Board meeting | 5 November 2024
Public session

Venue	Watercare Services, Level 4 Boardroom, 73 Remuera Rd, Remuera and via Microsoft Teams
Time	9:45am to 11am

	Meeting administration	Spokesperson	Action sought	Supporting material
1	Opening karakia	Graham Darlow	-	Verbal
2	Apologies	Chair	Record apologies	Verbal
3	Quorum	Chair	A majority of directors	Verbal
4	Declaration of any conflicts of interest	Chair	For noting	Verbal
5	Minutes of the previous meeting of 15 October 2024 Board meeting	Chair	For approval	Minutes
6	Public deputations	Chair	For information	Verbal
	Items for information, discussion and approval			
7	Our performance under the 2023 – 2026 Statement of Intent	Emma McBride	For discussion	Presentation
8	Health, safety and wellness update	Andrew Mercer	For discussion	Report
9	Chief Executive's report	Executive Team	For discussion	Report
10	Good Employer Policy – update	Sarah Phillips	For approval	Report
	Governance			
11	Capital Finance Committee meeting update	Julian Smith	For discussion	Verbal update
12	Board planner	Chair	For information	Report
13	Directors' appointment terms, committee memberships and meeting attendances	Chair	For information	Report
14	Disclosure of directors' and executives' interests	Chair	For information	Report
15	General business	Chair	For discussion	Verbal update

Date of next meeting	Thursday, 12 December 2024

Karakia Timatanga (To start a meeting)

1. **Whakataka te hau ki te uru**

   Whakataka te hau ki te tonga

   Kia mākinakina ki uta

   Kia mātaratara ki tai

   E hī ake ana te atakura

   He tio, he huka, he hau hū

   Tīhei mauri ora!

Cease the winds from the west
Cease the winds from the south
Let the breeze blow over the land
Let the breeze blow over the ocean
Let the red-tipped dawn come with a sharpened air.
A touch of frost, a promise of a glorious day.

2. **Tukua te wairua kia rere ki ngā taumata**

   Hai ārahi i ā tātou mahi

   Me tā tātou whai i ngā tikanga a rātou mā

   Kia mau kia ita

   Kia kore ai e ngaro

   Kia pupuri

   Kia whakamaua

   Kia tina! TINA! Hui e! TĀIKI E!

Allow one's spirit to exercise its potential
To guide us in our work as well as in our pursuit of our ancestral traditions
Take hold and preserve it
Ensure it is never lost
Hold fast.
Secure it.
Draw together! Affirm

Minutes

Board meeting	Public session
Date	15 October 2024
Venue	Watercare House, Level 4 Boardroom, 73 Remuera Rd, Remuera and via Microsoft Teams
Time	9:45am

Attendance		
Board of Directors	**Watercare staff**	**Guests**
Geoff Hunt (Chair) Julian Smith Frederik Cornu Andrew Clark Graham Darlow	Jamie Sinclair (Acting Chief Executive) Mark Bourne (Chief Operations Officer) Angela Neeson (Chief Financial Officer) Shayne Cunis (Chief Programme Delivery Officer) (from the beginning until end of item 10) Brent Evans (Acting Chief Customer Officer) Priyan Perera (Chief Strategy and Planning Officer) Suzanne Lucas (GM – Capital Delivery) Andrew Mercer (Head of Health, Safety and Wellbeing) Tere Ryan (Security Coordinator) (from item 5) Priya Thuraisundaram (Head of Customer Insights) (from item 10) Emma McBride (Head of Legal and Governance) Pinaz Pithadia (Legal and Governance Advisor) **Via Microsoft Teams** Tracey Carter (Legal and Governance Business Partner) (from item 10)	**Members from Auckland Council** Councillor Ken Turner (Watercare's Lead Councillor) Trudi Fava (CCO Programme Lead) (Via Microsoft Teams) **Members from the public (from item 5)** Jeanette MacDonald Harper Spurway David Spurway **Members from Commerce Commission** Dr John Small, Chair Loretta Lovell, Assistant Commissioner and also Board member of Taumata Arowai Andy Burgess, General Manager, Infrastructure Regulation Charlotte Reed, Water Implementation Director Sam Bishara, Senior Advisor, Governance

1.	**Opening karakia** There was no opening karakia as the day began with a whakatau for the representatives from the Commerce Commission.
2.	**Appointment of Acting Chair for the Board meetings** This item was not required as Auckland Council appointed Geoff Hunt to be the Chair of the Watercare Board from 12 October 2024.
3.	**Apologies** Dave Chambers sent his apologies, as he is on annual leave.
4.	**Quorum** All directors were present at the meeting, so a quorum was established.
5.	**Declaration of any conflicts of interest** The Chair declared his interests as follows: • Principal, Geoff Hunt Consulting Ltd • Director, Preston 2 Trust Ltd • Director, J Scott and Company Ltd • Director, PSP Ltd • Member, AUT Engineering Industry Advisory Committee • Member, Institution of Engineering and Technology • Member, Institute of Directors • Trustee, Hunt Family Trust • Board member, New Zealand Infrastructure Commission • Advisor to the Board, Geostabilization New Zealand Ltd (GSI).
6.	**Minutes of the previous Board meeting of 3 September 2024** *The Board **resolved** that the minutes of the public session of the Board meeting held on 3 September 2024 be confirmed as true and correct subject to:* • *fixing a minor typographical error on page 8 of the pack.* • *following amendments (in blue) on page 7 of the pack.* ○ *"Recruitment is underway for the new Chief Corporate Affairs Officer and Head of Sustainability and Innovation, with candidate interviews starting ~~being interviewed~~ next week, and expected to go through to the end of October 2024."*

7.	**Ratification of out of cycle resolution for Asset Management Committee membership** Emma McBride noted that Geoff Hunt was a member of the Asset Management Committee (Committee). As per the terms of reference of the Committee, the Committee did not have at least three directors. Therefore, an out of cycle resolution was circulated to appoint Julian Smith as a member of the Committee. However, given Geoff Hunt has been appointed as a Chair of Watercare again, the Board was not required to ratify the out of cycle resolution. Instead, the following decision was agreed: *The Board **appointed** Geoff Hunt as a member of the Asset Management Committee, effective from 15 October 2024.* *Given the Committee now has three members as per the terms of reference, the Board **noted** Julian Smith does not need to join the Committee.* *With the above amendments, the three members of the Committee are Graham Darlow (Committee Chair), Frederik Cornu, and Geoff Hunt.* *The Board also **noted** that the committee memberships will be reviewed again once the new Board members have been appointed later this year/early next year.*
7.1 (new item)	**Capital Finance Committee membership** *The Board **appointed** Geoff Hunt as a member of the Capital Finance Committee, effective from 15 October 2024.* *With the above appointment, the three members of the CFC are Julian Smith (Committee Chair), Geoff Hunt, and Andrew Clark.*
7.2 (new item)	**Audit and Risk Committee membership** *No changes were required to the Audit and Risk Committee membership. The three members are Andrew Clark (Committee Chair), Julian Smith, and Frederik Cornu.* *The Board also **noted** that the committee memberships will be reviewed again once the new Board members have been appointed later this year/early next year.*
8.	**Ratification of out of cycle resolution for update of directors of Auckland City Water Limited** *The Board **ratified** the decision made via an out of cycle resolution dated 1 October 2024 to:* • *approve the appointment of Andrew Clark as a director of Watercare's subsidiary company Auckland City Water Limited;* • *approve the removal of Geoff Hunt as a director of Watercare's subsidiary company Auckland City Water Limited; and* • *authorise Graham Darlow to sign the shareholder's ordinary resolutions.*
9.	**Public deputations** Jeanette MacDonald, a member of the Manukau Harbour Restoration Society Inc, provided a presentation to the Board (attachment 1).

	The Chair thanked Ms MacDonald for the presentation and confirmed that a formal response would be sent to her within seven days.
9.1 (new item)	**Introduction of the representatives from the Commerce Commission New Zealand** The five representatives from the Commerce Commission introduced themselves. The following key points were made: • The Department of Internal Affairs (DIA) has appointed the Commerce Commission to be the Crown Monitor during Watercare's transitional phase until full economic regulation of the water industry is set up. • Their main role is to observe Watercare's business to ensure Watercare is ready for the introduction of the Watercare Charter, which is currently being prepared by the DIA. • The Commerce Commission is also supporting the DIA in the development of this Charter. • Once the Charter is finalised, the Commerce Commission will monitor Watercare's performance against the Watercare Charter and then report back to the Minister. The Chair thanked the representatives from the Commerce Commission for their introduction and welcomed them to the meeting.
10.	**Health, safety and wellbeing update** Andrew Mercer took the report as read and responded to questioning from the Board. The following points were made: • Safety leadership training is a key focus. As recommended in the HSE Global report, the first pilot of inhouse training was held last month and went well. • Critical risk management is a focus and an SOI target for this year. We have a focus on permit audits, which is a lead indicator. • In relation to an incident involving vehicles (page 14 of the pack), Andrew noted that we are looking into different fittings to ensure the tailgates open safely. In response to a query from a Board member, Andrew confirmed he would investigate whether our contractors have similar challenges and to ensure consistency with Watercare position. • Regarding working from home, Andrew noted that Watercare has a module on *Immerse* (the online learning platform for Watercare staff). Additionally, Watercare has Flexible Work Policy which provides guidance for managers and employees on how to apply a flexible approach to working at Watercare. This Policy also includes health, safety and wellbeing aspects, including things to consider when working from home. • In response to questioning from the Board, and a comment that the Board and Executive are extremely busy at the moment, Andrew advised that Watercare has a strong engaged leadership. He confirmed that despite the teams being busy, the HSW team has sufficient visibility of the Board and Executive team members out in the field. That said, the Board and Executive team members are always welcome to do site visits more often. • The Chair noted the employee TRIFR and LTIFR are higher than the contractor TRIFR and LTIFR. Andrew noted that our focus is shifting from lag indicators to lead indicators. Watercare's TRIFR rate is tracking in a right direction. In the past, we have engaged with the contractors to understand from them any insights around their rates. Andrew and Graham confirmed that the new business-wide health and safety representative committees are already looking into this. • An insight into the new lead indicator for permit audits will be provided at the future Board meetings. *The Board **noted** the report.*

11.	**Chief Executive's report** The Acting CE and executive team introduced the report, which was taken as read. The following key points were made. • Management is working with the DIA and Commerce Commission to provide the information they require to develop the Charter. At the same time, Watercare is also working with the credit rating agencies, and feedback is expected in next three to four weeks. This work has created an additional pressure on the staff. • Our training campus at Māngere is a finalist for best skill-based learning at the NZ Association for Training and Development 2024 Awards. ***Key Performance Measures (KPIs)*** • There are two typographical error on pages 24 and 27 of the pack. Item 6, August 2024 result was 43 rather than 82 and item 21 commentary should read as Otahuhu distribution zone rather than Onehunga distribution zone. • Mark Bourne noted that item 21 is one of the new measures implemented by Taumata Arowai. According to this measure, 85% of free available chlorine (FAC) samples in a month must be >0.20mgL in each distribution network zone, with no results <0.1mgL. This was not achieved in Otahuhu with 82.4% of samples >0.20mgL and 1 sample <0.1mgL FAC. • Item 33, the measure on ratio of procurement sourced through Māori owned businesses is tracking in a right direction. With the establishment of Ngā Kakau Paraha – our Māori supplier business network, aimed at supporting Watercare's asset upgrade and renewals programme, we are confident to see an improvement in our performance, as the programme progresses. This initiative has been recognised as a finalist for "social impact award" in the NZ Procurement Excellence Awards 2024 to be held tomorrow. We are also working in collaboration with iwi directly and others (e.g. Amotai) to achieve our contract spend target with Māori businesses. • Items 11 and 12 are DIA measures. Mark noted the challenges associated with these measures. The core issue is the way the overflows are triaged. Overflows are triaged based on the priority. They are either P1 or P2 response. Our P1 response time (an overflow that may be going into streams or ocean) is to be on site within 60 minutes and our P2 response time (overflow that is contained, for example, around a manhole and not into the environment) is within 240 minutes (4 hours). In total, we are getting to P1 and P2 overflows within a median time of 82 minutes. The resolution target for overflows is the more important target and this is being met. ***Our people*** • Our employee engagement survey saw an increase in participation rate. The workload of our staff is a key focus area. • The 2024 diversity, belonging and inclusion (DIB) awards event is scheduled for tomorrow. • Turnover continued to track down to 9%; sick leave was up over the winter months. • The Acting CE noted that he is proud of our kaimahi for delivering extraordinary work during this transitional phase for Watercare. ***Our customers*** Brent Evans and Priya Thuraisundaram provided the following update.

- As part of our community engagement strategy, we are increasing our engagement with youth aged 14 to 18 years and last week held our first Watercare Youth Summit. Rangatahi spent a few days at Watercare and out on our sites to understand our business and the challenges we face. Their final presentations were impressive and focused on climate change and innovations.
- Watercare has been on a channel strategy journey. Previously, we only had phone calls and emails. Now we have chatbot, and interactions with customers via the chatbot are 1/3 of the cost. My Account monthly transactions have also increased. With the deployment of Nice, our new telephone system, we are now able to gain more insights into customers' requirements and enabled more targeted communication.
- Priya explained that we do not have targets for responding to phone calls. Instead, we measure first call resolution and that is approximately 70-75%, and varies by team.
- The complaints team delivers a personalised "human" service to customers who do not wish to use a chatbot as a channel of communication.

Partnerships

Priyan Perera provided the following update.

- We are working closely with the technical experts from the One Mahurangi Business Association to better understand the route options and the process behind the route selection. A proposal on the final pipeline route will be presented to the Board for approval at the December 2024 Board meeting. In the meantime, we are working closely with the community on how we can build the pipe with minimal disruption to the business community.

Operations

Mark Bourne provided the following update.

- The condition assessment on all interceptors has now been completed (recommendation 1 from the 1 Ōrākei main sewer failure analysis report). The assessment identified a short length of the interceptor at the Māngere wastewater treatment plant (WWTP) which will be accelerated for renewal. The only other outstanding recommendation (recommendation 4) concerns the cleaning method – the plough is no longer considered a safe method so a new method will be implemented in summer.
- We agreed with Waikato District Council (WDC) to extend our contract for services by another two years, with the revised end date being 30 June 2028. WDC's Waters Governance Board will be invited to attend a future Board meeting for a Board to Board catch up.
- Several of the significant non-compliances for August 2024 noted in the report were resolved quickly. However, the non-compliance reported for Army Bay WWTP has been ongoing and capital works are required to resolve the issue.
- This year, there was a significant increase in information requests from Taumata Arowai for their annual performance reports. We do not have an automated system and therefore fulfilling the request required significant manual intervention to enter the information and audit it before sending. If a similar level of detailed information request is received in future years, Management will look to automate the process.

Programme Delivery and Flood response recovery

Suzanne Lucas provided the following update.

- As of today, the Central Interceptor Tunnel Boring Machine (TBM) has reached a total length of 13.4km.
- The upgrade of the Clarks Beach wastewater treatment plant is now underway.

	• Relining the second stage of the Ōrākei Main Sewer has commenced. The works on St Georges Bay Road are nearly complete. • The flood recovery work is ongoing. We are now scaling up for summer when more work can be undertaken. • The Anniversary Weekend storm insurance claim is progressing, and we hope to receive a progress payment prior to Christmas. We are also working on a possible claim under the Civil Defence Emergency Management provisions. • The Pukekohe Water Treatment Plant (WTP) will be back online prior to Christmas. • The Muriwai WTP was taken out of service after Cyclone Gabrielle, but was returned to service in October 2023, albeit with reduced source water available. The Acting CE noted that the Climate Related Disclosures went well and we met Auckland Council's deadlines. In the future, when we are financially independent, it is likely we will need to separately report on climate-related risks and mitigations. *The Board **noted** the report.*
12.	**Conflict of Interest Policy – update** *The Board **approved** the updated Conflict of Interest Policy as recommended by the Audit and Risk Committee.*
13.	**Capital Finance Committee meetings update** Julian Smith, the Capital Finance Committee (CFC) Chair advised that the committee met on 11 September 2024, 25 September 2024 and 9 October 2024. The CFC received various updates on the detailed workplan, key milestones and Watercare Charter development. The CFC is conscious of the directors' duties during this process. The Business Plan is a critical aspect and will need to be finalised before we go to the credit rating agencies for a final rating next year.
14.	**Asset Management Committee meeting update** Graham Darlow, the Asset Management Committee (AMC) Chair advised that the AMC met on 11 September 2024 at Māngere Pump Station, followed by attendance at the CI breakthrough event at Western Springs. Graham commended the team for how ordered, tidy and safe the two sites were. The AMC received the following updates: • Central Interceptor and other projects dashboards • Asset Management Plan financials, delivery report and traffic light reporting • Quarterly update on capitalisation of assets • Progress update on digital programme deep dive • Increase in capital expenditure for North-East Sub-Regional Wastewater Scheme, during which there was rigorous debate about the lessons learnt.
15.	**Audit and Risk Committee meeting update** Andrew Clark, the Audit and Risk Committee (ARC) Chair advised that he attended Auckland Council's ARC meeting on 17 September 2024. This meeting was to report on an annual summary of risk matters raised within the annual accounts and associated actions.

16.	**Board planner** *The Board **noted** the Board planner*.
17.	**Directors' appointment terms, committee memberships and meeting attendances** *The Board **noted** that the report will be updated to include Geoff Hunt's details and the new committee memberships.*
18.	**Disclosure of Directors' and Executives' interests** *The Board **noted** that the report will be updated to include Geoff Hunt's interests.*
19.	**General business** There was no general business. The public session closed at 11:26am.

CERTIFIED AS A TRUE AND CORRECT RECORD

.....
Geoff Hunt, Chair

Attachment 1

5.1

Ka ora te wai
Ka ora te whenua
Ka ora ngaa taangata

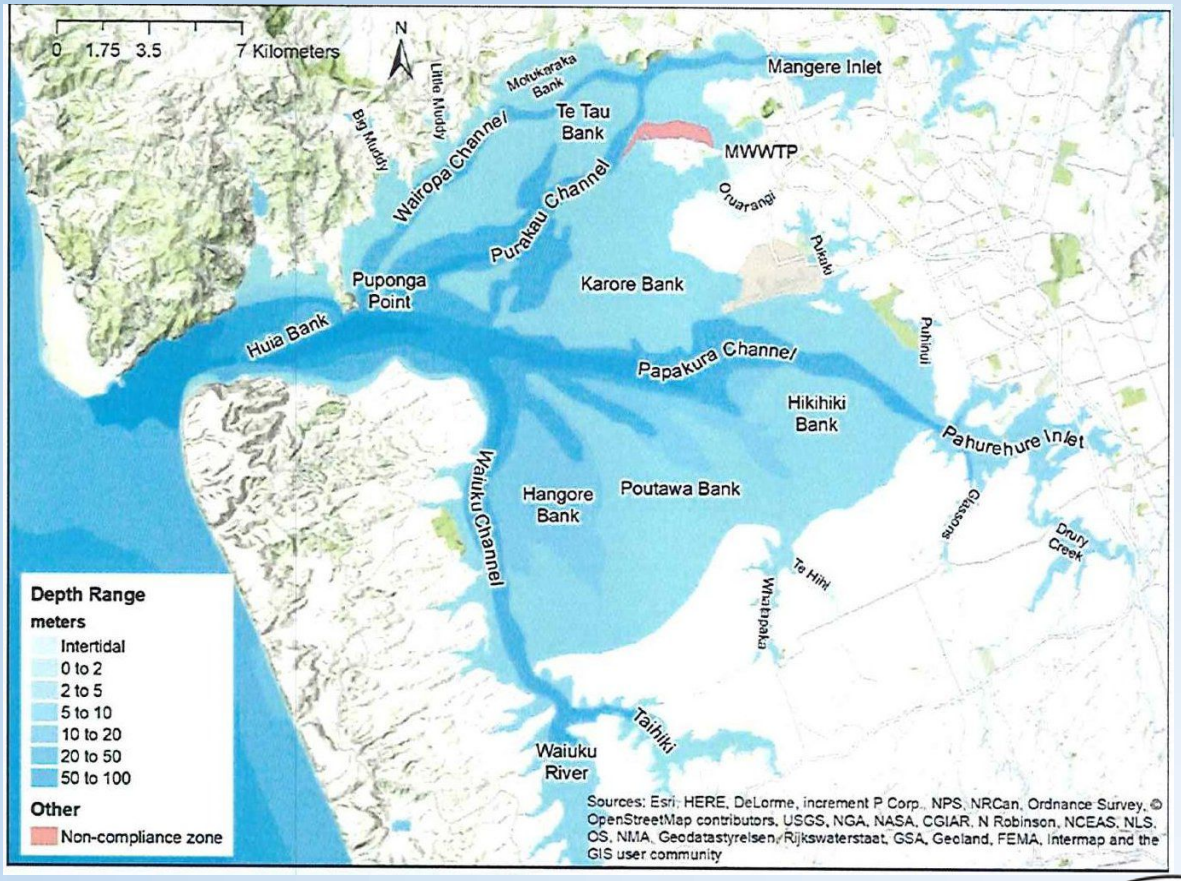
If the water is healthy, the land is healthy, the people are healthy

i.e. Back to first principles

Jeanie MacDonald

5.1

- History
- Risk management
- Hydrodynamic model
- Communication
- Actions



5.1

5.1

Harper Spurway

Science Fair Project First Place – Planet Earth and Beyond, NZ Coastal Society Award

Sampling in gumboots at tidal margin, 10 sites, 6 samples 3 at low tide, 3 at high tide
NE harbour between Green Bay and Ambury Farm
Testing at home
NOT TO BE COMPARED WITH OFFICIAL MONITORING

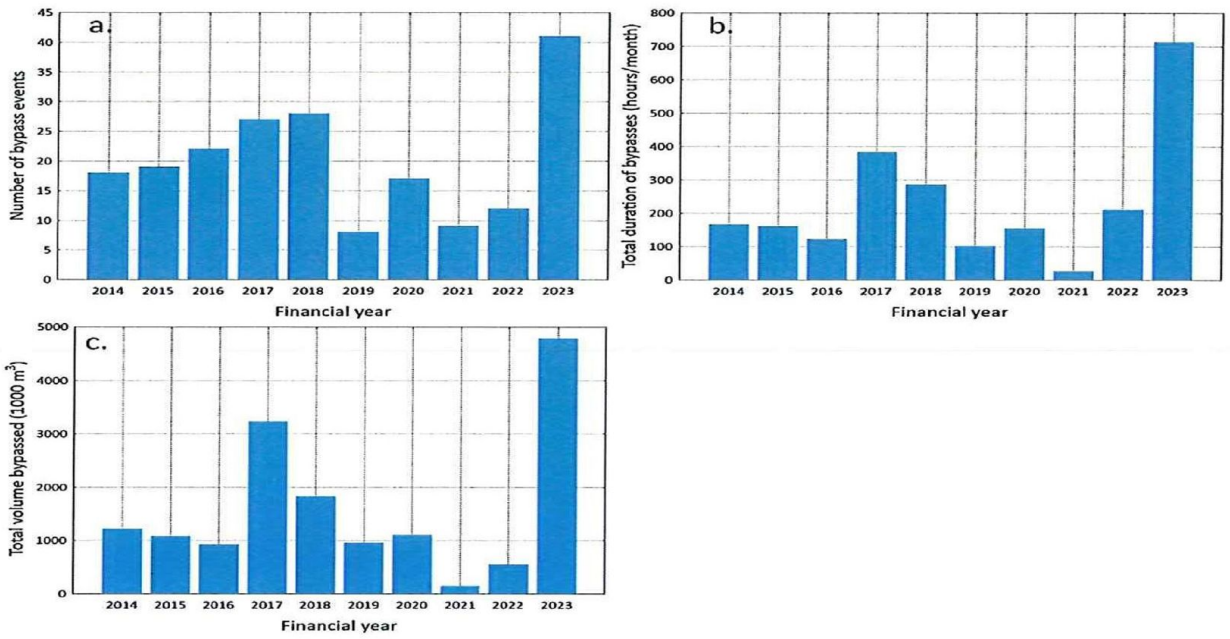
- **Nitrate** 53/60 (88 %) > 5 ppm (toxic)
- 4 sites all six samples above toxic levels
- Mean (all samples) 7 ppm

- **Ammonia** 46/60 (77 %) > 0.1 ppm (toxic)
- 4 sites all six samples above toxic levels
- Mean (all samples) 0.22 ppm More than double toxic threshold

5.1

Bypasses (Source HEMP report 2023)

Figure 9: Annual bypass data grouped by financial year (July to June) from July 2013 to June 2023 showing a) the total number of bypass events, b) the combined total duration of bypasses, and c) the combined total volume of bypasses per year.

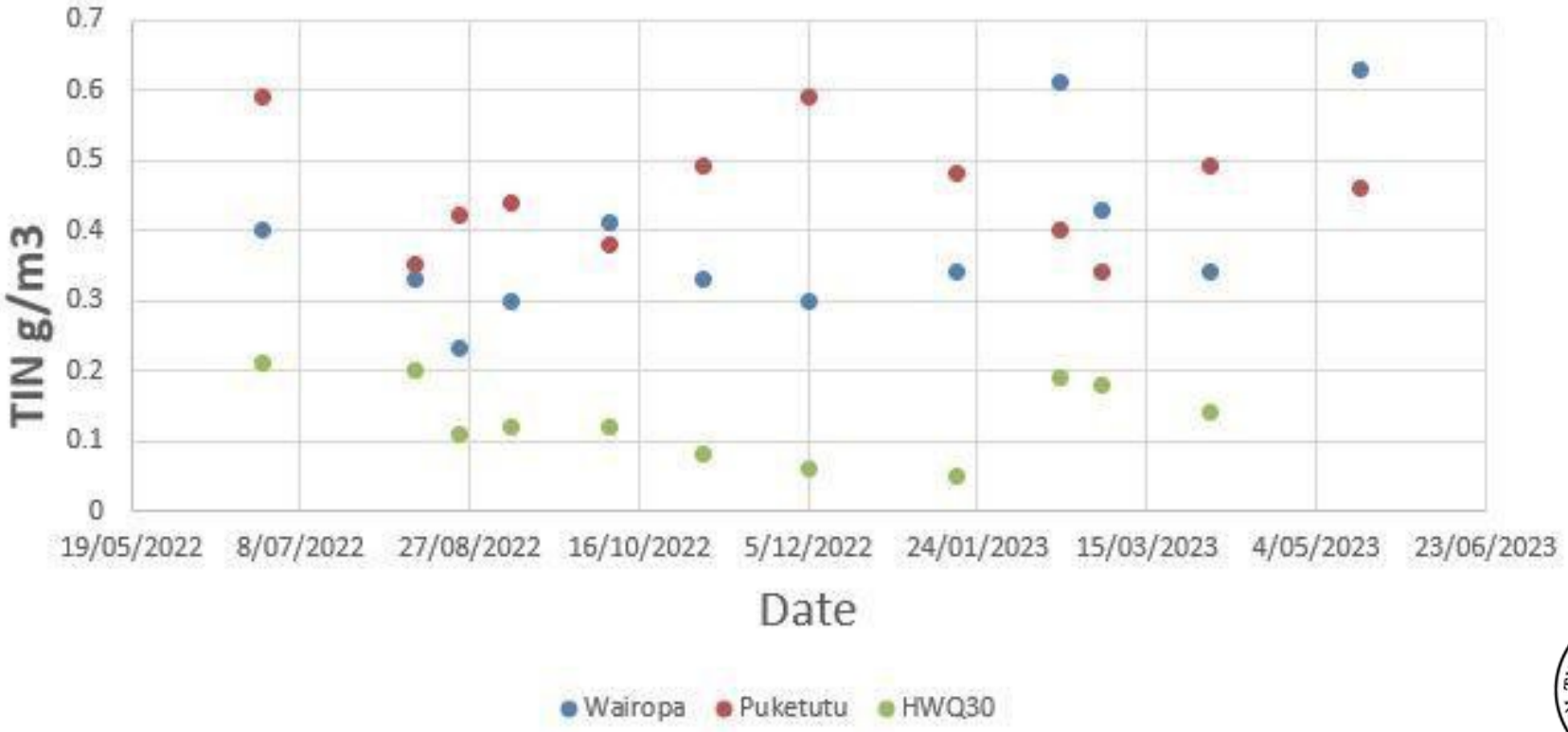


5.1

TIN Monitoring 2022-23

TN limit 0.2 g/m3 to prevent excessive growth of nuisance algal blooms in the NE Manukau (NIWA)

Data source HEMP report



5.1

Harbour Monitoring HEMP

Trends in discharge quality (2013 to 2023)

Table 2: Seasonal Kendall test results and Sen slope estimates derived from total monthly discharge volumes and loads. Statistically significant trends are shown in red.

