking flood bank rebuilding work and heavy machinery will interfere with the new seal. We propose working on the next streets on the priority list in Kaitangata. These will include St Catherine Street, St Albans Street and Exe Street.

The following is some of the work our Routine Trucks and other crews have completed over November and December:

- 62 Signs received routine maintenance
- 104 Signs or posts were repaired/replaced.
- 177 Marker Pegs were installed/replaced.
- 434 meters of sealed road edge-breaks were repaired
- 163 Potholes filled on sealed roads
- 14 tonnes of metal into potholes on unsealed roads.
- 14 callouts. Mainly for stock on roads.
- 1095km of grading completed.
- 5.2km Of Water tabling clearing
- 49 Culverts cleaned.
- 11,900 tonnes of maintenance metal spread.

2. Service Requests

Our team have received 145 service requests since the last meeting date at the start of December.



Figure 1. Rongahere Road Tree Issues

3. Streetlight Maintenance Contract

Our streetlight contractor reported an issue with a resident, being abusive towards their staff while they were attempting to install a new streetlight in Taieri Mouth, they removed themselves from the situation.

4. CCTV Update.

CCTV has been used 7 times in the last month, these have mostly been for vehicle offences and once was used for a potential sighting of a missing person.

We have been notified of a potential issue with the server reaching its end of life and have received quotes from our supplier in order to consider a replacement of this. A report will be presented to Council at the 20 February meeting to consider funding options for this.

Infrastructure Strategy & Operations Committee Item for INFORMATION

Report	Operations Update – Greenspace, Waste and Compliance
Meeting Date	5 February 2025
ltem Number	2
Prepared By	Jason Foster – Head of Infrastructure Operations
File Reference	927902

REPORT SUMMARY

The report details items from the Operations Greenspace, Waste and Compliance and Freedom Camping and are for information only.

RECOMMENDATIONS

1. That the Infrastructure Strategy & Operations Committee receives the 'Operations Update – Greenspace & Waste and Compliance' report dated 5 February 2025.

REPORT

2. Health and Safety Incidents.

No incidents or near misses were reported over this period between committee reports, there were however a number of observations and a near miss.

Observation: While mowing Balclutha A&P show operator identified leftover wire & waratahs hidden in the grass.

Observation: While driving on a gravel road, contractor spotted oncoming truck causing a dust cloud they couldn't see past, so they pulled over to let truck past and observe for following traffic.

Near Miss: Truck with trailer failed to give at a junction and the driver had to stop to avoid an incident.

Miscellaneous: Contractor came across a member of the public who had crashed their scooter, contractor called the ambulance and remained with person until it arrived.

The team attended a contractor's monthly safety meeting and conducted two health & safety audits of the greenspace contractor. One audit in Milton involved the removal of a fallen willow at Taylor Park after a weather event. The site setup was good, and there was a great initiative to withhold the use of a chainsaw (working alone) until a co-worker returned from disposing of material. The second was in Balclutha during the

weedeating of a bank, great housekeeping from the team keeping an eye on approaching public and stopping until they were out of range to be affected by the weedeaters.

Waste: -

No incidents or near misses were reported over this period.

Our contractor undertook a number of safety talks focused on several key areas to enhance workplace safety. These included the importance of taking extra precautions during the busy holiday season to avoid rushing and frustration. Drivers were reminded to drive safely, increase following distances, and allow extra time for travel.

The talks also highlighted the risks of workplace injuries due to fatigue and emphasized the importance of situational awareness, wellness, and rest.

No contractor safety audits were conducted by the infrastructure operations team over this period, this is related to the position of contract supervisor currently being vacant.

3. Greenspace

Service Delivery and Quality Management:

Despite the continuation of challenging weather conditions recently, our greenspace contractor has performed well and met all required outcomes. Service request numbers for this period were:

Toilets (11) – There was in increase in toilet related service requests, these included blocked toilets, missing and stolen consumables, requests to open facilities, stiff handles and locks, damaged roll holders, blocked dump stations.

Cemeteries (5) – There were five cemetery related service requests, subjects include sunken graves, fast growing weeds, gate repairs and a leaking tap.

Parks and Greenspace (33) –The requests fall into several key areas. Firstly, there are concerns about tree health and safety. Secondly, playground-related requests include loose pebbles, broken swings and graffiti. Thirdly, general maintenance needs include noxious weed control, wind damage to trees, loose bolts on signs and misused skips.

Operations Budget

We continue to monitor our operational budget and can confirm there are no significant budget issues to report.

Greenspace Area Updates

General:

The challenging weather conditions has put pressure on our greenspace maintenance. Our contractors are working hard to tackle fast-growing vegetation and weatherrelated issues, including continuing rain.

Lawrence:

Playground: With the completion of the playground project, we are investigating costeffective options to meet the Lawrence community's expectations for the upgraded site. While increasing care for the gardens and lawns is straightforward, the frequent need to clean up pebbles from the new sandpit equipment makes daily or every-otherday visits by Greenspace contractors inefficient and costly. Alternative solutions are being explored.

Dead Trees in Lawrence: At the beginning of the Beaumont end of the back road near the market reserve, there are three standing dead trees. We are awaiting removal cost quotes. These trees pose a high risk due to their location near the back road and highway, which may require traffic management during removal.

Balclutha:

Balclutha Grandstand: The replacement of the Perspex panel in the Balclutha Grandstand is happening in early February.

Balclutha Lawn Cemetery: The Balclutha Islamic Society has requested changes to the Muslim burial process, reflecting their growth since the establishment of a Muslim burial area in 2019. The proposed changes include facilitating burials at all times, including public holidays, and modifying the burial structure design and plot sizes. These changes would require council approval as they impact fees, charges, and long-term cemetery capacity. Price estimates have been investigated based on the proposal, and a cost estimate has been provided to the Islamic Society for feedback. Depending on their response, this may lead to a council decision on the matter.

Milton:

Taylor Park: The fallen willow at Taylor Park has been cleared, revealing significant erosion and gravel buildup on the showgrounds side of the creek. This has made a previously mown area unsuitable for mowing due to changes in ground level and the risk of further damage. Native plantings may be considered in the future to address this issue.

Nearby, a historically wet area, previously thought to be a spring, has expanded after the flood event. Small mitigation efforts were made during the willow cleanup to manage the wet area. Water testing confirmed that the source is a mains supply leak, not a spring. Investigations are ongoing to locate and stop the leak, which is believed to be from an unrecorded waterline connected to the Milton Tennis Club Pavilion.

Milton Memorial Park Fence Damage: Recent damage has occurred to the streetside ornamental fence surrounding Milton Memorial Park. Cost investigations for repair versus replacement are underway and will be revisited once the Union Street renovations are completed to avoid potential damage to any chosen solution.

Pounawea: At the Pounawea playground, a large limb from one of the Totara in the playground was torn from the tree in high winds, it was a shame to see as they are a great feature of the park, although the tree is sound it has created an eyesore on the specimen.

Tapanui: The first stage of the Bushyhill Street Playground upgrade has been completed with the installation of two new swing sets, renewed edging, and the application of playground-certified woodchip from a local supplier. The woodchip was necessary due to minimal fall protection and site degradation caused by a blocked sump. The new woodchip has significantly improved safety, but the cost has impacted the Tapanui non-routine budget, affecting capacity to undertake future reactive works this financial year.



Site conditions before and after the application of the woodchips.

Taieri Mouth: After high winds, arborists were required to remove a large hanging branch from one of the trees in Livingstonia Park close to a house boundary. The repair works to the turf at Knarston Park seem to be holding up reasonably well.

Rural: The Taieri Millennium Track is currently closed due to damage sustained during a recent weather event, particularly to culverts in remote sections between Henley and John Bull Gully. The Department of Conservation (DOC) has confirmed that repairs to the most substantially damaged sections, which they oversee, will not occur until later in the year due to the extent of the damage.

Track maintenance and repairs have traditionally been managed by Waihola Looking Forward under an ageing agreement. However, they have indicated they lack the resources to perform the necessary repairs, although they will continue low-level maintenance. Alternative sources are being approached to assess repair costs, but this is challenging due to the remote locations and access issues.

Funding repairs from the Rural Parks non-routine budget poses a high risk of exceeding the budget for this financial year unless alternative funds are sourced. The Otago Regional Council (ORC) has indicated potential assistance with excessive costs but will not confirm until prices are available.

Toilets:

Across the district there have been several replacements of broken or missing toilet roll holders, as well as small repairs being carried out ranging from blockages, low water pressure, pump issues and plumbing repairs.

There was recent vandalism in the Balclutha Destination Toilets involving sanitary bins, CCTV is installed in the area and police are looking for signs of the perpetrators, however during high-risk hours for vandalism – if there are large amounts of visitors to the toilets during those times, it can be difficult to track down the perpetrators.

4. Waste

Service Delivery and Quality Management

Waste collection and transfer station services have continually met their contract outcomes since our last update. The current contract with WasteCo expires in November 2026

Highlights for the closedown period was only delaying collections for Christmas Day and New Years Day with all scheduled collections being completed successfully, and transfer stations remained fully operational, with staff maintaining consistent service levels despite the holiday rush.

Council received 53 Service requests through November and December and are made up as follows.

Description of Request	Numbers
Cancelling Service	2
Contamination	8
Damaged Bin	15
Late Bin Presentation	1
Missed Collection	6
Missing Bin Replacement	3
New Bin Service Request	11
Overflowing Bin	2
Recycling Information	2
Reinstate Service	1
Second Bin Request	2

Landfill/Transfer Station Operations

The table below shows the sales targets for the first half of the year. Mt Cooee needed to have received approximately 3,500 tons of commercial sales volume. As of December 31st, actual sales were lower at 2,770 tons, resulting in a 733-ton deficit. The net value of the lower sales is \$199,473.

	Budgeted	Actual
Jul	584	393
Aug	1167	1065
Sep	1751	1448
Oct	2335	1914
Nov	2918	2348
Dec	3502	2769

This downward trend in waste tonnage is reflected in reductions in clean fill, as a result of a previous council decision to charge, as well as lower overall waste volumes. The impact of increased gate charges is not yet quantified.

Any downward trend ultimately impacts our immediate operational budget, both now and in the future. The total impact of lost income, however, needs to be compared against reductions in costs associated with emissions trading and landfill levies, which had budgets set at the sales volumes which will no longer be required to the full extent.



Landfill Space Update

The current landfill closure plan provides problem capacity through to August 2025, and we continue to survey the site to unsure space is fully utilised. From the recent survey, December 24 we have establish that waste filling in the east of the site has reached, and in places, exceed the height defined by the 2021 Closure Model.

Most of the landfill site is now at, or above the design capacity, with the below survey map showing the only spaces left for landfill.

The team are working with WasteCo, our current contractors and landfill engineers along with Survey Services Limited to re-design the closure plan to create enough

additional landfill volume for an additional 6-8 months. This was submitted as a NTC to WasteCo to provide a variation to services.

Owing to the current hight as we continue to move up and fill limited space faster given it's a narrowing peak, we are experiencing more landfill closure dates due to high winds. This is a point to note for the Cutha residents and landfill customers.



Closed Landfill Updates

Our professional services contactor has been engaged by Clutha District Council to complete combined resource consent application for the four highest risk closed landfill sites (Milton, Owaka, Tuapeka Mouth, and Kaitangata) for submission to the Otago Regional Council. The scope includes assessing environmental effects, engaging with affected parties, and coordinating the project. The application seeks a 25-year consent for ongoing discharges from these sites. The wider council team are currently review the consents with lwi before submission.

Waste Minimisation

Tyrewise

Mt Cooee landfill continues to demonstrate strong end destination for tyres. 272 were received for recycling. We continue to maintain significant increases from our pre-scheme average of just 25 tyres per month.

Transfer stations

The Transfer/Collection points continue to be under review for effectiveness. From the total number of sites operations currently managed, the average throughput remains 400kgs per month, including glass and other recycling. For November and December, the total 880kgs.

Bylaw Review

Following the December meeting council approval for the bylaw review and wheelie bin asset management, we've made significant progress on implementing the single-bin policy. Our labelling and RFID tagging printer has been ordered, and due for delivery towards the end of February.

Each label incorporates both a QR code and RFID tag and contains data for the number, and first line of address only. The system will ensure effective bin management by enabling collection drivers to verify and empty only officially labelled bins. Labels will only be issued to homeowners that pay the target rates fee for collections.



5. Analysis of Waste and Recycling Trends (Dec 23 - Dec 24):

Commercial waste volumes have experienced significant variations, kerbside and transfer station refuse levels have remained relatively stable, showing only minor fluctuations and indicating consistent disposal patterns for general waste. Residential waste sent to landfill has shown minimal change over the year, suggesting steady household disposal rates.



6. Compliance

In response to the various contacts received over Christmas regarding vehicle misbehaviour on beaches, all reported incidents have been addressed. Notifications came through CSR submissions, direct phone calls, and reports from the public during patrols.

Some incidents were handled directly, while others required coordination with DOC or NZ Police for more serious cases.

This year, the volume of vehicle misbehaviour has been significant. Notably, one incident resulted in the death of a large male sea lion, which was harassed by a group of vehicles and motorbikes over a two-day period at Tautuku Bay. Evidence has been collected, including vehicle details and a registration number of one of the main offenders. Witnesses also provided additional evidence. The motorbikes involved were unregistered dirt bikes.

DOC attended the sea lion death incident, collected a DNA sample, and will now launch an investigation. All evidence is being forwarded to both DOC and the police. Additionally, an incident involving two dirt bikes in the dunes at Cannibal Bay, a sea lion nesting area, was addressed. The dirt bikes fled upon seeing the CDC truck. Photographic evidence of vehicle misbehaviour and racing at three district beaches has been collected. Photographs and video footage related to the sea lion incident at Tautuku Beach are also available.

Options to review the Vehicles on Beaches Bylaw will be brought to Council at the February 20 meeting for consideration.

Infrastructure Strategy & Operations Committee Item for INFORMATION

Report	Operations Update – Water
Meeting Date	5 February 2025
Item Number	3
Prepared By	Linda Till – Head of Three Waters
File Reference	927903

REPORT SUMMARY

The report provides updates from the Operations Water Team that are for information only.

RECOMMENDATIONS

1. That the Infrastructure Strategy & Operations Committee receives the 'Operations Update – Water' report dated 5 February 2025.

REPORT

1. Water

Staffing

The start of January saw two new staff join the team, Hannah Bardsley as an administrator replacing a staff member who was internally promoted, and Nikesh Manilall who joined in a newly formed role of Contract Manager Network Distribution. Whilst a new position, this role was created when the Engineering Manager role was disestablished following a resignation last year. Nikesh will be managing the planners and reticulation staff, and working closely with Isaacs Construction, our lead reticulation contractor ensuring quality and cost-effective outcomes are achieved.

Another of our operators has completed their formal qualifications and been awarded their New Zealand Certificate in Drinking-Water Treatment Level 4, having completed the requisite e-learning assessment, off-job block courses and an onsite assessment. Formal training, with a duration of up to 22 months, is continuing for 5 water operators and one wastewater operator.

Flood Event – October 2024

A report was received following an independent review of the flooding event undertaken by Fluent Solutions. The review focussed on flooding at properties in Frances St, High St and James St in Balclutha, which were impacted by the performance of the Hospital Creek flood embankment. The report has been made available on Council's website.

An internal working group has been formed to work through the recommendations outlined in the report to mitigate future flooding. Whilst the report is specific to Balclutha, some of the solutions apply across the district and the Three Waters Planning team is subsequently forming plans for urban areas across the district. Aside from maintenance activities, the plans will target pre, intra and post event activities.

Repairs on the damaged sand filter at the Stirling Water Plant are underway, with physical works expected to be complete by mid-February. Following this we will begin reticulation sampling and flushing of the network. Completion of physical works has been delayed by the requirement for a second concrete pour which had not been included in the plan from the provider. The community has been kept updated as work has been progressing, and of this short delay.

Further temporary measures have been required on the intake for the Tapanui Water Treatment Plant at Whiskey Gully Creek since the emergency repairs were undertaken during the event. These appear to be holding, with a more permanent solution yet to be designed and constructed.

Repairs required at other water and wastewater plants have been effected, some of which required waiting for river levels to reduce to a safe level. The inground UV treatment system for the Owaka WWTP which, extraordinarily, flooded for the first time, has been repaired and the lamps and fittings replaced.

Staff met with the Otago Regional Council staff to debrief and review our actions and performance at impacted wastewater plants. No formal report has been required by them, and notably they were complimentary about the actions taken to minimise impact to the environment, and by staff in keeping them updated on progress.

Phoenix Dam

The Phoenix Dam bypass and siphon is operating successfully with no concerns about availability of supply for the town during summer months. Regular inspections of the outer race are ongoing, with some minor remedial repairs emerging which will be attended to by a local contractor. Given the supply is effectively secure with operationalising the Bungtown Creek outer race until Lawrence is supplied by the Balmoral Tuapeka RWS, it is intended that this update will be the last unless anything of significance arises.

Milton

Our response addressing the final improvement required in the Compliance Order issued by Taumata Arowai in November 2023 was submitted before the due date of January 31, 2025. The final matter was about having a trained and knowledge workforce, and our efforts to get the team to a level of competency has continued since receipt of the order. An update on feedback from Taumata Arowai on our response will be provided when it is received.

Moa Flat & North Bruce

A carbon filtration trial to improve incoming water quality for UV treatment started at the Moa Flat water treatment plant in December 2024. The results of this trial will be used to determine if this supply can consistently comply with the relevant Drinking Water Quality Assurance Rules to lift the long-term Boil Water Notice that is in place. Early indications of the proposed 3-month trial show that it is potentially not going to provide the results needed to

achieve full compliance. Further optimisation of the trial and changes within the process are being considered.

Stirling

The Stirling supply remains on a Boil Water Notice while repair work on the filter continues. Once works are complete, we will begin sampling of the reticulation and flushing on the network before the Boil Water Notice can be removed.

Tapanui

The Boil Water Notice that was issued in October after the extreme weather event was lifted on 11 November 2024. A conserve water notice was issued on 17 January 2025 because of process issues at the treatment plant resulting in a drop in treated water storage levels. This conserve water notice was still in place at the time of writing this report.