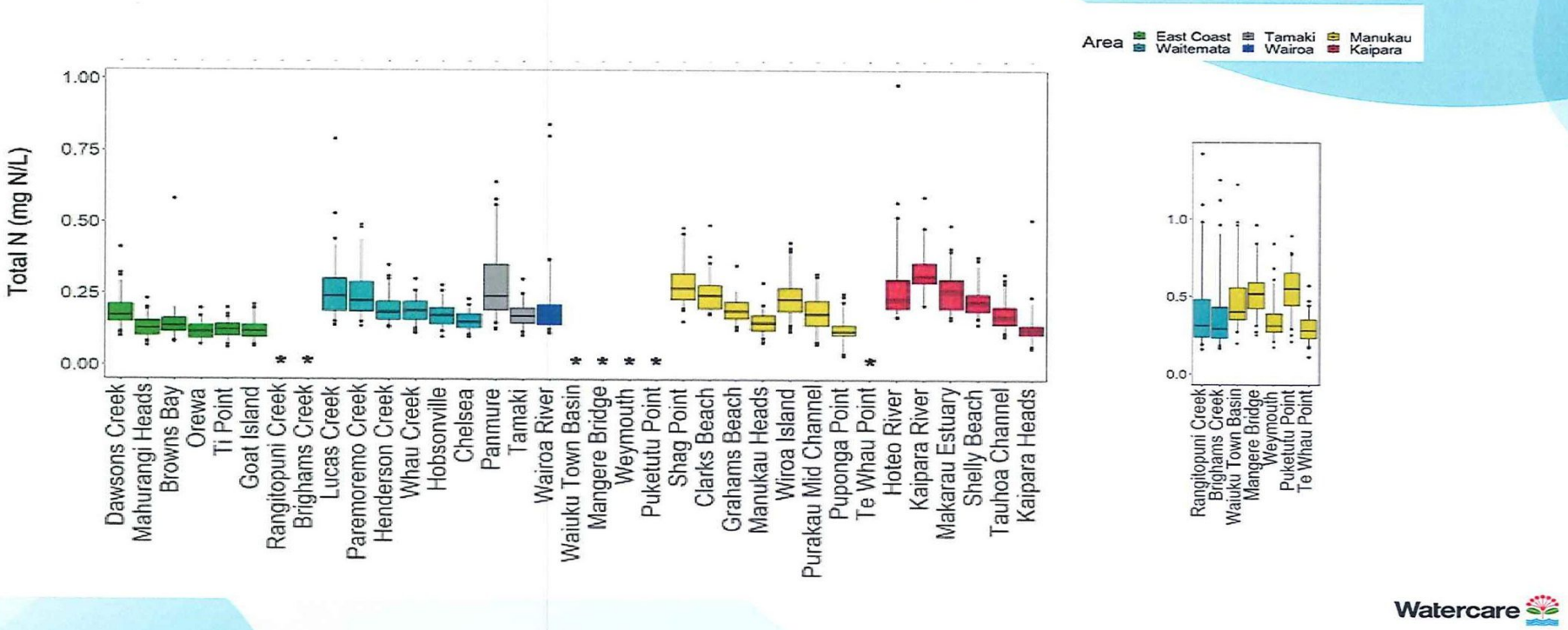
Variable	Annual change (% of median)
Volume (m^3)	0.80
Nitrate-nitrite-N load (t)	-3.77
Ammonia-N load (t)	3.08
Total nitrogen load (t)	-1.60
Soluble phosphorus load (t)	-8.19
Total phosphorus load (t)	-6.57
Total BOD_5 load (t)	3.23
TSS load (t)	3.15

Watercare

THE MANUKAU HARBOUR RESTORATION SOCIETY Inc.

5.1

Auckland Coastal & Estuarine Monitoring (2017-2022)



Watercare

5.1

Hydrodynamic model

- Commitments from previous CE (Raveen Jaduram) to share and work with community on scenarios for modelling
- Presentation at MWWTP CLG in June 2024. Accepted offer for community presentations
- Dates suggested in August and commitment to go to Clarks' Beach
- Withdrawn after extended communications
- Now part of a wider Auckland wide strategy on water and wastewater in early 2025
- Result

5.1

Board and Organisational Actions

Improvements needed

- Commitment to intergenerational thinking – What's the right thing for our great grandkids?
- Commitment to better communication – tell us how it is
- Community focus – How does what Watercare is doing right now affect local communities?

How can the community audit Watercare on the above?

What are some SMART goals for the above aims?

Board meeting | 5 November 2024
Public session

Our performance under the 2023 – 2026 Statement of Intent

For discussion

Te pou whenua tuhinga / Document ownership

Prepared and recommended by
Emma McBride
Head of Legal and Governance

Submitted by
Dave Chambers
Chief Executive Officer

7

1. Te tūtohunga / Recommendation

We recommend that the Board notes this report and the presentation attached to this report.

2. Take matua / Key points

The key points are:

- The Annual Report 2024, which includes our performance under the 2023–2026 Statement of Intent (SOI), was published on 18 September 2024.
- An overview of Watercare's performance under the SOI 2023–2026, including our performance under FY24 SOI targets, will be presented in the public session of the Board meeting.
- Members of the public will be allocated time to address the Board in relation to our performance under our SOI.

3. Whāinga / Purpose and context

The Local Government (Auckland Council) Act 2009 (Act) requires council-controlled organisations (CCOs) of the Auckland Council to nominate two Board meetings per year to be open to the public.

- One meeting must be held before 30 June each year for the purpose of considering comments from shareholders on the organisation's draft SOI for the following financial year
- One meeting must be held after 1 July each year for the purpose of considering the CCO's performance under its SOI in the previous financial year.

At each of these meetings, the Board must allocate a reasonable amount of time for members of the public attending the meeting to address the Board in relation to the subject matter of the meeting.

4. Kōrero pitopito / The details

The SOI represents Watercare's public expression of activities, intentions and objectives, and the legislative expression of accountability to its shareholder, the Auckland Council.

We have reported on our overall performance under the SOI

- We report to the shareholder, Auckland Council, via our Quarterly Reports on our progress under the SOI.
- Our overall performance under the SOI is also recorded in the Statement of Service Performance that is included in our Annual Report 2024.
- Our Annual Report 2024 was published online on our website on 18 September 2024 – Watercare Annual Report 2024.

At the Public Board meeting, an overview of our performance under the SOI will be presented

- A copy of the presentation is attached as Attachment 1.

5. Ā muri ake nei / Next steps

This report and the presentation finalise the reporting for the 2023–2026 SOI. Watercare is now working towards the 2024–2027 SOI.

6. Te whakapiringa / Attachment

Attachment number	Description
1.	Our performance under the 2023–2026 Statement of Intent

Attachment 1

7.1

Our performance under the 2023-2026 Statement of Intent

5 November 2024 Board meeting

Watercare

Watercare's overall performance under the 2023-2026 Statement of Intent

In FY24, Watercare had a total of 35 SOI measures, of which 12 were LTP measures.

Of the 35 measures:

- **27 measures were achieved**
- **Seven measures were not achieved**
- **One measure was not reported.**

27 SOI measures were achieved

1. Compliance with Watercare's resource consents for discharge from its sewerage system measured by the number of:
   - a) abatement notices
   - b) infringement notices
   - c) enforcement orders
   - d) convictions received by Watercare in relation to those resource consents ✓
2. The average consumption of drinking water per day per resident ✓
3. We will implement mitigation measures in line with our emissions reduction targets (Scope 1 and Scope 2 emissions) ✓
4. Reactive maintenance spend v's proactive renewals spend ✓
5. Adherence to the Service Level Agreement with Council (10 working days) for Watercare to provide specialist input into resource consents. (3 months rolling average) ✓
6. Compliance with Taumata Arowai Quality Assurance Rules T3 – Bacterial water quality ✓
7. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules T3 ✓
8. Compliance with Taumata Arowai Quality Assurance Rules T3 – Protozoal water quality ✓
9. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules T3 ✓

Watercare

27 SOI measures were achieved

10. Compliance with Taumata Arowai Quality Assurance Rules D3 – Residual disinfection (chlorine) water quality. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3 ✓
11. Compliance with Taumata Arowai Quality Assurance Rules D3 – Microbiological water quality. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3 ✓
12. Compliance with Taumata Arowai Quality Assurance Rules D3 – Disinfection by-products water quality. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3 ✓
13. Compliance with Taumata Arowai Quality Assurance Rules D3 – Plumbosolvent metals water quality. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3 ✓
14. Median response time for attendance for urgent water call-outs: from the time that the local authority receives notification to the time that service personnel reach the site (minutes) 12-month rolling average ✓
15. Median water response time for resolution of urgent callouts: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption (hours) 12-month rolling average ✓
16. Median response time for attendance for non-urgent water call-outs: from the time that the local authority receives notification to the time that service personnel reach the site (days) 12-month rolling average ✓
17. Median response time for resolution of non-urgent call-outs (water): from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption (days) ✓

Watercare

27 SOI measures were achieved

18. The total number of complaints received by the local authority about any of the following:
    a) drinking water clarity
    b) drinking water taste
    c) drinking water odour
    d) drinking water pressure or flow
    e) continuity of supply
    f) the local authority's response to any of these issues
    expressed per 1000 connections to the local authority's networked reticulation system. (12-month rolling average) ✓

19. The total number of complaints received by the territorial authority about any of the following:
    a) sewerage odour
    b) sewerage system faults
    c) sewerage system blockages
    d) Watercare's response to issues with its sewerage system
    expressed per 1000 connections to the territorial authority's sewerage system (12-month rolling average) ✓

20. Attendance at sewerage overflows resulting from blockages or other faults: median response time for resolution – from the time that the territorial authority receives notification to the time that service personnel confirm resolution of the blockage or other fault (hours) (12-month rolling average) ✓

Watercare

27 SOI measures were achieved

21. Average number of wet-weather overflows per engineered overflow point per discharge location (12-month rolling average) ✓
22. Percentage of customer complaints resolved within ten days of notification ✓
23. Community trust score ✓
24. The percentage of real water loss from the territorial authority's networked reticulation system (12-month rolling average) ✓
25. The number of dry-weather overflows from the territorial authority's sewerage system, expressed per 1000 sewerage connections to that sewerage system (12-month rolling average) ✓
26. Customer Net Satisfaction Score (Previously Net promoter score) ✓
27. Percentage of household expenditure on water supply services relative to average household income ✓

Watercare

Seven SOI measures were not achieved

Total recordable injury frequency rate (TRIFR) per million hours worked (12-month rolling average) ✘

- The TRIFR result for FY24 reduced slightly compared to FY23 but did not meet the target limit of <10.
- The data from ACC injury claims for Watercare reflects a steady decline in the severity and complexity of our injury cases over the past 12 months
- Industry leadership supports a general shift from lag indicators to lead indicators, reflecting a more proactive approach to health and safety performance and Improvement.
- The Business Leaders H&S Forum recognized the inherent limitations with LTIFR/TRIFR and paused the benchmarking project this year to explore alternative approaches for tracking health and safety performance.

Actions / Issues

- At the end of 2023, the Watercare board appointed HSE Global to undertake a health, safety and wellbeing culture review. The report identified that the key priorities for the company are: the need to agree on a HSW strategy; the need to define a suite of HSW metrics that can be used in combination to understand the company's performance; and improving psychological safety throughout the organisation.
- HSE Global also noted that TRIFR is no longer a reliable benchmark in the industry. Work to implement these recommendations is well underway.
- The measure is being replaced with critical control verification in the form of critical risk permit audits as a lead indicator for FY25.

Watercare

Seven SOI measures were not achieved

Attendance at sewerage overflows resulting from blockages or other faults: median response time for attendance – from the time that the territorial authority receives notification to the time that service personnel reach the site (minutes) ✘

- SOI Target 2023/24: ≤60 mins. For the 2023/24 year, we achieved 84 mins.

Actions / Issues

- The weather events seen in 2022/23 have significantly impacted the 12-month rolling average.
- Overflows are triaged as a P1 or P2 response. P1s have a one hour response target and P2s have a four hours response target. Accordingly, if we meet these response time targets, the weighted average of the P1s and P2s will not meet the 60 minute attendance set by this KPI.
- Whilst "attendance" time was not achieved “resolution of fault” time was, which is much more critical.

Adherence to all of DIA’s non-financial service performance measures. ✘

- SOI Target 2023/24: 100%. For the 2023/24 year, we achieved 91.67%.

Actions/Issues

- Out of 12 DIA measures, 11 measures were met, and one measure (reported above) was not met.

Watercare

Seven SOI measures were not achieved

Ratio of procurement sourced through Māori-owned businesses ✘

- SOI Target 2023/24: 3%. For the 2023/24 year, we achieved 2.4%.

Actions / Issues

- While we did not meet the 3% target for procurement through Māori-owned businesses, total Māori-owned supplier spend for 2023/24 was $30.63 million compared to $22.84 million in 2022/23. This is a 34% increase in spend from the previous year. However, due to an 20% increase in total spend with all suppliers, the SOI target was not met.
- Our supply chain function continues to work with our Te Rua Whetū team, internal stakeholders, and supply partner suppliers to encourage spend with Māori-owned suppliers where possible and appropriate to meet business needs.
- We have also set up Ngā Kakau Paraha, our Maori Supplier Network, which will help us reach and hopefully surpass this goal. The Network of sixteen Māori-owned businesses went through a robust tender and verification process to be included in the network. They represent a number of construction trades used by Watercare and our contractors for work in the water and wastewater networks, including electrical, landscaping, earth works, pipelaying, traffic management and plant and labour hire.

Watercare

Seven SOI measures were not achieved

Leakage performance litres/connection/day (l/c/d) ✘

- SOI Target 2023/24: 107.9 l/c/d (+-5%). For the 2023/24 year, we achieved 116 l/c/d

Actions / Issues

- Watercare continues to refine the leak reduction programme to focus on yielding positive results both volume lost and cost results:
  - 23,300 kms surveyed since the beginning of proactive leak deduction and 6,000 km surveyed in FY24.
  - 15,400 leaks found since we began proactive leak detection, with 3,800 leaks found in FY24.
  - 28MLD of water savings estimated since we began proactive leak deduction, and 7 MLD of estimated savings through its district metering and pressure management programme in FY24.

Seven SOI measures were not achieved

Controllable cost target ✘

- SOI Target 2023/24: $395.5m. For the 2023/24 year, we achieved $435.1m

Actions / Issues

- Controllable costs for the year were $39.6m unfavourable to plan largely due to one-off items ($21.7m for Flood, Ōrākei Main Sewer incident) and costs offset by revenue ($3.3m for water reform and $9.6m Waikato District Council contract).
- Without the one off costs/recoverable costs, we were on our budget ($338.7m budget vs $338.8 actual).

Seven SOI measures were not achieved

Debt to revenue ratio (the amount that Watercare can borrow in proportion to its revenue/assets) ✘

- SOI Target 2023/24: ≤3.35. For the 2023/24 year, we achieved 3.58

Actions / Issues

- The combination of delay in insurance proceeds for the anniversary floods, scale and acceleration of our capital project delivery and the lower-than-expected revenue impacted our working capital and reduced our debt headroom.
- Watercare kept Auckland Council informed of our debt position throughout the year. While we did not meet the measure, this was done with the full support and knowledge of Auckland Council.

7.1

Watercare

One SOI measure was not reported

Deliver capital programme in line with the asset management plan baseline approved by the Board.

- SOI Target 2023/24: 80% of projects are delivered within the approved budget and 80% of projects are in service within the approved time (Year to date data). For the 2023/24 year, we did not report this measure.

Actions / Issues

- Infrastructure capital projects, by their very nature, regularly undergo variations (for budget or time or both) as the project progresses. There will very often be valid strategic or operational reasons for delaying, amending or "upscaling" a project. Key to this is that the appropriate change control process has been followed, which in turn should reset the baseline reporting measures for the project.
- The measure does not consistently demonstrate how well Watercare is delivering on the outcomes of its capital programme. It is also possible that focusing on this measure may deliver potentially sub-optimal outcomes where projects should be varied but are not, in order to meet this target.
- We continue to consider how best to develop a long-term methodology that can be consistently applied over time.

Watercare


How we delivered value
...
Watercare

FY24 Highlights

Safe and reliable services for our communities

- As at 30 June 2024, our water supply storage was 77 per cent. We continue to balance our water resources carefully, utilising the Waikato River source appropriately to allow our dam storage levels to recharge over the winter.
- We maintained full bacterial and protozoal compliance for drinking water for the year. We continued to maintain a consistent level of compliance against Taumata Arowai's Drinking Water Quality Assurance Rules (DWQAR) for treatment plants and networks.
- One of the biggest challenges of the year, the collapse of the Ōrākei Main Sewer provided us with extremely valuable insights into the impact of climate change on the resilience of our assets. Following the collapse of the sewer, our teams worked 24/7 to design and build a 400-metre bypass and a large temporary pump station to divert flows from the sewer and reduce overflows into the harbour. This work was completed within 20 days of the incident.

Water reform and a sustainable financial way forward

- Auckland Council agreed to lift its debt-to-revenue cap for the 2024/25 financial year, while central government progresses Local Government Done Well legislation to allow us to raise our own debt by 1 July 2025. The revised price path of 7.2 per cent increases for water and wastewater and 14.4 per cent for infrastructure growth charges, for the next three years will enable the delivery of an average capital programme of $1 billion every year. This way forward is a win-win approach that will resolve the challenge of being able to utilise our balance sheet fully and ensure a more equitable and affordable price path for Aucklanders.

Watercare

FY24 Highlights

Largest ever capital programme

- We delivered more than $1 billion of infrastructure ($1.04b) – this is a record as this is the first time we have exceeded the $1b mark. About half of this investment is on growth-related projects and more than $700m of the total spend was towards improvements on the wastewater network, which will ultimately benefit our waterways and the environment.
- For 2024/25, we expect to spend more than $1.2b, about two-thirds of which will be on projects that improve our wastewater network and benefit the environment. Replacing ageing infrastructure will be a key priority, with about 39 per cent of our capital programme for 2024/25 allocated to renewing and replacing aging assets.

Reducing greenhouse gas emissions

- We have a target to reduce operational emissions (scope 1 and 2) by 50 per cent by 2030 and achieve net zero emissions by 2050.
- More than half of the electricity Watercare purchased was certified 100% renewable electricity leading to a significant reduction in our overall GHG emissions. A change in energy production at the Māngere wastewater treatment plant (WWTP) also resulted in reduced natural gas consumption which influenced the emissions.
- We are reviewing our co-generation operating philosophy and the high inflows into the WWTPs to better understand trade-offs between operating procedures, energy production, natural gas use, budget efficiency and meeting our long-term targets for GHG emissions.
- We will continue to implement initiatives to reduce emissions and will update our decarbonisation roadmap in the coming year alongside a finalised process emissions strategy.

Watercare

FY24 Highlights

Engagement and education

- Due to the collapse of the Ōrākei Main Sewer, we worked with a range of partners, and sought the advice of marine environmental experts, Ngāti Whātua Ōrākei and other mana whenua. We followed their recommendations with a monitoring programme to assess the impact of the overflows on the Waitematā Harbour as well as routine beach inspections to assess any noticeable wastewater debris on beaches. We were very grateful for the support from the local community, Ngāti Whātua Ōrākei and Auckland Council as we worked to address this significant operational challenge.

Advancing Māori outcomes

- Throughout the year, we continued to deliver outcomes for Māori within Tāmaki Makaurau. We focused our efforts on strategic initiatives that supported cultural competency, leadership development, and economic inclusion. For example:
  - We launched our inaugural reo and tikanga Māori learning modules, Kōpatapata and Kōnehunehu, designed to enhance the cultural competencies of all Watercare kaimahi (staff).
  - We celebrated the graduation of the first cohort of Watercare's Koiora leadership programme for Māori kaimahi. This five-month programme included marae noho (marae stay) experiences and a tira hoe (traditional canoe rowing) on the Waikato River, aimed at developing leadership skills and deepening cultural understanding.
  - Our procurement with Māori-owned businesses reached 2.47 per cent of our total supplier spend, against a target of 3 per cent, with $30.63 million for FY24, a 34 per cent increase from the previous year.
  - We launched Ngā Kakau Paraha (NKP), our Māori business network aimed at supporting Watercare's $3.5b asset upgrade and renewal programme.


Patai?
Watercare

Board meeting | 5 November 2024
Public session

Health, safety, and wellbeing update

For discussion

Te pou whenua tuhinga / Document ownership

Prepared and reviewed by
Andrew Mercer
Head of Health, Safety, and Wellbeing

Submitted by
Dave Chambers
Chief Executive Officer

1. Te tūtohunga / Recommendation

We recommend that the Board notes and discusses this report.

2. Whāinga / Purpose

This report provides an update on health, safety, and wellbeing outcomes and performance at Watercare.

3. Take matua / Key points

The report includes:

- Monthly progress update against the seven HSW KPIs.
- September 2024 – details of adverse events identified as critical risks, notifiable or high potential adverse work events.
- Total recordable injury frequency rate (TRIFR) and Lost Time injury frequency rate (LTIFR) – measure calculated based on 1 million hours worked.
- Progress against the HSE Global's review recommendations.

4. Kōrero pitopito / The details

4.1 HSW metrics – September 2024

KPI	Description	Target	July 2024	August 2024	September 2024	Commentary
HSW Climate	The team targets a HSW climate rating of ≥8/10 in each six-monthly Watercare climate survey.	> 8	8.1 (November 2023 results)			This survey is done every six months. The next full survey was scheduled for June 2024; however, that has been postponed until the November 2024 full survey due to organisational changes that occurred mid-year. A short Pulse survey in August 2024 covered staff engagement, and a full survey in November will measure HSW climate.
Open iCare cases	95% of iCare cases are closed with appropriate and effective actions within 30 days of having been raised.	< 5%	539 10%	589 10%	596 10%	In the last quarter, open cases remained ~10%. Detailed case statuses such as under investigation, awaiting additional information, or pending review are not readily available for reporting. Worth noting a third of open cases with more than 30 days are Site Walk cases; followed by Incident and Feedback cases. HSW will continue to work with BU to prioritize resource to resolve the backlog.
Leadership Walks	To be determined by business unit.	By business unit	84/127 66%	94/127 74%	95/127 75%	A positive trend of our people leaders being proactive in participating in workforce HSW engagement. The expectation is leadership walks will increase to the target level.
Reward and Recognition	All business units to have a way to reward and recognise positive health, safety and wellbeing.	By business unit	208	104	153	This is done via the reward and recognition app and business unit/site internal programmes. The numbers reported here are for recognition made via the Teams app. Recognitions are picking up in September following a decline in August.
Training – Induction	All kaimahi complete and maintain a current online Watercare HSW Induction within two months of starting with Watercare.	100% of kaimahi	100%	100%	99%	Some new starters since recent organisational changes. New starters to complete essential training within two months of starting.
Training – Safety Leadership in Action	All leaders complete training in leadership	100% of leaders by July 2024	62.96%	64%	73.77%	The safety leadership training has been refreshed and will be delivered as an in-house format from October.

KPI	Description	Target	July 2024	August 2024	September 2024	Commentary
	engagement interactions.					
Permit audits per site	Every month, a minimum of one permit audit is conducted per project/plant.	One per site	36/36	47/36	49/36	Three out of 49 permit audits revealed non-compliance with work involving confined space, lifting, and chlorine gas alarm testing. Opportunities for improvement and action were identified.

4.2 Incidents and close call events in September 2024

A positive approach to incident reporting has continued during September. The summary of incident and close calls is below:

	Incidents	Close calls
Watercare	28	7
Contractors	25	13
Total	53	20

Critical events involving Watercare employees

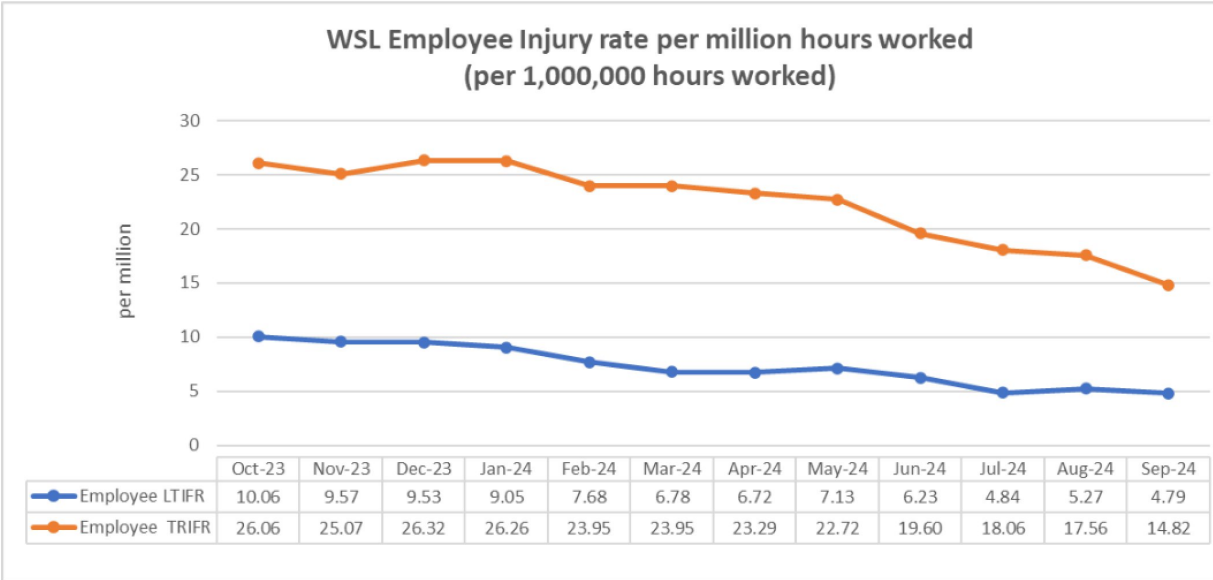
- Incident: A gas service strike occurred at a watermain renewal site in Onehunga. Service location and mark-out had been completed; however, the spray paint was misread as 900mm depth instead of 400mm depth to the gas pipe. An excavator was used to remove the hard surface material, but snagged the gas pipe at a shallow depth. The site was promptly evacuated, and Vector arrived within 20 minutes to isolate the affected section, ensuring no customers were impacted. All necessary protocols were followed to secure the site, with effective communication between the those involved.
- Close call: Carrying out air quality testing work on top of factory roof, with all appropriate permits and procedures in place, a factory boiler ejected steam and water near the Watercare employee. The employee was sprayed with lukewarm water, but it could have been hot water if they were closer to the vent. This was a failing in control of work processes by the third-party customer. That company is reviewing the incident and its own processes.
- Close Call: Accidentally drilled into an electrical conduit. Checked by electrician after the event, and confirmed no cables damaged.
- Close call: To flush a blocked sewer suspended in a stormwater pipe, a worker entered a confined space and inserted a pressure jetting hose into the pipe. While the worker was still in that space, the hose was switched on. The jetting hose was ejected from the sewer pipe under pressure and whipped around, out-of-control. Although the hose missed the worker, it could have resulted in serious harm due to the high water pressure. A safety alert was issued, highlighting key learnings including establishing an appropriate exclusion zone when jetting in that environment.

Critical events involving contractors

- Incident (Notifiable event): Contractor was working on a watermain renewal project site at Glenbrook estuary. The new pipe had been pressure tested and then depressurised by one crew; however, another sub-contractor work crew dismantled a valve fitting unaware that there was some residual pressure in that end of the pipe. The fitting blew off and struck the worker in the forehead causing a minor laceration and bleeding. Injured person was assessed by paramedics and subsequently at hospital.
- WorkSafe was notified as this incident involved an un-controlled loss of a pressurized substance and could have resulted in significant harm. WorkSafe reviewed the event and learnings, and advised no further action from WorkSafe would being taken. The contractor had one week off work and is recovering well. Key learnings include: introducing a lock out tag out procedure for pressure testing, ensuring a formal handover, and reminders about communication and planning. These learning were shared at the Watercare and Contractor safety toolbox meeting. Additional controls have been put in place and shared via a safety alert.
- Close call: work carried out on live electrical cabinet prior to isolation. That work involved fitting a fire suppression gas system to the outside of the cabinet. The electrical cabinet should have been isolated prior to starting work.
- Close call: work at a flood recovery project site was stopped due to concerns regarding permits, scaffolding, communication, spotting, emergency plans, and personal protective equipment. The site was shut down until multiple issues could be addressed.

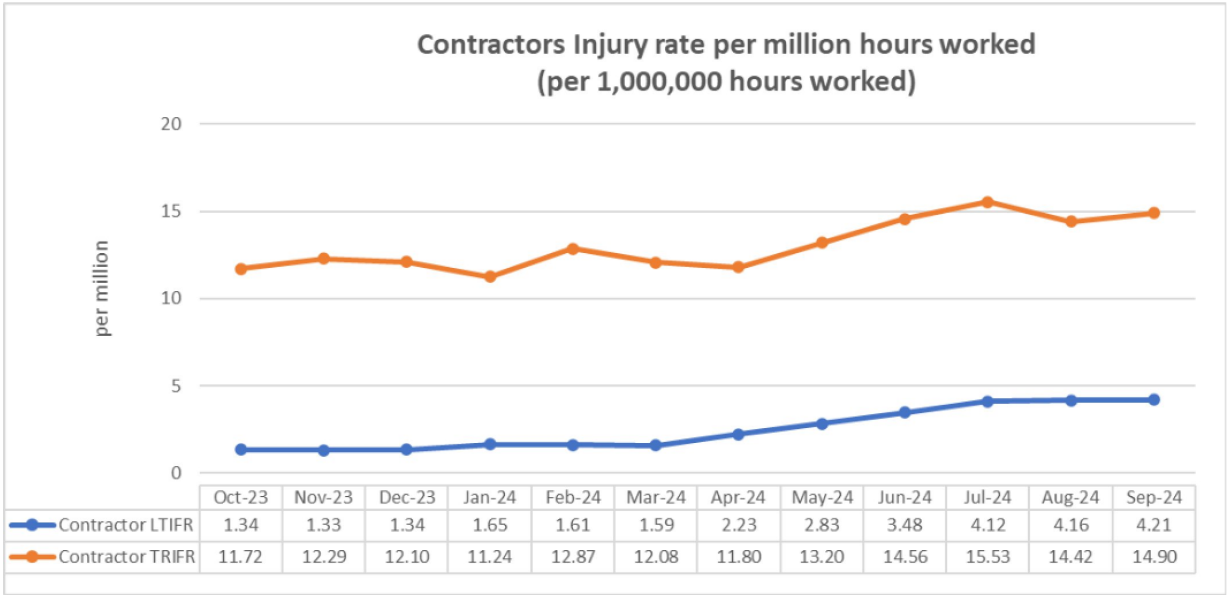
4.3 Recordable injuries

Watercare's injury rate is showing a steady trend of improvement, reflecting an overall reduction in the frequency of recordable injuries over the last 12 months:



	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Employee LTIFR	10.06	9.57	9.53	9.05	7.68	6.78	6.72	7.13	6.23	4.84	5.27	4.79
Employee TRIFR	26.06	25.07	26.32	26.26	23.95	23.95	23.29	22.72	19.60	18.06	17.56	14.82

The Contractor injury frequency rate for injuries reported over the last 12 months shows a general increase. Work is required to improve the accuracy of reported hours and recordable events.



	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Contractor LTIFR	1.34	1.33	1.34	1.65	1.61	1.59	2.23	2.83	3.48	4.12	4.16	4.21
Contractor TRIFR	11.72	12.29	12.10	11.24	12.87	12.08	11.80	13.20	14.56	15.53	14.42	14.90

These trends will be monitored; however, injury frequency rates as lag indicators are no longer considered to provide useful measurement of safety performance in isolation. Good practice suggests focusing on positive safety performance (the presence of controls), qualitative measurements and leading indicators that provide information about current safety management conditions as well as emerging HSW risks.

Recordable injuries during September 2024 are detailed below:

Case number	Injury classification	Business unit	Mechanism of harm – severity	People type	Critical risk	What happened and action
HSW0020102	Lost Time Injury (LTI)	Operations	Slip, trip and fall	Employee	Not related to critical risk	The employee was walking over uneven ground in the road berm, and she twisted her ankle. She was taken to A&E assessment.
HSW0020468	Lost Time Injury (LTI)	Programme Delivery	Pressurised substances	Contractor	WorkSafe notifiable event – critical risk	This event detailed above under High-Potential Events above.
HSW0020378	Restricted Duties Injury (RDI)	Programme Delivery	Slip, trip and fall	Contractor	Not related to critical risk	A forklift operator tripped over the tines of the forklift on site and landed on his side. He was assessed by a specialist and placed on light duties.

Case number	Injury classification	Business unit	Mechanism of harm – severity	People type	Critical risk	What happened and action
HSW0020104	Restricted Duties Injury (RDI)	Programme Delivery	Slip, trip and fall	Contractor	Not related to critical risk	A worker sustained an injury on his left knee when he was struck by a dropped manhole lid. The injured worker was lifting the lid with a manhole lifter when it slipped out of its lifting position. The contractor was taken to A&E.

4.4 HSE Global Review – update on recommendations

Recommendations	Short description	Action	Due	Status	Comments
Priority 1	Agree on a strategic approach to managing health, safety and wellbeing	• Collaborative development of new vision and principles for HSW at Watercare • Develop engagement plan for senior leadership and wider organisation and partners.	Oct 2024		Working with senior leaders to understand business needs and develop strategic direction of HSW initiatives. Reorientating HSW support to the changing business. Update of HSW policy is underway and will go to the December 2024 board meeting for approval. A refresh of the safety commitment cards has been completed.
Priority 2	Define a suite of health, safety and wellbeing metrics that can be used in combination to understand Watercare's performance	• Develop new metrics and measurement, reflecting and complementing redefined HSW strategy • Develop dashboards and trend analysis to support learning and improvement opportunity.	Jul 2024		Existing iCare system limitations will be reviewed for delivery of tactical system and dashboard enhancements in the short-term (FY24). These improvements are intended to improve data quality for reporting and to strengthen our risk categorisation, focusing on high-potential, critical, and significant risks. Long term improvement to be delivered through planned comprehensive HSW system replacement, planned for delivery in FY26.
Priority 3	Demonstrate accountability and psychological safety at all levels of the organisation	• Develop and implement enhanced safety leadership programme • Embed HOP and learning teams in business • Develop enhanced induction for new starters • Develop psychosocial safety knowledge and capability within Watercare.	Oct 2024		The new safety leadership training has been prepared and will be delivered from October 2024 onwards as an internal programme for people and safety leaders in the business. Ongoing re-assessment of psychological safety will occur with full staff survey cadence.

Recommendations	Short description	Action	Due	Status	Comments
Priority 4	Implement an organisational health and safety committee to increase cross-functional relationship building and organisational learning.	• Design HSW committee for Watercare (top tier committee) with clear purpose and support • Engage with HSRs and senior leaders to ensure appropriate representation • Ensure that representatives are trained and prepared for success in role.	Jul 2024		• HSR committees were engaged in the review of policy and stop-work cards. • HSR representatives are engaged and connected at business unit level HSW meetings. • Business-wide HSR committee to set cadence for engagement. • While the due date has passed, work continues on the above three actions with an new estimated completion date of December 2024.
Supplemental 1	Form a contractor management working group to draw on the internal and external expertise to review current processes with an aim to remove duplication of processes, define areas of influence and share best practice	• Establish contractor working group • Review processes and opportunity for better practice (overlapping duties).	Aug 2024		New approach for contractor safety engagement has been developed, with various cadence for different levels and purpose of engagement focus. • Monthly critical risk toolbox for sharing learnings and improvements • Three monthly contractor safety meetings for focused engagement • Annual safety forum for wider participation.
Supplemental 2	Add to the technical capability of the health safety and wellbeing team in high-risk areas to support senior leaders in ensuring compliance in complex areas	• Redefine role and alignment of HSW team within Watercare • Communicate role and function to staff and contractors • Develop HSW leadership, and technical HSW team capability.	Dec 2024		Reviewing capability and functional orientation of HSW team to the business. Postponed review of team until after broader organisational changes. Professional development of HSW team members has progressed.
Supplemental 3	Fully implement Safety in Design (SiD) principles in all project work	• Ensure that project delivery quality management processes include SiD • Capture and share learnings from SiD review.	Aug 2024		SiD is an established and verified check in the design delivery process. Ongoing quality assurance in delivery will ensure that this process is effective.

Chief Executive's report

Presented by: Dave Chambers

Watercare

9

1. September 2024

Continuing the momentum on our journey to financial independence, in early September 2024 we shared an information memorandum with two credit rating agencies, Moody's and S&P, presenting Watercare. We expect to receive a preliminary rating in October/November. We also published our 2024 annual report in mid-September summarising our performance, reflecting on the challenges and successes of 2023/24, while outlining where we need to focus our efforts going forward.

Another highlight for the month was the result from our most recent staff engagement pulse survey: participation continued to remain high at 84%; our engagement score continued to remain stable at 7.6 (across November 2023, March 2024 and this survey) and our NPS score has risen from 23 to 25. Given the amount of change across the organisation, these results speak to the loyalty and dedication of our people.

Watercare was very well represented at the 2024 Water NZ Conference in Hamilton:

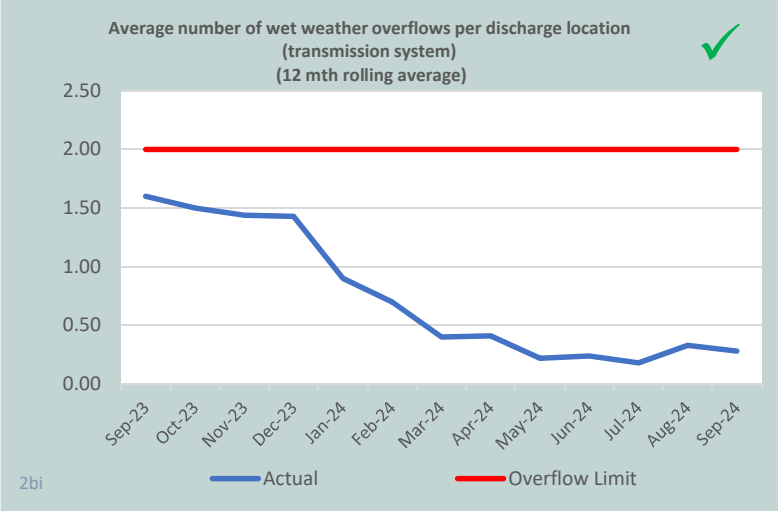
- Congratulations to our presenters who papers were selected for the conference – Mikayla Frisby, Isileli Aholelei, Kevan Brian, Naomi Houston, Joel Jeffries, Georgina Harris, Jessica Wang, Malaika Binny, Sharon Danks, Brendon Harkness, Soheila Beygi, Tuan Hawke, Farzam Farzadi, Neil Leat, Campbell Scott and Jenny Jariel.

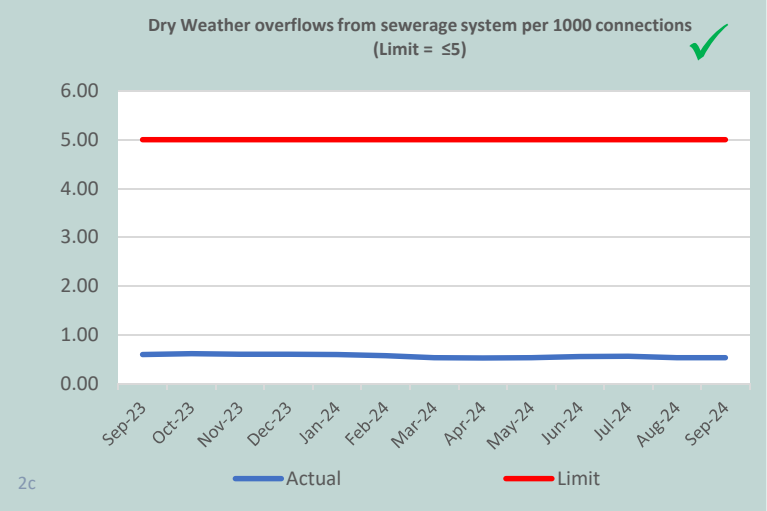
- Congratulations also to Gabriela Campos Balzat for winning Young Water Professional of the Year and Kevan Brian for winning the Ronald Hicks Memorial Award; Kevan also accepted the project award for delivering the upgrades at Waikato District Council's Te Kauwhata WWTP (delivered in collaboration with Veolia WTS and Spartan Construction).

2. Key performance measures

Watercare's unaudited performance against the current Statement of Intent (SOI) measures for September 2024 is set out below.

SOI measures — Natural Environment





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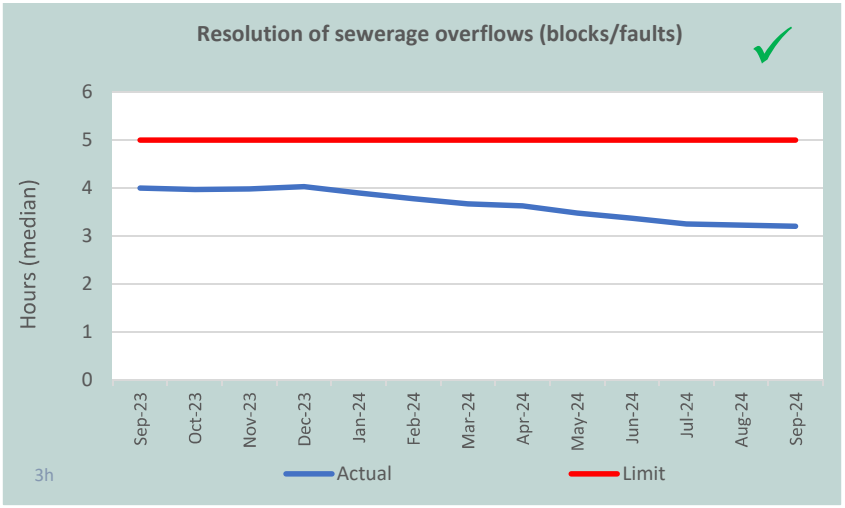
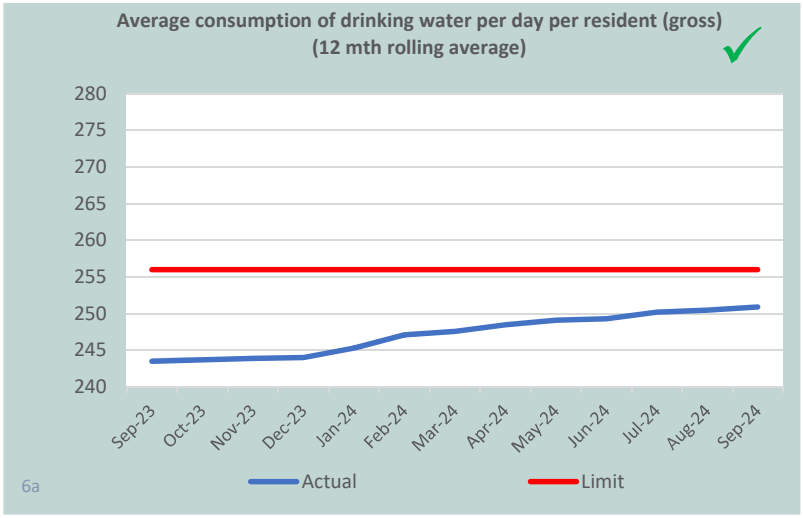
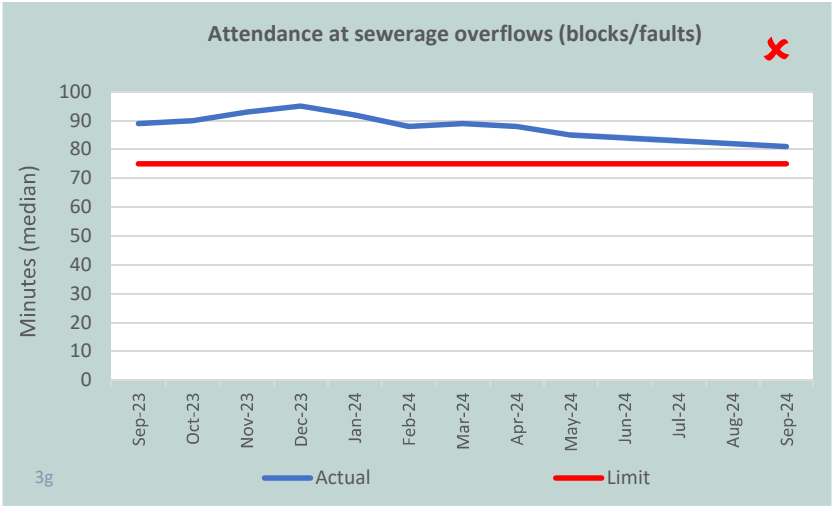
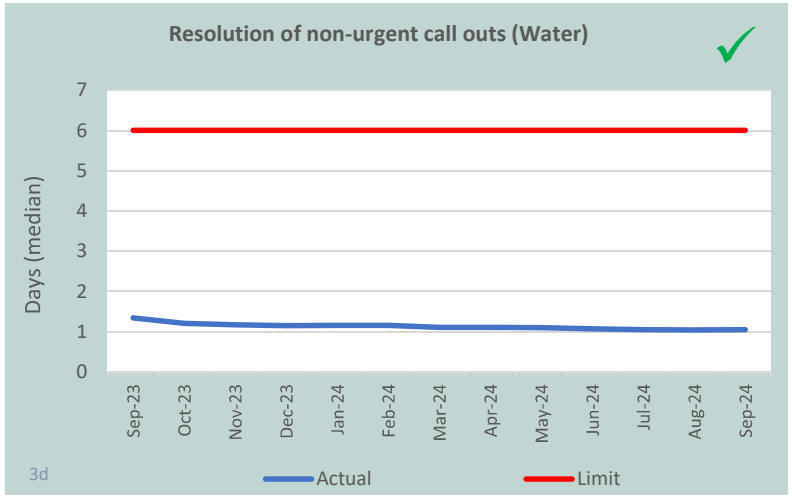
SOI measures — Community and Stakeholder Relationships

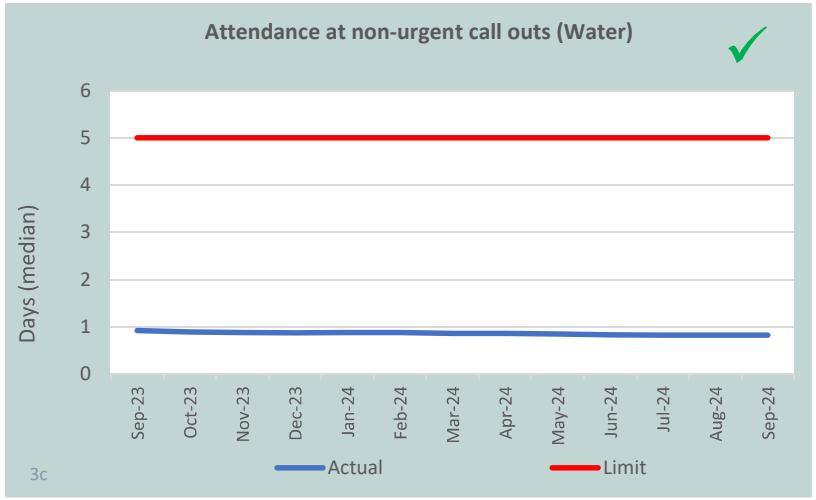


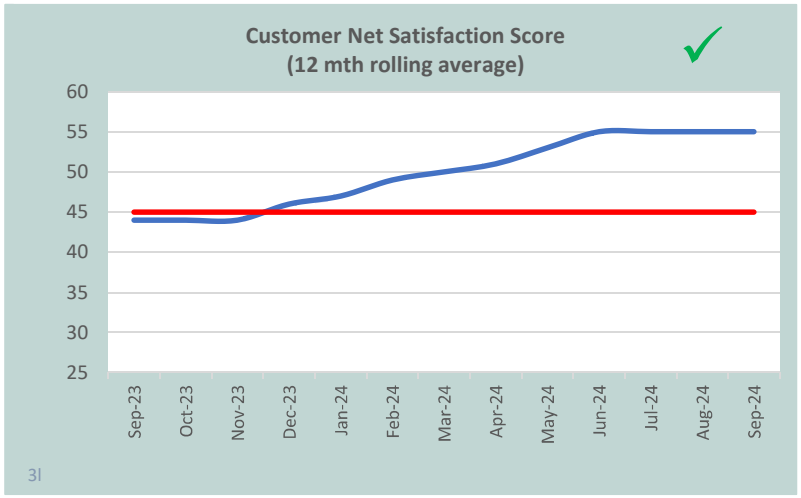


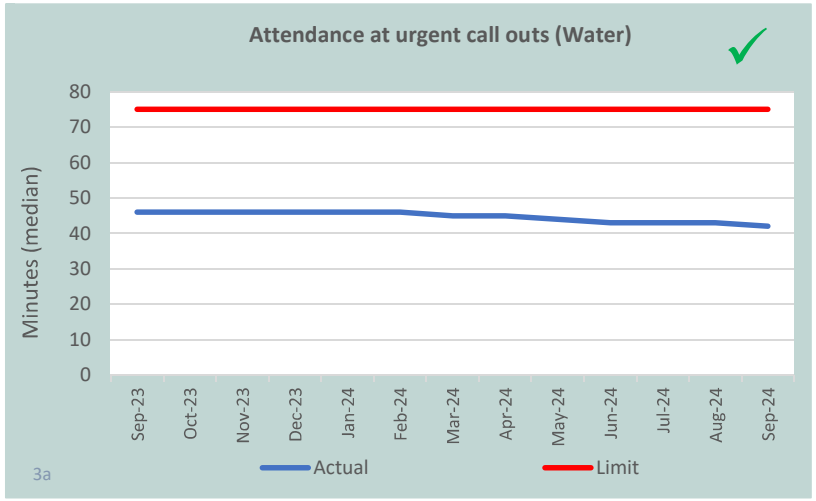


SOI measures — Community and Stakeholder Relationships









Watercare performance measures (unaudited)

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
1.	Compliance with Taumata Arowai Quality Assurance Rules T3 – **Bacterial water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules T3.	100%	100%	100%	
2.	Compliance with Taumata Arowai Quality Assurance Rules T3 – **Protozoal water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules T3.	100%	100%	100%	
3.	Compliance with Taumata Arowai Quality Assurance Rules D3 – **Microbiological water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3.	100%	100%	100%	
4.	Compliance with the territorial authority's resource consents for discharge from its sewerage system measured by the number of:				*Note the assumption is that abatement notices received relates to new notices issued in the financial year.*
	a) abatement notices	≤2	0	0	
	b) infringement notices	≤2	0	0	
	c) enforcement orders	≤2	0	0	
	d) convictions	0	0	0	
	received by the territorial authority in relation to those resource consents.				
5.	The average consumption of drinking water per day per resident within the territorial authority district (*litres plus/minus 2.5%) (12-month rolling average).	253 litres	250.90	250.50	
6.	Median response time for attendance for urgent water callouts: from the time that the local authority receives	≤ 75 mins	42	43	

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
	notification to the time that service personnel reach the site (minutes) (12-month rolling average)				
7.	Median response time for resolution of urgent callouts: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption (hours)(water, 12-month rolling average).	≤ 5 hours	3.60	3.68	
8.	Median response time for attendance for non-urgent water call-outs: from the time that the local authority receives notification to the time that service personnel reach the site (days) (12-month rolling average).	≤ 5 days	0.82	0.82	
9.	Median response time for resolution of non-urgent water call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption (days) (12-month rolling average).	≤ 6 days	1.05	1.04	
10.	The total number of complaints received by the local authority about any of the following: a) drinking water clarity b) drinking water taste c) drinking water odour d) drinking water pressure or flow e) continuity of supply f) the local authority's response to any of these issues expressed per 1000 connections to the local authority's networked reticulation system (12-month rolling average).	≤ 10	7.75	7.80	
11.	Attendance at sewerage overflows resulting from blockages or other faults: median response time for attendance – from the time that the territorial authority	≤ 75 mins	81	82	Overflows are triaged as either a P1 or P2 response. P1 is for overflows going into a waterway or effecting multiple properties. A P1 response is on site within 60

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
	receives notification to the time that service personnel reach the site (minutes) (12-month rolling average).				minutes. A P2 response is for all other overflows. A P2 response is on site with 240 minutes (4 hrs). At 81 minutes this means we are meeting all P2 and probably most P1s. The more important measure is resolution of blockages and faults (see row below), and this target is being met.
12.	Attendance at sewerage overflows resulting from blockages or other faults: median response time for resolution – from the time that the territorial authority receives notification to the time that service personnel confirm resolution of the blockage or other fault (hours) 12-month rolling average.	≤ 5 hours	3.2	3.23	
13.	The total number of complaints received by the territorial authority about any of the following: a) sewerage odour b) sewerage system faults c) sewerage system blockages d) Watercare's response to issues with its sewerage system expressed per 1000 connections to the territorial authority's sewerage system (12-month rolling average).	≤ 50	18.83	19.26	
14.	The percentage of real water loss from the territorial authority's networked reticulation system (12-month rolling average).	≤13%	12.97%	12.67%	Watercare calculates its leakage based upon the IWA (International Water Association) water loss calculation. The calculation involves estimates for both volumes produced and utilised. *Water loss result is with 95% confidence limits of +/- 10%.

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
15.	The number of dry-weather overflows from the territorial authority's sewerage system, expressed per 1000 sewerage connections to that sewerage system (12-month rolling average).	≤ 5	0.54	0.54	
16.	Adherence to all of DIA's non-financial service performance measures (items 1 to 15 above).	100%	93.33%	93.33%	Out of 15 DIA measures, 14 measures were met, and one measure (items 11) was not met.
17.	Average number of wet weather overflows per engineered overflow point per discharge location (12-month rolling average).	≤ 2 overflows per year	0.28	0.33	
18.	Leakage performance – litres/connection/day (l/c/d)	98.2 l/c/d	123.65	120.4	Watercare has set an aspirational target for economic level of leakage (ELL) at 98.2 l/c/d. The ELL is the point at which the cost of producing water is equivalent to the cost of the efforts to keep leakage at those levels through a combination of leakage repairs, managing water pressure and renewal of watermains. The aim is to achieve an ELL at or close to the target. We did not meet this target, with ELL higher than the target. The level of leakage is calculated by deducting the volume of water sold and unbilled water usage (or non-revenue water) from the total volume of water produced. The programme to reduce non-revenue water continues. To bring the result back towards the target, we are continuing our leak

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
					reduction efforts, within our existing opex budget.
19.	Compliance with Taumata Arowai Quality Assurance Rules T3 – **Chemical water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules T3.	100%	100%	100%	
20.	Compliance with Taumata Arowai Quality Assurance Rules T3 – **Cyanotoxins water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules T3.	100%	100%	100%	
21.	Compliance with Taumata Arowai Quality Assurance Rules D3 – **Residual disinfection (chlorine) water quality.** The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3.	100%	97.50%	97.50%	The Laingholm Distribution Zone did not achieve compliance due to one missed sample.
22.	Compliance with Taumata Arowai Quality Assurance Rules D3 – **Disinfection by-products water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3.	100%	100%	100%	
23.	Compliance with Taumata Arowai Quality Assurance Rules D3 – **Plumbosolvent metals water quality**. The extent to which the local authority's drinking water supply complies with Drinking Water Quality Assurance Rules D3.	100%	100%	100%	
24.	Deliver capital programme in line with the asset management plan baseline approved by the Board.	80% of projects are delivered within the approved budget and 80% of projects	4 projects are baselined to be completed in September 2024. These will be reported on in Q2	-	A list of the 19 capital works projects we are scheduled to deliver in FY25 is listed below* (yearly target).