The Tapanui supply was moved to Stage 2 water restrictions on 20 January 2025 after increased water consumption that is typical of summer months.

Milton Waihola

The Boil Water Notice and aluminium advisory for the Waihola township was lifted on 29 November 2024 after confirmation of which properties were being supplied water from the Milton water supply, and which remained connected to North Bruce. A map was provided on the CDC website to advise consumers of whether their property was supplied by Milton or North Bruce. Properties that are being supplied from North Bruce remain on a Boil Water Notice and aluminium advisory.

Waitahuna

E. coli transgressions were recorded at both the water treatment plant and in each of the three distribution networks between 27 December 2024 and 8 January 2025. Low residual chlorine levels were reported at the treatment plant and within the distribution networks as well.

There were operational malfunctions with the chlorine dosing system that were preventing adequate chlorine disinfection of the raw water, which resulted in lower residual chlorine levels reaching the distribution networks. Remedial works were performed in early January that included repairing the chlorine dosing equipment and removal of sludge from the clarifier to improve disinfection and filtration performance. Staff also shock-dosed treated storage reservoirs while chlorine to increase residual chlorine levels within the distribution.

The Water team provided regular updates to Taumata Arowai throughout this incident, with regular communications provided to the consumers on the supply.

Richardson South

A Boil Water Notice was issued for Richardson South and Kaka Point on 25 November 2024 after an operational error at the treatment plant resulted in unchlorinated water being supplied to the supply from 23 November until the afternoon of 25 November.

As part of the remedial actions, chlorine was dosed at higher levels to restore the treated reservoir and consumer tanks with safe drinking water, and a tanker was made available to consumers in Kaka Point until the Boil Water Notice was lifted on 2 December 2024.

To prevent any similar problems arising if operational errors occur in future, all plants have been programmed to shut down, rather than producing non-compliant water. Other operational improvements are ongoing, including review of the SCADA alerts system and phone equipment issued to operators as receipt of messages on some handsets is unreliable.

Taumata Arowai Reviews and Audits

The Compliance and Reporting team are working through providing data on all CDC drinking water supplies to Taumata Arowai for the annual drinking water report. Reporting is due by the end of February.

Reticulation Contract

The Three Waters Reticulation contract has been signed, with an effective start date of 1 August 2024. The contract term ends on 30 June 2028, with two possible 12-month extension terms, subject to a maximum Contract Works Period of 5 years 11 months, to align with the financial year end.

Service request volumes, particularly for rural supplies, have increased as expected over summer. Sewerage and stormwater queries have settled following the peak experienced during the October event.



2. Wastewater Treatment Plants and General

Abatement Notice EN. RMA22.0058 for the Kaitangata WWTP was cancelled by ORC in December 2024 after CDC demonstrated significant improvements against numerical limits for effluent discharge.

An extension was granted by ORC for the Abatement Notice EN.RMA.23.0145 from 21 December 2024 to 21 March 2025 for the Heriot WWTP. The Abatement Notice was issued due to Ammoniacal Nitrogen (NH_3 -N) non-compliances against Discharge Permit RM13.443.01. CDC had requested a 12-month extension of the Abatement Notice to confirm

improvements in Ammoniacal Nitrogen reduction, as improvements at WWTPs can take time to be reflected in plant performance. Further meetings between ORC and CDC to discuss treatment improvements are necessary before ORC will permit a longer extension timeframe.

3. I & I Inspection Programme

Inspections for non-compliant properties in the Clutha District are ongoing, with efforts planned for non-compliant properties to be complete by end of the 2025 year.



Please note that the graph has replaced tabled information previously supplied following feedback received and to show trends over time. This change has identified that incorrect information has previously been reported for some areas, but staff are confident that correct numbers are now being provided.

Location	Planned Dates – I&I Inspections
Owaka	January 2025 - complete
Heriot	January 2025 - complete
Stirling	February 2025
Tapanui	February 2025 - complete
Kaka Point	March 2025
Milton	April-July 2025
Lawrence	July-August 2025
Kaitangata	August-September 2025
Clinton	October 2025
Waihola	November 2025
Balclutha	December 2025-March 2026

Following are the planned reinspection dates for 2025.

Seasonal Water Restrictions

Noting the recommendation from the Committee to defer introduction of Stage 1 restrictions, this level was implemented on 17 December ahead of the festive break. The Stage 1 restriction remains in place until the end of March, and then we review whether it can be lifted or extended.

As advised earlier, warmer conditions and low reservoir levels in Tapanui saw Stage 2 restrictions implemented on 20 January. This will be reviewed weekly.

Infrastructure Strategy & Operations Committee Item for INFORMATION

Report	Compliance Update Report
Meeting Date	5 February 2025
Item Number	4
Prepared By	Daniel Pickup – Team Leader Compliance and Reporting Keiran Medel – Senior Compliance Engineer
File Reference	920345

REPORT SUMMARY

This report provides an update on all compliance-related issues across the Three Waters Operations department. It includes information that was previously provided in both the Operations and Infrastructure Strategy reports as well as additional specific information on compliance activities.

RECOMMENDATIONS

1 That the Infrastructure Strategy & Operations Committee receives the 'Compliance Update' report dated 5 February 2025.

REPORT

1 Water Treatment Plant (WTP) Compliance Focus

1.1 Drinking Water Quality Assurance Rules (DWQAR) Compliance Summary

Since the implementation of the DWQARs in November 2022, several of the Councils WTPs and distribution networks were identified, through routine sample analysis and monitoring, as having inadequate treatment processes, resulting in the supply of non-compliant drinking water to those consumers. Refer to Appendix A for an overview of the DWQARs that are not currently met by the WTPs and distribution networks subject to a Boil Water Notice (BWN) or Advisory Notice.

Monthly Compliance achieved / anticipated	Technica compli	Technical Non- Moderate Non- compliance compliance		e Non- ance	Significant Non- compliance		
Balclutha WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4.10.1.4 UV Treatment	100%	100%	100%	100%	100%	100%	
T3 Proto: 4.10.2.5 Filters T3 Proto: 4.10.2.13 UV Treatment	97%	98%	99%	100%	100%	100%	
D3 Bacto Balclutha: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%	
Compliance Comments	NA						
Milton WTP	lul-24	Aug-24	Sen-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4.10.1.1 FAC Disinfection	99%	97%	98%	97%	97%	96%	
T3 Proto: 4.10.2.11 Membranes	100%	100%	100%	99%	98%	98%	
D3 Bacto Milton: 4.11.4 Residual Disinfection	100%	77%	100%	100%	100%	100%	
D3 Bacto OCF: 4.11.4 Residual Disinfection	88%	96%	100%	100%	100%	100%	
D3 Bacto Waihola: 4.11.4 Residual Disinfection	NA	NA	NA	100%	100%	100%	
Compliance Comments	NA						
Stirling WTP	lul-24	Δμα-24	Son-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4.10.1.4 UV Treatment	100%	100%	98%	94%	100%	94%	
T3 Proto: 4.10.2.5 Filters T3 Proto: 4.10.2.13 UV Treatment	100%	100%	100%	95%	100%	100%	
D3 Bacto Stirling: 4.11.4 Residual Disinfection	100%	100%	100%	95%	100%	100%	
D3 Bacto South Bruce: 4.11.4 Residual Disinfection	100%	100%	100%	92%	100%	100%	
Compliance Comments	T3 Bacto: Minor	UV non-complian	ces at the WTP.				
Kaitangata W/TD	lul-24	Δμα-24	Son-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4 10 1 1 FAC Disinfection	99%	100%	100%	100%	100%	100%	
	07%	100%	0.00%	100%	100%	100%	
T3 Proto: 4.10.2.5 Filters	97%	100%	97%	100%	99%	100%	
T3 Proto: 4.10.2.13 UV Treatment D3 Bacto Kaitangata: 4.11.4 Residual	100%	100%	100%	100%	100%	100%	
Disinfection D3 Bacto Wangaloa: 4.11.4 Residual	100%	100%	100%	100%	100%	100%	
Compliance Comments	NA		100/0		100/0		
Whitelea Rd WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4.10.1.1 FAC Disinfection	98%	89%	91%	77%	76%	94%	
T3 Proto: 4.10.2.11 Membranes	100%	100%	100%	100%	100%	100%	
D3 Bacto North Richardson: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%	
Compliance Comments	T3 Bacto: The chlorine dose rate and contact time were not maintained for the required period to achieve full compliance.					d period to	

Puerua WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
T3 Bacto: 4.10.1.4 UV Treatment	97%	98%	95%	90%	99%	94%
T3 Proto: 4.10.2.13 UV Treatment	97%	98%	97%	93%	99%	94%
D3 Bacto Richardson South: 4.11.4 Residual Disinfection	100%	100%	100%	100%	95%	100%
D3 Bacto Kaka Point: 4.11.4 Residual Disinfection	100%	100%	100%	100%	76%	100%
Compliance Comments	T3 Bacto and Pro	oto: Minor UV nor	n-compliances at t	the WTP.		
Owaka WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
T3 Bacto: 4.10.1.4 UV Treatment	98%	100%	97%	98%	100%	100%
T3 Proto: 4.10.2.13 UV Treatment	100%	100%	96%	98%	98%	100%
D3 Bacto Owaka: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%
Compliance Comments	NA					
Clydevale-Pomahaka WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
T3 Bacto: 4.10.1.4 UV Treatment	100%	100%	100%	100%	100%	100%
T3 Proto: 4.10.2.13 UV Treatment	97%	100%	98%	100%	99%	99%
D3 Bacto Clydevale: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%
D3 Bacto Clinton: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%
Compliance Comments	NA]
Glenkenich WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
T3 Bacto: 4.10.1.1 FAC Disinfection	100%	99%	100%	99%	99%	97%
T3 Proto: 4.10.2.11 Membranes	98%	99%	99%	97%	99%	100%
D3 Bacto Glenkenich: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%
Compliance Comments	NA					
l awronce WTP	Jul-24	Δυσ-24	Son-24	Oct-24	Nov-24	Dec-24
T2 Bacto: UV Disinfection	100%	100%	100%	99%	99%	100%
T3 Proto: UV Disinfection	100%	96%	100%	99%	100%	95%
T3 Proto: Filters	100%	95%	100%	97%	92%	100%
D2 Bacto Lawrence	100%	100%	100%	100%	100%	100%
Compliance Comments	NA					
Tapanui WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
T3 Bacto: 4.10.1.1 FAC Disinfection	85%	99%	100%	77%	98%	96%
T3 Proto: 4.10.2.5 Filters	42%	73%	90%	8%	88%	90%
D3 Bacto Tapanui: 4.11.4 Residual Disinfection	100%	100%	100%	70%	100%	100%
Compliance Comments	T3 Proto: The turbidity in the treated water exceeded the maximum allowable NTU.					

Tuapeka West WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	
T2 Bacto: FAC Disinfection	73%	53%	84%	85%	57%	47%	
T2 Proto: Filters	0%	0%	0%	0%	0%	0%	
D2 Bacto Tuapeka West	100%	67%	63%	77%	67%	88%	
Compliance Comments	D2 Bacto non-compliance when FAC levels in the distribution are <0.2mg/L.						
Compliance Comments	There is no protozoal treatment at this site.						

North Bruce WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4.10.1.4 UV Treatment	74%	71%	70%	53%	50%	50%	
T3 Proto: 4.10.2.13 UV Treatment	71%	72%	60%	53%	50%	50%	
D3 Bacto North Bruce: 4.11.4 Residual Disinfection	93%	100%	100%	77%	54%	62%	
	The turbidity in the treated water exceeded the maximum allowable NTU.						
Compliance Comments	D3 Bacto: FAC results detected in the North Bruce network were below <0.1 mg/l.						
	The UV dose and UVT was not sufficient to achieve compliance.						

Moa Flat WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	
T3 Bacto: 4.10.1.4 UV Treatment	88%	91%	94%	93%	83%	94%	
T3 Proto: 4.10.2.13 UV Treatment	56%	90%	89%	93%	79%	86%	
D3 Bacto Moa Flat: 4.11.4 Residual Disinfection	100%	100%	100%	100%	100%	100%	
Compliance Comments The UV dose and UVT was not sufficient to achieve compliance.							

Waitahuna WTP	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24		
T3 Bacto: 4.10.1.1 FAC Disinfection	32%	18%	15%	17%	18%	12%		
T3 Proto: 4.10.2.5 Filters	0%	0%	0%	0%	0%	0%		
D3 Bacto Balmoral 1: 4.11.4 Residual Disinfection	80%	100%	44%	42%	46%	60%		
D3 Bacto Balmoral 2: 4.11.4 Residual Disinfection	69%	80%	25%	42%	62%	68%		
D3 Bacto Tuapeka East: 4.11.4 Residual Disinfection	73%	67%	11%	42%	15%	11%		
	The turbidity in the treated water exceeded the maximum allowable NTU.							
Compliance Comments	The chlorine dose rate and contact time was not maintained for the required period to achieve compliance.							

1.2 Boil Water and Conserve Water Notices

Tuapeka West remains on a BWN due to inadequate treatment at the plant and inconsistent chlorine levels in the reticulation. The BWN will not be lifted without considerable upgrades as there is currently no protozoal treatment at this site. This is the only site that has no protozoal treatment. The Balmoral Tuapeka Rural Water Scheme will replace the Tuapeka West WTP once it is commissioned.

1.3 Boil Water and Aluminium Advisory Notices

The Tapanui BWN was issued on 5 October 2024 after the wet weather event caused treatment plant issues. The treatment plant issues were resolved in November and the BWN lifted on 11 November 2024.

A BWN was issued for Richardson South and Kaka Point on 25 November 2024 following an operational error which caused inadequate chlorine dosing at the treatment plant. Following reinstatement of the treatment process and collection and analysis of corrective samples, the BWN was lifted on 2 December 2024.

A BWN was issued for Stirling, Benhar and South Bruce on 5 October 2024 after the wet weather event caused treatment plant issues. The BWN remains in place while remediation work is carried out at the treatment plant.

The Boil Water Notice and aluminium advisory for Waihola township was lifted on 29 November 2024 after confirmation of what properties were being supplied water from the Milton water supply. A map was provided on the CDC website to advise consumers of whether their property was supplied by Milton or North Bruce.

1.4 Moa Flat and North Bruce WTP DWS Compliance Issues

A carbon filtration trial to improve incoming raw water quality for UV treatment started at the Moa Flat treatment plant in December 2024.

North Bruce will remain on a BWN until the treatment plant demonstrates compliance with Sections 4.10.1.4, and 4.10.2.13 and the distribution network demonstrates compliance with the D3 Rules. The plant does not demonstrate the consistent compliance required to lift the BWN.

- The treatment plant struggles to consistently achieve the required UV dose to provide assurance that the bacteria in the water has been adequately disinfected by the UV treatment process.
- The treatment plant struggles to achieve the required UV dose and UVT to provide assurance that protozoa in the water has been adequately disinfected by the UV treatment process.
- Low levels of residual chlorine detected in the distribution network prevents compliance with the D3 Rules.

E. coli was not detected in the North Bruce distribution zone during the past ten weeks of monitoring, demonstrating compliance with Rule D3.29. Fifteen FAC results analysed were below the minimum requirement of 0.2 mg/L during the past ten weeks of monitoring, failing to comply with Rule D3.19.

Six aluminium results analysed from the North Bruce distribution network were above the MAV of 1 mg/L during the past ten weeks of monitoring. The most recent non-compliant residual was detected on 30 December 2024.

Two aluminium results analysed from the North Bruce WTP were above the MAV of 1 mg/L during the past ten weeks of monitoring. The most recent non-compliant residual was detected on 17 December 2024.

An elevated sampling programme will remain in place for the distribution while the analysed results are above the MAV.