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
		are in service within the approved time.			
25.	Planned network pipe renewal Measure – Actual Kilometres delivered /planned kilometres.	26km (+/- 5%) of network planned for year ending 30 June 2025	3.3km	-	Yearly target.
26.	Measure: Planned and renewal spend (water and wastewater): reactive maintenance spend *Depicted as both a percentage split, and a ratio.*	75% (Planned): 25% (Reactive) >3	-	-	Reported 6-monthly (yearly target).
27.	Percentage of household expenditure on water supply services relative to average household income.	< 1.5%	0.81%	0.89%	
28.	Debt to revenue ratio.	≤4.00	3.91	3.92	
29.	Controllable Cost target (including 4% efficiency target per year, for 10 years, from FY23-FY32).	$441m	$33m	$35m	Yearly target.
30.	Customer Net Satisfaction Score (Previously Net promoter score).	≥45	55	55	
31.	Community trust score.	≥55	58	59	
32.	Percentage of customer complaints resolved within ten days of notification.	≥95%	99.3%	99.3%	
33.	Ratio of procurement sourced through Māori owned businesses.	5%	2.72%	2.69%	Direct 1.12% and Indirect 1.60%. Total Māori business spend for FY25 is $8.10m. ($3.33m Direct, $4.77m Indirect).

No.	Measure	FY25 Target	Actual		Commentary
			September 2024	August 2024	
					We have 125 active Māori suppliers out of a total of 2112 active suppliers (5.92% of active suppliers). We are also working in collaboration with iwi directly and others (e.g. Amotai) to achieve our contract spend target with Māori businesses (yearly target).
34.	Adherence to the Service Level Agreement with Council (10 working days) for Watercare to provide specialist input into resource consents (3 months rolling average).	90%	89.89%	91.01%	Increase in input requests over the last three months (average 243) compared to April – June (average 206). We are recruiting new kaimahi to replace engineers that have recently left and are almost back to a full team.
35.	Health & Safety: Every month, a minimum of one permit audit is conducted per site (i.e. all 15 major operational sites, and 21 major construction project sites).	One per site (36)	49	47	
36.	We will implement Mitigation measures in line with our emissions reduction targets scope 1 and 2) (Quarterly measure). *Note: these targets now include emissions from Puketutu island and also align with our current Asset Management Plan. Previously set target for FY25, excluding Puketutu is <89,200 tonnes CO_2e.*	<139,170 tonnes CO_2e	30,714 tonnes CO_2e	-	Tracking well against target. We are seeing positive performance in electricity and reduced fuel consumption (yearly target.

The 19 capital works projects that are scheduled to be delivered in FY25 are set out below:

Project name	FY25 baseline, end of execution phase	On time?	On budget?
1. Mangakura Dam 1 Safety Upgrade	02/09/2024	Yes, delivered on time	Yes, under budget
2. Kahika Rising Main Replacement	30/09/2024	Yes, delivered on time	Yes, under budget
3. Northern Interceptor – Stage 1	30/09/2024	Yes, delivered on time	Yes, under budget
4. Dunkirk Road WW Capacity Upgrade	30/09/2024	Yes, delivered on time	Yes, under budget

Project name	FY25 baseline, end of execution phase	On time?	On budget?
5. Glen Innes WW PS (DPS071) Pump Replacement	15/10/2024	On track to deliver on time	On track to deliver within budget
6. Orewa 3 to Orewa 1 cross-connection Highgate Bridge	31/10/2024	On track to complete within the threshold	On track to deliver within budget
7. Supply Treatment Huia and Supply Treatment Waitākere Tank Reconciliation	30/11/2024	Not on track but forecast to complete FY25	On track to deliver within budget
8. Glenbrook Estuary Crossing	30/11/2024	On track to deliver on time	On track to deliver within budget
9. Rehua Place Stage 2 And Aorere Park WW Pipeline	31/12/2024	On track to deliver on time	On track to deliver within budget
10. Kāinga Ora – Waikowhai Pump Station & Water Main	15/02/2025	On track to deliver on time	At risk to deliver over budget
11. Takapu Street wastewater	13/03/2025	On track to deliver on time	On track to deliver within budget
12. East Coast Bays Link Sewer Upgrade	31/03/2025	On track to deliver on time	On track to deliver within budget
13. Waikato WTP Waste Management Upgrade	31/03/2025	On track to deliver on time	On track to deliver within budget
14. Pukekohe East Bulk Supply Point	30/04/2025	On track to complete within the threshold	On track to deliver within budget
15. Branch 3B Judges Bay Replacement	30/04/2025	On track to deliver on time	On track to deliver within budget
16. Rosedale MLE 2_3 wall repair	30/05/2025	On track to deliver on time	On track to deliver within budget
17. Warkworth to Snells Transfer Pipeline	30/05/2025	On track to deliver on time	On track to deliver within budget
18. Rosedale MLE Diffuser Renewal	30/06/2025	On track to deliver on time	On track to deliver within budget
19. Waiuku Interim Treatment Facility	30/06/2025	Yes, delivered on time	Yes, on budget

3. Our people

September saw us recognise Te Wiki Te Reo Māori with activities that will be much more enduring than just a week. With the theme being Ake Ake Ake, A Forever Language, one of the highlights was the launch of our very own Watercare haka, Ki te Ora te Wai, which references our purpose statement. The idea for this initiative came from our very own Koiora leadership programme graduates who saw an opportunity to strengthen connection to our purpose. With training sessions for an associated waiata made available in the weeks prior, our people could participate in the event while also enjoying a hāngi together. Following this, a Watercare tradition was embraced by our Programme Delivery team who participated in our Maunga Challenge at Māngere Mountain where Te reo Māori featured in a series of activities including box-fit. Rounding off the celebrations, our inaugural Manawa Māori Foundations for Teams te reo Māori course participants were recognised at their graduation ceremony. Our team committed to weekly sessions for two months to learn Te reo Māori and build the confidence to take their skills forward into their everyday interactions.

We also took some time this month to acknowledge World Suicide Prevention Day. The construction industry sadly continues to have disproportionate statistics for suicide where rangatahi, males and Māori workers are especially vulnerable. We are continuing to make sure that our people and others we encounter during the course of our work can access assistance in challenging times. Mates in Construction work across the industry to provide suicide prevention networks accessible to at-risk employees. Watercare is a foundation partner of Mates in Construction and already over 50 of our own people are trained Mates in Construction Connectors across our Watercare sites. In September, we added to this number and the trainees will be armed to show kindness and compassion and given the skills to link those in need with specialist support when required.

Finally, our Diversity, Inclusion and Belonging Committee opened nominations for their first-ever awards contest for exceptional achievement. The winners in each category will receive year-long ownership of beautiful carved kete o te wānanga or baskets of knowledge, to celebrate their diversity, inclusion and belonging mahi. There are three categories; Te Kete Tuauri to recognise those who have the courage and confidence to challenge the status quo, Te Kete Aronui to recognise those continuously seeking ways to improve and Te Kete Tuatea to recognise those consistently championing diversity, inclusion and belonging by leading by example in all facets of their work. We cannot wait to see the nominations and ultimately who our winners will be next month.

Our People dashboards for the month are included. Turnover continued to track downwards at 9.5% compared to 9.68% last month. Sick leave decreased this month to 3.58% from 4.03% compared to August 2024.

Employment Status
Headcount & Demographics

**Contractors and Directors are excluded. Long term leave and parental leave employees are included.*
*** Waikato employees are included in the overall snapshot (Operations).*

1299 WSL Headcount

1485 Total Positions

6.0% Māori ⬆

38.03% Female ⬇

6.6 years Avg. Tenure
(3.4 yrs Median)

42.2 years Avg. Age
(40 yrs Median)

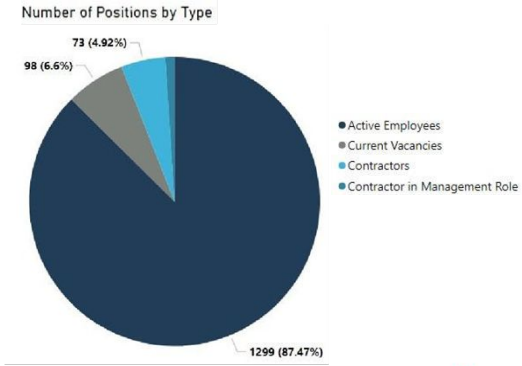
Headcount
- As of the end of September 2024, the workforce comprised 1,299 employees, down slightly from 1,300 at the end of August.
- Despite this minor change, the headcount continues to show steady growth compared to previous years (1,299 in September 2024, 1,273 in 2023, and 1,236 in 2022). There are currently 1,485 positions filled, a decrease of 10 from the 1,495 recorded in August.

Diversity
- The proportion of Māori employees remains stable at 6.0% in September, aligning with the SOI.
- In September, the proportion of women in the workforce dropped slightly to 38.03% from 38.31% in August. Otherwise, the workforce's age and tenure of service are steady.

Headcount as at 30 Sep 2024			*Headcount as at 30 Sep 2023*		
1299	38.03%	61.97%	1273	37.63%	62.37%
Perm Full Time	34.95%	60.66%	Perm Full Time	34.17%	60.57%
Perm Part Time	1.92%	0.54%	Perm Part Time	1.96%	0.71%
Fixed Term	0.54%	0.46%	Fixed Term	0.86%	0.86%
Casual	0.62%	0.31%	Casual	0.63%	0.24%

Gender Category

Board	100% | 0%
Executive	75% | 25%
Overall	84.6% | 15.3%



Watercare

Starters, Leavers & Turnover

11 Starters, 9 Leavers

9.50% Turnover Rate

99.31% Retention Rate

36.53 Avg. Workdays to Hire

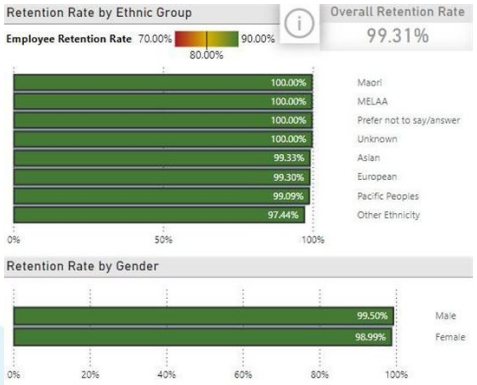
There were 9 departing employees and 11 new hires in September (details per business unit below).

Attrition

- There has been a reduction in the voluntary turnover of permanent employees, with the rate tracking at 9.50% as of September, down from 13.24% in the previous 13 ~ 24 months (3.73%). While female retention continues to decline slightly month on month from 99.60% in July to 99.0% in August to 98.99% in the month of September, the total staff retention percentage is at 99.31% as of September.

Hiring

- The average number of workdays to employ has increased in September to 36.53 from 27.30 average workdays previous month.
- While the average hiring time has generally improved since Q4 of FY24 (falling from 66.63 days in April to 27.30 days in August), September saw a slight setback with the rise to 36.53 days
- 6.37% of new hires in the past 12 months have been Māori.
- Women accounted for 38.33% of voluntary departing workers and 44.32% of new recruits over the previous 12 months.



Sick Leave & Leave Liability

$11.29m Annual Leave Liability ↑

$482k Long Service Leave Liability ↑

- **Annual leave liability** increased to $11.294 million in September, up from $10.709 million, with an average liability of $8.7k per employee.
- **Long service leave liability** reported at $482k in September, up marginally from $467k in August.
- **Sick leave** fluctuated in recent months, dropping to 3.58% in September from 4.03% in August and 2.97% in July. The rolling 12-month rate is trending upwards at 3.22%, up from 3.08% in Sept/Oct of the previous year.

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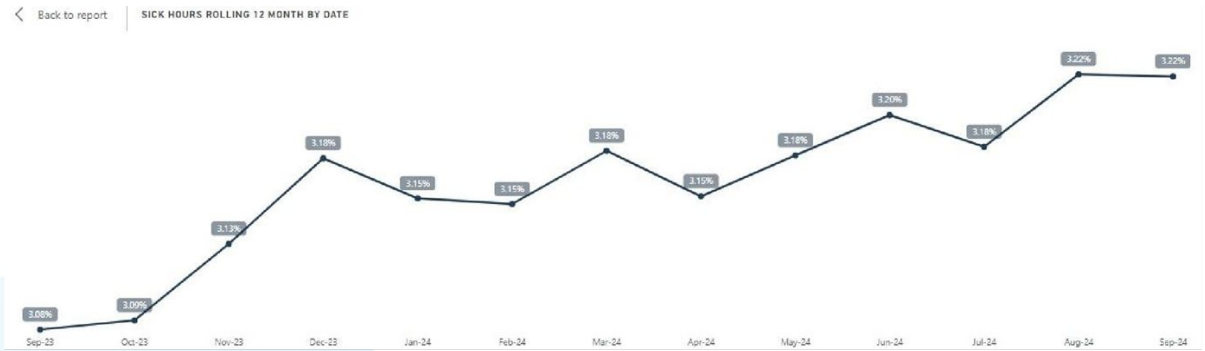
Sick Leave by month & Rolling Total

3.58% Sick Leave Taken (proportion out of total hours worked)

3.22% Sick Leave Taken at Rolling 12 Months Ave.



Watercare

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4. Our operations

4.1 Ōrākei main sewer (OMS) project

The progress with the recommendations from the OMS failure analysis report is shown in the table below:

WSP recommendations in the OMS failure Analysis report		Watercare response to recommendations	Status current	Status prior
1	It is recommended Watercare continue to inspect transmission sewers every 5 years using CCTV and Laser and Sonar profiling with inspections being undertaken on tighter frequencies on pipelines where there are concerns about the condition.	Last part of the eastern to be completed in October. This will complete condition assessment on all interceptors. Data will be fed into the condition assessment model to inform renewals. We will maintain the recommended frequency of inspections going forward and these are programmed into EAM.		
2	In addition, it is recommended to undertake condition inspections after events that could trigger rapid decline in condition e.g. after large storm events.	Agreed. This will be implemented as required.		
3	Improve the quality and resolution of the CCTV inspections to provide a clearer view of the pipe wall and aid the identification of faults	The enhanced CCTV camera is now being used in the CCTV inspections.		
4	Reinstate cleaning the OMS using the plough or alternative cleaning systems that meets with current health and safety requirements.	Trial of new "high volume flushing methodology" presented by selected contractor. Trials planned to begin in October. Finalising methodology with contractor.		
5	Produce detailed CCTV log sheets to record impactions and assign condition grades using a system suitable for brick pipelines.	This work has been included in the scope of future inspections.		
6	Change standard practise so that laser and sonar profiles are analysed for all inspections	This work has been included in the scope of future inspections.		
7	Compare laser profiling against previous inspections to determine the extent and severity of corrosion that could trigger a renewal.	The surveys have been completed on the OMS. We are currently comparing the new CCTV and analysis to earlier surveys. This will be standard practice at the completion of all surveys going forward.		

WSP recommendations in the OMS failure Analysis report		Watercare response to recommendations	Status current	Status prior
8	It is recommended that Watercare continue with a risk-based approach to the management of assets however it is recommended that Watercare develop guidance documents to detail these process and procedure and ensure decision making is recorded.	A guidance document has been completed.		
9	Watercare should update process for determining the criticality of asset to include all factors that could impact the consequence of failure ie is the pipe under a building	The Transmission sewer renewals strategy has developed.		
10	Develop a condition assessment strategy that specifies the techniques that should be used for condition inspections, the timing of inspections and how the data should be recorded, analysed and stored.	The Transmission sewer renewals strategy has developed.		
11	Document a renewals intervention strategy that specifies the repairs and renewals to be undertaken and the urgency for undertaking the works based on the condition and the consequence of failure.	The Transmission sewer renewals strategy has developed.		
12	Consider undertaking structural analysis of block and brick-built sewers using finite analysis to improve the assessment of likelihood of failure and to set trigger levels for intervention.	This activity will be planned to follow the review of data from the condition assessment investigations.		
13	Develop a prioritised list of Transmission Sewer renewals and the triggers set out in the renewal intervention strategy.	This list has been developed and will be updated as new condition information is collected.		

 Completed  Underway/Not due yet  Not on target

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4.2 Water quality

Annual Water Quality Report July 2023 – June 2024 is now published on our website.

Microbiological and chemical compliance has been achieved for the month of September for all water treatment plants (WTPs) and distribution zones (DZs).

The residual disinfection target of 85% of free available chlorine (FAC) samples in a month >0.20mgL was achieved in all 40 distribution zones, however the Laingholm Distribution Zone did not achieve compliance due to 1 missed sample. Three FAC samples are required a week in this zone, with only two collected due to a Laboratory scheduling fault. A schedule is prepared for the full year and issued to the Laboratory, for upload into the Laboratory scheduling system called Labware (Laboratory Information Management Systems or LIMS). The erroneous Laingholm schedule fault had arisen from an unknown Labware event that corrupted the data in the uploaded CSV file. It has been impossible to determine if the upload itself corrupted at the time or if a subsequent action or event has caused the random. Based on the levels of FAC, pH, turbidity, E.coli, total coliforms in the Laingholm zone, Watercare assessed this issue as being a technical non-compliance and there was no increased risk to public health. A high degree of confidence has been established that the water supply remains safe in the Laingholm zone as defined by the Water Service Act 2021.

Low Residual Chlorine (FAC) and elevated Disinfection By-products (Trihalomethanes (THMs)) Investigation: Water age modelling to assess water age contributions to THMs formation and low FACs is progressing well. Final zones are being modelled, with reports due to be issued soon. The next group of zones is being confirmed. This will determine next steps, with operational improvements and capital investment likely required. A balance of security of supply (reservoir storage) vs water age will have to be considered. A summer strategy will be developed for the 2024-2025 summer period to best mitigate this risk, as done last year.

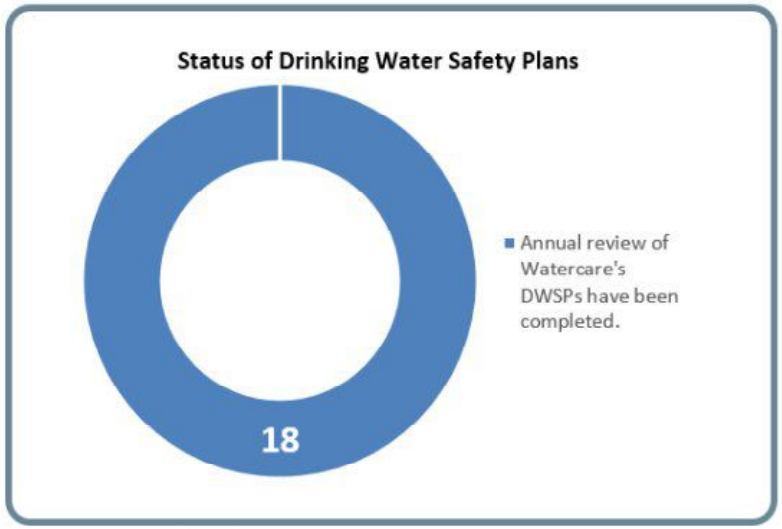
Drinking Water Safety Plan (DWSPs): Drinking Water Safety Plan audits are required by the New Zealand Drinking Water Safety Framework. The Internal Audit Team has programmed these audits into its audit plan. To date the Ardmore WTP audit has been completed. Huia WTP audit has been completed. Waikato WTP audit is underway.

Investigations into Emerging Contaminants: The Water Quality Science team is looking into global trends and learnings that Watercare should be aware of.

Backflow prevention: Backflow testing has been completed as per targets set for the end September 2024. Backflow surveys will be further progressing in 2024.

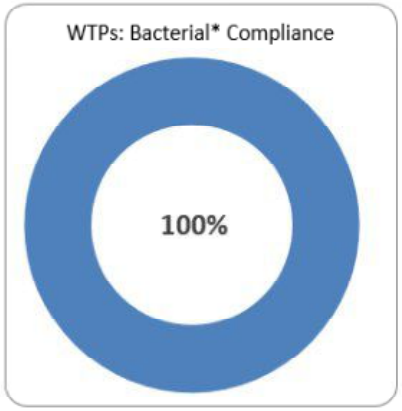
The water quality report for September 2024 is set out below.

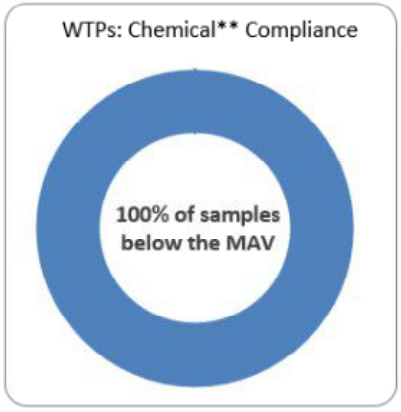
Scorecard

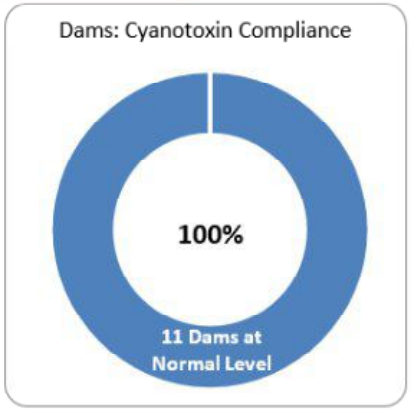


Compliance Summary

WTPs (17 total)	
Bacterial	**100%**
Protozoal	**100%**
Chemical	**100%**
Cyanotoxins	**100%**
Distribution Zones (40 total)	
Microbiological	**100%**
Disinfection by-products	**100%**
Plumbosolvent metals	**100%**
Residual disinfection (Chlorine)	**97.5%**







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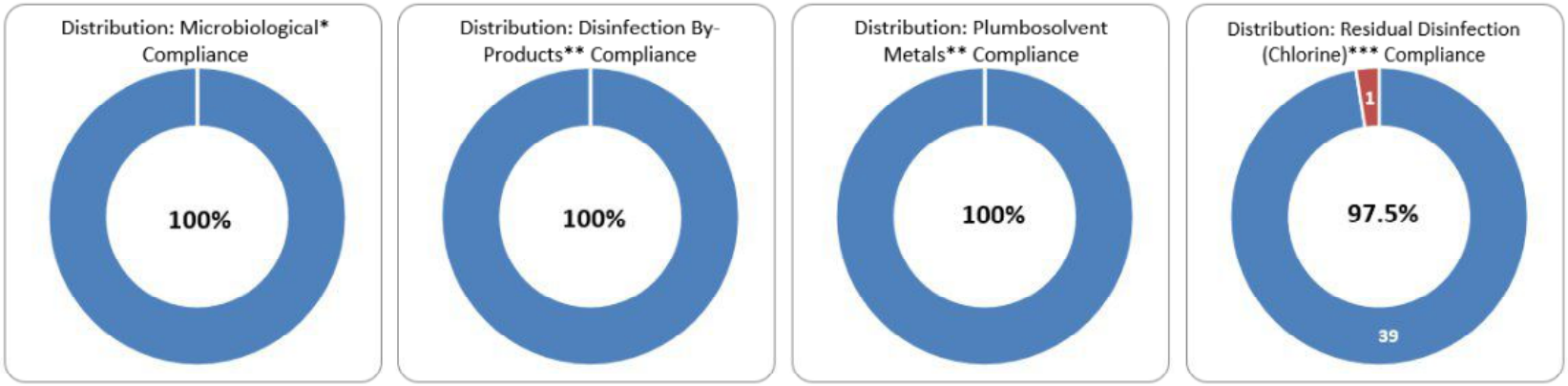
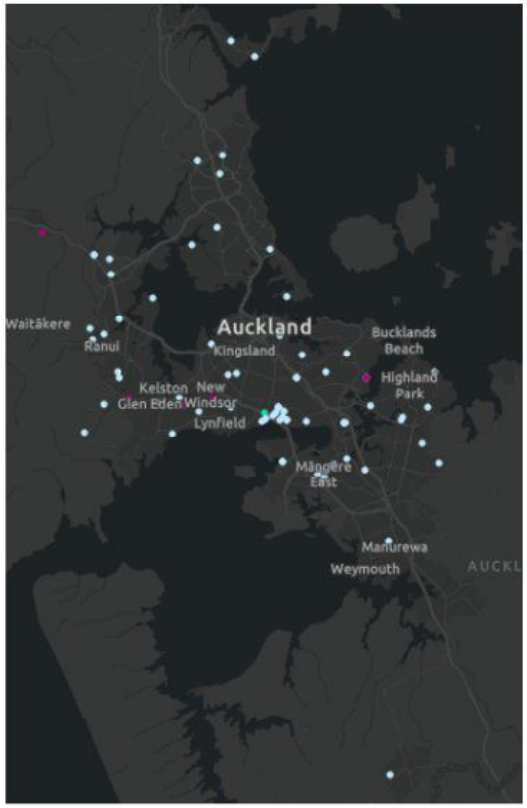


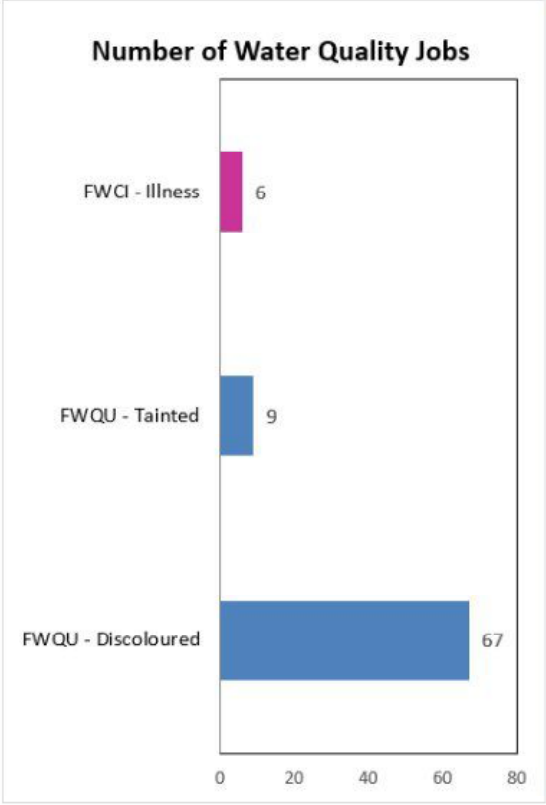
**At the WTPs bacterial compliance is assessed on continuous monitoring results. In the distribution network microbiological compliance is based on E. coli monitoring to indicate the probable presence of bacterial contamination of water supply.*

*** Chemical compliance: At the WTPs determinands associated with chemicals dosed during the treatment process are monitoried. In the distribution network disinfection by-products (DBPs) are monitored in each zone, and chlorates monitored in four zones where chlorine booster stations are utilised as best practice monitoring.*

**** Residual disinfection (Chlorine) – 85% of free available chlorine (FAC) samples in a month must be >0.20mgL in each distribution network zone, with no results <0.1mgL. The Laingholm zone was non-compliant due to a missed FAC sample – the result of a Lab programme scheduling fault.*

Customer complaints





Actions Taken

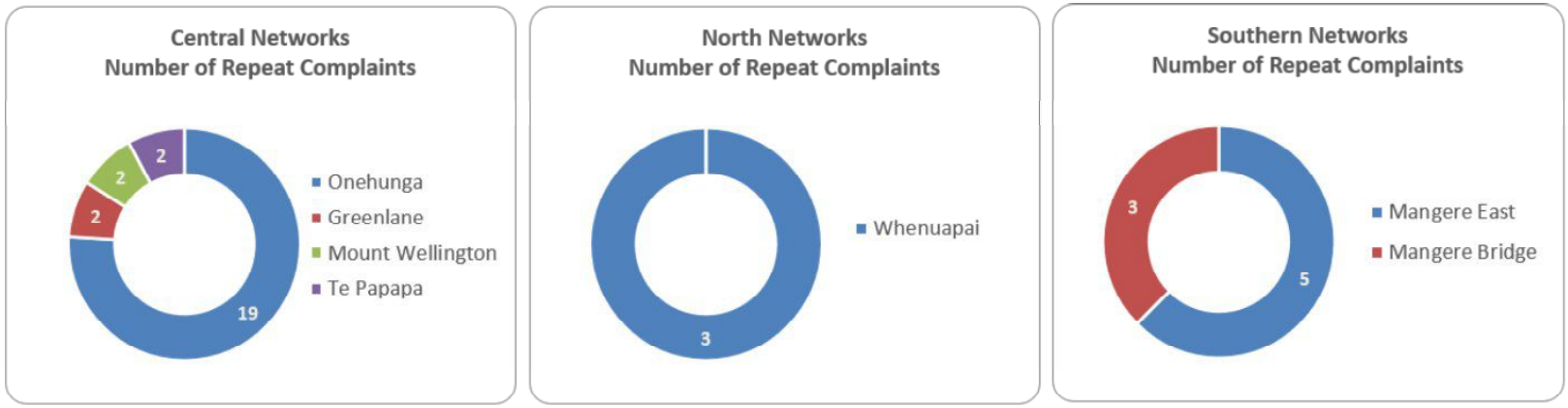
Illness Complaints*: Provision of WQ compliance data to customer, water testing and hydrant flushing if appropriate
Main cause: Unrelated health issues

Tainted Water: Network flush with field FAC and turbidity testing
Main causes: Off taste and/or odour, black particles

Discoloured Water: Network flush at nearest fire hydrant or water meter as appropriate
Main causes: Mineral and sediment build-up coming off pipes

**Illness complaint – an illness complaint arises when a member of the public has an illness that they think is related to water quality. All such complaints are investigated and in all cases our drinking water has been found to be compliant. Persons with an illness complaint*

Repeat water quality complaints – April 2024 to September 2024



Actions taken for repeat complaints*

Central

George Tce, Waller St, Forbes St and Onehunga Mall, Onehunga – Discoloured water: MSN will continue to carry out flushing according to the current process to address discoloured water within the Onehunga Low WSZ. Watermain renewal at George Tce ongoing.