North Bruce WTP	Total Aluminium ¹	E. coli	FAC
Samples Collected in the past ten weeks	2	0	0
Compliant Samples collected in the past ten weeks	0	0	0

North Bruce Distribution Network	Total Aluminium	E. coli	FAC
Samples Collected in the past ten weeks	9	20	31
Compliant Samples collected in the past ten weeks	3	20	16

Water Treatment - North Bruce WTP

Treated Water Compliance Report for December 2024

			Section 4.10.	1.4: Bacterial Rules - Water	Disinfected with U	Itraviolet Light		Sect	ion 4.10.2.13: Prot	tozoal Rules - Ultr	aviolet Light		
	Rule:		T3.15	T3.16	T3.17	T3.18	T3.85	T3.86	T3.87	T3.88	T3.89	T3.90	
	Requirement: Plant Run Time	UV Reactor 1 Run Time	% of day flow ratewithin validated range	% of the day where a Reduction Equivalent Dose (RED) of at least 40mJ/cm ² (or equivalent) was achieved	<40 mJ/cm ² for 15 consecutive minutes or more (total time)	>5.0 NTU for 15 consecutive minutes or more (total time)	% of the day flow rate within validated range	% of day UV dose met log credit requirement	< log credit requirement for 15 consecutive minutes or more (total time)	>5.0 NTU for 15 consecutive minutes or more (total time)	% of day where UVT is ≥ 95% of lowest UVT validated	<80% of lowest validated UVT for 15 consecutive minutes or more (total time)	Total number of log credits achieved
Date	min/day	min/day	95%	95%	0	0	95%	95%	0	0	95%	0	4
1/12/2024	1440	1288	100.0%	26.8%	789	0	100.0%	16.3%	789	0	0.0%	0	0
2/12/2024	1440	1333	100.0%	36.0%	676	0	100.0%	18.5%	676	0	0.0%	0	0
3/12/2024	1440	1330	100.0%	14.4%	1001	0	100.0%	14.4%	1001	0	0.0%	0	0
4/12/2024	1440	1320	100.0%	34.3%	736	0	100.0%	12.2%	736	0	0.0%	0	0
5/12/2024	1440	1362	100.0%	60.8%	414	0	100.0%	15.2%	414	0	0.0%	0	0
6/12/2024	1440	1379	100.0%	73.3%	256	0	100.0%	16.2%	256	0	0.0%	0	0
7/12/2024	1440	1404	100.0%	38.2%	757	0	100.0%	13.7%	757	0	0.0%	0	0
8/12/2024	1440	1343	100.0%	43.0%	628	0	100.0%	18.4%	628	0	0.0%	0	0
9/12/2024	1440	1313	100.0%	29.6%	803	0	100.0%	14.1%	803	0	0.0%	0	0
10/12/2024	1440	1348	100.0%	35.7%	741	0	100.0%	11.0%	741	0	20.3%	0	0
11/12/2024	1440	1349	100.0%	24.2%	908	0	100.0%	11.7%	908	0	2.9%	0	0
12/12/2024	1440	1304	100.0%	29.8%	791	0	100.0%	12.0%	791	0	11.5%	0	0
13/12/2024	1440	1382	100.0%	45.7%	637	0	100.0%	21.4%	637	0	15.5%	0	0
14/12/2024	1440	1366	100.0%	49.2%	519	0	100.0%	17.6%	519	0	41.1%	0	0
15/12/2024	1440	1385	100.0%	41.0%	713	0	100.0%	25.0%	713	0	20.0%	0	0
16/12/2024	1440	1280	100.0%	45.5%	593	0	100.0%	22.2%	593	0	33.4%	0	0
17/12/2024	1440	1359	100.0%	37.3%	707	0	100.0%	21.2%	707	0	10.2%	0	0
18/12/2024	1440	1405	100.0%	36.4%	801	0	100.0%	28.1%	801	0	28.6%	0	0
19/12/2024	1440	1363	100.0%	38.0%	781	0	100.0%	7.0%	781	0	0.0%	0	0
20/12/2024	1440	1395	100.0%	68.8%	354	0	100.0%	7.7%	354	0	0.0%	0	0
21/12/2024	1440	1395	100.0%	61.6%	520	0	100.0%	26.7%	520	0	0.0%	0	0
22/12/2024	1440	1237	100.0%	5.0%	1091	0	100.0%	2.1%	1091	0	0.0%	0	0
23/12/2024	1440	1204	100.0%	0.1%	1138	0	100.0%	0.1%	1138	0	0.0%	0	0
24/12/2024	1434	1117	100.0%	1.3%	1058	0	100.0%	1.3%	1058	0	0.0%	0	0
25/12/2024	1440	1303	100.0%	14.1%	985	0	100.0%	13.6%	985	0	0.0%	0	0
26/12/2024	1440	1282	100.0%	14.4%	951	0	100.0%	14.0%	951	0	0.0%	0	0
27/12/2024	1440	1233	100.0%	14.4%	920	0	100.0%	14.3%	920	0	0.0%	0	0
28/12/2024	1440	1342	100.0%	16.8%	983	0	100.0%	16.2%	983	0	0.0%	0	0
29/12/2024	1440	1350	100.0%	25.8%	841	0	100.0%	25.0%	841	0	0.0%	0	0
30/12/2024	1440	1279	100.0%	20.5%	855	0	100.0%	18.6%	855	0	0.0%	0	0
31/12/2024	1440	1292	100.0%	3.6%	1130	0	100.0%	3.1%	1130	0	0.0%	0	0
N	lumber of Days that w	ere Compliant:	31	0	0	31	31	0	0	31	0	31	0
	Compliance Percer	ntage Achieved	100%	0%	0%	100%	100%	0%	0%	100%	0%	100%	0%
			Ор	perator / Supplier Comments:					Operator /	Supplier Comments:			

Moa Flat will remain on a BWN until the treatment plant demonstrates compliance with Sections 4.10.1.4, and 4.10.2.13 and the distribution network demonstrates compliance with the D3 Rules. The plant does not demonstrate the consistent compliance required to lift the BWN.

- The treatment plant does not consistently achieve the required UV dose to provide assurance that the bacteria in the water has been adequately disinfected by the UV treatment process.
- The treatment plant struggles to achieve the required UV dose and UVT required to provide assurance that protozoa in the water has been adequately disinfected by the UV treatment process.

E. coli was not detected in the Moa Flat distribution network during the past ten weeks of monitoring, demonstrating compliance with Rule D3.29. All FAC results analysed were above the minimum requirement of 0.2 mg/L during the past ten weeks of monitoring, demonstrating compliance with Rule D3.19.

Two aluminium results analysed from the Moa Flat distribution network were above the MAV of 1 mg/L during the past ten weeks of monitoring. The most recent non-compliant residual was detected on 3 December 2024.

All aluminium results analysed from the Moa Flat WTP were below the MAV of 1 mg/L during the past ten weeks of monitoring.

An elevated sampling programme will remain in place while carbon-based media is trialled at the treatment plant.

Moa Flat WTP	Total Aluminium	E. coli	FAC
Samples Collected in the past ten weeks	2	0	0
Compliant Samples collected in the past ten weeks	2	0	0

Moa Flat Distribution Network	Total Aluminium ²	E. coli	FAC
Samples Collected in the past ten weeks	9	10	31
Compliant Samples collected in the past ten weeks	7	10	31

Water Treatment - Moa Flat WTP

Treated Water Compliance Report for December 2024

		Se	ection 4.10.1.	.1.4: Bacterial Rules - Water Disinfected with Ultraviolet Light Section 4.10.2.13: Protozoal Rules - Ultraviolet Light			Section 4.10.2.13: Protozoal Rules - Ultraviolet Light						
	Rule:		T3.15	T3.16	T3.17	T3.18	T3.85	T3.86	T3.87	T3.88	T3.89	T3.90	
	Requirement: Plant Run Time	UV Reactor 1 Run Time	% of day flow ratewithin validated range	% of the day where a Reduction Equivalent Dose (RED) of at least 40mJ/cm ² (or equivalent) was achieved	<40 mJ/cm ² for 15 consecutive minutes or more (total time)	>5.0 NTU for 15 consecutive minutes or more (total time)	. % of the day flow rate within validated range	% of day UV dose met log credit requirement	< log credit requirement for 15 consecutive minutes or more (total time)	>5.0 NTU for 15 consecutive minutes or more (total time)	% of day where UVT is ≥ 95% of lowest UVT validated	<80% of lowest validated UVT for 15 consecutive minutes or more (total time)	Total number of log credits achieved
Date	min/day	min/day	95%	95%	0	0	95%	95%	0	0	95%	0	4
1/12/2024	1425	1425	100.0%	100.0%	0	0	100.0%	73.1%	0	0	100.0%	0	0
2/12/2024	1394	1394	100.0%	97.3%	14	0	100.0%	82.4%	14	0	99.9%	0	0
3/12/2024	1062	1062	100.0%	51.4%	497	0	100.0%	43.3%	497	0	52.1%	0	0
4/12/2024	1425	1425	100.0%	80.8%	232	0	100.0%	27.4%	232	0	60.7%	0	0
5/12/2024	1290	1290	100.0%	97.3%	3	0	100.0%	65.6%	3	0	99.3%	0	0
6/12/2024	1410	1410	100.0%	99.4%	0	0	100.0%	78.5%	0	0	100.0%	0	0
7/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	79.7%	0	0	100.0%	0	0
8/12/2024	1396	1396	100.0%	98.1%	5	0	100.0%	79.2%	5	0	100.0%	0	0
9/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	91.8%	0	0	100.0%	0	0
10/12/2024	1389	1389	100.0%	99.9%	0	0	100.0%	69.0%	0	0	100.0%	0	0
11/12/2024	1395	1395	100.0%	99.4%	0	0	100.0%	97.5%	0	0	100.0%	0	4
12/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	83.3%	0	0	100.0%	0	0
13/12/2024	1382	1382	100.0%	99.3%	0	0	100.0%	86.1%	0	0	99.1%	0	0
14/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	90.4%	0	0	100.0%	0	0
15/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	81.7%	0	0	100.0%	0	0
16/12/2024	1390	1390	100.0%	99.8%	0	0	100.0%	97.5%	0	0	100.0%	0	4
17/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	88.4%	0	0	100.0%	0	0
18/12/2024	1425	1425	100.0%	100.0%	0	0	100.0%	75.4%	0	0	100.0%	0	0
19/12/2024	1359	1359	100.0%	99.9%	0	0	100.0%	91.8%	0	0	100.0%	0	0
20/12/2024	1398	1398	100.0%	99.2%	0	0	100.0%	76.3%	0	0	100.0%	0	0
21/12/2024	1395	1395	100.0%	100.0%	0	0	100.0%	100.0%	0	0	100.0%	0	4
22/12/2024	1396	1396	100.0%	100.0%	0	0	100.0%	100.0%	0	0	100.0%	0	4
23/12/2024	1367	1367	100.0%	100.0%	0	0	100.0%	99.7%	0	0	100.0%	0	4
24/12/2024	1391	1391	100.0%	100.0%	0	0	100.0%	96.7%	0	0	100.0%	0	4
25/12/2024	1388	1388	100.0%	99.9%	0	0	100.0%	99.9%	0	0	100.0%	0	4
26/12/2024	1403	1403	100.0%	99.9%	0	0	100.0%	99.9%	0	0	100.0%	0	4
27/12/2024	1410	1410	100.0%	99.6%	0	0	100.0%	93.0%	0	0	100.0%	0	0
28/12/2024	1410	1410	100.0%	100.0%	0	0	100.0%	96.7%	0	0	100.0%	0	4
29/12/2024	1396	1396	100.0%	100.0%	0	0	100.0%	100.0%	0	0	100.0%	0	4
30/12/2024	1366	1366	100.0%	99.4%	0	0	100.0%	97.2%	0	0	100.0%	0	4
31/12/2024	1396	1396	100.0%	100.0%	0	0	100.0%	96.4%	0	0	100.0%	0	4
N	Number of Days that w	vere Compliant:	31	29	26	31	31	12	26	31	29	31	12
	Compliance Perce	ntage Achieved	100%	94%	84%	100%	100%	39%	84%	100%	94%	100%	39%
										Notes			

Waitahuna will remain on a BWN until the treatment plant demonstrates compliance with Sections 4.10.1.1, and 4.10.2.5 and the distribution networks demonstrate compliance with the D3 Rules. The plant does not demonstrate the consistent compliance required to lift the BWN.

- The treatment plant struggles to achieve the required contact time, and turbidity levels to provide assurance that the bacteria in the water has been adequately disinfected with chlorine.
- The treatment plant struggles to achieve the required turbidity levels to provide assurance that protozoa in the water has been adequately removed by the coagulation, flocculation, sedimentation, and filtration process.
- Low levels of residual chlorine detected in two of the three distribution networks limits compliance with Rule D3.19.

E. coli was detected at the Waitahuna WTP and in all three distribution networks during the past ten weeks of monitoring, failing to comply with Rule D3.29.

Of the 39 FAC samples analysed from the Balmoral 1 distribution 24 were below 0.2 mg/L during the past ten weeks of monitoring, failing to comply with Rule D3.19.

Of the 49 FAC samples analysed from the Balmoral 2 distribution 31 were below 0.2 mg/L during the past ten weeks of monitoring, failing to comply with Rule D3.19.

Of the 52 FAC samples analysed from the Tuapeka East distribution 44 were below the 0.2 mg/L during the past ten weeks of monitoring, failing to comply with Rule D3.19.

Of the 12 FAC samples analysed from the Waitahuna WTP three were below the 0.2 mg/L during the past ten weeks of monitoring.

One aluminium result analysed from the Balmoral 2 distribution network was above the MAV of 1 mg/L during the past ten weeks of monitoring. The most recent non-compliant residual was detected on 12 December 2024.

All aluminium results analysed from the Waitahuna WTP, Balmoral 1 and Tuapeka East distribution networks were below the MAV of 1 mg/L during the past ten weeks of monitoring.

Waitahuna WTP	Total Aluminium ³	E. coli	FAC
Samples Collected in the past ten weeks	2	12	12
Compliant Samples collected in the past ten weeks	2	11	9

Balmoral 1 Distribution Network	Total Aluminium	E. coli	FAC
Samples Collected in the past ten weeks	9	27	39
Compliant Samples collected in the past ten weeks	9	26	15

Balmoral 2 Distribution Network	Total Aluminium	E. coli	FAC
Samples Collected in the past ten weeks	9	37	49
Compliant Samples collected in the past ten weeks	8	35	18

Tuapeka East Distribution Network	Total Aluminium	E. coli	FAC
Samples Collected in the past ten weeks	9	46	52
Compliant Samples collected in the past ten weeks	9	39	8

Water Treatment - Waitahuna WTP

Treated Water Compliance Report for December 2024

Section 4.10.2.5: Protozoal Rules - Coagulation, Flocculation, Sedimentation, and Filtration

					Filter 1			
	Rule:		T3.39	T3.40	T3.43	T3.44	T3.47	T3.48
	Plant Run Time	Filter 1 Run Time	% of day where turbidity was <= 0.3 NTU	# consecutive 15 min periods where turbidity was > 0.5 NTU	% of day where turbidity was <= 0.15 NTU	# consecutive 15 min periods where turbidity was > 0.5 NTU	% of day where turbidity was <= 0.1 NTU	# consecutive 15 min periods where turbidity was > 0.3 NTU
Date	min/day	min/day	95%	0	95%	0	95%	0
1/12/2024	982	982	0.0%	856	0.0%	856	0.0%	856
2/12/2024	929	929	0.0%	649	0.0%	649	0.0%	649
3/12/2024	1083	1083	10.1%	814	4.4%	814	1.5%	831
4/12/2024	973	973	0.0%	735	0.0%	735	0.0%	735
5/12/2024	1028	1028	6.2%	775	4.6%	775	1.9%	802
6/12/2024	803	803	8.3%	621	4.0%	621	0.9%	657
7/12/2024	910	910	0.3%	813	0.0%	813	0.0%	836
8/12/2024	1051	1051	0.0%	826	0.0%	826	0.0%	826
9/12/2024	1145	1145	0.0%	907	0.0%	907	0.0%	907
10/12/2024	1195	1195	0.0%	999	0.0%	999	0.0%	999
11/12/2024	1211	1211	0.0%	1057	0.0%	1057	0.0%	1057
12/12/2024	1010	1010	0.0%	716	0.0%	716	0.0%	716
13/12/2024	1120	1120	0.0%	1036	0.0%	1036	0.0%	1036
14/12/2024	940	940	0.0%	674	0.0%	674	0.0%	674
15/12/2024	774	774	0.0%	522	0.0%	522	0.0%	522
16/12/2024	1107	1107	0.0%	995	0.0%	995	0.0%	995
17/12/2024	939	939	0.0%	659	0.0%	659	0.0%	659
18/12/2024	1061	1061	0.0%	832	0.0%	832	0.0%	832
19/12/2024	738	738	0.0%	612	0.0%	612	0.0%	612
20/12/2024	1239	1239	0.0%	1057	0.0%	1057	0.0%	1057
21/12/2024	888	888	0.0%	636	0.0%	636	0.0%	636
22/12/2024	939	939	0.0%	589	0.0%	589	0.0%	589
23/12/2024	908	908	0.0%	600	0.0%	600	0.0%	600
24/12/2024	966	966	0.0%	714	0.0%	714	0.0%	714
25/12/2024	1006	1006	0.0%	768	0.0%	768	0.0%	768
26/12/2024	780	780	0.0%	374	0.0%	374	0.0%	374
27/12/2024	966	966	0.0%	669	0.0%	669	0.0%	669
28/12/2024	1007	1007	0.0%	909	0.0%	909	0.0%	909
29/12/2024	1027	1027	0.0%	943	0.0%	943	0.0%	943
30/12/2024	870	870	0.0%	674	0.0%	674	0.0%	674
31/12/2024	1015	1015	0.0%	693	0.0%	693	0.0%	693
Numb	er of Days that v	were Compliant	0	0	0	0	0	0
Cc	ompliance Perce	ntage Achieved	0%	0%	0%	0%	0%	0%
				Operator / Suppl	lier Comments:			

³ Includes results received up to 9 January 2025.

Water Treatment - Waitahuna WTP

Treated Water Compliance Report for December 2024

Section 4.10.1.1: Bacterial Rules - Water Disinfected with Chlorine									
	Rule:	T3.2	T3.3	T3.4	T3.5	T3.6			
	Requirement: Plant Run Time	% of day C.t value is at least 15 min.mg/L	% of day FACe is ≥ 0.2mg/L	10 Minimum T contact time	% of day where the turbidity of water leaving WTP is < 1.0	# consecutive 15 min periods where the turbidity of water leaving WTP is > 2.0 NTU			
Date	min/day	95%	100%	5	95%	0			
1/12/2024	982	32.1%	100%	1	7.8%	601			
2/12/2024	929	3.8%	100%	2	0.0%	649			
3/12/2024	1083	1.8%	100%	2	16.3%	232			
4/12/2024	973	1.2%	100%	1	0.0%	141			
5/12/2024	1028	1.0%	100%	2	13.2%	1			
6/12/2024	803	0.2%	58%	3	24.3%	28			
7/12/2024	910	10.4%	95%	2	4.9%	5			
8/12/2024	1051	2.8%	97%	2	0.0%	133			
9/12/2024	1145	4.1%	100%	2	0.0%	770			
10/12/2024	1195	4.9%	100%	1	0.0%	942			
11/12/2024	1211	4.5%	96%	2	0.0%	736			
12/12/2024	1010	4.0%	100%	2	0.0%	536			
13/12/2024	1120	4.2%	100%	1	6.0%	414			
14/12/2024	940	4.0%	100%	1	0.0%	526			
15/12/2024	774	3.7%	100%	2	0.0%	522			
16/12/2024	1107	4.2%	100%	2	0.0%	916			
17/12/2024	939	4.8%	100%	2	0.0%	643			
18/12/2024	1061	4.4%	86%	2	0.0%	832			
19/12/2024	738	7.0%	94%	2	10.0%	409			
20/12/2024	1239	5.9%	100%	1	0.0%	1030			
21/12/2024	888	12.3%	100%	2	0.0%	548			
22/12/2024	939	3.9%	100%	2	0.0%	589			
23/12/2024	908	2.1%	100%	2	0.0%	582			
24/12/2024	966	2.5%	100%	2	0.0%	712			
25/12/2024	1006	1.2%	70%	2	0.0%	768			
26/12/2024	780	0.8%	83%	2	0.0%	374			
27/12/2024	966	1.6%	84%	2	0.0%	669			
28/12/2024	1007	2.0%	97%	2	0.0%	909			
29/12/2024	1027	1.3%	93%	1	0.0%	943			
30/12/2024	870	1.4%	100%	1	0.0%	674			
31/12/2024	1015	0%	26%	2	0.0%	693			
Number of Days	that were Compliant:	0	19	0	0	0			
Compliance Pe	rcentage Achieved	0%	61%	0%	0%	0%			
		(Operator / Supplier Cor	nments:					

1.5 Disinfection By-products

Disinfection by-products (DBP) are formed when disinfectants like chlorine interact with natural organic matter in the source water. The pH of the water, length of time chlorine is in contact with the organic matter, temperature, and cleanliness of the distribution network all contribute to the formation of DBPs. The increased concentration of chlorine in the water causes an increase in DBP formation.