Nolan Rd, Greenlane – Discoloured and cloudy water: Flushing was done from nearest hydrant on two consecutive days to address repeat complaint.

Panama Rd, Mt Wellington – Discoloured water: Flushing was done from nearest hydrant on two consecutive days to address repeat complaint.

Neilson St, Te Papapa – Discoloured water: Flushing was done from two hydrants to clear discoloured water.

North

Brigham Creek Rd, Whenuapai – Discoloured water: Flushing was done from nearest hydrant then customer's water meter. Customer confirmed issue was resolved.

South

Royton Ave, Mangere East – Discoloured water: Flushing was done from nearest hydrant until clear.

Buckland Rd, Mangere East – Discoloured water: Flushing was done from nearest hydrant until clear. Repeat complaint was likely due to insufficient flushing from the customer's taps.

Wallace Rd, Mangere Bridge – Discoloured water: Multiple times flushing from nearest hydrant and replacement of customer's service line was done to resolve the issu

**Repeat complaints – Complaints from one customer for the same WQ issue within the last six months.*

4.3 Leak management programme

Our proactive acoustic leak detection programme remains a critical component in optimising the performance of our water network. Now, with the implementation of our leakage management software, we have refined a more targeted, volume-based approach to prioritise and address areas with significant water loss. By leveraging comprehensive data on reported leaks, pipe breaks, and the performance of our 9,000-kilometre network of water pipes, we can direct our resources more efficiently and effectively.

This integrated strategy allows us to proactively identify and resolve leaks before they escalate, reducing water wastage and improving network reliability. With the combined power of our software and field detection efforts, we are taking a more data-driven and precise approach to leakage management, helping us maintain a sustainable and resilient water supply.

In parallel to this Watercare is optimising its network to control excessive pressures and make leaks quicker to find. In FY24 this yielded 7 MLD of leakage savings and the programme is targeting 5 MLD of savings.

5. Risk and compliance

5.1 Non-compliance with resource consents

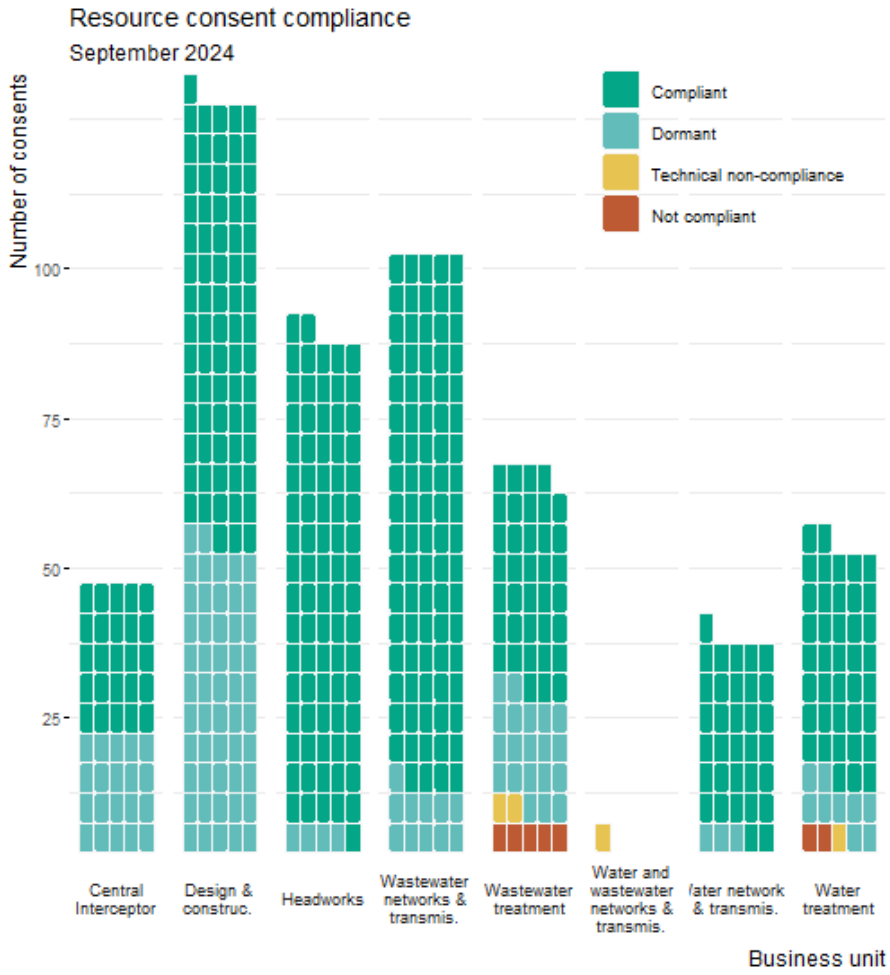
Overall consent non-compliance for operations decrease to 11 in September 2024, down from 14 in August 2024. Four were technical non-compliances, while seven facilities were affected by non-technical issues. A summary of the technical non-compliances is provided below, with detailed information on the seven facilities available in the consent table within this section:

- Warkworth-Wells WTP: Water quality sampling for OB3 observation bores is being addressed by implementing a low-flow purge sampling method. The Council has been informed, and equipment is being sourced and the issue should be resolved by November.
- Kingseat WWTP: The 12-month rolling average remains non-compliant for total suspended solids and *Escherichia coli*, but with no exceedances during the reporting period
- Wellsford WWTP: The 12-month rolling 95%tile non-compliant for and faecal coliform, but with no exceedances during the reporting period.
- Auckland Tree Consent: Wide ranging consent relevant to water and wastewater networks and transmission. We are currently working on developing training and reporting material.

The rating Watercare applies in the detailed breakdown of non-compliance is consistent with Auckland Council's criteria. The rating is below:

Rating	Detail
Category 1	Watercare has complied with the consent condition.
Category 2	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance as technical or having no more than a minor adverse effect.
Category 3	Watercare has not complied with the consent condition. Watercare has assessed that non-compliance has the potential to result in minor adverse effects on the environment. Alternatively, since the last audit, there is evidence of repeat Category 2 non-compliance.
Category 4	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance as having the potential to cause significant adverse effects on the environment. Alternatively, since the last audit, there is evidence of repeat Category 3 non-compliance.

Active resource consents in September 2024	**400**
Consents with non-compliances in September 2024	**11 ↓**
Rolling 6-month average (non-compliant consents)	**14 ↓**
Consents under enforcement in August 2024	**0 -**



Non-compliances for September 2024 (excludes technical non-compliances)

Facility/Asset	Consent	Condition(s)	Issue(s)	Actions and commentary	Resolution	Category
Wellsford WTP	DIS60396929	Condition 50	Monthly sample Chlorine 0.23 g/m3 (limit 0.02 – upstream value was 0.14).	No action taken.	Environmental Care team to work with facility manager and operations controller to confirm chlorine resampling requirements and assess the need for a dichlorination plan.	Category 2
Huia WTP	DIS80299761	Condition 3	Total Al; 6th Sep (2.1 mg/L), 19Sep (8.7 mg/L), 25 Sep (1.3 mg/L), Sep running median >80th percentile value of control site for the previous 24 months.	Sampling and historical consenting issue. Total aluminium is not a direct measure of ecotoxicity.	The aluminium issue is ongoing and intermittent. A periphyton assessment will be conducted at both test and control locations to confirm low level of potential effects and requirement for further action.	Category 2
		Condition 3	19 Sept total suspended solids: 80 mg/L (limit 30 mg/L).	No action taken.	Subsequent sample was compliant.	Category 2
		Condition 9	19 Sept 52.6 m3/day exceeded the maximum discharge rate of process waters into the Lower Huia Reservoir (limit 50.0 m3/day).	No action taken.	Marginal exceedance unlikely to result in adverse effects.	Category 1
Waiwera WWTP	CST60263133	Condition 5	Monthly average DO 95%ile 1.8, below the 2 g O_2/m^3.	All individual weekly samples were above 2 g O_2/m^3.	Resolved	Category 1

Facility/Asset	Consent	Condition(s)	Issue(s)	Actions and commentary	Resolution	Category
Beachlands WWTP	DIS60263339	Condition 0	Effluent discharge volumes exceeded 2,800 m3/day for 2 days during September: 2/9 (3,044 m3) and 3/9 (2,864 m3).	New consent is due late 2025 and associated upgrades included in AMP. Consent has been lodged.	Ongoing	Category 2
Owhanake WWTP	DIS60263346	Condition 35	There were five exceedances across the ammonia (2), total nitrogen (1), total suspended solids (1) and biological oxygen demand (1) parameters.	Several issues related to water quality and chemical dosing led to the exceedances. Several process improvements have been completed, and biomass from Mangere WWTP has been used to reseed. Improvements occurred following this and the plant returned to compliance. Aquatic macroinvertebrate sampling was undertaken to assess ecological effects and to monitor recovery.	Treatment efficacy appears to have improved notably from August. Follow up ecological monitoring to be scheduled eight weeks after the initial assessment to confirm ecological recovery (relative to control location).	Category 3
Army Bay WWTP	DIS60331146	Condition 6	UV dose rate below 25 mJ/cm^2 99 % of time for September, with the effective dose applied for 91.4% of the time.	During wet weather, high flows become problematic for the UV system. UV dose sensitivity for the Army Ba is based on a T1 indicator organism, while our consent relates to MS2, which has a sensitivity approximately 1.4 times greater than T1.	Wastewater treatment planning is preparing a comparative analysis, including cost options for future plant upgrades (such as membrane solutions) to reduce ongoing non-compliance.	Category 2

Facility/Asset	Consent	Condition(s)	Issue(s)	Actions and commentary	Resolution	Category
Snells Beach WWTP	REG-67916	Condition 38	On 19 September 2024, a leak occurred between Dawson Rd and Ridge Rd, discharging ~150 m^3 of treated effluent into Mahurangi Bay, caused by drainage of the outfall pipe	Council, the oyster farmers and MPI were notified and kept updated on subsequent monitoring results and additional incident details. Environmental sampling was undertaken.	Ongoing	Category 3

5.2 Enterprise risk management

A cyber-incident tabletop exercise was held with the Communications Team to practice our response in the event of a real incident and improve our collaboration on communication strategies. Learnings will be applied to future scenarios.

Auckland Council Group Methodology for Climate-related Scenarios, Risks, and Opportunities received and under review. The methodology will be applied to Watercare's entity level climate-related risks going forward.

Gold Clam incident management team has been stood down as management of the biohazard becomes BAU activity for the Operations Team.

On 11 October 2024, Kordia, our network provider, had a major network issue that impacted Watercare's sites. From 2:27am to 4:40am, all sites were offline, including the control network so treatment plants were offline to central SCADA and the Nerve Centre was blind. Staff were dispatched to major sites to ensure the safe manual operation of these sites. There were no operational issues due to the outage. Plants continued to run (site SCADA unaffected) with no issues. However, losing network visibility of our sites is a cause of significant concern and is being fully investigated. We will be getting a full investigation report on the incident to understand why there was no redundancy in the network design.

5.3 Privacy Act 2020

There have been no matters disclosed to the Privacy Commissioner since the last Board update, or during September 2024.

Two requests for personal information were received during September 2024 and dealt with by the Privacy Officer. The responses were made within the required timeframe.

5.4 Whistleblowing update

There were no disclosures to the whistle-blower service since the last Board update, or during September 2024.

5.5 LGOIMA requests

In September 2024, we received 26 requests for information under the Local Government Official Information and Meetings Act 1987 (the Act). Six of these requests were transferred to us from Auckland Council. One of these requests was transferred to Auckland Council for their direct response to the requestor. We responded to 25 requests in accordance with the Act (within 20 working days). For one of the requests, we extended the time to respond. The extension was necessary because the request necessitated reviewing a large quantity of information. As such, a proper response could not reasonably be made within the original time limit. At the time of writing this update, we are working on this request to ensure we respond to it within the extended deadline.

5.6 Non-RMA related legal actions

- There is currently one claim for $1.2m for alleged damage to a residential property from a burst watermain. The matter is being handled by our insurers. A technical meeting was held with the plaintiff's experts and Watercare's experts in late February 2024. We have reviewed the plaintiff's engineering report into possible causes of damage to the residential property. The next step is to file an updated defence and either enter into mediation, or a Judicial Settlement Conference. If a settlement is not reached, a trial has been set down for April 2026.
- In February 2023, Watercare was served with a copy of proceedings lodged in the Māori Land Court by Te Runanga o Ngāti Whatua, Ngāti Manuhiri Settlement Trust concerning the legal status of the Hōteo Awa bed and customary ownership. Watercare owns property in Wellsford that adjoins the awa and draws water from it. Watercare filed a notice of intention to appear in late March 2023. Watercare must now file evidence in the proceedings, setting out the history of the Wellsford WTP and the intake structure in the awa, and information about our consents and take from the awa via the intake structure. This evidence is due in December 2024.
- Watercare is involved in a legal dispute concerning a housing development in Red Hills.

6. Programme delivery

6.1 Central Interceptor

- There were zero LTIs in September 2024.
- A coordinated Level 3 emergency response drill involving multiple agencies (NZ Fire, NZ Police, Mines Rescue) was carried out on 19 September 2024. The operation was well executed with good participation from all parties.
- Secant piling work for the shaft at Pt. Erin commenced this month.
- In the main tunnel the TBM advanced 355m during September, with a total length of 13,244m installed by the end of September. There was also a break through into Western Springs on 11 September 2024, which was the original stopping point for the project. The next breakthrough at Tawaraki St is planned to take place prior to the Christmas break.
- At Māngere Pump Station (MPS), work continues to progress well with MEICA activities, air treatment facility, emergency pressure relief and confluence chamber all nearing completion. Commissioning of MPS continues to progress well. The bulkheads were installed between the inlet shaft and wet well to allow filling of the wet well and commencement of main pump commissioning.
- Onehunga Branch Sewer (PS23) and Western Interceptor (PS25) cut-ins were successfully completed, and precast benching was installed in diversion chambers. All major live sewer cut-ins (Haycock, PS23 and PS25) for Section 1 have been completed.

Herne Bay Project

- This project is being delivered by the Central Interceptor team to achieve delivery efficiencies.
- Work is in progress to develop the procurement plan for the works, in conjunction with the completion of Central Interceptor.
- The target is to complete this project in 2028, to minimise the disruption to the residents.

Queen Street Project

- Construction contract awarded on 19 September 2024 to Fulton Hogan, and a project office at Greys Ave established.
- Contractor is to mobilise to site in October 2024.
- This project is being delivered by the Central Interceptor team, to leverage of their technical, commercial, communication and stakeholder experience gained from Central Interceptor. The team is working closely with Auckland Council to ensure we meet the required project delivery deadlines.


Actual Work Progress
Pt Erin, Herne Bay
Grey Lynn
Tawariki Street
Western Springs
Auckland Zoo
Rawalpindi Reserve
Norgrove
Mt Albert War Memorial Reserve
Lyon Avenue
St Lukes Shopping Centre
Mt Eden
Haverstock Road
Greenlane
Walmsley Park
Mt Roskill
New Lynn
Miranda Reserve
PS25
Dundale Avenue
May Road
Keith Hay Park
Haycock Avenue
Onehunga
Ambury Park
Manukau Harbour
Puketutu Island
Mangere Wastewater Treatment Plant
Central Interceptor
Main construction site
Construction site

6.2 Southern wastewater scheme

- There were no LTIs in September 2024.
- This project is to upgrade the Clarks Beach Wastewater Treatment Plant, and install a new outfall pipe, so that effluent can be discharged on the outgoing tide.
- Once complete this upgrade will significantly improve the quality of treated effluent. Works are required to be completed by mid June 2026, in order to activate the resource consent held for the operation. We remain on track to achieve this deadline.
- On the 12 September 2024, Watercare presented at the Waiau Pa and Clarks Beach Business Association which was well received.
- Preparations are well underway installing equipment that allows the upgrade work to take place – this equipment ensures Watercare maintains compliance during construction.
- Work has now started on site for the Clarks Beach Wastewater Treatment Plant Upgrade.
- Once complete this upgrade will significantly improve the quality of treated effluent.
- Works are due to start later this year constructing a new outfall pipe. Once this is complete, effluent can be discharged on the outgoing tide.
- Watercare are working closely with the Clarks Beach Golf Club to minimise the impact of the Works.

6.3 Northeast wastewater scheme

Snells Beach WWTP

- There were no LTIs in September. There were four minor incidents (environmental discharge, static electricity discharge, minor cut, I-beam slippage) which have been reviewed with safe procedures reinforced.
- The Wastewater Treatment Plant is accelerating towards commissioning in 2025 with Operations approval of the Commissioning Plan.
- Vector transformer and RMU installation was livened on the high voltage side, and completion of the northern road corridor concrete pavement. ASR walkways and Raised Inlet Works access platforms are in progress with scheduled completion in October/November.
- Interior fitout of the new control building is progressing well.
- An update on the programme to the Rodney Local Board was given on 1 October 2024. A site visit of both the treatment plant and the transfer pipeline is scheduled for November for board members and councillors.

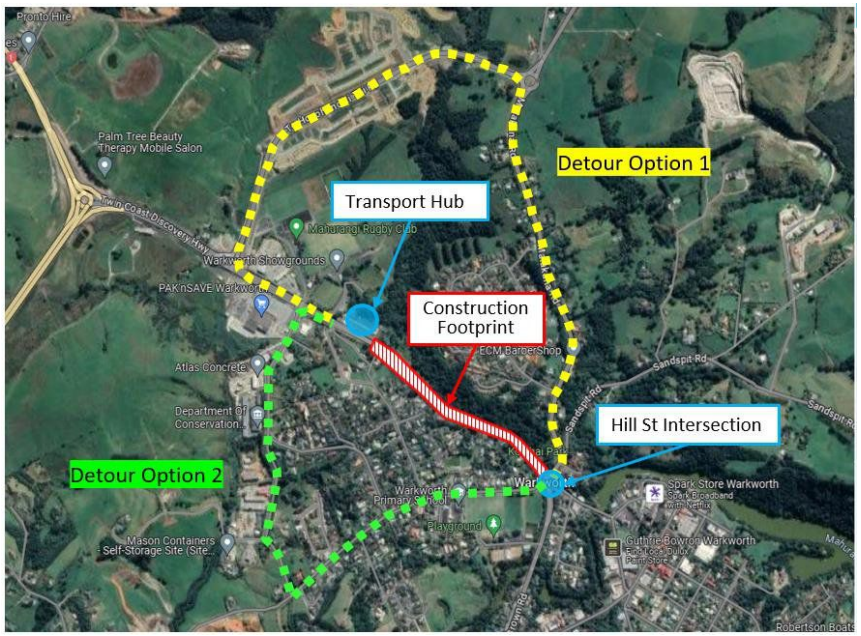
Warkworth – Snells Transmission Pipeline

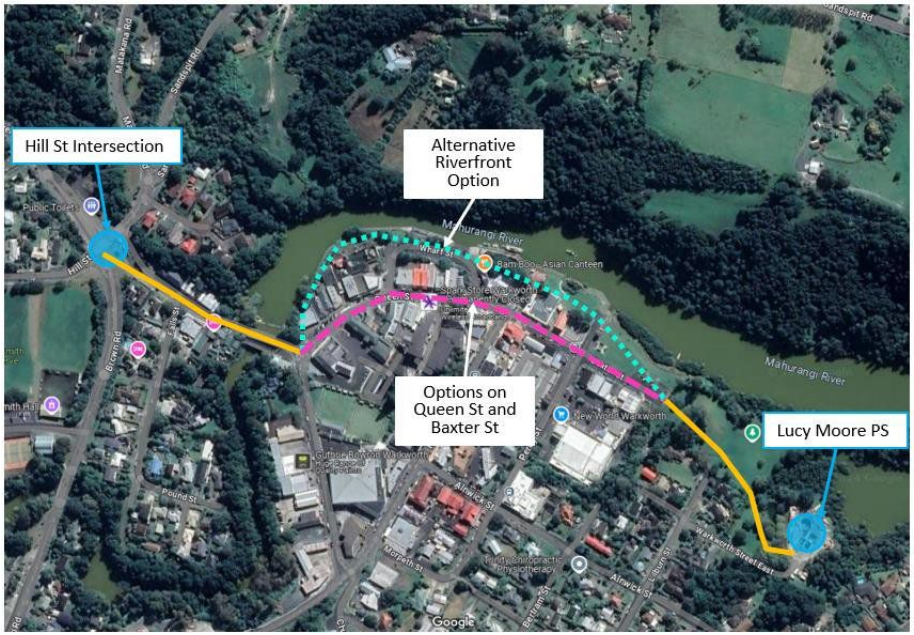
- This project is the installation of wastewater pipelines to provide the link between the new Lucy Moore Pump Station (in Warkworth) wastewater pump station and the Snells WWTP.
- There were no LTIs in September.

- Tunnelling of the 3rd and last section (1,500 metres) started in August 2024 with 760m completed.
- Installation of the 1,000mm diameter HDPE gravity liner inside the second completed tunnel section (1,900 metres) is on track to be completed in mid November 2024.

Warkworth Growth Servicing Wastewater Pipeline

- This project is the installation of a wastewater pipeline between the Warkworth Showgrounds and the new wastewater pump station at Lucy Moore Memorial Park. The total length of the pipeline is approximately 2km, but has generated significant local concerns due to the potential disruption associated with the construction works.
- The project objectives are to provide the necessary capacity upgrade for the Warkworth growth area and to mitigate the wastewater overflows in the Mahurangi River from the EOP (Engineering Overflow Point) at Elizabeth Street.
- The Northern Branch Sewer is the section running from the Showgrounds to Hill Street Intersection. The preliminary design for this section is complete.
- The Full Road Closure was proposed to accelerate the construction of this section, which can reduce 50% of the construction time compared to the option of keeping one lane open to public traffic.
- The Southern Branch Sewer is the section running from Hill Street Intersection to Lucy Moore Memorial Park. This section is currently in the feasibility stage.
- Watercare is currently engaging with the local community to confirm the pipe route for the Southern Branch Sewer.





6.4 Ōrākei Main Sewer (OMS)

Stage 1: Remediation of the sink hole in Parnell and re-lining of the first stage of the sewer.

- The sinkhole shield was removed one week ahead of schedule and the sinkhole backfill has been completed two weeks ahead of schedule.
- Upper St Georges Bay Road has been reinstated and reopened to the public.

Stage 2: Relining the second stage of the OMS

- Site establishment in Alberon Reserve continues.
- Construction of the 4m high retaining wall has been completed.
- The liner has been manufactured and has arrived in New Zealand.

6.5 Judges Bay

- The purpose of the project is to replace the Branch 3B Judges Bay wastewater main which collapsed during the January 2023 rain event.
- The scope includes the installation of a new prefabricated pump station in the road reserve and a new rising main, consisting of both open trenching and horizontal directional drilling sections.
- During September the contractor has mobilised and established on site.

6.6 Huia 1 and Nihotupu 1

- This project is upsizing the existing watermain for both the Huia 1 and Nihotupu 1 watermain.
- The section of Huia 1 in Heaphy St (Blockhouse Bay) was completed and brought into service on 1 October.
- In total (as shown below) 96% of the Huia 1 has been installed and 66% of it is in service.
- Slip lining on St Andrews Rd to Gillies Ave (Epsom) is progressing well. 45% of the pipe has been slip lined, with air valve and scour valve chambers to follow.
- Auckland Transport have agreed with our traffic management approach for the next stage of White Swan Rd, which is planned to start late October 2024.

6.7 Eastern Busway Works

- The Eastern Busway project is a 5km long, $1.3b transport infrastructure project jointly funded by Central Government and Auckland Council. It includes the renewal of 2km of network watermains, approximately 750m of transmission watermains and the betterment of 1km of network wastewater pipes.
- Works started in April 2023 and are scheduled to be completed in 2027. The new busway extends from Pakuranga Road to the Botany town centre as shown.
- The complex commissioning of the new network watermains is taking place in stages to facilitate the other temporary and permanent critical infrastructure renewals and diversions.
- To date we have commissioned 360m of network watermain and installed 420m of CIPP lined network wastewater pipeline.

7. Policy update

Submissions on future bills

- Infrastructure Priorities Programme (IPP) – NZ Infrastructure Commission – "proposals and projects that will meet New Zealand's strategic objectives, represent good value for money and can be delivered". The IPP will enable an independent approach to identifying and building consensus around the top infrastructure priorities. Applications now open, first closes December 2024 and second applications close April 2025. Watercare planning to provide input in April 2025.
- Uber decision: The Government is planning to clarify the definition of a contractor by amending the Employment Relations Act.

The table below sets out the current programmes of work that are underway, and their expected impacts to Watercare.

Policy / Legislation	Current status	Watercare actions	Priority
Fast Track Approvals Bill	Submission filed by Council 19 April. Watercare contributed to Auckland Council's submission. Select Committee Report released.	Bill to become an Act late 2024. 149 projects listed in the Bill.	High
Local Water Done Well	Next Bill 3 (Economic regulation etc). Due for introduction, December 2024.	Await the December 2024 Bill to incorporate framework for economic regulation and the more detailed powers and duties of the water CCOs.	High
Biosecurity Act 1993 Reform	The amendments address six issues: System-wide issues; Funding and compensation; Border and imports; Readiness and response; Long-term management; and Legislative interfaces.	Council family is making a submission. Watercare contributed. Closes 29 November 2024.	High
Resource Management (Freshwater and Other Matters) Amendment Bill.	Select Committee has reported back.	Watching brief	High
Marine and Coastal Area (Takutai Moana) (Customary Marine Title) Amendment Bill (MACAA).	At Second Reading.	Watching brief	High

8. Matters for noting

8.1 Māngere wastewater treatment plant consent

On Wednesday, 23 October 2024, Auckland Council's Manger of Environmental Monitoring wrote to Watercare to determine whether a Māngere WWTP consent review was warranted pursuant to Section 128 of the Resource Management Act 1991, specifically for the purpose of addressing any adverse environmental effects that may arise from the activity.

A copy of the letter received from Council is at Attachment 1. A response to Council's four questions was requested by Friday, 25 October 2024. This very tight deadline was met and a copy of Watercare's comprehensive response (excluding technical attachments) is set out at Attachment 2.

Watercare's response demonstrates that the WWTP is operating well within its consented limits, consistently meeting discharge quality standards, and that significant improvements have been made over time through technological advancements and upgrades. Given the consistent level of compliance and ongoing improvements since the consent was granted, along with planned upgrades and robust monitoring, Watercare noted that we believe there is no justification for a review of consent conditions at this time. Indeed, if a review is required, this would essentially result in similar resources, effort and cost as a reconsenting process. With the consent expiring in 2032 and the reconsenting process starting well ahead of that date, we argued that this does not seem appropriate.

Council has acknowledged receipt of our letter and is now considering the detailed information provided. They will advise Watercare by the end of October 2024 whether a consent review will be required. Management will therefore be able to provide the Board with a verbal update on any developments at the Board meeting on 5 November 2024.

8.2 Watercare's response to public deputation received at the 15 October 2024 Board meeting

At the 15 October 2024 Board meeting, Jeanette MacDonald, a member of the Manukau Harbour Restoration Society Inc, provided a presentation to the Board. The presentation outlined the intergenerational thinking, communications with the community, and our community focus in relation to Manukau Harbour. Ms MacDonald's presentation is attached with the draft minutes of the 15 October 2024 Board meeting (see agenda item 5 of this meeting pack). Attachment 3 sets out Watercare's response to her presentation.

8.3 Significant meetings attended by the CE

- Hobson Leavy Interviews
- Group CEs meeting – Quarterly Māori Outcomes
- Waikato District Council.
- Hobson Leavy Executive Search
- MP Simon Court – May Road Site and Central Interceptor visit
- Group Shared Services Governance Board
- Ngāti Manuhiri Settlement Trust
- Auckland Council – Issuer Credit Rating (ICR) and Charter Development processes
- Group CEs and Chairs meeting
- Group CEs regular meetings
- Moody's Investors Service Limited
- Alastair Cameron, CCO Governance and External Partnerships at Auckland Council
- Helen Robinson, Independent Chair of Group Shared Services Board
- Standard & Poors Global Ratings
- Department of Internal Affairs
- Auckland Transport
- Water NZ Conference
- Commissioner, Utilities Disputes Tribunal
- Pead PR.

9. Delegated authority to Chief Executive

In accordance with the authority delegated to the Chief Executive by the Board for the month of September 2024:

- there were seven documents required to be signed by the Chief Executive in relation to deeds, instruments and other documents. Out of the seven documents, three documents related to the same property.
- there were no documents signed by the two members of the Watercare Board.
- there were two capex approvals signed below a threshold of $50m.

- there was one contract approved over $100,000. It was as follows:

Contract description	Successful supplier
FY25 Microsoft License Agreement Year 3	Datacom Systems Limited

Dave Chambers
Chief Executive Officer

Attachment 1

23 October 2024

Mr Mark Bourne
Chief Operations Officer
Watercare Services Ltd
Private Bag 92521
Victoria St West
Auckland 1142

Dear Mr Bourne

Resource Consent 30083: Mangere Wastewater Treatment Plant

I am writing regarding Resource Consent 30083, which relates to the discharge of treated effluent from Mangere Wastewater Treatment Plant (MWWTP) into the Manukau Harbour.

Under Condition 5 of Resource Consent 30083, Auckland Council may review consent conditions pursuant to Section 128 of the Resource Management Act 1991, specifically for the purpose of addressing any adverse environmental effects that may arise from the activity.

The consent also requires Auckland Council provide Watercare with notification of its intention to review by the end of October in any given year.

Given that we are approaching the end of October 2024, I am seeking Watercare's response to the following matters to inform Council's assessment of whether a consent review is warranted.

1. The hydrodynamic model conducted by NIWA (see attached report) reveals that the discharge's zone of non-compliance in the harbour extends beyond the boundaries permitted under the current consent conditions. This expansion of the impact zone requires immediate investigation and explanation, particularly regarding:
    - The factors contributing to this expanded footprint
    - Any operational or environmental changes that may have influenced this outcome
    - The implications for harbour health and consent compliance
    - Potential mitigation measures to bring the non-compliance zone back within consented limit
2. Given the significant operational challenges faced during the unprecedented rainfall events of early 2023, coupled with climate change projections that predict an increase in the frequency and intensity of severe weather events, what specific measures has Watercare implemented or planned to enhance the resilience of its infrastructure and operations?
3. With the impending commissioning of the Central Interceptor in 2026. Does this provide an opportunity for watercare to reassess effluent quality standards. Given that there is more control over stormwater flows to the treatment plant.

4. Has Watercare explored emerging technologies, innovative treatment processes, and advanced management practices that could enhance effluent quality and contribute to the long-term ecological restoration of the Manukau Harbour?

In addition to the points above, the Council encourages Watercare to engage directly with the Manukau Harbour Restoration Society (MHRS) to share more detailed insights into your ongoing efforts related to operational improvements and initiatives aimed at enhancing the Manukau harbour's health. During our recent meeting with MHRS, they expressed concerns about the increasing discharge of concentrated nutrients—particularly phosphorus and nitrogen—into the harbour, which exceeds the levels initially consented.

Please provide a response by midday, **Friday 25 October 2024**.

Yours sincerely

Robert Laulala
Manager Environmental Monitoring
Licensing & Compliance
Phone: 027 480 9248

Attachment 2

Watercare Services Limited
73 Remuera Road, Remuera,
Auckland 1050, New Zealand
Private Bag 92521, Victoria Street West,
Auckland 1142, New Zealand
Telephone +64 9 442 2222
www.watercare.co.nz

25 October 2024

Robert Laulala
Manager Environmental Monitoring
Licensing & Compliance
Auckland Council

Via email

Dear Mr Laulala

Resource consent 30083: Māngere wastewater treatment plant discharge consent

On 23 October 2024, we received your letter. Your letter states that Auckland Council (**Council**) is considering a review of the consent conditions for the Māngere wastewater treatment plant (**WWTP**) under condition 5 of consent 30083.

In particular, you have asked for Watercare's response to the following matters by today, 25 October 2024:

1. *The hydrodynamic model conducted by NIWA (see attached report) reveals that the discharge's zone of non-compliance in the harbour extends beyond the boundaries permitted under the current consent conditions. This expansion of the impact zone requires immediate investigation and explanation, particularly regarding:*
    - *The factors contributing to this expanded footprint*
    - *Any operational or environmental changes that may have influenced this outcome*
    - *The implications for harbour health and consent compliance*
    - *Potential mitigation measures to bring the non-compliance zone back within consented limit*
2. *Given the significant operational challenges faced during the unprecedented rainfall events of early 2023, coupled with climate change projections that predict an increase in the frequency and intensity of severe weather events, what specific measures has Watercare implemented or planned to enhance the resilience of its infrastructure and operations?*
3. *With the impending commissioning of the Central Interceptor in 2026. Does this provide an opportunity for watercare to reassess effluent quality standards. Given that there is more control over stormwater flows to the treatment plant.*
4. *Has Watercare explored emerging technologies, innovative treatment processes, and advanced management practices that could enhance effluent quality and contribute to the long-term ecological restoration of the Manukau Harbour?*

Background

First, we note that Watercare received a similar request from Council in 2014 and provided a comprehensive response at that time.

We argued that there was no justification for a review of the WWTP discharge consent as independent expert reviews consistently found no significant concerns, and that the WWTP was meeting discharge standards, and operating with a high level of compliance. The 2014 response is provided as **Attachment 1** to provide further context to the current information request.

Transparency and independent monitoring of the Māngere WWTP discharge

Below we outline the extent of independent monitoring conducted for Māngere WWTP.

Monitoring of the Māngere WWTP discharge and the Manukau Harbour is fully transparent and includes a high level of disclosure, probably more so than any other wastewater discharge in New Zealand.

In addition to the regulatory compliance functions undertaken by Council, the resource consents for the WWTP also established a number of independent groups to monitor the plant's performance. These include:

a. **Audit Group:** This group consists of independent experts in the field of wastewater treatment, plant design, operation, chemistry and marine water quality, air quality, and iwi issues. The membership of the group is approved by the Council.

   The Audit Group's role is to provide independent expert advice to the Council, Watercare, and the Community Liaison Group. It reviews treatment plant performance, compliance with consent conditions environmental monitoring, public health and Mana Whenua concerns. The Audit Group meets quarterly and has done so since 1998. The Audit Group produces an annual report to the Council.

b. **Disinfection Review Group (DRG):** This group consists of internationally recognised experts in the field of microbial inactivation via disinfection and environmental virology. Their role is to review the operation of the UV disinfection facility at the plant.

c. **Microbiological Review Group (MRG):** This group consists of internationally recognised experts in the field of microbiology, environmental virology, public health and wastewater treatment. Their role is to review the operation of the plant in relation to the discharge of pathogens to the environment; and the accumulation and re-suspension of effluent derived pathogenic micro-organisms from sediments.

None of the reports from the independent groups (noted above) have raised any matters of ongoing concern regarding discharge to the harbour.

d. **Community Liaison Group (CLG):** This group consists of representatives from a number of local community interest groups including the Māngere Residents and Ratepayers' Association, Forest and Bird, Manukau Harbour Restoration Society, other environmental groups, Mana Whenua, interested members of the public, and neighbouring industry stakeholders. The group's role is to facilitate communication between the community, Watercare and Council. The group reviews, amongst other matters, any complaints received and compliance with consent conditions. The CLG meets quarterly and has done so for the last 20 years. The Auckland Council Compliance Officer attends the meetings. The CLG has access to all compliance reports, all harbour environmental monitoring programmes, as well as direct access to the authors of these reports when they are presented. As noted above, one of the roles of the Audit Group is to provide independent expert advice to the CLG.

Our response to your letter

We provide our response in the order of your letter.

1. ***Non-Compliance Zone: Below addresses Council's request for Watercare to investigate the findings of the NIWA hydrodynamic model in relation to the operation and environmental performance of the WWTP and Non-Compliance Zone (NCZ).***

This point in your letter raises questions about the Non-Compliance Zones (NCZ) and its extension.

The NCZ and its requirements are defined in condition 17 of Consent 30083. Condition 17(1) establishes the geographical area of the NCZ, as shown in Figures 1 and Figure 2[1] below.

Most of the requirements under condition 17 are associated with the monitoring of pathogens in shellfish at the boundary of the NCZ and their gathering for human consumption. The exception is condition 17(3), which requires "*that the discharge shall not cause any significant adverse effects on marine life beyond the*

[1] Note that the figures show the same NCZ area, Figure 1 was taken from the original consent to demonstrate main focus of the NCZ related to public health matters.

Non Compliance Zone." The instrument provided by Consent 30083 for monitoring adverse effects on marine life beyond the NCZ is the Harbour Environmental Monitoring Programme (**HEMP**). The HEMP is a comprehensive monitoring programme that has been carried out for over 20 years, with the current scope of monitoring being undertaken since 2011 as approved by Council. A copy of the latest HEMP annual report is provided in **Attachment 2**, and it is discussed in more detail in the Environmental Performance section further below.

It is important to clarify that the NCZ remains the same as defined in consent 30083. No changes have been made to NCZ. It is further noted that the consent does not establish water quality standards for the NCZ, nor does it define a boundary for dispersion of the WWTP discharge. The consent discharge quality standards are defined in condition 12(2), as detailed in the Operational Performance section below.

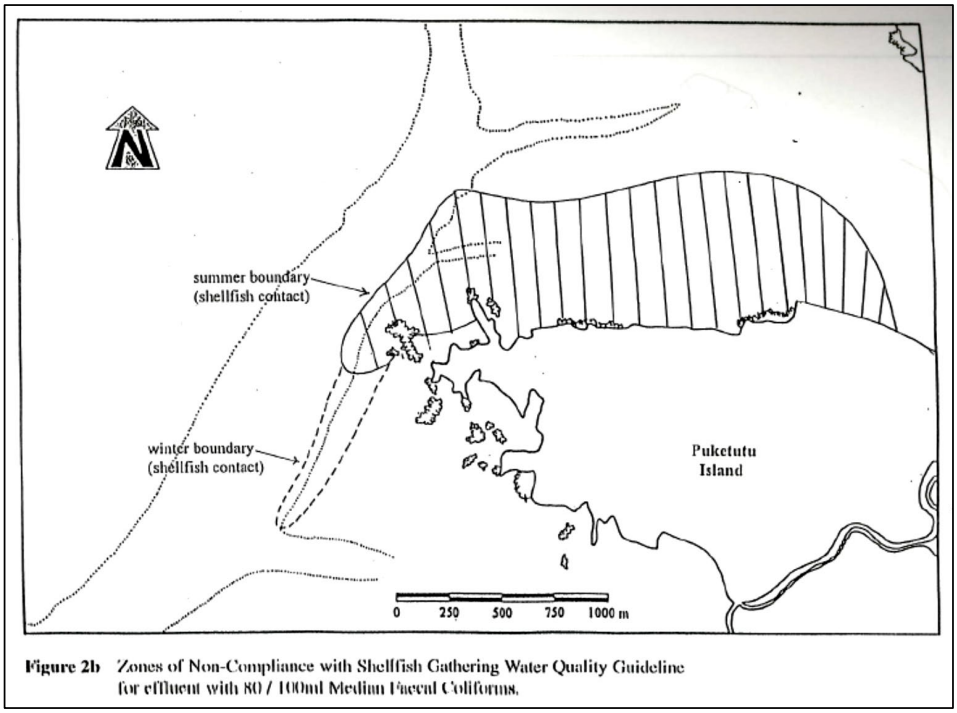


Figure 1: Copy of the NCZ map referred in Consent 30083 condition 17(1). Zones of Non-Compliance with Shellfish Gathering Water Quality Guideline for effluent with 80/100ml Median Faecal Coliforms.

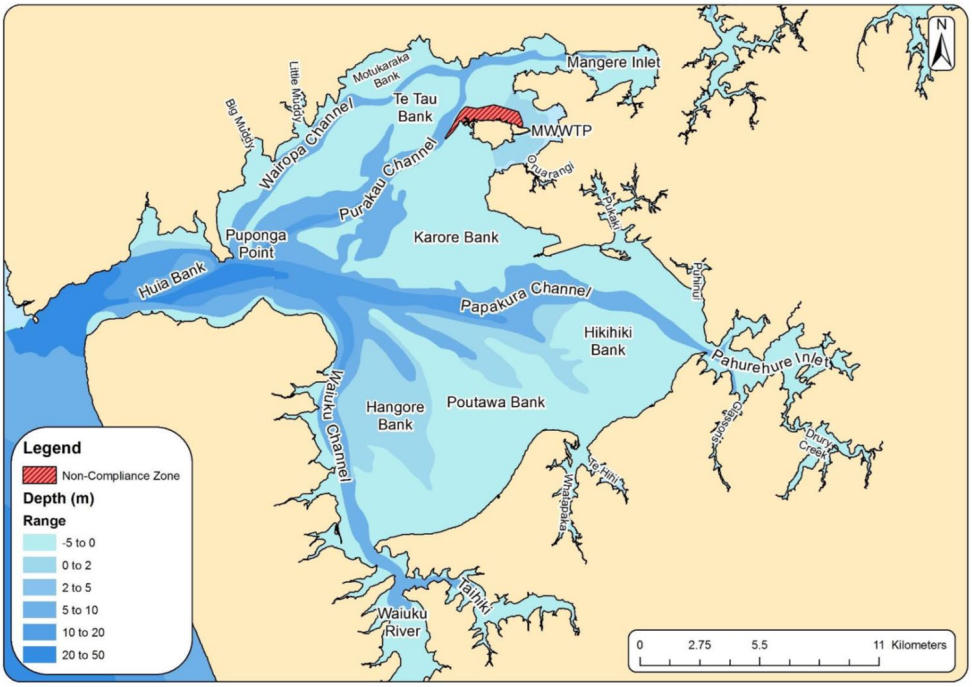


Figure 2: Map showing the NCZ defined in consent 30083 and the wider Manukau Harbour.

Operational performance

Resource consent 30083, which permits discharge from the WWTP to the Manukau Harbour, specifies in condition 12(2) the compliance quality standards that are required to be met and the frequency of sampling. Watercare monitors those parameters at the frequencies required, or greater, and provides the results to Council and external groups on a quarterly basis. In addition, the Council Compliance Officer attends the quarterly Audit Group and CLG meetings to review the WWTP performance. The discharge monitoring results for the last five years, summarised by each month, are presented in **Attachment 3**. As the results show, the WWTP has been fully compliant with the required quality standards over the five-year period, with exception of a non-compliance with total nitrogen and ammonia in December 2023. This issue, which was reported to Council and external groups at the time, was of short duration and resolved following completion of a blower room ventilation upgrade project.

It is further noted that the WWTP discharge performs well below the consent limits in relation to nitrogen and phosphorus levels for the period 2019 to 2024. As shown in Table 1, the loads for total nitrogen ranges between 20% and 57% of the permissible amount and only 14% for dissolved reactive phosphorus.

Given the significant margin between the WWTP's performance and the consent requirements, a review of the discharge standards is unlikely to necessitate improvements to the current operations, as the WWTP is already operating well within the required limits.

Table 1: Comparison of nutrient loads allowed by consent limits versus loads discharged from the Māngere WWTP

Parameter		Consented 30083 discharge limits		Māngere WWTP discharge results 2019-2024		Discharged load in relation to load allowed by consent limits (%)
		Monthly average concentration (g/m^3)	Average load[3] (tonnes/day)	Average concentration (g/m^3)	Average load[4] (tonnes/day)	
Ammonia	Summer[1]	3	1.2	0.9	0.3	25%
	Winter[2]	5	2.0	1.1	0.4	22%
Total Nitrogen	Summer[1]	9.5	3.7	7.1	2.1	57%
	Winter[2]	35	13.7	7.9	2.8	20%
Dissolved Reactive Phosphorus		9	3.5	1.5	0.5	14%
Total Phosphorus		N/A	N/A	1.8	0.6	N/A

Notes:
1. Summer: December to March, inclusive
2. Winter: April to November, inclusive
3. Average consented load: calculated using the consented average concentrations and the consented average daily flow of 390,000 m^3/day.
4. Average discharged load: calculated using weekly loads from 2019 to 2024, which are based on the measured concentrations (daily composites for Ammonia, and 7-day composites tested weekly for TN, DRP and TP) and the total discharged volume over each week.

Regarding long-term trends in nutrient loads associated with the discharge, the WWTP demonstrated positive progress in reducing nutrient discharges between July 2013 and June 2023. Total nitrogen loads decreased slightly by 1.60% annually over this period, while total phosphorus loads saw a more significant annual reduction of 6.57% over the same period. These reductions reflect improvements in the discharge quality over time. Full details on these trends are available in the 2022-23 HEMP report (**Attachment 2**).

It is important to note that the observed reductions in nitrogen and phosphorus in the discharge loads since 2019 are not fully reflected in the harbour hydrodynamic model, as the model used data from prior to 2016 for calibration. According to the model, the WWTP contributes 47% of the total nitrogen and 82% of the total phosphorus entering the harbour. These figures are based on the actual monitoring data from the WWTP and estimated data from 203 rivers and streams in the catchment of Manukau Harbour, for which no monitoring data exists. As NIWA's calibration report explains, the model is not suitable for a quantitative analysis. Other limitations and a detailed discussion on the model are provided in the relevant sections below. Irrespective of the model results, the key consideration for informing the potential requirement for a consent review will relate to the environmental performance.

Environmental performance

The environmental performance of the WWTP is monitored through the HEMP. The purpose of the HEMP is to assess the WWTP's compliance with its resource consent conditions and evaluate the effects of the discharge on various environmental parameters, including water quality, sediment quality, benthic ecology, benthic macroalgae and shellfish contamination. Specifically, the HEMP:

- Tracks changes in nutrient levels (nitrogen and phosphorus), total suspended solids, biological oxygen demand, and other water quality parameters in the harbour;
- Analyses long-term trends in harbour water quality in relation to the WWTP discharge;
- Provides insights into the ecological health of the harbour;
- Recommends future monitoring actions and management measures to mitigate any adverse effects identified; and
- Importantly, the HEMP considers WWTP discharge volume and quality, as well as variations in treatment process unit bypass events.

The most recent HEMP is provided in Attachment 2, with the main findings relevant to this response discussed below:

- Historical trends in water quality indicate a consistent influence on water quality from the WWTP discharge on the north-eastern parts of the harbour. This influence is relatively localised with most parameters returning to near background levels (similar to those found at the harbour entrance)

midway through the Purakau Channel. The water quality in the southwestern and southeastern sections of the harbour (i.e. in Waiuku and Papakura channels) are influenced by their respective catchments.

- Water quality improved over time. The 2022-23 monitoring report detected stable or declining 10-year trends for most parameters across the harbour except for total nitrogen. However, the HEMP report concludes that *"… increasing trends in Total Nitrogen concentrations in Manukau Harbour are inconsistent with stable loads in the Māngere WWTP discharge. This suggests that other inputs are also having a significant influence on harbour concentrations*." The report initially recommended further investigation into this observation. Subsequent analysis has revealed that the observed trends in total nitrogen were not true environmental changes but rather a result of laboratory procedure adjustments[2]. These adjustments corrected a bias that arose from using a freshwater reference method in coastal water samples.
- Chlorophyll-a levels improved over time. The 2022-23 monitoring report detected declining 10-year trends in algal growth (chlorophyll-a) at monitoring location nearest to the WWTP. Longer term data also indicates that a much greater reduction in harbour nitrogen levels occurred after the plant upgrade was commissioned in 2003, and concentrations remain well below previous levels. During the 2022–2023 period, chlorophyll-a levels stayed well below the limit of 0.03 mg/l which was defined by the Harbour Water Quality Task Force (1994) as an indicator of a significant algal blooms.
- The sediment quality results indicate that contaminant concentrations, including cadmium, mercury, copper, lead, and zinc, remain low and within background ranges for the Auckland region, with cadmium and mercury below detection limits. Overall metal concentrations have remained relatively stable across all sites.
- The HEMP found that the benthic ecology of the harbour is characterised by natural spatial and temporal variability, with benthic communities showing multi-year cycles in abundance. Localised differences in benthic communities are observed between sites near the outfall compared with more remote sites. However, those differences are consistent with expectations and there is no indication that the level of adverse effect is increasing, or that the discharge is having a significant adverse effect beyond the mixing zone. In the decommissioned pond sites, communities have stabilised, with any future changes likely constrained by changes in sediment composition.
- Additional monitoring has been carried out to assess nuisance plant growth and verify the accuracy of features identified in aerial photographs of the northern harbour, a practice ongoing since 2016. The most recent findings were reported in the 2020-21 HEMP report. Ground-truthing surveys, which included helicopter observations and underwater video transects, were conducted to confirm the presence and distribution of key biotic features, such as seagrass beds, macroalgae (*Gracilaria* and *Solieria*), and other potential nuisance species like sea lettuce *(Ulva*). This validation process ensures the ecological features mapped in aerial imagery are accurate and aids in tracking and managing nuisance plant growth in the harbour.
- A significant reduction in the nuisance macroalgae was recorded after the 2003 upgrade. In fact, the extent and cover of nuisance macroalgae, specifically *Gracilaria* species, have significantly declined since 2013. The average percent cover of *Gracilaria* in monitoring plots decreased from around 88% to 8% (according to the 2020-21 HEMP report), and it has disappeared from 16 of the original 19 fixed monitoring plots. Conversely, the expansion of seagrass beds, which is generally associated with improving environmental conditions, has been observed in some areas. This suggests that while the WWTP discharge does affect nutrient levels in the harbour, it has not led to a significant corresponding increase in nuisance plant growth over the monitoring period.

Historical trends in water quality

The performance of the WWTP and the overall water quality of the harbour improved significantly following the substantial upgrade when the consent was granted. For instance, Figure 3 demonstrates a

[2] Which is stipulated by New Zealand's National Environmental Monitoring Standards (NEMS).

marked reduction in ammoniacal nitrogen (left) and total phosphorus (right) at the Wairopa monitoring site.

Due to time constraints, we have not conducted a detailed historical analysis of the percentage contributions of nitrogen and phosphorus from the WWTP to the harbour. However, it is worth noting that prior to 2002 WWTP upgrade, contribution of nutrients from the WWTP to the harbour would have been much higher. Regardless of the contribution, the key consideration under the current consent is the ecological effect of these nutrient loads on the harbour. In addition to the relevant HEMP results in the section above we refer to the findings from the Council's State of the Environment Monitoring in the Manukau Harbour (2021) report[3], which states the following:

- **Water quality**: "*Generally, increasing concentrations of nutrients and sediments are considered to infer degrading water quality while decreasing concentrations are considered to be improving. Over the past 30 years (1990 to 2019), we have seen long-term improvements in water quality…*"
- **Marine sediment contamination**: "*Overall, and when compared to the Waitemata, there is a low level of contamination across the Manukau Harbour with 24 of 27 sites assessed in the ERC[4] green category*" and "*Long-term trend analysis of sites in Māngere Inlet indicates that things are improving, with sites showing decreasing levels of contamination for both copper and lead. Trends for zinc are more mixed, however none are occurring at a rate that would be considered ecologically meaningful*."
- **Marine ecology:** "*…Mud content has been low at the open sandflat sites over the last 30 years (less than seven per cent), and the only trends have been decreases. There have also been declining trends in sediment organic content at five of these sites and chlorophyll a concentration at four. As such, neither sedimentation nor nutrient enrichment are likely to be affecting ecological health in the main harbour. Mud content is much higher in the low energy sheltered sites (where land derived sediment settles out of the water column), with nine of these sites having >80 per cent mud content.*

  Long-term cycles in the abundance of several species in the Manukau Harbour have been linked to climatic patterns such as the El Niño Southern Oscillation. Beyond these natural cycles, specific trends have emerged, notably the increase in tuangi (cockles) populations at all sandflat sites since 1987. As cockles play a crucial role in benthic ecosystem functions and are moderately sensitive to sedimentation, suspended sediments, and stormwater contaminants, their increased abundance suggests that the functionality and ecological condition of the sandflats have improved over the monitoring period."

In 2023, NIWA published a report[5] on the monitoring of ocean health, highlighting a "*virtually certain*" decreasing trend in chlorophyll-a concentrations over the two-decade period from 2002 to 2022 in Manukau Harbour. In their report they conclude that this trend indicates a notable improvement in the harbour's ecosystem in this period.

Therefore, in response to the matter raised regarding the NCZ and significant adverse effects, the HEMP, the latest State of the Environment Monitoring Report or the 2023 NIWA study referenced above, have not found evidence of significant adverse effects associated with the WWTP discharge. While localised changes in water quality, and to a lesser extent sediment quality, have been observed, these changes do not result in ecological effects that would warrant a review of the current consent conditions.

[3] https://knowledgeauckland.org.nz/publications/a-synthesis-of-state-of-the-environment-monitoring-in-the-manukau-harbour/
[4] Environmental Response Criteria
[5] https://environment.govt.nz/assets/publications/monitoring-ocean-health.pdf

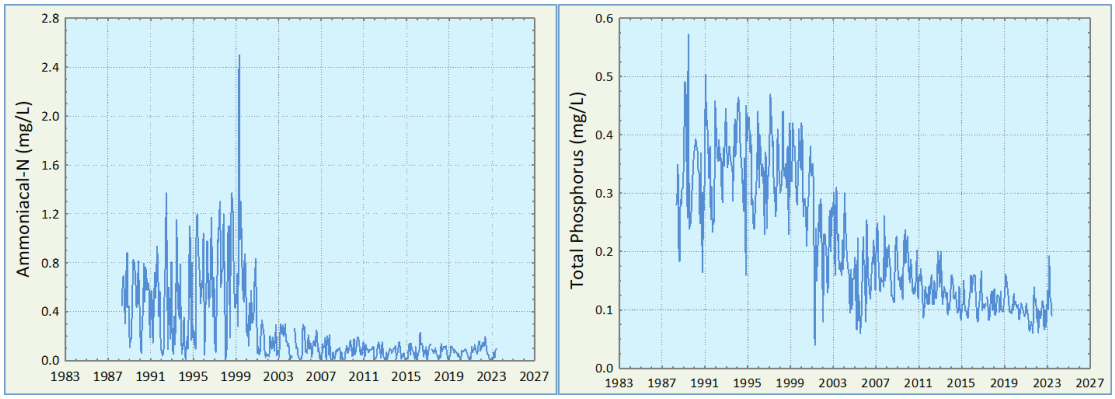


Figure 3: Ammoniacal nitrogen and total phosphorus at Wairopa monitoring station showing historical trends.

Manukau Harbour Hydrodynamic Model

In 2016, Watercare engaged NIWA to develop a hydrodynamic and water quality model of the Manukau Harbour to:

- provide a holistic view of the harbour to better understand the combined impact of all the point sources (stormwater and wastewater) on the harbour water quality; and
- create a tool to enable high-level discharge scenarios to be tested along with the impact of land-based activities on the harbour's health – this will help Watercare make more informed decisions that consider the impact on water quality in the Manukau Harbour.

A technical report was delivered by NIWA in 2023 (provided as **Attachment 4**) on how the model was built and calibrated, its limitations and what application it is suitable for. This report has been shared with the Council, members of Manukau Harbour Forum, and the CLG.

The NIWA report clearly explains that the model is only suitable for studying qualitative and relative patterns, not quantitative prediction of specific parameters. That is due to the intrinsic error that is part of any numerical modelling approach, which arise from (a) the simplification of natural physical phenomena into mathematical equations, and (b) the assumptions made about the physical behaviours of real-world processes.