The formation of DBPs is impacted by increased temperatures, so it would be expected that there will be more DBPs formed in spring and summer.

The type of DBP formed depends on the pH. The types found in the Waitahuna and Milton distribution networks are associated with lower water pH (6.5 - 7.5).

	Waitahuna Supply										
Date	Location	Dichloroacetic acid (MAV 0.05 mg/L)	Trichloroacetic Acid (MAV 0.2 mg/L)	FAC (mg/L)							
2/9/2024	Waitahuna WTP	0.019	<0.05								
4/9/2024	Balmoral 2	0.040	0.16	0.62							
	Balmoral 1	0.064	0.18	0.50							
2/10/2024	Balmoral 2	0.066	0.19	0.42							
3/10/2024	Tuapeka East	<0.005	0.18	<0.05							
	Waitahuna WTP	0.068	0.11								
1/11/2024	Waitahuna WTP	<0.005	0.12								
	Balmoral 1	<0.005	0.35	0.07							
7/11/2024	Balmoral 2	<0.005	0.34	0.38							
	Tuapeka East	<0.005	0.36	0.08							
	Waitahuna WTP	<0.005	<0.05								
2/12/2024	Balmoral 1	<0.005	0.18	0.44							
5/12/2024	Balmoral 2	<0.005	0.17	0.30							
	Tuapeka East	<0.005	0.18	0.21							

		Milton Supply		
Date	Location	Dichloroacetic acid (MAV 0.05 mg/L)	Trichloroacetic Acid (MAV 0.2 mg/L)	FAC (mg/L)
2/9/2024	Milton WTP	<0.005	<0.05	
4/0/2024	Milton OCF	0.006	<0.05	2.20
4/9/2024	Milton Town	0.093	0.11	1.98
	Milton WTP	0.008	<0.05	2.28
3/10/2024	Milton OCF	<0.005	<0.05	2.3
	Milton Town	0.011	<0.05	1.81
1/11/2024	Milton WTP	<0.005	<0.05	
7/11/2024	Milton Town	0.016	0.07	1.83
	Milton OCF	0.016	0.08	2.05
3/12/2024	Milton WTP	<0.005	<0.05	
	Milton Town	0.013	<0.05	1.85
16/12/2024	Milton OCF	0.007	<0.05	2.05
	Waihola Town	0.023	< 0.05	1.52

Public health advice regarding DBPs, and water treatment is that the microbiological quality of the water should not be compromised to minimise DBP formation. Reducing the concentration of chlorine in the treated water to prevent DBP formation could result in increased levels of *E. coli*. Adverse health effects from DBPs are based upon long-term continuous exposures.

Improvement: Monthly Compliance	No Change (may be a non-	Consent non-compliance
achieved / anticipated	compliance if continues)	

Balclutha WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit								
Compliant.								
Discharge Parameters:								
Non-compliant results in Dec 2024.								
Dissolved Oxygen:								
Compliant average.								
HSE access:								
Concerns for samplers and operators								
 existing workarounds are in place. 								

Balclutha Wastewater Treatment Plant Resource Consent Compliance Report Jan-2024 RM17.328.01; Expiry Date: 17/10/2030 Plant Discharge Volume (m ²) Plant Effluent Sample Results (YTD) Monthly														
Parameter CBOD5 TSS E. Coli FC NH -N TP pH DÒ N+N+N DIN TN DRP PC										POM				
		g/m ³	g/m ³	cfu/100 mL	cfu/100ml	g/m³	g/m³		g O /m³	g/m³	g/m³	g/m³	g/m³	mg/L
	B out of 12	40	70	55000		20	7.2	6.5	2					
2	out of 12	85	150	350000	2500	25	8.9	9	5.54	0.005	21.1	50.1	1.22	42
	9/02/2024	30	49	2200	2000	28.0	2.97	7.0	6.17	0.005	27	42.9	1.04	43
	6/02/2024	24	52	2200	1000	20.9	2.74	7.99	0.17	30.4	1.09	42.0	1.04	52
	2/04/2024	24	36	5700		29.2	2.04	7.0	0.59	39.4	1.00	46.1	1.00	55
	6/05/2024	30	30	210000	60000	24.2	2.02	7.0	0.55	0.01	33.3	40.1	2.2	28
	6/06/2024	32	61	20000	00000	34.4	3.58	7.4	0.95	0.03	42.7	49.8	2.58	47
	3/07/2024	13	23	10000	34000	32.4	2.73	7.7	7	0.101	31.8	40.1	1.69	23
	2/08/2024	17	28	35000	50000	28.3	2.12	7.8	6	0.493	30.1	36.6	1.49	28
	5/09/2024	21	33	9000	17000	24.4	2.2	7.7	6	0.242	28.1	36.8	1.12	30
1	1/10/2024	36	44	2400	4000	12.9	1.32	8.3	12	1.92	14.8	20.4	0.642	40
	6/11/2024	22	19	5500	10000	19.9	2.07	7.4	1	0.005	19.9	30.8	1.31	19
	6/12/2024	25	34	620	1100	26.1	2.21	8.1	1	0.355	26.6	38.2	0.651	70
Numb	er of Samples	13	13	13		13	13							
8 out of 12	Limit of non-compliant samples	8	8	8		8	8							
samples	Actual	o	0	1		10	0							
Media	an Compliant?					No								
2 out of 12	Limit of non-compliant samples	2	2	2			2							
samples	Actual	0	0	0		8	0							
95th	Compliant?	Yes	Yes	Yes		No	Yes							

Balclutha WWTP compliance overview:

- The Balclutha WWTP did not exceed its 2,500 m³ daily discharge limit during November and December 2024.
- The Balclutha WWTP complied with all discharge parameter limits during November 2024. The Ammoniacal Nitrogen (NH3-N) results analysed in December 2024 were non-compliant.
- Although some samples were non-compliant in November and December 2024, the DO average is still above the consented limit of 2 g/m³.
- The inlet screen works for connection are underway with both the main and Telford lines.

Clinton WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
One non-compliance in Dec 2024.								
Discharge Parameters:								
Non-compliant results in Dec 2024, but								
overall compliant.								
Dissolved Oxygen:								
Compliant average.								
HSE access:								
Concerns for samplers and operators								
 existing workarounds are in place. 								

					Clinton Was	towator Troa	tment Diant				
Control Waste Water in Faulterin Finit											
RC No.:17.092.01- Expire 5/5/2027											
					Plant Efflue	nt Sample Re	sults (YTD)				
		pH	BOD	TSS	E. Coli	FC	NH _a -N	ТР			
000 84- 8			a/m ⁸	a/m ³	cfu/100ml	cfu/100ml	a/m ³	a/m ^s			
ORC SILE Name	Lower Limit	6.5									
	Median Limit		24	26	550		13	4			
	95th Percentile Limit		37	46	3400		17.5	11			
Clinton STP Final Effluent	04/01/2024	7.8	4	13	6000	6000	12.8	5.37			
Clinton STP Final Effluent	08/02/2024	7.8	22	40	2100	3300	6.9	6.17			
Clinton STP Final Effluent	04/03/2024	7.9	20	53	10	1200	6.75	6.01			
Clinton STP Final Effluent	04/04/2024	7.6	38	40	350		6.45	5.5			
Clinton STP Final Effluent	06/05/2024	7.90	41.00	39.00	120		8.34	5.05			
Clinton STP Final Effluent	05/06/2024	7.3	10	21	360	600	10.4	3.25			
Clinton STP Final Effluent	03/07/2024	7.5	57	26	900	2300	11.9	3.14			
Clinton STP Final Effluent	02/08/2024	7.8	10	18	330	900	10.4	2.74			
Clinton STP Final Effluent	05/09/2024	8.1	13	17	30	60	12.7	2.87			
Clinton STP Final Effluent	09/10/2024	7.5	6	15	400	800	11.5	1.79			
Clinton STP Final Effluent	07/11/2024	7.5	15	25	400	2800	9.99	2.26			
Clinton STP Final Effluent	04/12/2024	7.4	4	10	4200	25000	10.3	3.61			
Clinton STP Final Effluent	08/01/2025	7.5	6	6	6800	11000	11.8	4.18			
Number of Samples			13	13	13		13	13			
Samples must not exceed Median limits in	Limit of non-compliant sample	S	8	8	8		8	8			
more than 8 out of 12 consecutive samples		3	4	5		0	6				
Median Complia	nt?		Yes	Yes	Yes		Yes	Yes			
Samples must not exceed 95th percentile	Limit of non-compliant sample	s	2	2	2		2	2			
limits in more than 2 out of 12 consecutive	Actual		3	1	2		0	U			
95th Complian		NO	res	res		res	res				

Clinton WWTP compliance overview:

- The Clinton WWTP failed to comply with the daily discharge limit on one day during December 2024. The treatment plant is susceptible to wet weather and regularly breaches the 400 m³ daily limit.
- The Clinton WWTP did not comply with the *E. coli* discharge limit during December 2024. However, the site remains compliant with the consented discharge requirements.
- Since commissioning in October 2024 the UV treated discharge has recorded results of <10 E.coli cfu/100ml, illustrating the effect of the wetlands.
| Waihola WWTP | May-24 | Jun-24 | Jul-24 | Aug-24 | Sep-24 | Oct-24 | Nov-24 | Dec-24 |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Discharge Volume Limit: | | | | | | | | |
| Three non-compliances in Dec 2024. | | | | | | | | |
| Discharge Parameters: | | | | | | | | |
| Non-compliant results in Dec 2024. | | | | | | | | |
| Dissolved Oxygen: | | | | | | | | |
| Compliant average. | | | | | | | | |
| HSE access: | | | | | | | | |
| No new H&S issues have been | | | | | | | | |
| identified at this site. | | | | | | | | |

				Waihola Wastewater Tr Resource Consent Comp RM15.364.01 Expire da Final Effluent (eatment Plant bliance Report ite May 2028 YTD)						
Date	CBOD₅	TSS	E. Coli	NH3-N	ТР	TN	Faecal Coliforms	N+N+N	DIN	DRP	РОМ
	g/m ³	g/m ³	cfu/100 ml	g/m ³	g/m ³	g/m ³	cfu/100 ml	m3/s	mg/l	NTU	l in the second s
median	75	100	80000	23	5.7						
95 percentile	140	175	315000	31	8.2						(
15/01/2024	12	33	6400	37.5	9.87	47.5	6000	0.77	38.3	8.61	19
07/02/2024	8	29	780	41.7	11.6	55.5	100	0.038	46.2	10.8	18
04/03/2024	14	52	4800	44.3	8.78	53.6	4600	0.27	40.4	8.67	49
05/04/2024	22	17	10	51.9	8.86	62.7	13000	0.052	52	7	18
06/05/2024	17	19	1400	30.3	5.02	41.5	2400	0.271	35	4.03	17
05/06/2024	10	26	10000	24	5.27	24	41000	3.1	29.1	4.68	18
03/07/2024	10	22	6500	12.3	4.14	32.6	80000	1.48	26.4	5.95	21
05/08/2024	10	19	8000	15.9	4.38	22.3	33000	1.91	17.9	3.54	15
02/09/2024	13	26	7500	21.6	10.7	28.2	11000	1.42	23	5.05	15
11/10/2024	6	17	210	14.8	3.29	17.4	800	1.53	16.3	2.42	6
06/11/2024	6	20	470	22.2	5.03	29.5	440	0.301	22.5	4.04	9
04/12/2024	7	13	2900	34.1	7.71	40.5	2500	0.074	36.2	6.77	7
08/01/2025	6	22	4200	41.8	10.2	46.9	4200	0.29	42.1	8.31	16
Number of Samples	12	12	12	12	12						
ble no. samples in last 12 consec samples > medi	8	8	8	8	8						
I no. samples in last 12 consec samples > median	0	1	0	11	7						
Compliant?	Yes	Yes	Yes	No	Yes						
ole no. samples in last 12 consec samples > 95th %	2	2	2	2	2						
I no. samples in last 12 consec samples > 95th %ile	0	0	0	5	2						
Compliant?	Yes	Yes	Yes	No	Yes						

Waihola WWTP compliance overview:

- The Waihola WWTP failed to comply with the daily discharge limit of 160 m³ on three days during December 2024.
- The Waihola WWTP did not comply with the NH3-N and Total Phosphorus (TP) discharge limits during December 2024.

Milton WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
Compliant in Dec 2024.								
Discharge Parameters:								
Compliant results in Dec 2024.								
Treatment Plant Bypass:								
Partially treated effluent bypassed the								
treatment plant once in Dec 2024.								
HSE concerns:								
Raised by sampling staff, ORC &								
operators regarding safe access to								
sample locations and below ground								
maintenance pits – existing								
workarounds are in place.								

			Milton W	astewater Tre	atment Plant				
			Resource	Consent Com	oliance Report				
				Jan-2024					
			RC No.:2007.	090_V1; Expiry	/ Date: 20/05/20)44 3			
			nH			NH -N	TN	ТР	E coli
			pn	q/m ³	g/m ³	g/m ³	g/m ³	g/m ³	cfu/100mL
Sum	nmer Limit					10			
Lov	wer Limit		6.5						
Upper Limit		9	30	40	19	22	14	400	
ORC Site Name	Sample Date	Sample Time							
Milton STP Final Effluent	4/01/2024	1:00:00 PM	7.6	8	17	5.18	21.1	4.48	460
Milton STP Final Effluent	7/02/2024	1:00:00 PM	7.2	6	21	9.04	20.2	5.17	1100
Milton STP Final Effluent	4/03/2024	12:00:00 AM	7.2	6	19	9.36	21.1	5.31	70
Milton STP Final Effluent	3/04/2024	1:00:00 PM	7	6	13	8.78	21.6	5.05	2000
Milton STP Final Effluent	8/05/2024	12:00:00 AM	7	8	16	11.5	28.6	5.49	10
Milton STP Final Effluent	6/06/2024	12:00:00 AM	6.9	7	16	12.5	20.8	5.22	10
Milton STP Final Effluent	3/07/2024	12:00:00 AM	6.9	6	18	5.53	16	2.34	90
Milton STP Final Effluent	8/08/2024	12:00:00 AM	7	7	14	5.83	19.9	3.63	10
Milton STP Final Effluent	2/09/2024	12:00:00 AM	7.2	6	12	7.63	17.1	3.11	10
Milton STP Final Effluent	9/10/2024	12:00:00 AM	7	9	32	2.24	13	2.07	100
Milton STP Final Effluent	8/11/2024	12:00:00 AM	7.1	7	22	14	17	3.99	10
Milton STP Final Effluent	13/12/2024	12:00:00 AM	7.1	8	15	9.75	15.8	4.87	60
Milton STP Final Effluent	8/01/2025	12:00:00 AM	6.8	6	16	9.76	15.5	4.52	40
90th Pe	rcentile Limit			30	40	19	22	14	2100
				8.1	22.1	11.6	22.3	5.3	1190.0
95th Pe	rcentile Limit					25			
95th Percent	ile (Last 10 Res	ults)				12.1			
Lir	Limit Mean								400
Geometric Me	an (Last 10 Re	sults)							80.0

Milton WWTP compliance overview:

- The Milton WWTP complied with the daily discharge limit of 1,625 m³ during December 2024.
- The Milton WWTP discharged partially treated effluent to the Tokomairiro River on one day during December 2024. The discharge of partially treated effluent is currently consented.
- The Milton WWTP complied with all discharge parameter limits during December 2024.

Kaitangata WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit								
Compliant.								
Pond Overflow								
Compliant.								
Discharge Parameters:								
Non-compliant results in Dec 2024.								
HSE access:								
Concerns for samplers and operators								
 existing workarounds are in place. 								

Kaitangata Wastewater Treatment Plant											
		Resource C	onsent Comp	liance Report							
			Jan-2024								
	RC No.: RM14.001.01; Expiry Date: 21/03/2049										
Plant Discharge Volume (m ³)											
Plant Effluent Sample Results (YTD)											
PH BOD TSS NH -N TN TP E.coli											
		g/m ³	cfu/100mL								
Lower Limit	6.5										
Upper Limit	9	20	30	20	35	10	260				
4/01/2024	8	6	2.5	26.4	28.6	0.903	5				
7/02/2024	8.6	3	3	14	19.1	1.09	5				
6/03/2024	7.5	3	3	23.3	29.7	0.368	20				
3/04/2024	8	4	2.5	18.5	27	0.076	5				
3/05/2024	8	1	3	19.6	22.7	0.063	100				
5/06/2024	7.5	3	6	18.3	20.2	0.042	30				
3/07/2024	7.9	2	5	14.9	18.3	0.037	10				
5/08/2024	7.7	6	6	14.9	16.4	0.266	10				
4/09/2024	7.5	6	13	19.8	9.49	1.73	10				
3/10/2024	7.8	3	6	14.1	20.3	1.13	10				
8/11/2024	7.4	6	6	19.8	21.9	1.3	10				
4/12/2024	7.9	3	5	29	28.9	2.19	10				
8/01/2025	8.1	5	4	23.2	25.6	2.43	10				
Lower Limit	6.5										
Upper Limit	9	20	30	20	35	10	260				
Compliance	8	6	6.7	23.3	27.19	2.214	37				

Kaitangata WWTP compliance overview:

- The Kaitangata WWTP complied with the daily discharge limit of 800 m³ during December 2024. The discharge volume is largely limited by the treatment capacity of the membrane units.
- The Kaitangata WWTP did not comply with the NH₃-N discharge limit during December 2024.
- Kaitangata WWTP had abatement notice EN.RMA22.0058 cancelled in December 2024.