Some of the assumptions and limitation of the model include:

- *The model over-predicts total nitrogen in the immediate vicinity of the Māngere WWTP outfall, and in Waiuku inlet. (Page 8)*
- *The model over-predicts chlorophyll-a at most stations in the NE of the harbour but under-predicts it elsewhere. (Page 8)*
- *… some detail(s) of implementation of the Māngere outflows or simulated monitoring is incorrect… (Page 74)*
- *Even if the direction of advective flow is 'about right', the model may not be accurately representing near-field dispersive mixing processes. (Page 74)*
- *the model reproduces the qualitative characteristics (presence of seasonal cycles and spatial trends) of all the state-variables used in the calibration adequately. (Page 74)*
- *not unexpectedly, the model is less successful at reproducing the quantitative dynamics of particulate and solute nutrient components other than nitrate (particularly, those of phosphorus). (Page 74)*
- *for total nitrogen, total phosphorus and dissolved reactive phosphorus, performance … at the HWQ40 site (close to Puketutu Island) is markedly different from those at other nearby stations. (Page 74)*
- *More than 210 streams and culverts drain into the harbour, but there are almost no field observations of the nature (flow rates, water quality) of these inputs… … it is not clear how reliable they are at even the annual-scale, let alone seasonal or event- scales. (Page 75)*

NIWA's report also explains that the model is only suitable for large-scale analysis (quadrants or octants, i.e., dividing the harbour into 4 or 8 main parts). Also due to its limitations, it "*may not be accurately representing near-field dispersive mixing processes"*. As such, this model cannot be used for making any conclusions about the changes in the size of the NCZ.

While the model aids in understanding the broader nutrient dynamics in the Manukau Harbour, it does not provide any new insights regarding the environmental performance of the WWTP in relation to the current consent. The existing environmental monitoring framework, including the HEMP, already tracks the WWTP's discharge impact on the harbour's water and sediment quality, benthic ecology, and nutrient levels. As such, the model's qualitative insights complement but do not alter the existing understanding or suggest the need for changes to the current consent conditions.

2. Given the significant operational challenges faced during the unprecedented rainfall events of early 2023, coupled with climate change projections that predict an increase in the frequency and intensity of severe weather events, what specific measures has Watercare implemented or planned to enhance the resilience of its infrastructure and operations?

It is important to note that the term "treatment bypass" does not mean a bypass of the WWTP. All wastewater received at the WWTP passes through the first stage of treatment. Under most flow conditions, wastewater is then treated by all subsequent treatment processes. However, in storm flow conditions, when the flow rate exceeds a determined value, the excess flow bypasses a treatment process unit. All flow is then treated in the final stage of treatment before discharge into the harbour. These partial treatment bypasses are provided for in the consent, which has additional requirements for partially treated bypassed flows such as applying maximum output UV dose and monitoring of shellfish for viruses under certain trigger conditions. An audit of the UV performance and consent requirements in relation to bypasses is undertaken by the DRG annually and their audit report provided to Council.

Irrespective of these partial treatment bypasses, Watercare must always comply with the consent conditions, including the discharge quality. The samples tested for compliance with the consent discharge standards are collected at the shoreline discharge pump structure, which receives all effluent from the WWTP, including any partially treated flows during bypass events, as shown in the flow diagram in Figure 4. The results of this discharge monitoring have already been discussed in the Operational Performance section above and demonstrate the WWTP has been consistently compliant with the consent limits over the past five years. This includes the period of unprecedented rainfall events in early 2023, when all discharge quality standards were met.

Despite the increased inflow volumes in 2022 and 2023, the overall volume of partially treated effluent bypass was only around 2% or less of the total volume discharged, as shown in Table 2. This means that, even in a year of unprecedented weather events such as 2023, around 98% of all flows to the WWTP are still fully treated. Furthermore, the additional inflow to the WWTP during rainfall events are due to additional stormwater and groundwater entering the network system, not additional wastewater. This means that partial treatment bypass flows have a large degree of dilution from groundwater and stormwater, the latter of which would ultimately end up in waterways and the harbours whether through the WWTP or not.

In relation to concerns about climate change and an increase in severe rainfall events such as the Auckland Anniversary Floods in 2023, it is noted that NIWA described that event as at least a 1-in-200-year event[6]. While the possibility of similar events occurring before reconsenting cannot be ruled out, it is anticipated that climate change-related issues will be addressed during the reconsenting process. As such, in our view these concerns do not justify an early review of the current consent conditions.

[6] "Auckland suffers wettest month in history". NIWA. 2 February 2023. Retrieved 24 October 2024.

Table 2: Total discharged volumes and partial treatment bypass volumes

Year	Total discharged volume (m^3)	Partial treatment bypass volume (m^3)	% of partially treated effluent in relation to total discharge volume
2019	117,911,089	693,490	0.6%
2020	109,954,348	548,491	0.5%
2021	113,502,147	398,103	0.4%
2022	131,111,925	2,262,475	1.7%
2023	143,442,740	3,020,634	2.1%
2024 (up to 30 June)	59,259,290	557,013	0.9%
Total 2019-2024	675,181,538	7,480,206	1.1%

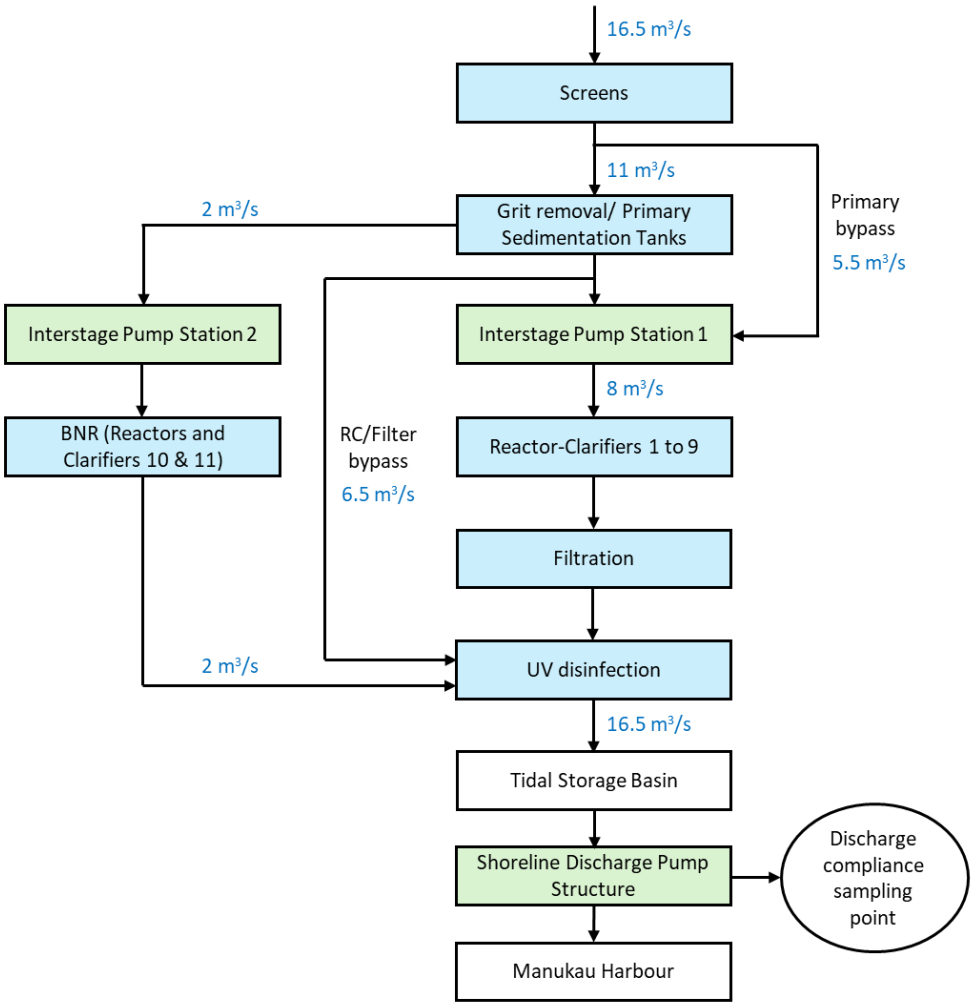


Figure 4: Simplified Māngere WWTP liquid stream process flows.

3. With the impending commissioning of the Central Interceptor in 2026, does this provide an opportunity for Watercare to reassess effluent quality standards, given that there is more control over stormwater flows to the treatment plant

The Central Interceptor has been designed and will be operated in a manner that ensures compliance with condition 11(1), specifically, limiting the maximum inflow to the WWTP to 1,209,600 cubic metres per day.

The Māngere Pump Station (**MPS**), which pumps flows from the CI tunnel to the WWTP, will be managed to prevent exceeding an instantaneous inflow rate of 14 m^3/s, equivalent to 1,209,600 m^3 over a 24-hour period. This will be accomplished through interlocked controls that continuously monitor the total inflow and adjust the MPS pumping rate as needed to ensure it stays below the 14 m^3/s level.

While the Central Interceptor will provide greater control of wastewater and combined wastewater/ stormwater flows to the WWTP, the reduction in overflows across the network will result in more wastewater and combined flows captured and conveyed to the WWTP. Upgrade projects are being implemented at the WWTP to ensure there is sufficient treatment process capacity to continue to meet effluent quality standards. These are being planned for implementation in stages over the next eight years and consider effluent quality standards and the projected increase in inflows, through population growth and delivery of projects.

It is Watercare's view that reassessing the effluent quality standards would compromise WWTP upgrades currently being planned, run contrary to the outcomes being worked towards through the delivery of CI and other wastewater projects, and conflict with the Central Interceptor Network Discharge Consent and Wastewater Network Discharge Consent, all of which are focused on the reduction of network overflows while maintaining compliance at the WWTP through the capture, conveyance and treatment of wastewater and combined flows.

4. Has Watercare explored emerging technologies, innovative treatment processes, and advanced management practices that could enhance effluent quality and contribute to the long-term ecological restoration of the Manukau Harbour?

In 2018, Watercare has established an inhouse technology innovation team whose focus is assessing, piloting and demonstrating new and emerging technologies aimed at reducing the carbon footprint, operational efficiency and effluent quality outputs from Watercare's wastewater treatment plants.

In 2018, we also commissioned the new biological nutrient removal reactors (BNR) at Māngere WWTP. This process upgrade increased peak flow capacity of secondary treatment by an additional 2 m3/s (Figure 4). The upgrade has also improved nitrogen removal performance of the treatment plant under normal flow conditions.

The Watercare innovation team has been actively exploring new technologies to increase the flow treated through the WWTP secondary process, aiming to exceed the consented minimum of 9 m^3/s and reduce the occurrence of treatment process bypass events in the future. As part of this effort, we have invested in a full-scale technology trial that has been running for approximately two years. This trial is the first of its kind in the southern hemisphere and globally on a four-pass step feed activated sludge system, such as the one used at the WWTP. The results have shown that the technology is robust, requires minimal maintenance, and significantly improves sludge settlement rates, allowing for a 30-40% increase in the hydraulic capacity of reactor clarifiers. Importantly, this can be achieved without major civil works, no increase in plant footprint, and with only minimal modifications to the existing reactors. We include a paper detailing these results in **Attachment 5.**

One of the primary objectives of this trial was to demonstrate that higher flows could be treated using our existing infrastructure while maintaining compliance with the summer monthly maximum ammonia nitrogen concentration of 6 mgN/L in the plant discharge.

Additionally, the innovation team, in collaboration with Auckland University and the University of Queensland, has conducted a series of pilot and demonstration trials to explore new technologies for

enhanced nitrogen removal. These technologies are being considered as part of ongoing planning studies for the WWTP, focusing on future discharge consent requirements in case further improvements in nutrient discharge are needed. Technologies such as the Membrane Aerated Bioreactor (**MABR**) have already been successfully implemented at some of our smaller treatment plants, proving to be effective, low-energy alternatives for nitrogen reduction.

Given the consistent technological advancements and improvements at the WWTP since the current consent was granted, as well as the ongoing exploration of innovative treatment technologies, we consider there is no immediate need for a review of the consent. Watercare has demonstrated a commitment to improving operational efficiency, effluent quality, and environmental outcomes through both existing upgrades and future plans. Any additional technical assessments or reviews will be addressed as part of the reconsenting process, ensuring that the plant continues to meet evolving environmental standards.

Our final comments

In this response, we have demonstrated that the WWTP is operating well within its consented limits, consistently meeting discharge quality standards, and that significant improvements have been made over time through technological advancements and upgrades.

Additionally, any issues relating to the WWTP's effects on the harbour, including concerns about nutrient levels, resilience to extreme weather events, and the adoption of emerging technologies, have been discussed. We consider this response demonstrates our commitment to continuously improving operational performance.

Given the consistent level of compliance and ongoing improvements since the consent was granted, along with planned upgrades and robust monitoring, we believe there is no justification for a review of consent conditions at this time. We note that if a review was required this would essentially result in similar resources, effort and cost as a reconsenting process. With the consent expiring in 2032 and the reconsenting process starting well ahead of that date, this does not seem appropriate.

Your letter encourages us to engage directly with the MHRS. As noted above, the MHRS are part of the CLG and therefore are recipients of all reports relating to the operation of the Manukau WWTP and wider monitoring of the harbour. The MHRS has also presented to the Watercare Board three times over the last 12 months. They know our door is always open and they are welcome to approach our subject matter experts for further information or attend our Board meetings to address the Board and executive team.

Next steps

Due to the limited time available to respond to this information request, we have not been able to provide the full response we would have liked to have submitted. Accordingly, we focussed our efforts on the specific issues that have been raised by Council. As in 2014, Watercare's position is that the WWTP discharge has demonstrated a high level of compliance and as independent expert reviews have not identified any issues of concern, there is no justification for a review of discharge consent conditions.

If this response does not satisfy the concerns Council has, we would appreciate the opportunity, and adequate time, to submit a full response.

Yours sincerely

Mark Bourne | Chief Operations Officer
Watercare Services Limited

Attachment 3

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23 October 2024

Jeanette MacDonald
Harper Spurway
David Spurway
Manukau Harbour Restoration Society Inc.

Via email

Dear Jeanette, Harper and David

WATERCARE BOARD PRESENTATION

Thank you for your time and presentation to our Board of Directors on Tuesday, 15 October 2024.

Your presentation covered a variety of topics, all related to the Manukau Harbour, but in summary, you wanted the Board and Management to commit to improving intergenerational thinking, communications with the community, and our community focus.

Our response to your presentation

I asked our Watercare subject matter experts to address each of the points in your presentation, and their response is set out in **Appendix A**.

We realise that your society is disappointed that Watercare's hydrodynamic model has not yet been widely distributed. However, based on recent collaboration between Healthy Waters and Watercare, we have agreed to reset Watercare's approach to using our (NIWA) model. It is important that there is a consistent, holistic and deliberate approach to ensure that we have a robust and well tested model, that will provide the best possible understanding of the Manukau Harbour and the inputs that influence water quality, including from the Mangere Wastewater Treatment Plant.

We have met with Healthy Waters to discuss how we can work together to progress information from the Watercare model with a focus on the more advanced technology of the advanced Healthy Waters model, the latter of which is more easily interpreted and presented to the public. Please be assured we will remain transparent and will not lose any of the information that has so far been reported by NIWA.

It was great that Harper was able to attend the meeting and for you to share the results of her studies. As you will have seen, Watercare has been working on a Youth Summit and Hackathon for rangatahi aged 14 to 18 years old. I understand that you have subsequently made contact with Moana Williams in our stakeholder team, who can provide further opportunities for Harper to get involved in such events.

Our team looks forward to continuing to work with you and the Manukau Harbour Restoration society via the Community Liaison Group. Our door is always open, and you are welcome to attend future public board meetings to present, or reach out to our subject matter experts if you have any specific questions regarding Watercare's operations around the Manukau Harbour.

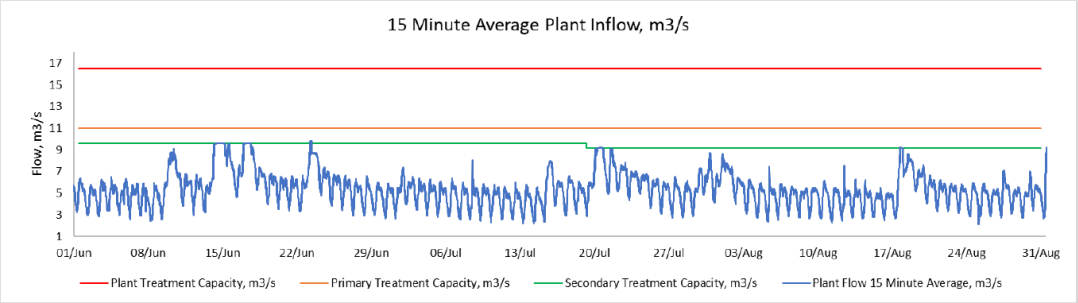
Yours sincerely

Geoff Hunt
Chair
Watercare Services Limited

Appendix A

1. Treatment bypasses

It is important that we all have a common understanding of the term "treatment bypass". This is not a bypass of the wastewater treatment plant. All wastewater received at the wastewater treatment plant passes through the first stage of treatment. Under most flow conditions, wastewater is then treated by all subsequent treatment processes. However, in storm flow conditions, when the flow rate exceeds a determined value, the excess flow bypasses a treatment process unit. All flow is then treated in the final stage of treatment before discharge into the harbour. Importantly, irrespective of these treatment bypasses, Watercare must always comply with the consent conditions.



The above graph shows the inflow into the plant for the period 1 June to 31 August 2024. During these winter months this inflow was above the reactor clarifier filter capacity on five occasions. The final effluent quality for the same period is provided on the table below. At all times the plant remained complaint with consent conditions.

PARAMETER	Jun-24	Jul-24	Aug-24		COMPLIANCE
					MONTHLY MEAN
BOD (g/m^3)	3.3	2.7	2.4	<	15
NFR (g/m^3)	4.8	5.5	4.4	<	15
Total Petroleum Hydrocarbon (g/m^3)	0.3	0.3	0.3	<	0.5
Ammoniacal Nitrogen (g/m^3)	1.0	0.7	0.8	<	5[(a)]
Total Nitrogen (g/m^3)	8.2	7.8	7.8	<	35[(b)]
Reactive Phosphorus (g/m^3)	1.5	1.3	1.1	<	9
Dissolved Oxygen, %saturation	86%	88%	91%	>	80%
					MONTHLY MAXIMUM
BOD (g/m^3)	19.0	8.6	9.3	<	50
pH	7.5	7.4	7.7	<	9
Ammoniacal Nitrogen (g/m^3)	4.8	2.6	3.5	<	15[(a)]
					MONTHLY MINIMUM
pH	6.9	7.0	7.1	>	6.5
					95%TILE OVER THREE DISCRETE MONTHS
BOD (g/m^3)		6.3		<	30
NFR (g/m^3)		9.4		<	30
					MONTHLY % UV MEASUREMENT
UV Dose Applied % Measurement	100.00%	99.99%	99.30%	>	99.00

Notes: (a) Ammoniacal Nitrogen limits for the period of April-November inclusive. For December-March inclusive, the limits are 3 g/m^3 for monthly mean and 6 g/m^3 for monthly maximum. (b) Total Nitrogen limit for the period of April-November inclusive. For December-March inclusive, the limit is 9.5 g/m^3.

Monitoring of the discharge and the Manukau Harbour is fully transparent and includes a high level of disclosure; probably more so than any other wastewater discharge in New Zealand.

The resource consent, which permits the discharge to the Manukau Harbour, specifies the compliance standards that are required to be met and the frequency of sampling. In addition to the regulatory compliance functions undertaken by Auckland Council, the resource consents for the wastewater treatment plant also established a number of independent groups to monitor the plant's performance. These include:

a) Audit Group

This group consists of independent experts in the field of wastewater treatment, plant design, operation, chemistry and marine water quality, air quality and iwi issues. The membership of the group is approved by Auckland Council.

The Audit Group's role is to provide independent expert advice to the Auckland Council, Watercare, and the Community Liaison Group. It reviews treatment plant performance, compliance with consent conditions environmental monitoring, public health and Mana Whenua concerns. The Audit Group meets quarterly and has done so since 1998. The Audit Group produces an annual report to the Auckland Council.

b) Disinfection Review Group

This group consists of internationally recognised experts in the field of microbial inactivation via disinfection and environmental virology. Their role is to review the operation of the UV disinfection facility at the plant.

c) Microbiological Review Group

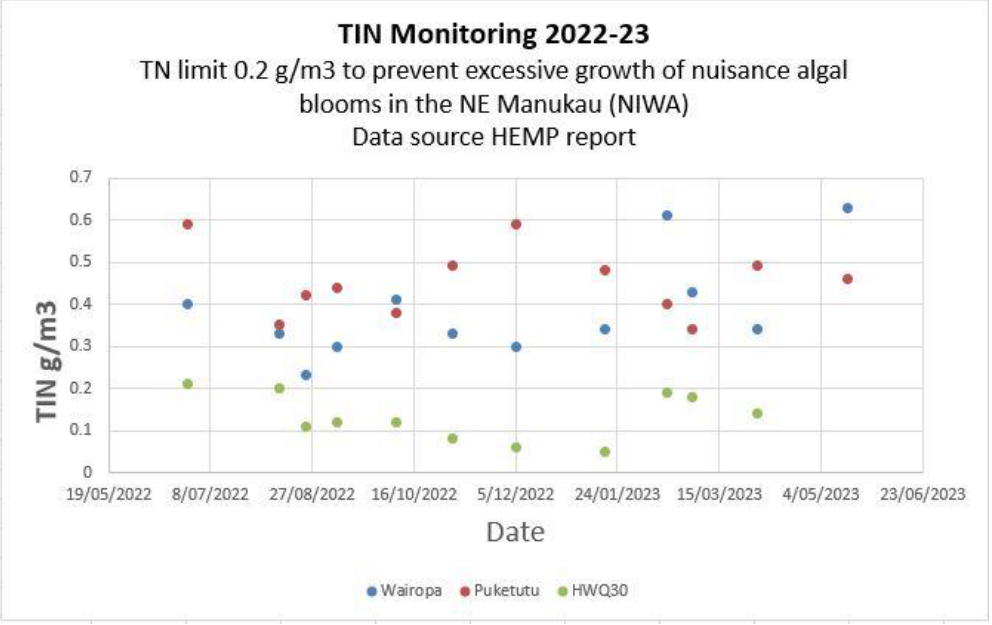
This group consists of internationally recognised experts in the field of microbiology, environmental virology, public health and wastewater treatment. Their role is to review the operation of the plant in relation to the discharge of pathogens to the environment; and the accumulation and re-suspension of effluent derived pathogenic micro-organisms from sediments.

None of the reports from the independent groups have raised any matters of ongoing concern.

d) Community Liaison Group

This group consists of representatives from a number of local community interest groups including the Māngere Residents and Ratepayers' Association, Forest and Bird, other environmental groups, Mana Whenua, interested members of the public and neighbouring industry stakeholders. The group's role is to facilitate communication between the community, Watercare and Auckland Council. The group reviews, amongst other matters, any complaints received and compliance with consent conditions. The group meets quarterly and has done so for the last 20 years. The Auckland Council Compliance Officer attends the meetings. As a member of this group, you have access to all compliance reports and all harbour environmental monitoring programmes and direct access to the authors of these reports when they are presented. As noted above, one of the roles of the Audit Group is to provide independent expert advice to the Community Liaison Group.

2. Total Inorganic Nitrogen (TIN) Monitoring by NIWA in the NE Manukau Harbour



The 2022-23 monitoring report detected declining 10-year trends, TIN levels were higher in the north-eastern part of the harbour near the treatment plant but decreased quickly as you moved west. The locations of Wairopa, Puketutu and HWQ30 monitoring sites are indicated in the figure below. To the mid-section of Purakau Channel, TIN levels returned to normal, similar to those found at the harbour entrance. In the southern areas of the harbour, TIN levels were generally low.

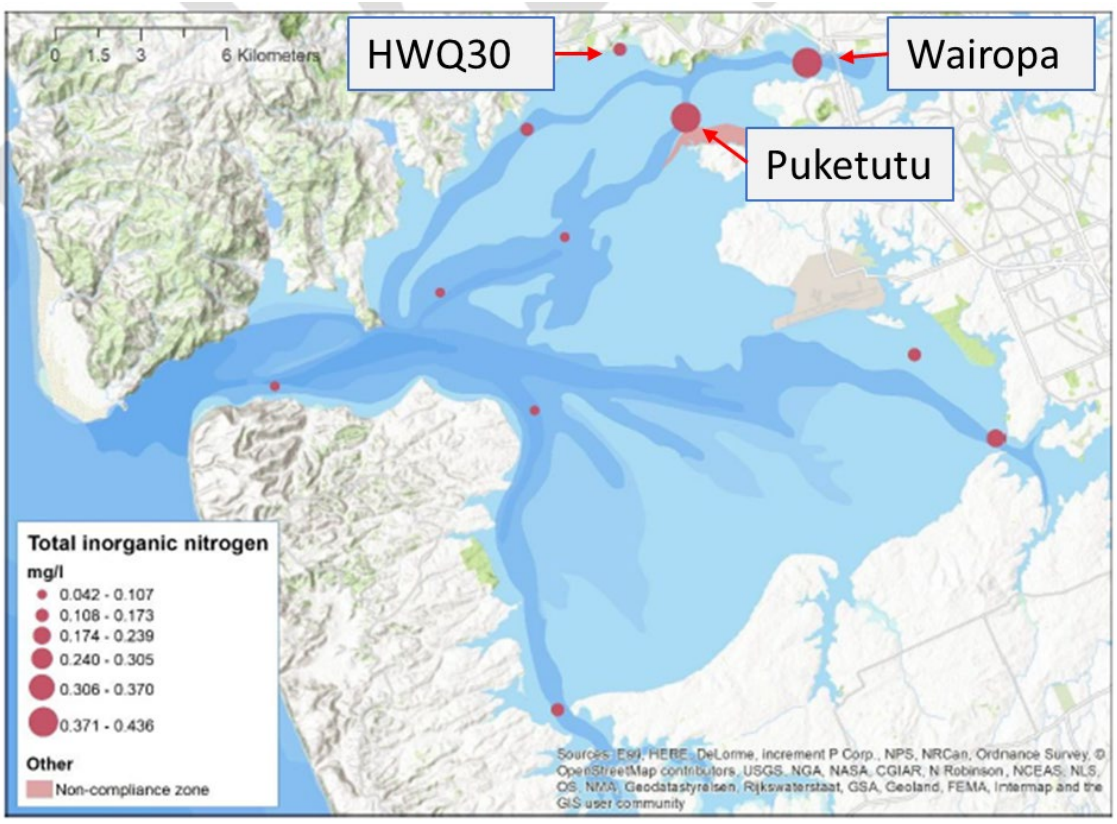
Although TIN levels are higher near the plant, the broader monitoring data shows that the wastewater treatment plant (WWTP) is not significantly contributing to nuisance algal blooms at these locations for a few reasons:

- The 2022-23 monitoring report detected declining 10-year trends in algal growth (chlorophyll a) at the Wairopa and Puketutu monitoring sites. Longer term data also indicates that a much greater reduction in harbour nitrogen levels occurred after the plant upgrade was commissioned in 2003, and concentrations remain well below previous levels. During the 2022–2023 period, chlorophyll a levels stayed well below the limit of 0.03 mg/l which was defined by the Harbour Water Quality Task Force (1994) as an indicator of a significant algal blooms.

- Additional monitoring is conducted to assess nuisance plant growth and verify the accuracy of features identified in the aerial photographs of the northern Harbour (since 2016). Through ground-truthing surveys, which included helicopter observations and underwater video transects, the monitoring aimed to confirm the presence and distribution of key biotic features such as seagrass beds, macroalgae (*Gracilaria* and *Solieria*), and other potential nuisance plants like sea lettuce (Ulva). This process helps validate the mapping of ecological features in the aerial imagery and supports efforts to track and manage the growth of nuisance plants in the harbour.