Heriot WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
Compliant.								
Pond Overflow								
Compliant.								
Discharge Parameters:								
Compliant results in Dec 2024.								

	Heriot Wastewater Treatment Plant Resource Consent Compliance Report										
RC No.:RM13.443.01; Expiry Date: 28/02/2049 Final Effluent Såmple Results (YTD)											
		NH -N	BOD	, E.coli	рН	TSS	TN	TP			
OPC Site Name		g/m3	g/m3	cfu/100mL		g/m3	g/m3	g/m3			
OKC Site Name	Lower Limit				6.5						
	Upper Limit	20	20	260	9	30	35	10			
Heriot Oxidation Pond Final Effluent	4/01/2024	19.3	2	5	8.0	3	26.5	5.3			
Heriot Oxidation Pond Final Effluent	7/02/2024	7.55	10	5	7.9	3	11.5	4.8			
Heriot Oxidation Pond Final Effluent	6/03/2024	11.4	2	10	7.8	3	15.8	5.2			
Heriot Oxidation Pond Final Effluent	29/04/2024	34.4	6	50	7.6	3		6.0			
Heriot Oxidation Pond Final Effluent	6/05/2024	14.6	6	10	7.6	6	36.0	5.7			
Heriot Oxidation Pond Final Effluent	7/06/2024	31.2	4	10	7.8	6	32.6	4.0			
Heriot Oxidation Pond Final Effluent	5/07/2024	27.6	5	10	7.7	6	30.3	3.8			
Heriot Oxidation Pond Final Effluent	5/08/2024	28.7	9	10	7.4	6	32.6	4.7			
Heriot Oxidation Pond Final Effluent	6/09/2024	23.1	6	10	7.9	13	28.4	3.1			
Heriot Oxidation Pond Final Effluent	9/10/2024	11.6	3	10	7.6	6	17.0	2.2			
Heriot Oxidation Pond Final Effluent	6/11/2024	14.8	14	10	7.7	6	18.6	2.5			
Heriot Oxidation Pond Final Effluent	4/12/2024	16.6	3	10	7.5	6	19.3	3.2			
9 out of 10 consecutive samples not to	Non-compliant Samples	5	0	0	0	0	1	0			
exceed	Limit of non-compliant samples		1	1	1	1	1	1			
CACCEU	Compliant?	No	Yes								

Heriot WWTP compliance overview:

- The Heriot WWTP complied with the daily discharge limit of 315 m³ during December 2024.
- The Heriot WWTP complied with all discharge parameter limits during December 2024.
- Heriot Abatement notice EN.RMA23.0145 has been extended until 21 March 2025 to allow us time to discuss treatment improvements with the ORC to enable a longer extension timeframe to achieve compliance.
- Heriot had an aerator installed in December 2024 to improve aeration and pond health.

Kaka Point WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
Compliant.								
Pond Overflow:								
Compliant.								
Discharge Parameters:								
Non-compliant results in Dec 2024.								
HSE access:								
Concerns for samplers and operators								
 existing workarounds are in place. 								

	Kaka Poir	nt Wastewater T	reatment F	Plant						
	Resourc	e Consent Com	oliance Rep	port						
RC No.: 2008.690; Expiry Date: 26/01/2046										
Final Effluent Såmple Results (^f /TD)										
OPC Site Name	ORC Site Name Date NH -N BOD Enterecocci pH TSS TN TP									
	Date	g/m ³	g/m ³	cfu/ 100mL		g/m³	g/m³	g/m ³		
Kaka Point Oxidation Pond	4/01/2024	7.3	13	5	7.4	19	39.9	10.3		
Kaka Point Oxidation Pond	7/02/2023	38.8	14	30	7.5	9	52.0	8.7		
Kaka Point Oxidation Pond	6/03/2024	49.9	12	360	7.6	22	49.5	8.9		
Kaka Point Oxidation Pond	3/04/2024	7.8	9	20	6.5	7	46.3	8.2		
Kaka Point Oxidation Pond	3/05/2024	9.8	5	100	6.4	9	52.2	7.9		
Kaka Point Oxidation Pond	5/06/2024	2.7	6	10	6.6	6	49.6	7.9		
Kaka Point Oxidation Pond	3/07/2024	6.2	6	10	7.6	11	19.6	5.9		
Kaka Point Oxidation Pond	6/08/2024	9.6	6	10	4.4	17	40.3	5.5		
Kaka Point Oxidation Pond	5/09/2024	7.0	6	10	4	47	40.0	5.7		
Kaka Point Oxidation Pond	9/10/2024	3.4	10	10	7	28	21.7	3.4		
Kaka Point Oxidation Pond	6/11/2024	2.4	18	110	8.5	39	28.5	4.5		
Kaka Point Oxidation Pond	4/12/2024	2.3	20	10	7.4	15	24.3	6.2		
Consented Limit		20	12	140	6.5-9	30	30	10		
9 out of 10 consecutive samples not to	Non-compliant Samples	1	2	1	3	2	6	0		
evceed	Limit of non-compliant samples	1		1				1		
exceed	Compliant?	Yes	No	Yes	No	No	No	Yes		

Kaka Point WWTP compliance overview:

- The Kaka Point WWTP complied with the daily discharge limit of 120 m³ during December 2024.
- The Kaka Point WWTP did not comply with the BOD₅ discharge limit during December 2024.

Owaka WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
Compliant in Dec 2024.								
Pond Overflow:								
Compliant.								
Discharge Parameters:								
Non-compliant results in Dec 2024.								
HSE access:								
Concerns for samplers and operators								
 existing workarounds are in place. 								

		Ov	vaka Wastewa	ter Treatment	Plant						
		Res	source Consent	t Compliance	Report						
	RC No.:2003_680; Expiry Date: 25/11/2045										
			Final Efflu	ent Sample							
ORC Site Name	Sample Date	Sample Time	NH -N	BOD	E.coli	рН	TSS	TN	ТР		
	Sample Date		g/m ³	g/m ³	cfu/100mL		g/m ³	g/m ³	g/m ³		
Owaka STP Final Effluent	6/01/2024	9:56:00 AM	5.55	6	30	7.1	8	9.75	6.22		
Owaka STP Final Effluent	7/02/2024	12:00:00 AM	5.12	17	170	7.5	45	18	7.09		
Owaka STP Final Effluent	6/03/2024	12:00:00 AM	0.52	8	10	7.9	3	18.1	6.52		
Owaka STP Final Effluent	3/04/2024	12:00:00 AM	15.2	23	20	7.6	33	31	8.09		
Owaka STP Final Effluent	3/05/2024	12:00:00 AM	10.4	21	60	8.3	54	19.9	3.91		
Owaka STP Final Effluent	6/06/2024	12:00:00 AM	1.15	3	120	7.4	6	3.67	0.371		
Owaka STP Final Effluent	3/07/2024	12:00:00 AM	0.05	6	10	7.3	22	2.74	0.069		
Owaka STP Final Effluent	5/08/2024	12:00:00 AM	0.73	11	10	7.2	36	16	2.2		
Owaka STP Final Effluent	5/09/2024	12:00:00 AM	0.21	7	10	7.5	15	9.49	1.73		
Owaka STP Final Effluent	11/10/2024	12:00:00 AM	0.01	4	50	6.8	20	4.3	0.462		
Owaka STP Final Effluent	6/11/2024	12:00:00 AM	0.12	9	10	6.7	32	7.64	1.33		
Owaka STP Final Effluent	4/12/2024	12:00:00 AM	0.09	9	130	7.2	35	11.7	3.72		
Owaka STP Final Effluent	8/01/2025	12:00:00 AM	0.18	12	140	7.3	60	14.6	4.4		
Lower Li	Lower Limit					6.5					
Upper Lir	nit					9					
90th Percentil	e Limit		20	12	260		30	30	10		

Owaka WWTP compliance overview:

- The Owaka WWTP complied with the daily discharge limit of 360 m³ during December 2024.
- The Owaka WWTP did not comply with the Total Suspended Solids (TSS) discharge limit during December 2024.
- Following the October wet weather event, the UV system was repaired and lamps replaced.

Stirling WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
Compliant.								
Pond Overflow:								
Compliant.								
Discharge Parameters:								
Non-compliant results in Dec 2024.								
HSE access:								
Concerns for samplers and operators								
 existing workarounds are in place. 								

	Stirling Wastewater Treatment Plant											
	Resource Consent Compliance Report											
RC No.: 2005.193; Expiry Date: 25/11/2045												
Final Effluent Sample Results 90th Percentile Compliance												
ORC Site Name	Date	NH -N	BOD	E.coli	рН	TSS	TN	TP				
	Date	g/m ³	g/m ³	cfu/100mL		g/m³	g/m ³	g/m ³				
Stirling Oxidation Pond Final Effluent	4/01/2024	1.4	7	10	8.6	18	7.8	7.9				
Stirling Oxidation Pond Final Effluent	7/02/2024	6.1	8	10	7.4	11	16.0	8.6				
Stirling Oxidation Pond Final Effluent	4/03/2024	9.9	6	140	7.4	14	19.8	7.4				
Stirling Oxidation Pond Final Effluent	3/04/2024	7.5	7	10	7.2	19	22.8	6.9				
Stirling Oxidation Pond Final Effluent	6/05/2024	7.3	4	10	6.8	6	35.7	5.1				
Stirling Oxidation Pond Final Effluent	5/06/2024	31.1	10	10	7.5	16	40.4	5.5				
Stirling Oxidation Pond Final Effluent	3/07/2024	7.6	38	10	7.8	26	38.4	5.7				
Stirling Oxidation Pond Final Effluent	6/08/2024	12.1	9	20	8.2	22	35.3	5.1				
Stirling Oxidation Pond Final Effluent	4/09/2024	4.0	10	10	7.5	40	32.7	5.4				
Stirling Oxidation Pond Final Effluent	11/10/2024	11.0	6	10	7.4	13	25.5	4.6				
Stirling Oxidation Pond Final Effluent	6/11/2024	5.8	9	10	6.2	22	2.7	6.1				
Stirling Oxidation Pond Final Effluent	4/12/2024	11.9	6	10	7.7	20	44.4	7.4				
Consented	Limit	20	12	260	6.5-9	30	30	10				
9 out of 10 consecutive samples not to	Non-compliant Samples	1	1	0			6	0				
exceed	Limit of non-compliant samples	1	1	1	1	1		1				
CALLEU	Compliant?	Yes	Yes	Yes	Yes	Yes	No	Yes				

Stirling WWTP compliance overview:

- The Stirling WWTP complied with the daily discharge limit of 140 m³ during December 2024.
- The Stirling WWTP did not comply with the Total Nitrogen (TN) discharge limit during December 2024.

Lawrence WWTP	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Discharge Volume Limit:								
Dissolved Oxygen:								
Compliant.								
Pond Overflow:								
Compliant.								
Discharge Parameters:								
Compliant results in Dec 2024.								

	Lawrence Wastewater Treatment Plant												
	Resource Consent Compliance Report												
RC No.: 2008.308; Expiry Date: 21/01/2046													
Final Effluent Såmple Results (^A TD)													
OPC Site Name	Sampla Data	NH -N	BOD	E.coli	рН	TSS	TN	TP					
	Sample Date	g/m ³	g/m ³	cfu/100mL		g/m ³	g/m³	g/m ³					
Lawrence Oxidation Pond Final Effluent	4/01/2024	18.1	12	20	7.1	20	36.8	6.9					
Lawrence Oxidation Pond Final Effluent	7/02/2024	15.6	19	10	7.4	53	28.1	9.2					
Lawrence Oxidation Pond Final Effluent	6/03/2024	1.5	12	10	7.2	16	41.7	7.2					
Lawrence Oxidation Pond Final Effluent	4/04/2024	0.9	12	10	7.7	15	32.2	7.2					
Lawrence Oxidation Pond Final Effluent	6/05/2024	18.9	8	10	7.2	11	43.0	6.1					
Lawrence Oxidation Pond Final Effluent	5/06/2024	10.2	9	10	6.4	6	37.9	5.0					
Lawrence Oxidation Pond Final Effluent	3/07/2024	5.5	6	10	9.8	9	22.0	4.8					
Lawrence Oxidation Pond Final Effluent	5/08/2024	5.0	9	90	6.9	13	28.7	4.4					
Lawrence Oxidation Pond Final Effluent	5/09/2024	2.3	13	10	7.4	16	22.8	4.0					
Lawrence Oxidation Pond Final Effluent	9/10/2024	6.9	6	10	6.8	9	23.1	3.7					
Lawrence Oxidation Pond Final Effluent	6/11/2024	5.6	6	10	7.4	13	31.1	5.2					
Lawrence Oxidation Pond Final Effluent	6/12/2024	4.3	6	40	7.3	7	28.3	5.8					
Consented	Limit	20	12	260	6.5-9	30	30	10					
9 out of 10 consecutive samples not to	Non-compliant Samples	0		0	2	0	5	0					
evceed	Limit of non-compliant samples	1	1	1		1		1					
CACCU	Compliant?	Yes	Yes	Yes	No	Yes	No	Yes					

Lawrence WWTP compliance overview:

- The Lawrence WWTP complied with the daily discharge limit of 250 m³ during December 2024.
- The Lawrence WWTP complied with all discharge parameter limits during December 2024.

Tapanui WWTP		May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24		
Discharge Volume Limit											
Compliant in Dec 2024.											
Pond Overflow											
Compliant.											
Discharge Parameters											
Compliant results in Dec	2024.										
Tapanui Wastewater Treatment Plant											
Resource Consent Compliance Report											
Jan-2024											
		KU Fin	al Effluent Sar	Expiry Date: 23	out of 10						
Final Entuent Sample Results 9 out of 10											
OPC Site Name	Data	NH -N	BOD	E.coli	pl	H I	TSS	TN	TP		
	Date	g/m ³	g/m ³	cfu/100m	nL		g/m ³	g/m ³	g/m ³		
Tapanui STP Final Effluent	4/01/2024	11.1	11	5	6.	8	7	25.7	5.32		
Tapanui STP Final Effluent	7/02/2024	9	10	5	6.	9	12	23.4	4.98		
Tapanui STP Final Effluent	6/03/2024	12.8	20	90	7.	2	15	28.4	4.49		
Tapanui STP Final Effluent	5/04/2024	8.02	11	10	6.	8	18	20	4.46		
Tapanui STP Final Effluent	6/05/2024	13.4	10	5	7.	6	28	25.1	3.85		
Tapanui STP Final Effluent	7/06/2024	3.02	2	10	7.	1	3	25.3	2.91		
Tapanul STP Final Effluent	5/07/2024	11.7	10	30	1.	3	26	19.5	2.31		
Tapanui SIP Final Effluent	2/08/2024	10.5	1/	60	/.	2	40	21.1	2.64		
Tapanui STP Final Effluent	6/09/2024	11.1	59	250	7.	1	27	16.9	2.21		
Tapanui STP Final Effluent	16/10/2024	0.26	<6	<10	6.	4	<6	10.5	1.25		
Tapanui STP Final Effluent	6/11/2024	0.45	<6	<10	6.	3	<5	11	1.5		
Tapanul STP Final Effluent	8/01/2025	n 97	6	10	6	4	13	14.2	3 25		
	0/01/2023	0.07		10	<u> </u>		10	14.2	0.20		

Tapanui WWTP compliance overview:

- The Tapanui WWTP complied with the daily discharge limit of 465 m³ during December 2024.
- The Tapanui WWTP complied with all discharge parameter limits during December 2024.

Appendix A: Drinking Water Quality Assurance Rules Technical Details

Section 4.10.1.1 of the DWQARs details the requirements that must be met to provide assurance that bacteria in the water has been adequately disinfected with chlorine. The following rules make up the requirements set out by Section 4.10.1.1:

- Rule T3.2 requires the treated water to achieve a chlorine C.t. value of at least 15 min.mg/L for 95% of the day. The C.t. value is determined by the residual chlorine (mg/L) in the final water and the T10 contact time (Rule T3.4). A low result in either of these values will results in a non-compliant C.t. value.
- Rule T3.4 requires a T₁₀ disinfectant contact time of at least 5 minutes to be demonstrated. The T₁₀ contact time is determined by the water level in the contact tanks (%) and the flow rate (l/s) of water through those tanks. A low reservoir level or high flow rate can result in a non-compliant T₁₀ contact time. The continuous monitoring report takes the lowest T₁₀ value from each 24-hour period.
- Rule T3.3 requires the residual chlorine in the final water to remain above 0.2 mg/L for 95% of the day.
- Rule T3.5 requires the turbidity in the final water to remain below 1.0 NTU for 95% of the day.
- Rule T3.6 requires the turbidity in the final water to remain below 2.0 NTU.

Section 4.10.1.4 of the DWQARs details the requirements that must be met to provide assurance that bacteria in the water has been adequately disinfected with Ultraviolet (UV) Light. The following rules make up the requirements set out by Section 4.10.1.4:

- Rule T3.16 requires an applied UV dose of greater than 40 mJ/cm² be achieved for 95% of the day.
- Rule T3.17 requires an applied UV dose of not less than 40 mJ/cm² be achieved for any consecutive 15-minute period.
- A reduction in UV dose is caused by low lamp intensity, fouling of the lamps, poor quality water, and high flow rate (I/s) through the UV unit.

Section 4.10.2.5 to 4.10.2.7 of the DWQARs details the requirements that must be met to provide assurance that protozoa in the water has been adequately removed by the coagulation, flocculation, sedimentation, and filtration process. The following rules make up the requirements set out by Section 4.10.2.5:

- Rule T3.39 requires the turbidity in the final water to remain below 0.3 NTU for 95% of the day.
- Rule T3.40 requires the turbidity in the final water to not exceed 0.5 NTU for any consecutive 15-minute period.
- The maximum credit achieved through compliance with Section 4.10.2.5 is 3-log.

The following rules make up the requirements set out by Section 4.10.2.6:

- Rule T3.43 requires the turbidity in the final water to remain below 0.15 NTU for 95% of the day.

- Rule T3.44 requires the turbidity in the final water to not exceed 0.5 NTU for any consecutive 15minute period.
- The maximum credit achieved through compliance with Section 4.10.2.6 is 3.5-log.

The following rules make up the requirements set out by Section 4.10.2.7:

- Rule T3.47 requires the turbidity in the final water to remain below 0.1 NTU for 95% of the day.
- Rule T3.48 requires the turbidity in the final water to not exceed 0.3 NTU for any consecutive 15-minute period.
- The maximum credit achieved through compliance with Section 4.10.2.6 is 4-log.
- Turbidity levels are susceptible to weather events that cause changes to the raw water quality, and over or under dosing of the coagulant.

Section 4.10.2.13 of the DWQARs details the requirements that must be met to provide assurance that protozoa in the water has been adequately removed by the UV disinfection. The following rules make up the requirements set out by Section 4.10.2.13:

- Rule T3.86 requires the applied UV dose to meet or exceed that required to achieve the claimed log credit for 95% of the day.
- Rule T3.87 requires an applied UV dose of not less than that required to achieve the claimed log credit for any consecutive 15-minute period.
- A reduction in UV dose is caused by low lamp intensity, fouling of the UV lamps, poor water quality, and high flow rate through the UV unit.
- Rule T3.89 requires the UV Transmission (UVT) to meet or exceed 95% of the UVT for which the reactor has been certified for at least 95% of the day.
- Rule T3.90 requires the UVT of not less than 80% of the lowest UVT for which the reactor has been certified for any consecutive 15-minute period.
- A reduction in UVT is caused by an increase in organics and dissolved compounds in the water passing through the UV unit.

Rules T3.92 and T3.93 requires the monitoring of identified Treatment Chemical Determinands that are introduced into the drinking water supply during the treatment process. Aluminium is used at most WTPs as a coagulant and must be monitored in accordance with Table 33 and Table 34 of the DWQARs.

Distribution Rule D3.19 requires the chlorine residual in the water distributed to the networks to remain above 0.2 mg/L in 85% of the analysed samples. The FAC must remain above 0.1 mg/L in every analysed sample.

Distribution Rule D3.29 requires the monitoring of *E. coli* and total coliforms in the distribution networks according to the frequency set out in Table 39 of the DWQARs. The Maximum Allowable Value (MAV) for *E. coli* is <1 CFU/100ml.

Infrastructure Strategy & Operations Committee Item for INFORMATION

Report	Infrastructure Strategy & Delivery Update
Meeting Date	5 February 2025
Item Number	5
Prepared By	Donna McArthur – Head of Infrastructure Strategy & Delivery
File Reference	927906

REPORT SUMMARY

The report details items from the Infrastructure Strategy & Delivery Team for information and discussion.

RECOMMENDATIONS

1. That the Infrastructure Strategy & Operations Committee receives the 'Infrastructure Strategy & Delivery Update' report, dated 5 February 2025.

REPORT

1. Asset Management - THREE WATERS

1.1 Wastewater – Initial Land Treatment Investigations and Next Steps

Driven by evolving regulations, rising costs, and a growing focus on environmental protection, the Clutha District Council (CDC) is reviewing its wastewater management practices for various communities. One potential option being explored is land-based discharge.

To evaluate this option, an environmental engineering consultant was engaged in early December 2022 to develop a report on potential disposal options. Building on this initial work, further investigations in 2023 focused on identifying suitable land treatment areas within a 10 km radius of all 11 existing CDC wastewater treatment plants.

This report has been presented to the council and the local Runanga. Recent announcements by the government regarding set discharge standards for small to medium wastewater discharges may significantly alter the direction and cost of this work. However, we intend to continue our engagement process to work through this and refine the potential costs. Following initial discussions with council and Runanga, the next steps involve comprehensive engagement. This includes:

- Iwi and councillor engagement: Collaborative planning workshops will be held after an initial technical briefing, ensuring cultural considerations are integrated throughout the process.
- Detailed investigations: Working with consultants, potential land treatment zones will be further refined, with engineering studies and cost estimates developed.

1.2 CDC Development Engineering Code of Practice

To improve efficiency and consistency across the Clutha District and the Otago/Southland regions, CDC is collaborating with neighbouring councils to develop a unified engineering code of practice. This collaborative approach will streamline processes for CDC, service providers, and contractors.

In recent months, CDC has engaged in discussions with neighbouring councils to identify areas for improving efficiency and promoting consistency. These conversations have highlighted shared challenges, areas for improvement, and opportunities for joint efforts.

Currently, CDC is working closely with Dunedin City Council, Invercargill City Council, and Southland District Council, and with their agreement, we aim to adopt their existing documents and make the necessary additions that are relevant to our district. This approach avoids reinventing the wheel and ensures a more efficient process, leading to improved management of the development, construction and regulatory environments for all parties involved.

1.3 CDC 3-Waters Asset Data Standard

To improve the quality and consistency of asset data, the 3-Waters Asset Management Team are developing a dedicated data standard. Currently, no formal standard exists, leading to variations in the data currently being provided by maintenance and capital project contractors. This standard aims to create clear guidelines and templates on data requirements to ensure accurate and complete asset records, enabling more informed decisions regarding renewals, budgeting, and long-term planning.

The 3-Waters Asset Management Team is leading this development, with the document currently in draft form. Once completed, the standard will undergo review and approval to ensure it meets CDC's strategic needs for maintaining its assets.

1.4 CDC As-Built Specification

CDC is developing an As-Built Specification to standardise the information received from contractors upon project completion. Without a formalised standard, CDC has had to rely on varying levels of detail provided by contractors, supplemented by unofficial requirements. This new specification will set consistent expectations for as-built documentation on both capital and operational projects.

The document, currently under development by the 3-Waters Asset Management Team, will be implemented following review and approval. This specification will provide a consistent framework for capturing essential project data, ensuring completeness and accuracy for ongoing asset management and future planning.

1.5 Clutha District Water Supply Schemes Strategy

This strategy is being developed to investigate the feasibility of amalgamating a number of water supplies. The goal is to improve overall water system resilience and potentially postpone costly upgrades at individual treatment plants and amalgamation which could reduce the number of plants and consents needed.

The proposal focuses on four potential connections:

- Richardson South and North: Connecting these schemes to either the Whitelea Road Water Treatment Plant (with a capacity upgrade) or the Balclutha plant, allowing the Puerua Water Treatment Plant to be decommissioned or operate at a reduced capacity.
- Kaitangata: Connecting Kaitangata to either the Stirling plant (with an upgrade) or routing water through Stirling and then Balclutha (with a Balclutha plant upgrade). This would eliminate the need for a separate, recently tendered (2023) \$2,400,000 upgrade to the Kaitangata intake and improve network resilience.

The next steps outlined in the report involve using existing water network models to determine the necessary pipeline upgrades for each connection scenario. Additionally, the report proposes estimating the capacity increase required at the water treatment plants to handle the additional demand. Finally, high-level cost estimates will be developed based on recent CDC water treatment plant upgrade projects.

1.6 Asset Management Information System (AMIS)

The 3-Waters Asset Management Team, in collaboration with IT, is currently exploring alternatives to our existing Asset Management Information System (AMIS) to improve value for money, functionality, and reliability. Our current system in use is Univerus Assets (formerly AssetFinda/Univerus).

In late December, Council staff were granted access to a test environment where a sample of our data was uploaded to a potential new system. This allowed us to test the functions and capabilities of our preferred system.

The 3-Waters Asset Management Team will summarise its findings in a memo, which will include recommendations for the approval of our preferred system.

1.7 Catchment Protection Policy/Strategy (Forestry)

The 3-Waters Asset Management Team, in collaboration with the Regulatory Team, is developing a policy and strategy to protect infrastructure from the impacts of afforestation, tree planting, and catchment protection. Currently, our protections are limited to those outlined in the bylaw and district plan, which in the past have not actively monitored or enforced.

Increased forestry activities have negatively impacted the quality of source water and the supply of water via our infrastructure.

This new strategy aims to establish clear and enforceable guidelines that align with the district plan. The policy will be based on specific criteria to ensure the protection and sustainability of our water sources and water-related infrastructure by improving our ability to manage and safeguard these areas.

1.8 3-Waters Priority Renewal Work

The 3-Waters Asset Management Team has developed a temporary solution for the forward works programme, which had been inactive for the previous five years. We have recently completed a priority replacement works programme, prioritising replacements from 1 to 3. This programme for drinking water infrastructure is now operational and available in the GIS system under the forward works layer.

We are now focusing on finalising the wastewater and stormwater sections and anticipate these sections will also be live in the GIS system by the end of February. Once this is achieved, we will begin the development of a detailed forward works programme for all Three Waters infrastructure.

1.9 Mapping of Critical Infrastructure

The 3-Waters Asset Management Team is currently undertaking a project to map and create 3D models of our critical above-ground infrastructure. This involves using drone technology to capture detailed imagery and data of key assets, including bores, reservoirs, valves, treatment facilities, raw water storage dams, and more.

The primary goal of this project is to have comprehensive and up-to-date information on hand, enabling us to monitor changes and manage our infrastructure more effectively. By building accurate 3D models, we can ensure better planning, maintenance, and response to any issues that may arise.

The data collected will be integrated into our existing asset management and GIS systems.

2. Asset Management – ROADING

2.1 Asset Management Data Standards – Asset and Work Management (AWM formerly known as RAMM)

AWM has been updated to the new national standard for all Councils, namely AMDS. Migration was completed on the 22 November 2024 with minor hiccups. Council's AWM Team is in constant communications to keep the system updated.

2.2 NZTA Waka Kotahi – Technical Audit

NZTA have advised the next Technical Audit of the district roads is planned for May 2025. The team will liaise with NZTA to plan the audit and provide any information needed.

2.3 Setting of Speed Limits - School Speed Limits

Safer speed limits for schools have been a project in CDC since 2022. A Speed Management Plan Project for Council which included the Speed Management Plan for Schools has been greatly discussed and debated on. All the previous engagements took place and were underwritten by the Land Transport Rule: Setting of Speed Limits 2022, with the change in Government in November 2023 the LTR: Setting of Speed Limits 2022 was retracted and in September 2024 was replaced with the Land Transport Rule: Setting of Speed Limits 2024. Throughout the country many councils have been informed that many of their speed limit changes are now unlawful and need to be changed back. The following dates were released for councils to adhere to on 30 October 2024.

- By **1 May 2025** RCAs must provide a list of all roads in scope of the reversal provisions to NZTA.
- By **1 July 2025** all roads in scope of the reversal provisions must be reversed, with reversed speed limits in the National Speed Limits Register (NSLR) and in force, with new signs and road markings in place.
- By **1** July **2026** roads outside school gates must have variable speed limits implemented (with some exceptions).

The Asset Management Team is working in collaboration with LTR: Setting of Speed Limits 2024 and the district's schools to create a safer environment for everyone around schools.

2.4 Bridge Inspections

The next round of bridge inspections is about to commence and will include the 2 yearly inspections of 172 bridges and the 6 yearly inspections of 60 bridges. Beca has also completed some special inspections 10 where structural assessment had been identified by Stantec.

To date Beca has completed 8 Principal Inspections and 22 General Inspections; thus 62 Principal Inspections and 150 General Inspections are still outstanding for the year24/25.

2.5 Overweight Permits

Clutha District Council is taking a more prudent approach to the management of Overweight Permits which has increased the number of restricted bridges. Beca will reassess some following the next round bridge inspections and also review the bridge span capability and deck capacities to safely reduce the number of restricted bridges.

2.6 Regional Public Transport Plan – Upcoming Consultation

CDC is a partner agency to ORC and has contributed to the preparation of the Regional Public Transport Plan (RPTP) ahead of the document being released for public consultation. ORC has engaged with other stakeholders representing schools, operators, workforce, government, communities, youth, business, and environmental advocacy across Otago. The RPTP is a statutory requirement of the Land Transport Management Act. The Plan describes the current situation and the 30-year plan for public transport needs, aspirations and priorities.

Partner agency feedback on the RPTP closed on 27 January 2025 and ORC proposes to seek public feedback on the Plan after it is approved on 5 March 2025.

CDC feedback has included reference to current CDC documents and requested the inclusion of additional towns, extensions to proposed inter-district routes and more detail about how the Plan will provide for transport disadvantaged people. It also suggests some routes could be started sooner, for example, the Balclutha-Milton-Dunedin route could be in place by Jun 2027.

The Plan refers to the collection of rates from Otago ratepayers to fund public transport. 80% of this is via Targeted Rates applied to the areas with immediate access to public transport (such as Orbus). ORC will extend Targeted Rates as the planned routes are implemented. CDC ratepayers will undoubtedly be contributing to the 20% General Rate component that funds public transport in Dunedin and Queenstown.

ORC has not provided a timeframe for further development or implementation of the Plan following the public consultation on the Plan. Any plans for extending public transport into the Clutha District should involve the Council and include demand/cost assessments to justify implementation.

3. Asset Management – FACILITIES & WASTE

3.1 Climate Change

Climate Change and Health Workshop

In December Council hosted a climate change and health workshop targeted at Council and Clutha Development staff involved in climate change, emergency management and community health. The workshop was facilitated by Health New Zealand and is a result of the engagement between Health New Zealand and the Otago region's climate change group (OCOG). The purpose of the workshop was to help participants better understand the connections between people, the environment and climate change. Activities focused on how climate change affects health and explored strategies to promote both public health and environmental health.

3.2 Facilities Asset Management

3.2.1 Community Housing

We have met with the Community Facilities Operations team to discuss the upcoming work planned for our Community Housing Assets. From this, we have begun developing a comprehensive template to capture all maintenance, upgrades and repair work scheduled. This template is designed to streamline data collection, ensuring that all work carried out is accurately recorded and easily accessible for reporting and asset management purposes. It will also support improved tracking of asset condition and future planning. Once finalised, this will enhance our ability to manage Community Housing more efficiently, aligning with Council's long-term asset management goals.

3.2.2 Reserve Management Plans

Council administers just over 50 reserves within the district. The Reserves Act 1977 requires that council as the administering authority, develops and maintains reserve management plans (RMP) that ensure the use, enjoyment, maintenance, protection and preservation of reserves, as well as their development where appropriate.

Council strategy going forward is to develop reserve management plans per ward in step with the Our Place Plans. Currently, Rural Bruce, Clutha Valley and Clinton wards have no overarching RMPs, while Taieri Mouth, Mt Stuart and Tuapeka Mouth RMPs are out of date.

The Rural Bruce ward RMP process has been commenced, with initial assessment of the reserves and available data underway. This will be followed by internal consultation with staff and some elected members before the publication of the intention to develop the RMP and invitation for written proposals.





3.3 Solid Waste Asset Management

3.3.1 Mt Cooee New Landfill Consent Application

ORC is expected to make a notification decision within the week ending 31 January 2025. Work is also underway to update proposed consent conditions to align with recommendations made during the application process. A meeting with ORC and our consultants WSP was held on 20 January 2025 to clarify any outstanding work and determine solid timelines for the delivery of the consent. Possible timelines based on various scenarios were discussed and will be used along with estimated design and construction timelines provided by Leach & Co to project possible delivery times of the new landfill and transfer station.

3.4 Fleet Asset Management

We have finalised the purchase of 9 new vehicles for Council's fleet, consisting of 5 SUV's, 2 Utes and 2 light passenger vehicles. These acquisitions align with our ongoing efforts to modernise the fleet and ensure it meets the operational needs of various departments. 8 vehicles are scheduled to arrive by the end of January to the middle of February, while the remaining vehicle (Extra Cab Ute) expected in May. These additions will further support Council's commitment to reliability, sustainability and operational effectiveness.

4. Solid Waste

4.1 Project 500022,500023, 500021 Mt Cooee – Upgrades, Construct Cell 1 & Cap Existing Cell

We are working with the Asset Team on the ORC consent application to continue operating a landfill and develop a Refuse Transfer Station and Resource Recovery Park at Mt Cooee (see section 3.3.1). We are also currently working with the support of Leach and Co. For early contractor engagement advice to expedite the process to allow a seamless transition to the new landfill cells and Refuse Transfer Station. We are currently working with the CDC Operations Team to obtain any operational needs for the Refuse Transfer Station. Concluding the previous update to source local clay, we managed to secure 5000m³ for the lining once the solution was approved.

5. Capital Projects – Roading

5.1 Contract 858 – Reseal and Pre-Seal Repairs

The contract was awarded to Fulton Hogan. Year 2 is 100% of the 32km of the pre-seal repair works completed and 100% of the 32km of the reseal completed. We have identified additional sites to be included in Year 2 for \$1M, and a list of these sites has been provided to the contractors, FH is in the process of programming this work in late Feb & March.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
300044	300010	Re-seal Year 2	\$3,504,067*	\$2,523,670**	\$980,397	\$980,397	\$0
300035	300010	Pre-seal Repair Year 2	\$300,000	\$300,000	\$0	\$0	\$0
Totals			\$3,804,067	\$2,825,670	\$980,397	\$980,397	\$0

*\$1M added to the budget from NZTA

**Updated until the claim for December 2024

6. Capital Projects – 3-WATERS

6.1 Milton Manganese Reduction Project

Fluent Solution submitted a memo to present findings for Stage 1 of the current services agreement scope of works. As a result, additional sampling had been recommended at the Milton WTP for a reasonable period (3 months) to capture any significant rainfall events within this period, to further provide clarity of where exactly manganese (Mn) and iron (Fe) levels are introduced and increased within the Milton water supply scheme.

The treatment plant operator and 3water operations team are assisting with the collection of the samples and sending them to Eurofins Laboratory for testing starting January to March 2025. The samples will be collected once a month for 3 months.