- A significant reduction in the nuisance macroalgae was recorded after the 2003 upgrade. In fact, the extent and cover of nuisance macroalgae, specifically *Gracilaria* species, have significantly declined since 2013. The average percent cover of *Gracilaria* in monitoring plots decreased from around 88% to

8% (according to the 2020-21 HEMP report), and it has disappeared from 16 of the original 19 fixed monitoring plots. Conversely, the expansion of seagrass beds, which is generally associated with improving environmental conditions, has been observed in some areas. This suggests that while the WWTP discharge does affect nutrient levels in the harbour, it has not led to a corresponding increase in nuisance plant growth over monitoring period. The latest results of the 2023-24 will be shared with the community once available.



Trends in discharge quality into the Manukau Harbour

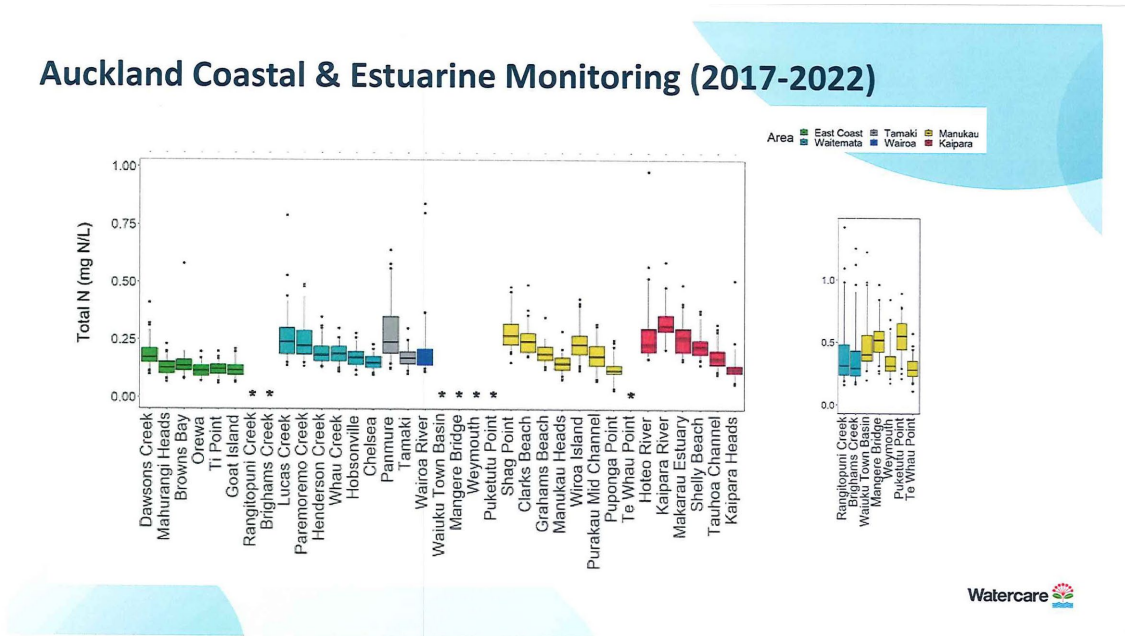
Trends in discharge quality (2013 to 2023)

Table 2: Seasonal Kendall test results and Sen slope estimates derived from total monthly discharge volumes and loads. Statistically significant trends are shown in red.

Variable	Annual change (% of median)
Volume (m^3)	0.80
Nitrate-nitrite-N load (t)	-3.77
Ammonia-N load (t)	3.08
Total nitrogen load (t)	-1.60
Soluble phosphorus load (t)	-8.19
Total phosphorus load (t)	-6.57
Total BOD_5 load (t)	3.23
TSS load (t)	3.15

Watercare

In reference to the above table, all variables under "Trends in Discharge Quality 2013–2023" have been comprehensively addressed in the Māngere Harbour Environmental Monitoring Programme (HEMP) report. The HEMP report has been distributed to the Community Liaison Group (CLG). During the recent CLG meeting, the presentation focused primarily on long-term nutrient trends, particularly nitrate - nitrite nitrogen and phosphorus, and their influence on the harbour's water quality. It highlighted significant trends in these nutrients and examined their relationships with key water quality parameters, including chlorophyll a concentrations and dissolved oxygen levels. This focus on nutrient trends was in response to concerns raised in previous CLG meetings about nutrient enrichment in the harbour. Additionally, the presentation provided context by comparing nutrient levels, salinity, chlorophyll a, and benthic biodiversity in the Manukau Harbour with those in other harbours across the Auckland Region.



Total nitrogen (TN), as shown in the above figure was used in the presentation to the CLG to provide a broader context for comparing the water quality of Manukau Harbour against other harbours in the Auckland region. By highlighting TN levels, the presentation aimed to illustrate how nutrient concentrations, particularly nitrogen, in the Manukau Harbour compare with those of other monitored sites. This comparison helps to understand the water quality of the Manukau Harbour in relation to other harbours not associated with treated effluent discharge. The graph used in the presentation was sourced from the publicly available Coastal and Estuarine Water Quality in Tāmaki Makaurau / Auckland 2021-2022 Annual Data Report, offering a transparent view of how nitrogen levels vary across different coastal and estuarine environments in Auckland.

The Manukau Harbour Hydrodynamic Model

The Māngere Wastewater Treatment Plant (**WWTP**) and the water discharged from this facility to the Manukau Harbour, are a critical part of Auckland's wastewater servicing and are essential to Auckland's future success and prosperity.

Watercare, in recognising the importance of this facility and the need to focus on the health and wellbeing of the Manukau Harbour, have sought to develop a hydrodynamic model to:

- provide a holistic view of the harbour to better understand the combined impact of all the point sources (stormwater and wastewater) on the harbour water quality; and
- create a tool to enable high-level discharge scenarios to be tested along with the impact of land-based activities on the harbour's health – this will help us make more informed decisions that consider the impact on water quality in the Manukau Harbour.

History of the Hydrodynamic Model

In 2016, Watercare engaged NIWA to develop a hydrodynamic and water quality model of the Manukau Harbour. At the time when this project commenced, the tools and background data available were very limited, particularly given the highly ambitious output expectations. Modelling the processes in the Harbour proved to be much more difficult and challenging than originally anticipated. This all caused several years of delay in building and delivering the model.

In 2021, building on their catchment modelling tool, Healthy Waters commenced the construction of hydrodynamic models for all Auckland harbours, including the Manukau. Healthy Waters engaged Danish Hydraulic Institute (**DHI**) for all their modelling, which enabled better efficiency and interconnectivity between their various catchment and harbour models across Auckland. Information from the Watercare model, in particular the monitoring data sets was used for validation of the Healthy Waters model.

The following are some key differences between the Watercare and the Healthy Waters models:

	Key Model Outputs	**Contaminant Load Simulation Basis**	**Model Interface**
DHI Model (Healthy Waters)	Simulates movement of water (hydrodynamic) and contaminants in the harbour. Contaminants can be traced back to the catchment from which they originate.	Uses Auckland Council's Freshwater Management Tool (FWMT), which can model land-based contaminants at a 15-minute interval resolution.	Offers a user interface (UI) that allows running scenarios and visualising flows and circulation of contaminants within the harbour in real time.
NIWA Model (Watercare)	In addition to the hydrodynamic and water quality, it includes additional complexity as it simulates the impact of nutrients and other environmental factors on the microorganisms, allowing prediction of algal blooms.	Uses the CLUES catchment model that is developed by NIWA. It uses annual load and distributes it across the catchment based on daily rain profile. This approach has a higher level of uncertainty compared with AC FWMT.	Initially intended to have an externally accessible user interface, however, the model complexity has prevented this functionality. The model can only be run on high-performance computers by NIWA experts with the technical modelling knowledge and ability to interpret the outputs.

Based on recent collaboration between Healthy Waters and Watercare, we have agreed to reset Watercare's approach to using our (NIWA) model. It is important that there is a consistent, holistic and deliberate approach to ensure that we have a robust and well tested model, that we can continue to develop that will provide the best possible understanding of the Manukau Harbour and the inputs that influence water quality.

Given the complexities of Watercare's model, and the opportunity to combine outputs with Healthy Waters for more easily interpreted outcomes, it is prudent that we reset our approach and work towards the delivery of one model. We remain transparent and will continue to work collaboratively with Auckland Council to confirm the best way forward to achieve the Manukau Harbour environmental outcomes set out by the Council.

The Initial Output of the NIWA Hydrodynamic Model

The model shows that a large proportion of the nutrients entering the harbour come from Māngere WWTP, which is in line with Watercare's Harbour Environmental Monitoring and Auckland Council's State of the Environment reporting. The model's calibration report states that:

"*the Māngere WWTP is (by far) the largest individual sources of water and nutrients to the harbour, providing approximately 17%, 47% and 82% of the total water, nitrogen and phosphorus loads respectively.*"

This statement is based on total load entering into the harbour over 7 years (2009-2016).

Our harbour environmental monitoring report in 2022 indicates that "*… increasing trends in Total Nitrogen concentrations in Manukau Harbour are inconsistent with stable loads in the Māngere WWTP discharge. This suggests that other inputs are also having a significant influence on harbour concentrations*."

NIWA's report also goes on to highlight that the sources contributing nutrients shift significantly during wet seasons, as nutrient-rich stormwater increases, particularly in the eastern and southern reaches of the harbour.

Board meeting | 5 November 2024
Public session

Good Employer Policy – update

For approval

Te pou whenua tuhinga / Document ownership

Prepared by
Kirsty Cels
Head of People Partnering

Recommended by
Sarah Phillips
Chief People Officer

Submitted by
Dave Chambers
Chief Executive Officer

1. Te tūtohunga / Recommendation

We recommend that the Board approves the updated Good Employer Policy (the Policy).

2. Whāinga / Purpose

The purpose of this Policy is to ensure that Watercare meets our legal obligations as an employer under Section 59 of the Local Government Act 2002 (the Act), and that our policies, programmes, and practices promote values of equity and fairness.

3. Kōrero pitopito / The details

Minor changes have been made to the Policy to reflect our new company values and ensure a greater commitment to Māori, pay gap reporting, and Diversity and Inclusion.

Attachment 1 is the updated Policy, with changes highlighted in green.

4. Ngā whakaaweawe ki a Watercare / Impact on Watercare

This policy:

- provides a policy framework to ensure we meet our statutory obligations
- creates a working environment that promotes our values and focus on Diversity and Inclusion
- supports an engaged and empowered team
- promotes us as an employer of choice by promoting a culture of equity and fairness
- protects staff so that they are healthy, safe and well
- builds internal and external customer trust and value.

5. Ā muri ake nei / Next steps

Once Board approval is confirmed, this policy will be updated on the Controlled Documents Hub and staff will be notified.

6. Te whakapiringa / Attachment

Attachment number	Description
1.	Draft Good Employer Policy with the changes highlighted in green.

Attachment 1

Good employer policy

November 2024

1. Overview and scope

The purpose of this Policy is to ensure that Watercare ~~not only~~ meets our legal obligations as an employer under Section 59 of the Local Government Act 2002 (the Act), and that our policies, programmes, and practices promote our company values of *Manaakitanga / We care*, *Kotahitanga / We work together* and reflect our commitment to equity and fairness.

2. Application of Policy

This Good Employer Policy covers all employees (which includes staff members and contractors) who work for Watercare and its related companies (*including all divisions, business units and subsidiaries*).

3. Principles of a Good Employer Policy

Watercare's Good Employer Policy and associated policies and practices are based on the following principles:

3.1 Fair treatment for all

At all times we maintain a workplace that is free of discrimination whilst demonstrating zero-tolerance for all forms of bullying and harassment. We foster a positive climate in the workplace which celebrates diversity and encourages and supports all employees to access development opportunities.

We provide clear expectations around integrity, conduct, and concern for public interests. We provide clear performance expectations and transparency in assessment of performance and feedback and access to opportunities.

3.2 Good and safe working conditions

We provide good and safe working conditions and take a proactive approach to employee health, safety, and well-being. We create an environment that supports and encourages employee participation in health, safety and environmental initiatives.

We ensure our culture and practices enable employees to maintain proper standards of integrity, conduct, and concern for the public interest.

3.3 Equal employment opportunities

We value diversity and provide an equitable approach to recruiting and developing all employees. We ensure our processes and practices maximise the use of skills and unique strengths of all employees. We recruit on the basis of merit and build inclusive systems and structures that promote equal opportunities in the workplace taking into account the perspectives and experiences of all people.

3.4 Fair recruitment and selection

We ensure impartial selection of suitably qualified kaimahi for appointment based on job requirements, giving preference to the person who is best suited to the position.

We ensure no bias or barriers exist to employ the best person for the job.

3.5 Fair remuneration and reward

We provide a remuneration framework that reflects the skills and experience required to attract employees. We ensure a remuneration system that is equitable, transparent and gender neutral providing equal access to job opportunities, conditions, development opportunities, and further advancement.

3.6 Leadership and culture

We provide a positive organisational culture of accountability and leadership with a clear vision and one where people are valued. We promote open communication with employees and their representatives, respecting a wide range of views and providing opportunities to engage and participate in organisational decisions.

We recognise the aims and aspirations of Māori and the need for greater involvement of Māori in local government employment and the water industry. We recognise the importance of Te Ao Māori and tikanga in decision making and practices.

Watercare reserves the right to review, amend or add to this Policy at any time upon reasonable notice to its staff members.

This Policy has been reviewed and approved by the Board in November 2024. It will next be reviewed in November 2026.

4. Approval

Policy Number: PC-010-POL-007	Introduction date: May 2018
Approved for issue by: Board	Last Revision: November 2022
Revision approved by: Board	This revision date: November 2024
Application: All Staff	Issue Method: Controlled Document Hub

		Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
Meetings	Board	15-Oct	5-Nov (Statutory Public Meeting)	12-Dec		26-Feb	25-Mar	29-Apr	27-May	25-Jun 18-Jun (Board Strategy Session)	29-Jul	26-Aug	30-Sep	28-Oct	25 Nov 19 Nov (Board Strategy Session)	11-Dec
	Audit and Risk Committee		19-Nov			11-Feb			21-May			14 Aug 28 Aug			24-Nov	
	Asset Management Committee		20-Nov			26-Feb		30-Apr			2-Jul	27-Aug		29-Oct		10-Dec
	Capital Finance Committee	9-Oct 24-Oct	6-Nov 21-Nov 26-Nov	11-Dec	22-Jan	5-Feb 20 Feb	5 Mar 20 Mar	2 Apr 16 Apr	7 May 21 May	5 Jun 17 Jun	3 Jul 16 Jul 30 Jul	14 Aug 27 Aug	10 Sep 24 Sep	8 Oct 29 Oct	5 Nov 18 Nov	3 Dec 17 Dec
Running the Business	Financial			Auckland Council Draft Annual Plan - approve Watercare input		Approve half year accounts Approve long term financials for Auckland Council modelling	Q2 forecast information	Approve financials for Draft SOI including projected 25/26 price increases		Board approval of insurance proposal Board approval of 2025/2026 Budget and updated SOI Financials	Auckland Council and Watercare to review 30 June Treasury Interest rates	Approve Auckland Council Reporting Pack (via an out-of cycle resolution)	Approve 2024/235 accounts Delegate final sign off of Annual Report 2025		Auckland Council Draft Annual Plan - approve Watercare input	
	Statement of intent		2023/2024 SOI Results to be presented to Board at Public Meeting. Public deputations to be received Q1 (FY25) Performance Report due to Council by 8 November 2024	2025/26 Letter of Expectations to be received		Q2 Performance Report - due to Council by 28 February 2025	Draft 2025-2028 SOI for Board's approval - to be sent to Council on or before 1 April 2025	Q3 Performance Report - due to Council by 28 April 2025		Present shareholder SOI Feedback at public meeting. Public deputations to be received	Final submission of 2025-2028 SOI to Council on or before 31 July 2025	Final 2025-2028 SOI adopted by Auckland Council Q4 Performance Report - due to Council by 29 August 2025		Q1 (FY26) Performance Report due to Council by date TBC	2024/2025 SOI Results to be presented to Board at Public Meeting. Public deputations to be received	2026/27 Letter of Expectations to be received
	Community and Stakeholder Relationships	Stakeholder	Iwi	Stakeholder Progress update from Infrastructure, Operations and Customer teams on the recommendations of the Citizens' Assembly		Iwi	Stakeholder	Iwi Progress update from Infrastructure, Operations and Customer teams on the recommendations of the Citizens' Assembly	Stakeholder	Iwi	Stakeholder	Iwi	Stakeholder	Iwi	Stakeholder	Iwi
	Governance	Conflicts of Interests Policy Update on Auckland flood recovery Waikato WTP site visit, Councillors have been invited Legal Training Session	Enterprise Risk Report Good Employer Policy update Q1 Statutory compliance Policy update Māngere Wastewater Treatment Plant site visit, Councillors have been invited.	Board delegations to the CE Policy		Enterprise Risk Report Q2 Statutory compliance Policy update Update on Auckland flood recovery		Enterprise Risk Report Policy update Update on Auckland flood recovery	Q3 Statutory compliance	Update on Auckland flood recovery Policy update		Enterprise Risk Report Q4 Statutory compliance Update on Auckland flood recovery	Policy update	Update on Auckland flood recovery	Enterprise Risk Report Good Employer Policy update Q1 Statutory compliance Policy update	Update on Auckland flood recovery Board delegations to the CE Policy
	Parakia	Frederik Cornu	Graham Darlow	Geoff Hunt		Julian Smith	Andrew Clark	Frederik Cornu	Graham Darlow	Geoff Hunt	Julian Smith	Andrew Clark	Frederik Cornu	Graham Darlow	Geoff Hunt	Andrew Clark
Confidential		Increase in capital expenditure for North-East Sub-Regional Wastewater Scheme Update on Hibiscus Coast Wastewater Servicing Demand/supply balance review Archboyd Ave PS and associated pipelines	CE's KPIs Southwestern interceptor rehabilitation approval	Watuku water supply system upgrade Financing Strategy Connections Policy		CE's KPIs			CE's KPIs Approve CE's KPIs			A year end progress update for CE's KPIs			CE's KPIs	
Audit & Risk Committee			Planning report for half-year accounts Internal audit report and plan Enterprise Risks Deep Dive on Artificial Intelligence risk at Watercare Directors' expenses for the quarter ended 30 September 2024 Board delegations to the CE Policy	Enterprise Risks update to the Auckland Council Audit and Risk Committee		Presentation of Watercare's draft half-year accounts Internal Audit Report Directors' expenses for the quarter ended 31 December 2025			Present plan for Year end to A&R A&R Approve Insurance Proposal Approval of 2025/26 Budget & updated SOI Financials Review tax ahead of year end Internal Audit Report Directors' expenses for the quarter ended 31 March 2025		Auckland Council reporting pack Approval of FY25 financial statements External audit update Internal audit report Enterprise Risks Deep Dive on failure to meet developer services commitments Directors' expenses for the quarter ended 30 June 2025 Annual Summary of the Performance of Watercare Dams for 2024	Annual update to the Auckland Council Audit and Risk Committee		Board delegations to the CE Policy Planning report for half-year accounts Internal audit report and plan Enterprise Risks Deep Dive on Artificial Intelligence risk at Watercare Directors' expenses for the quarter ended 30 September 2024	Enterprise Risks update to the Auckland Council Audit and Risk Committee
Asset Management Committee			Waiuku water supply system upgrade Deep dive on Huia Water Treatment Plant AMP financials, delivery report and traffic light reporting Connections Policy			Central Interceptor and other projects dashboards AMP financials, delivery report and traffic light reporting		Central Interceptor and other projects dashboards AMP financials, delivery report and traffic light reporting	Central Interceptor and other projects dashboards AMP financials, delivery report and traffic light reporting						
Capital Finance Committee		Credit rating process Business Model Business Plan Bank Debt Facilities Strategic Communications Transitional Debt Facility Agreement Charter timeline														

12

Board meeting | 5 November 2024
Public session

Directors' appointment terms, committee memberships and meeting attendances

For information

Te pou whenua tuhinga / Document ownership

Prepared and recommended by
Emma McBride
Head of Legal and Governance

Submitted by
Dave Chambers
Chief Executive Officer

1. Te tūtohunga / Recommendation

We recommend that the Board notes this report outlining directors' appointment terms, committee membership and meeting attendances.

2. Take matua / Key points

The key points are:

- the tenure of the current directors of Watercare Services Limited
- details of the committees each director is a member of
- details of directors' attendance at Board meetings
- details of directors' attendance at committee meetings.

3. Kōrero pitopito / The details

We currently have five directors appointed by Auckland Council.

3.1 The tenure of the current directors

Director	Original appointment date	End of term
Geoff Hunt (Board Chair)	12 October 2024*	1st term ends on 31 October 2027
Graham Darlow	3 February 2021	2nd term ends on 31 October 2027
Julian Smith	1 January 2022	2nd term ends on 31 October 2027
Andrew Clark	1 June 2024	1st term ends on 31 October 2027
Frederik Cornu	1 June 2024	1st term ends on 31 October 2027

**Geoff was originally appointed to be the Board Chair by Auckland Council with effect from 1 July 2024 (appointment announced on 4 July 2024). Following a judicial review, the appointment was found to be unlawful and Geoff ceased to be the Chair and a director of Watercare Board with effect from 11 September 2024. Auckland Council ran the appointment process again, and on 11 October 2024, it appointed Geoff Hunt to be the Board with effect from 12 October 2024.*

3.2 Details of the committees

We have three committees to assist the Board in its corporate governance. Committee Chairs and members are appointed by the Chair. Attendance at Committee meetings by non-members is optional.

The current committee memberships are as follows which will be reviewed once the new Board members have been appointed by Auckland Council in late 2024/early 2025.

Director	Audit and Risk Committee[&]	Asset Management Committee[+]	Capital Finance Committee[#]
Geoff Hunt (Board Chair)		✓	✓
Graham Darlow		Committee Chair	
Andrew Clark	Committee Chair		✓
Julian Smith	✓		Committee Chair
Frederik Cornu	✓	✓	

 # The Capital Finance Committee was established at the 10 July 2024 Board meeting. Geoff Hunt was on the Committee from 10 July 2024 to 11 September and resumed his committee membership again from 15 October 2024.
+ Julian Smith was on the Asset Management Committee from 1 October 2024 to 15 October 2024. Geoff Hunt was on the Committee from 3 September 2024 to 11 September 2024 and was appointed again from 15 October 2024.
& Frederik Cornu joined the Audit and Risk Committee from 3 September 2024.

3.3 Directors' attendance at Board meetings

Attended ✓ **Did not attend ✘** **Not on the Board ■**	**Attendance at Board meetings**															
	25 January 2024	**8 February 2024**	**5 March 2024**	**9 April 2024**	**23 April 2024**	**2 May 2024**	**7 May 2024**	**12 June 2024**	**25 June 2024**	**3 July 2024**	**10 July 2024**	**14 August 2024**	**3 September 2024**	**15 October 2024**	**5 November 2024**	**12 December 2024**
Geoff Hunt (Board Chair)	■	■	■	■	■	■	■	■	■	✘	✓	✓	✓	✓		
Graham Darlow	✓	✓	✓	✓	✘	✓	✓	✓	✓	✓	✓	✘	✓	✓		
Julian Smith	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Andrew Clark	■	■	■	■	■	■	■	✓	✓	✓	✓	✓	✓	✓		
Frederik Cornu	■	■	■	■	■	■	■	✓	✓	✓	✓	✓	✓	✓		
Margaret Devlin (term ended on 18 September 2024)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	■	■	■
Nicki Crauford (term ended on 18 September 2024)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✘	✓	■	■	■

3.4 Directors' attendance at committee meetings

Attended ✓ Did not attend ✘ Not on the committee ■	Capital Finance Committee meetings												Audit and Risk Committee meetings						Asset Management Committee meetings					
	10 July 2024	29 July 2024	16 August 2024	30 August 2024	11 September 2024	25 September 2024	9 October 2024	24 October 2024	6 November 2024	21 November 2024	26 November 2024	11 December 2024	7 February 2024	23 April 2024	21 May 2024	16 August 2024	30 August 2024	19 November 2024	19 February 2024	23 April 2024	2 July 2024	5 August 2024	11 September 2024	20 November 2024
Geoff Hunt (Board Chair)	✓	✓	✓	✓	✓			✓									✓					✓	✓	
Graham Darlow	✓												✘	✓	✓				✓	✓	✓	✓	✓	
Julian Smith	✓	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓			✓				
Andrew Clark	✓	✓	✓	✓	✓	✓	✓	✓								✓	✓							
Frederik Cornu	✓		✓					✓													✓	✓	✓	
Margaret Devlin	✓												✓	✓	✘	✓	✓		✓	✓	✓	✓	✘	
Nicki Crauford	✓												✓	✓	✓	✓	✓		✓	✓	✓	✓	✘	

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Board meeting | 5 November 2024
Public session

Disclosure of Directors' and Executives' interests

For information

Te pou whenua tuhinga / Document ownership

Prepared and recommended by
Emma McBride
Head of Legal and Governance

Submitted by
Dave Chambers
Chief Executive Officer

1. Te tūtohunga / Recommendation

We recommend that the Board notes the directors' and executives' interests.

2. Take matua / Key points

Section 140 of the Companies Act 1993 requires all directors to keep an Interests Register, which must be disclosed to the Board of the company.

One of key principles of good governance is transparency and having an open and honest approach to working with the wider community. Watercare not only maintains an Interests Register for its directors, but also voluntarily maintains an Interests Register for our executives.

3. Kōrero pitopito / The details

3.1 Watercare Services Limited's Directors' Interests Register

Director	Interest
Geoff Hunt	• Principal, Geoff Hunt Consulting Ltd • Director, Preston 2 Trust Ltd • Director, J Scott and Company Ltd • Director, PSP Ltd • Member, AUT Engineering Industry Advisory Committee • Member, Institution of Engineering and Technology

Director	Interest
	• Member, Institute of Directors • Trustee, Hunt Family Trust • Board member, New Zealand Infrastructure Commission • Advisor to the Board, Geostabilization New Zealand Ltd (GSI).
Graham Darlow	• Director, Holmes GP ANZ Ltd • Director, Hick Group Ltd • Business Executive, Acciona Infrastructure NZ Limited • Director and Shareholder, Brockway Consulting Limited • Chair, Frequency NZ Limited • Director, Hick Bros. Civil Construction Limited • Director, Hick Bros. Heavy Haulage Limited • Director, Hick Bros. Holdings Limited • Director, Holmes Group Limited • Chair, The LEAD Alliance Board • Project Governance Group, Sludge Minimisation Project, Wellington City Council
Julian Smith	• Advisory Board Member Vadacom Limited • Board Trustee, Look Good Feel Better Trust • Director and Shareholder of JTB Enterprises Limited • Committee member of Institute of Directors, Auckland Committee • Chair, Institute of Directors Te Tai Tokerau, Northland Sub-Committee • Committee member of Body Corporate Chairs Group NZ, Auckland Committee • Body Corporate Committee member, The Connaught Residential Apartments, Auckland • MyCareerBrand • Group Manager – Northland Corporate Group • Member, Waikato Tainui Kawenata Joint Governance Oversight Group
Andrew Clark	• Chief Financial Officer, Port of Auckland Limited • Director, Auckland City Water Limited (Watercare's subsidiary company) • Member, Waikato Tainui Kawenata Joint Governance Oversight Group

Director	Interest
Frederik Cornu	• New Zealand Sustainable Solutions Lead, Schneider Electric • Vice-President and Board Member, French New Zealand Chamber of Commerce (FNZCCI) • Director, Alliance Francaise Auckland • Executive Committee Member, New Zealand China Trade Association • Shareholder and New Zealand Planet Leader, Team for the Planet

3.2 Watercare's Executives' Interests Register

Executives	Interest
Dave Chambers	• Director, GB & DD's Outfit Limited
Jamie Sinclair	• Director and Shareholder, Sinclair Consulting Group Ltd
Shayne Cunis	Nil
Priyan Perera	• Board member, Water New Zealand • Director and Shareholder, Popellow Limited
Mark Bourne	• Trustee, Te Motu a Hiaroa (Puketutu Island) Governance Trust
Sarah Phillips	• Trustee, Te Motu a Hiaroa (Puketutu Island) Governance Trust
Richard Waiwai	• Director and owner, Te Hautapu Consultants Limited • Trustee of Te Rana Te Araroa Waiwai Whanau Trust • Relatives work for Waikato Tainui
Angela Neeson	• Director, Tranquillo Properties Limited
Nigel Toms	• Director, TRN Risk & Resilience Consulting • Member, Audit and Risk Committee, Institute of Risk Management • Director, Toi Ora Live Arts Trusts
Brent Evans	Nil