Job Code	Project Code	Description	Budget 24/25	Cost to Date	Available Budget	Forecast Spend	Variance
350118	351064	Milton Mn & Fe Reduction Project	\$1,500,000	\$43,358	\$1,456,642	\$56,642	\$1,400,000*
Totals			\$1,500,000	\$43358	\$1,456,642	\$56,6424	\$1,400,000*

*To be carried forward to 2025/26 for physical works

6.2 Contract 842 – Hub Pump Station

- The streetlights have been delivered and in NES storage. NES will install the streetlight at the state highway, awaiting the traffic management plan.
- NES will provide detailed options and prices on how they will connect the electricity to the streetlight.
- The isolation cabinet has been installed, and the old switchboards have been removed.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
400090	400080	Hub Pump Station / Underground cabling	\$1,896,000	\$1,739,319	\$156,681	\$30,000	\$126,681
Totals			\$1,896,000	\$1,739,319	\$156,681	\$30,000	\$126,681

6.3 Contract 846 – Sewerage Treatment Plant Upgrade (Balclutha, Clinton, Waihola, Heriot & Kaitangata) – Contractor: Marshall Projects Ltd

- <u>Heriot/Kaitangata Waste Water Treatment Plant</u>: The project is complete and under the defect's liability period. There is no definite end date for the final completion at this stage as all the defects are required to be remediated. The operation team are investigating the defects and working with the contractor for the remediation
- <u>Clinton Waste Water Treatment Plant</u>: This plant is also fully commissioned and in operation. We are finalising the defects list and working with the CDC

Operations Team for the contractor to remediate before the issuance of the Practical Completion Certificate. The defects are aimed to be remediated by the end of February 2025. However, the contractor is focusing on getting Baclutha WWTP commissioned first before remediating the minor defects at Clinton.

- <u>Waihola Waste Water Treatment Plant</u>: The final stage is working on the screening backwater supply. The plant is 95% commissioned and we are finalising a defects list for the contractor to remediate before the issue of the Practical Completion Certificate. The defects are aimed to be remediated by the end of Feb 2025. However, the contractor is focusing on getting Baclutha WWTP commissioned first before remediating the minor defects at Waihola.
- <u>Balclutha Waste Water Treatment Plant:</u> The inlet screen tank and the waterline are installed, and ready to be connected to the screen for its backwash system. The next stage is to continue the electrical work and recirculation pumps and finish off the screen work. It is aimed to be fully commissioned before the end of February 2025.

Job Code	Project Code	Description	Total Budget	Cost to Date (work completed)	Available Budget Left (carry forward 24/25)	Forecast Spend (under C846 only)	Variation
400101	400083	Kaitangata and Heriot Sewerage TP Upgrade	\$572,010	\$572,010	\$0	\$0	\$0
400024	400029	Waihola Sewage Treatment Plant Upgrade	\$1,150,855	\$1,043,876	\$106,979	\$6,287	\$100,693
400022	400027	Balclutha Sewage Treatment Plant Upgrade	\$3,162,215	\$2,582,505	\$579,710	\$218,661	\$361,049
Totals			\$4,885,080	\$4,198,391	\$686,689	\$224,948	\$461,741

*Total budget and cost to date are associated with the works from FY 2019. The allocated budget for this FY is \$392,971. Note: The Cost to Date includes contingency.

6.4 Contract 849 - Milton to Waihola Pipeline

The Milton Waihola Water Supply Scheme is now operational. The remaining work on this project is security fencing and driveway construction for Milburn Pump Station to start by February subject to NZTA approval for the driveway permit. There are some defects still being corrected by February.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
350061	350019	Milton Waihola Water Supply Scheme	\$6,292,882*	\$6,074,730	\$218,152	\$200,000	\$18,152
Totals			\$6,292,882	\$6,074,730	\$218,152	\$200,000	\$18,152

* Original budget was \$5,976,882 however, additional \$316,000 has been added based from internal memo Mfile: 906096

6.5 Balmoral/Tuapeka Rural Water Scheme & Lawrence New Supply

The Balmoral/Tuapeka Rural Water Scheme & Lawrence New Supply Project has many components and two construction contracts: Contract 850 (construction of 48km of pipeline) and Contract 865 (construction of 4 Booster Pump Stations, 3 on the Greenfield scheme and 1 on the Milton Waihola Scheme, and construction of a Water Treatment Plant (WTP) and bore works as a provisional item).

This project has been split into 2 contracts:

- Contract 850 Installation of Pipeline; using Southern Trenching Ltd
- Contract 865 Construction of Pump Stations, Treatment Plant, and Bores; using Cowley Electrical Dairy and Pumps

JOB-STATUS SUMMARY

Progress

1) <u>Contract 850 – Pipe Installation</u>

Pipe installation has been completed now except for the tie-in connection to the Lawrence township distribution network, this work will be done at the end of February.



Lawrence pressure relief valve (PRV)

2) Contract 865 – Pump Station Installation

Borefield

- Pipework and ducting have been installed between bores.
- The new bore field will include an extension to the Pomahaka-Clydevale treatment building where the new switchboard will be installed by the end of January.
- Water quality results from Bore 1 & 2 show it is suitable to supply water to the scheme. Water quality from Bore 3 will be ideal for supply once additional flushing (8 days of flushing is required) is completed.
- Bore heads have been ordered and are expected to be received in February.

Water Treatment Plant (WTP)

- Civil works underway, target to be completed by February
- Building and reservoir foundation works underway, target to be completed by February
- UV units are ready for shipment
- Transformer is ready for shipment



Work underway on the WTP site

Lower Greenfield Pump Station (Greenfield Road) (Completed)



Lower Greenfield Pump Station

Upper Greenfield Pump Station (Greenfield Road/Cairn Road corner)(Completed)



Upper Greenfield Pump Station

Cairn Road Pump Station (Waitahuna West Road / Cairn Road) (Completed)

Cairn Road Pump Station

Planned Activities for Next Period (January and February).

- All pump stations tidied up
- Installation of bore heads
- WTP building foundation completion and start of building works.
- Civil works and underground pipework for the Treatment Plant to be completed.

Financial

Note: All figures below are GST-exclusive.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
360201	361156	Balmoral/Tuapeka Rural Water Scheme & Lawrence New Supply	\$25,243,000*	\$19,904,557	\$5,338,443	\$5,338,443	\$0
Totals			\$25,243,000	\$19,904,557	\$5,338,443	\$5,338,443	\$0

*Original budget was \$19,808,300 however, an additional \$5,430,000 has been added based on the Council meeting last September 2024.

6.6 Contract 863 – Reservoir Civil Construction – North Bruce, Puerua, Lawrence and Moa Flat

- Puerua Reservoir inlet cut-ins were completed in December. During the quality control handover process with Tasman Tank, we identified defects on the facial panels (dents on outer lining panels). Tasman Tank deployed a team to rectify these defects and ran into the holiday shutdown period, additional costs were absorbed by Tasman Tank. The reinstatement of the pipe works and prefabrication of the pipe adaptor will commence in January 2025. The commissioning plan is set for February 2025.
- North Bruce During the discussion of the cut-in methodology, it was identified that the cut-ins are preferred on the inlet of the old tank reservoir and decommissioning the old tanks. The original scope was to decommission the old tanks and cut them in to be at the outlet of the old reservoir tanks. The new cut-in requirements were sent to our professional services panel (Beca) to provide a solution. We received the response late in December. We forecast a cost for the pipe work for an additional amount of \$30,000. Once quotations are received and finalised, we will update the price and communicate to the rural water chairman for the next steps.
- Moa Flat Inlet cut-in on the outgoing line was completed with the intent of obtaining and using an actuator at the inlet. Pricing obtained for an actuator in late December was high with a long delivery period provided. A second option of modification to pipework at the water treatment plant was provided by our operations team and a quotation was requested from our local contractor. Due to the large capacity of the 3000KL reservoir and the necessity to achieve the hydraulic heights from the water treatment plant, the reservoir had to be moved to a low point on the farmland incurring additional costs. Once we finalise the cost, we will engage the rural water chairman and committee.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
360205	361121	Puerua Reservoir	\$846,000	\$733,975	\$112,024	\$62,000	\$50,024
360204	361113	North Bruce	\$787,000	\$798,335	-\$11,335	\$30,000	-41,335*
360125	361049	Moa Flat	\$1,157,000	\$1,149,945	\$7,054	\$92,111	-85,057**
Totals			\$2,790,000	\$2,682,255	\$119,078	\$235,470	

* Additional cost incurred for the change assessment and re-routing of the reservoir inlet piping. **Anticipated Variation (Actuator + Piping), the final cost to be confirmed.

7 Capital Projects – OTHER

7.1 Taylor Park Cabins

- Four remaining cabins at OCF (Cabin 5-8) are completed.
- We are in the midst of final negotiations of an additional two cabins being purchased, the purchase price for these is slightly less than the prior 4 due to not all fixtures and fittings being included.

•	The last 2 cabins	(Cabin 9 and 10) will not be continued.	

Job Code	Project Code	Description	Budget	Revenue Received	Cost to Date	Available Budget	Forecast Spend	Variance
670008	670007	Taylor Park Cabins	N/A	\$198,261	\$798,434	N/A	\$401,566	\$1,200,000
Totals			N/A	\$198,261	\$792,184	N/A	\$407,815	-\$1,001,739

7.2 Contract 845 - Milton Mainstreet Underground Utilities

• In December, we achieved key milestones by completing the undergrounding utility services from the intersection of High Street and Union heading south to the intersection of Union and Cowper Street. Some of the additional milestone achievements included the testing and commissioning of the new Ø63 rider main and the successful completion of the Ø300 UPVC stormwater pipeline from Abercrombie to Cowper. Next activities would be the water mains in Gray Street and Ajax Street which is targeted to complete by early March.



Milton Mainstreet overhead power lines and poles were removed.



Flushing of the pipeline after pressure testing.

- Once all connections were finalised, Terramark was brought in to complete as-built GPS surveys of the new infrastructure.
- NZTA is laying new asphalt from the Springfield Road intersection down Union Street heading North to the bridge.



Terramark On-site conducting GPS surveying for as built.

Job	Project	Description	Budget	Cost to	Available	Forecast	Variance
Code	Code			Date	Budget	Spend	
450044	450045*	Stormwater	\$3,852,000	\$3,731,219	\$120,781	\$120,781	0
400107	400084*	Foul Sewer	\$580,000	\$831,534	-\$319,135	\$27,100	-\$346,235
350124	351087*	Water	\$556,000	\$593,120	-\$37,120	\$55,992	-\$93,112
310003	310002**	Streetscape costs including undergrounding	\$5,000,000	\$2,069,966	\$2,930,034	\$108,399	\$2,821,635
Totals			\$9,988,000	\$7,456,689	\$2,531,311	\$242,211	\$0

*3 Waters urban budgets will be utilised for job code overspending ** Includes undergrounding budget

Milton Mainstreet - Separable Portion D (Footpath Reinstatement)

• The footpath renewal budget will be utilized to expense costs. The works will start once NZTA has completed their work in February. The footpath reinstatement is targeted to be completed by March.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
300037	300003	Footpath Renewals Budget	\$362,227	\$0	\$362,227	\$362,227	\$0
Totals			\$362,227	\$0	\$362,227	\$362,227	\$0

7.3 Contract 880 – Milton Community Pool/Library Hub Project

Phase: Detail Design

During the Council meeting of 5 December 2024, a resolution was passed to continue with the project, and that the now increased total project budget is \$19.4M.

Donna McArthur will be project managing this project.

Detail Design work has now commenced, and we are working very closely with Calder Stewart on this stage. Fortnightly minuted meetings are occurring to ensure early identification of any issues/risks.

A letter to the relevant tenant in one of the current buildings on site has been distributed advising that they will be required to vacate the premises by 30 April 2025.

We are in discussions with Tokomairiro Training Centre on their vacating plan – at this stage agreement is for the end of term two (end of July 2025)

Our Library team are actively looking for a temporary Library site.

Consent work is in process, and to date there are no known issues or potential delays apparent. A possible issue could be if Notice of Requirement delays occur due to neighbours reluctant to provide approval of change of requirement status for facility build.

Demolition of sites work has been awarded to Andrew Haulage and is scheduled to commence in July/August 2025 at the latest, subject to when all existing premises are vacated, and consents approved. It is estimated that this work would take one calendar month.

Task Name 👻	Duration 👻	Start 🗸	Finish 👻	Resource Names 💌
Bruce Community Project	578 days	Thu 5/12/24	Mon 22/02/27	
Detail Design though to consent issue	95 days	Mon 20/01/25	Fri 30/05/25	Calder Stewart
Notice to Tenant 47 Ajax Street to Vacate Premises	68 days	Mon 27/01/25	Wed 30/04/25	Delwyn Burrow
Notice to Tokomairiro Training Centre to Vacate Premises	134 days	Mon 27/01/25	Thu 31/07/25	Finance Dept
Milton Library team move to Temporary Library Facility	22 days	Tue 1/04/25	Wed 30/04/25	Debbie Duncan
Demolition of Existing Buildings	22 days	Fri 1/08/25	Sun 31/08/25	Andrew Haulage
Physical Construction	370 days	Mon 1/09/25	Fri 29/01/27	Calder Stewart
Pre-Commissioning/Testing Facility	15 days	Mon 1/02/27	Fri 19/02/27	Calder Stewart
Public Formal Opening	1 day	Mon 22/02/27	Mon 22/02/27	TBC

High level timeline of delivery for this project

Job Code	Project Code	Description	Total Budget	Cost to Date	Available Budget	Forecast Spend	Variance
570011	570007	Milton Pool	\$12,610,000	\$583,630	\$12,026,370	\$12,026,370	0.00
560010	560019	Milton Library	\$ 6,790,000	\$168,842	\$ 6,621,158	\$ 6,621,158	0.00
Totals			\$19,400,000	\$752,472	\$18,647,528	\$18,647,528	0.00

Total Project Budget/Expenditure/Forecast

Job Code	Project Code	Description	Annual Budget	Cost to Date	Available Budget	Forecast Spend	Variance
570011	570007	Milton Pool	\$958,866	\$14,988	\$943,878	\$797,452	\$161,414
560010	560019	Milton Library	\$500,000	\$13,860	\$486,140	\$433,646.00	\$66354
Totals			\$1,458,866	\$28,848	\$1,430,018	\$1,231,098	\$227,768

Annual Project Budget/Expenditure/Forecast

7.4 Contract 883 – Mt Cooee Leachate Pump Station and Owaka Wastewater Pump Station

Mt Cooee:

• Topsoil is expected to be delivered in February to finish the reinstatement. Once it's delivered Isaac's will spread the topsoil, shape it, and put the grass seed down.

Owaka:

- The contractor (Issac Construction) will finish the snag list from the operations team at Owaka by the end of January.
- The electricians will be working on sealing up the conduits in the switchboard by February.



Owaka Fence Before

New Owaka Fence After

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
400091	400082	Owaka Wastewater Pump Station Renewal	\$1,669,520	\$1,539,391	\$130,128	\$53,000	\$77,128
500011	500009	Mt Cooee Wastewater Pump Station & Leachate Pond Renewal	\$1,940,000	\$829,696	\$1,110,304	\$68,000	\$1,042,304
Totals			\$3,609,520	\$2,369,087	\$1,240,432	\$121,000	\$1,119,432

7.5 Balclutha Pool Filter Replacement Project

• Contractor Filtration and Pump (Company Name FPC) installed the bisulphate tank and vacuum pump on 12 December. Commissioning was completed on the 9 January. The project has been completed.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
570015	570011	Balclutha Filter Replacement	\$500,000	\$211,186	\$288,814	\$0	\$288,814
Totals			\$500,000	\$211,186	\$288,814	\$0	\$288,814

8. **Projects in Design Phase**

8.1 Contract 892 – Milton-Tokoiti Water Network Extension

The concept design and tender documents was finalized and tender placed on GETS on the 12 December 2024, the tender will close on the 7 February 2025.

Job Code	Project Code	Description	Budget 24/25	Cost to Date	Available Budget	Forecast Spend	Variance
----------	-----------------	-------------	-----------------	--------------	---------------------	-------------------	----------

350104	351085	Milton-Tokoiti Water Network Extension	\$615,000	\$80,525	\$534,475	\$380,000	\$154,475
Totals			\$615,000	\$80,525	\$534,475	\$380,000	\$154,475

8.2 Project No. 400064 – Connecting Stirling to Balclutha Sewer Network

The project is currently still in the investigation phase, exploring options to transport sewage from Stirling to the Balclutha network, hence the forecast spend is based on no physical works this financial year. A feasibility study will assess the viability of both land treatment and direct pipeline solutions. The target for the first report review is scheduled for 31 January.

Job Code	Project Code	Description	Budget 24/25	Cost to Date	Available Budget	Forecast Spend	Variance
400105	400064	Connecting Stirling to Balclutha Sewer Network	\$500,000	\$6,685	\$493,315	\$20,000	\$473,315
Totals			\$500,000	\$6 <i>,</i> 685	\$493,315	\$20,000	\$473,315

8.3 Project No. 362016 – Mt Mistake Pump Station Replacement

Additional assessment was requested by our operation team to be carried out for the addition of a variable speed drive, Grundfos makes pumps, and a redesign of the switchboard. Currently, we awaiting quotations from different suppliers.

Job Code	Project Code	Description	Budget 24/25	Cost to Date	Available Budget	Forecast Spend	Variance
	362016	Mt Mistake Pump Station Replacement	\$115,166	\$0	\$115,166	\$115,166	0
Totals			\$115,166	\$0	\$115,166	\$115,166	0

8.4 Project No.351050-Balclutha WTP Intake Upgrade Project

The Detailed Design for the WTP Intake and Platform is underway (50% Complete). Stantec Consultants are responsible for this deliverable including the tender documents and specifications to be due on 28 February 2025.

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend*	Variance
350086	351050	Balclutha WTP Intake Upgrade	\$617,465	\$50,900	\$566,565	\$566,565	\$0
Totals			\$617,465	\$50,900	\$ 566,565	\$ 566,565	\$0

*Forecast spending will be clearer once the engineer's estimate is received.

8.5 Project No. 450033 – Balclutha Stormwater Renewal Project

Detailed design has been completed by GHD. Awaiting Tender documents and specifications to be completed by the 12 February 2025 for tender publication on GETS by the 14 February 2025.

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend*	Variance
450037	450033	Balclutha SW Main Renewal	\$572,202*	\$12,968	\$464,234	\$464,234	\$0
Totals			\$572,202	\$12,968	\$464,234	\$464,234	\$0

* The initial allocated budget of \$572,202, of which \$95,000, was reallocated for Milton Main Street Utilities/SW's Main Renewal project.

**Forecast spending will be clearer once the engineer's estimate is received.

8.6 Project No. 450042 – Lawrence Hospital Creek Improvements Project.

The revised internal memo will be circulated for approval. The recommended approach is to seek quotes from local contractors to complete the improvement works. Consent issues have been clarified by ORC.

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend	Variance
450043	450042	Lawrence Hospital Creek Improvements	\$250,000	\$0	\$250,000	\$200,000	\$50,000
Totals			\$250,000	\$0	\$250,000	\$200,000	\$50,000

8.7 Project No. 450043 – Lawrence Stormwater Main Renewal Project

Project is currently on Tender. This is due on the 31 January 2025. Tender evaluation will take 2 weeks before awarding contract on the 21 February 2025.

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend	Variance
450049	450043	Colonsay Street,	\$136,000	\$9,812	\$126,188	\$500,000**	-\$373,812

		Lawrence SW Main Renewal					
350116	351056	Kaitangata WM Renewal*	\$224,416	\$0	\$224,416	\$0	\$224,416
450038	450035	Kaitangata SW Main Renewal*	\$170,443	\$0	\$170,443	\$0	\$170,443
Totals			\$530,859	\$9,812	\$521,047	\$500,000	\$21,047

*These projects have been deferred

** Variance will be covered by reallocated funds from 350056 (\$224,416) and 450035 (\$170,443) and approved under the delegated Authority.

8.8 Project No. 351060 – AC Milton Watermain Renewal Project

Two separable portions were contracted to Andrew Haulage before Christmas 2024. Contracted physical works have been successfully completed before the 20 December 2024, which was the contracted due date for practical completion.

Awaiting receipt of as-built plans for issuing Practical Completion Certificate (PCC).

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend	Variance
351029	351060	Milton AC Mains Renewal	\$0	\$79,976	\$0	\$85,565	\$165,541**
350104	351085	Milton – Tokoiti Water Network Renewal	\$788,660	\$0	\$105,541*	\$105,541	\$105,541
350026	351008	Milton Pipeline Renewals	\$355,066	\$0	\$60,000*	\$60,000	\$60,000
Totals			\$0	\$0	\$0	\$165,000	\$0

Table Separable Portion B Financial

*Budget reallocated from Milton – Tokoiti Water Network Renewal is \$105,541 and from Milton Pipeline Renewals is \$60,000.

**3 Waters urban budgets will be utilised for job code overspending

Table Separable Portion C Financials

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend	Variance
351029	351060	Milton AC Mains Renewal	\$100,000	\$0	\$100,000	\$231,660	\$131,660
350089	351059	Milton Concrete Pipeline Renewals	\$100,000*	\$0	\$100,000	\$0	\$100,000
351030	351048	Balclutha AC main renewals	\$100,000*	\$0	\$100,000	\$0	\$100,000
Totals			\$100,000		\$300,000	\$231,661	\$68,340

* 3 Waters urban budgets will be utilised for job code overspending

8.9 Contract 888, 901, and 902 - Tank Farm Reservoir Projects.

- The open tender for tank procurement for the supply and delivery of 95 x 30m³ tanks under Contact 888 was published on the Government Electronic Tenders Service (GETS) and closed on 21 November 2024. Due to the Christmas holidays, the final decision was delayed. The tender award memo has been approved on 21 January 2025.
- Contracts 901 and 902 will be the civil and plumbing contracts for the 10 reservoir sites and will be published in GETS in January. The memorandum of understanding (MOU) between CDC and farm owners is in progress.



30m³ Plastic Tank Farm Reservoir in Moffat reservoir, for reference only

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend**	Variance
350085	351022	Waihola Reservoir renewals programme	\$651,873	\$240,427*	\$411,446	\$411,446	\$0
360133	361063	Richardson Oakleigh Road Reservoir assessment and renewals	\$551,975	\$48,839	\$503,136	\$503,136	\$0
360221	361143	Tuapeka East Breakneck Reservoir upgrade	\$543,907	\$20,436	\$523,471	\$523,471	\$0
Totals			\$4,397,034	\$415,684	\$3,981,350	\$3,981,3 50	\$0
--------	--------	---	-------------	-----------	-------------	-----------------	-----
360262	361140	Tuapeka West Heathcote Reservoir upgrade	\$93,695	\$11,171	\$82,524	\$82,524	\$0
360214	361097	Glenkenich Main Reservoir upgrade	\$216,468	\$100	\$216,368	\$216,368	\$0
360211	361090	Pomahaka Main Reservoir upgrade	\$441,524	\$17,739	\$423,785	\$423,785	\$0
360219	361139	Mt Stuart Reservoir upgrade	\$442,721	\$21,044	\$421,677	\$421,677	\$0
350100	351066	Owaka Reservoir upgrade	\$476,725	\$13,680	\$463,045	\$463,045	\$0
350099	351023	Kaka Point Reservoir renewals programme	\$488,653	\$19,116	\$469,537	\$469,537	\$0
360220	361142	Tuapeka West Main (Cockleshell) Reservoir upgrade	\$489,493	\$23,132	\$466,361	\$466,361	\$0

* This includes the piping cost related to the Milton-Waihola pipeline project (\$216,298).

** The forecast spend will be verified once the tender for the Contract 901 and 902 has been awarded in March.

8.10 Contract 868 - Clydevale Bore Security Project

• Beca has completed the Clydevale bore field options assessment report with two potential options and recommended the second option as the more cost-effective solution. Below are the two options:

Option 1

Upgrade the bore 4 pump, bore head, and variable speed drive (VSD).

Drill 2 new bores to replace older Bores 1, 2, and 3 (targeting flow rates comparable to Bore 4)

Total expected estimate (plus design fees, planning & consenting fees, fencing, etc.) - \$1,400,000

Option 2

Upgrade and raise bore heads of bores 2 & 3 above ground to meet the sanitary bore head requirements of the Drinking Water Quality Assurance Rules

Drill 1 new bore to replace bore 1

Total expected estimate (plus design fees, planning & consenting fees, fencing, etc.) - \$800,000.

• After reviewing the report, a discussion was initiated with the operations team and the Rural Water Committee to confirm the recommended option and the budget required to complete this project, however, the Rural Water Committee Chairman (John Whiteside) expressed his opinion and raised concerns about allocating funds for compliance upgrades, such as raising the bore heads of Bores 2 and 3, citing financial constraints on the Rural Water Committee. He also mentioned that the current water quality is acceptable and does not justify the investment in upgrading Bores 2 and 3 as a part of the compliance requirement. Additionally, we discussed the potential challenges if Bores 2 and 3 are not upgraded to meet the Drinking Water Quality Assurance Rules, as well as Taumata Arowai's role in regularly auditing water facilities. However, he acknowledged the ongoing issues with Bore No. 1 and recommended drilling a new bore to replace it. The decision on the proposed option and additional budget is under discussion.



Installed Clydevale WTP Bore No.4, for reference

Job Code	Project Code	Description	Budget	Cost to Date*	Available Budget	Forecast Spend	Variance
360212	361092	Clydevale Bore Security Improvements	\$111,706	\$54,987	\$56,719	\$0	\$56,719
Totals			\$111,706	\$54,987	\$56,719	\$0	\$56,719

*Includes the payment last January

8.11 Project No 351061 - Milton (Milburn) WTP upgrade to 5,000 m3/day

Beca has provided 3 options.

Option 1 - Biological Activated Carbon (BAC)

BAC filter to be installed upstream of membranes, increasing longevity of membranes. Membranes could then be decommissioned at end of life and replaced with conventional media and UV treatment. – estimated cost at \$5.4M to \$8.0M

Option 2 – Greensand Media Filtration

Media filter installed downstream of membranes (cannot be upstream due to chlorine dosing and risk of disinfection byproducts). Membranes could then be decommissioned at the end of life and replaced with conventional media and UV treatment. - estimated cost at \$5.4M to \$8.0M

Option 3 - Pre oxidation and UF

This is the most operationally difficult option for dose control and would require a new chemical storage & dosing system. The membranes will still need replacing once they reach the end of life (likely in the next 1-5 years). This is the most expensive option. Estimated cost at \$7.4M to \$11.1M.

Beca recommended Option 2. This had a similar cost to Option 1 but provided more reliable removal. With media filtration in place, the membranes can be decommissioned once they reach the end of life and replaced with UV for protozoa treatment.

The next steps would be to explore other options such as replacing the existing membrane and installing another membrane unit to increase the overall capacity of the water treatment plan.

In the LTP we currenlty have additional budgets – total of \$1.875M (Yr 2/3)



Milton WTP Membrane Unit No.1

Job Code	Project Code	Description	Budget 24/25	Cost to Date	Available Budget	Forecast Spend	Variance
350117	351061	Milton (Milburn) WTP upgrade to 5,000 m3/day	\$109,308	\$0	\$109,308	\$109,308	\$0
Totals			\$109,308	\$0	\$109,308	\$109,308	\$0

8.12 Contract 851 – Project No 310002 - Milton Streetscape

The tender has been published in GETS and will close on 21 February.

8.13 Contract 890 – Project No 310004 - Balclutha Streetscape (Hub Carpark)

The tender has been published in GETS and will close on 5 February.

8.14 Project 30013 – Structures component replacements (Category 215)

• The report "2022/2023 Bridge and Other Structure Inspections" issued in July 2023 identified the below list which included various types of work on 28 different bridges (table provided on the last ISO infrastructure strategy and delivery update in November 2024).

- The repair works in 18 out of the 28 bridges require design works, Beca has completed a detailed inspection of these 18 bridges and provided a list of the required repairs and their priority. We are currently working on preparing the required designs and tender documents. The tender is scheduled to be published on March 2025.
- The repair works in the remaining 10 bridges will be carried out under the general maintenance programme.

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend*	Variance
300047	300013	215 - Structures component replacements	\$741,000	\$59,331	\$681,669	\$681,669	\$0
Totals			\$741,000	\$59,331	\$681,669	\$681,669	\$0

*The forecast spend will be verified once the tender has been awarded.

8.15 Project 30063 – Bridges Renewals (category 216)

- The project's objective is to replace 10 road bridges over the coming 3 years to open our road network to MAX and high productivity motor vehicles (HPMV).
- As per NZTA funding requirements, we carried out SP2 (Simplified Procedure No.2) and PVEOL (Present Value End of Life analysis) reports for the 10 bridges, the reports' outcome indicated that only 3 bridges (as listed in *Table 1* below) qualify for renewal in this financial year. We are following up with NZTA on the final approval.

Bridge #	Location Ward		Span (m)	Lanes
121	Taumata Road	Clinton	6	1
147	Slopedown Road	Catlins	9	1
173	Waitepeka Road	Balclutha	8	2

Table 1 Brid	dges location	& description
--------------	---------------	---------------

Progress Update:

- Surveying and soil investigation physical works completed for 2 bridges (121, 147) and bridge 173 investigation works are in progress.
- Design and contract documents are completed for 2 bridges (121, 147) and bridge 173 design and contract documents are in progress.
- The tender publish is planned to be published on GETS by March 2025.

Job Code	Project Code	Description	Budget 24/25	Cost to Date 24/25	Available Budget	Forecast Spend*	Variance
300084	300063	216 - Bridges renewals	\$ 2,124,000	\$ 305,629	\$1,818,371	\$1,818,371	\$0
Totals			\$ 2,124,000	\$ 305,629	\$1,818,371	\$1,818,371	\$0

*The forecast spend will be verified once the tender has been awarded.

8.16 Project – Water Supply Pipelines Renewals (Lawrence, Tapanui, Glenkenich, Richardson and Balmoral)

The table below summarises the scope of work in each location in terms of priority. To manage the budget, each scope is split into two portions depending on the Engineer's cost estimate and the available budget, the final scope will be decided based on the tender prices.

Project No.	Location	Scope of Work
351007, 351071	Lawrence	Reduced scope: Replace 786m of 100mm AC main on SH8. Additional scope: Replace 115m of 80mm AC main supplying the school on Harrington St., Replace 250m of 80mm AC main on Colonsay Street.
351010, 351068	Tapanui	Reduced scope: Replace 465m of 100mm AC main on Warwick Street. Additional scope: Replace 585m of 100mm AC main around Cumberland Place and Somerset Street.
362020	Balmoral 2	 Reduced scope: Replace 540m of 150mm AC main on Hillend Road (from Coe Rd to Smith track) – Northen section. Additional scope: Replace 540m of 150mm AC main on Hillend Road (from Coe Rd to Smith track) – Southern section.
361024	Glenkenich	 Reduced scope: Replace 560m of 150mm AC main between Donald Road and McPhail Road - Northen section. Additional scope: Replace 2,280m of 150mm AC main between Donald Road and McPhail Road – Southern section.
361165, 362028	Richardson	 Reduced scope: Replace 2,500m of 65/80mm PVC between Clifton Road and Kaihiku Road – Southern section. Additional scope: Replace 1,730m of 65/80mm PVC between Clifton Road and Kaihiku Road - Northen section.

Table 1 location & Scope of Work

Project Progress:

- Surveying works completed.
- Design and tender documents are completed.
- The tender was published on GETS and the closing date is 31 January 2025.
- Tender evaluation is planned in February and construction is planned to start by March 2025 with a construction period of 4 months.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend*	Variance
350025	351007	Lawrence pipeline renewals programme	\$64,119	\$0	\$64,119	\$64,119	\$0
350027	351010	Tapanui pipeline renewals programme	\$179,532	\$0	\$179,532	\$179,532	\$0
350101	351068	Tapanui AC pipeline Renewals	\$359,065	\$16,355	\$342,710	\$342,710	\$0
350120	351071	Lawrence AC Pipeline Renewals	\$474,478	\$16,355	\$458,123	\$458,123	\$0
360167	361024	Glenkenich pipeline renewals	\$136,620	\$16,355	\$120,265	\$120,265	\$0
360249	361165	Richardson Upgrades/Renew als for Pipelines	\$250,000	\$16,355	\$233,645	\$233,645	\$0
360276	362028	Clifton Road Main Renewal**	\$300,000	\$0	\$300,000	\$300,000	\$0
360269	362020	Balmoral 2 AC Main Renewals	\$150,000	\$16,355	\$133,645	\$133,645	\$0
		Total	\$1,913,814	\$81,775	\$1,832,039	\$1,832,039	\$0

*The forecast spend will be verified once the tender has been awarded.

** Clifton Road Main Renewal budget (\$300,000) was added to the portfolio of projects.

8.17 Project – Water Plant Backwash Treatment System (Tapanui, Milton, Kaitangata)

Project Scope:

• The backwash of the three plants is currently discharging to the water stream. Due to compliance requirements with ORC (Otago Regional Council) discharge consents, we need to find an alternative solution. We are also looking to assess the existing backwash systems' condition and capacity and carry out any upgrades/ refurbishments that might be required in each plant.

Project Progress:

- We appointed a local consultant (Environmental Associates Ltd) to carry out the modelling and consent application for Milton and Tapanui plants. They are planned to be completed by March (Milton) and April 2025 (Tapanui).
- We are working with the operations team on the scope of work for required upgrades in the Kaitangata water plant. Scoping is planned to be completed in March 2025.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
351034	352007	Kaitangata Backwash treatment System	\$100,000	\$0	\$100,000	\$50,000	\$50,000
351035	352008	Tapanui backwash treatment system	\$100,000	\$0	\$100,000	\$30,000	\$70,000
351036	352009	Milton Backwash Treatment System	\$100,000	\$0	\$100,000	\$30,000	\$70,000
Totals			\$300,000	\$0	\$300,000	\$110,000	\$190,000

8.18 Project 400030 – Balclutha Pump Station Renewals

The project's Scope is:

- Reinstate 3 wastewater pump stations (Gormack St, Gypsy St and Koau).
- Raise the platform of the Gormack pump station 1.5 meters above the existing level as it's currently exposed to floods and stormwater.
- Assess and advise on the structural safety/integrity of the wet wells of the 3 pump stations (Gormack St, Gypsy St and Koau).
- Replace 1 pump in Gormack, St. Andrew and Gypsy stations.
- Replace all worn-out valves, fittings, meters, etc. of the 3 pump stations (Gormack St, Gypsy St, and Koau).

Project Progress:

- Assessment completed by the consultant (GHD).
- Design and tender documents for Gormack PS are completed.
- The tender for Gormack PS is published on GETS and the closing tender date is 31 January 2025.
- Construction is planned to start in March 2025 and be completed by June 2025.
- Depending on the tender outcome and the budget, we will decide when to start on Gypsy and Koau stations.

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend*	Variance
400048	400030	Balclutha Pump Station Renewals	\$147,566	\$33,591	\$113,975	\$113,975	\$0
Totals			\$147,566	\$33,591	\$113,975	\$113,975	\$0

*The forecast spend will be verified once the tender has been awarded.

8.19 Project 640042 Housing Unit Maintenance Component Replacement Programme

Housing Unit Maintenance Component Replacement Programme was approved in the 2024 - 34 Long Term Plan Projects List by the Council. There is \$400k allocated in 24/25, \$408k in 25/26 and \$416.8k in 26/27. It is intended for the community housing unit maintenance programme. The total budget for this project is \$1.22 million for 3 years.

From the financial year 2024 to 2027, it was decided to focus on Naish Courts Community Housing Units (15 units), Waihola Community Housing Units (5 units), and Owaka Community Housing Units (6 units). These three Community Housing sites require the most attention for renewal works.

It is proposed that the replacement of the windows installation programme for Naish Courts Community Housing units be commenced before the major construction work (while waiting for the designs and building consents at the current stage). The reason for this is that some units are currently not compliant with the Healthy Homes Standards as advised by our consultant, Betta Property Compliance. This will bring them up to standard as soon as possible. No design and no building consent is required for this prior project. The contractor can commence the construction during the summer period as well. There is adequate funding and resources this 24/25 financial year for the windows installation programme.

Fairview Windows is the contractor for the window installation programme, the work started on 11 November 2024 and will finish by February. As of January, the installation of the windows is 80% completed (total of 85 windows).



Figure 1. Naish Courts Community Housing Units (64 Charlotte Street, Balclutha)



Figure 2. Waihola Community Housing Units (9 Nore Street, Waihola).



Figure 3. Owaka Community Housing Units (13 Burns Street, Owaka).

Job Code	Project Code	Description	Budget	Cost to Date	Available Budget	Forecast Spend	Variance
640023	640042	Housing Unit Maintenance Component Replacement Programme	\$ 400,000	\$157,777	\$242,223	\$242,223	\$0
Totals			\$ 400,000	\$157,777	\$242,223	\$242,223	\$0