

Agenda for a meeting of the Waters Governance Board to be held in the Committee Rooms 1 & 2, District Office, 15 Galileo Street, Ngaruawahia on **TUESDAY, 11 OCTOBER 2022** commencing at **10.30am**.

1. APOLOGIES AND LEAVE OF ABSENCE

2. CONFIRMATION OF STATUS OF AGENDA

3. DISCLOSURES OF INTEREST

The register of interests is no longer included on agendas, however members still have a duty to disclose any interests under this item.

4. CONFIRMATION OF MINUTES

Meeting held on Tuesday, 30 August 2022 7

5. ACTIONS REGISTER

6. REPORTS

6.1	Waters Reform Update – September 2022	20
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6.5	Huntly Wastewater Treatment Plant Upgrade	146

7. EXCLUSION OF THE PUBLIC

GJ Ion
CHIEF EXECUTIVE

TERMS OF REFERENCE AND DELEGATION

Reports to:	The Council
Chairperson:	Ms Rukumoana Schaafhausen
Membership:	Mr Garth Dibley Mr David Wright Mr Gavin Ion (Chief Executive) Ms Jackie Colliar (Board Intern)
Meeting frequency:	Monthly
Quorum:	A majority of members (excluding the Board Intern)

The Waters Governance Board is a subordinate decision-making body of the Waikato District Council established under Schedule 7 of the Local Government Act 2002.

Purpose and Terms of Reference:

1. To provide governance and oversight of the development and implementation of the Council contract with Watercare Services Limited ('Watercare').
2. To ensure the activity goals are clearly established, and strategies are in place for achieving them.
3. To establish policies for strengthening the performance of the water activity including ensuring management and the contractor are proactively seeking to build the business through innovation, initiative, technology, new products and the development of its business capital.
4. To monitor the performance of management through the Chief Executive.
5. To ensure high standards of health & safety are maintained by management and Watercare and undertaking appropriate due diligence.
6. To decide on whatever steps are necessary to protect the Council's financial position and the ability to meet its debts and other obligations when they fall due, and ensuring that such steps are taken.
7. To ensure the water activity's financial statements are true and fair and otherwise conform to law.
8. To ensure the water activity adheres to high standards of ethics and corporate behavior.
9. To ensure the water activity has appropriate risk management/regulatory compliance policies in place.
10. To look to improve environmental outcomes from this activity.
11. To consider kaitiakitanga as part of decision-making.
12. To monitor and ensure Watercare are meeting their obligations.

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13. To report to Council twice yearly on progress with Waters' Management.
 14. To provide innovation and ideas that could improve profitability, service levels or environmental outcomes.
 15. To hold Watercare to account over the delivery of the operational and capital programmes.
 16. To work with Council to agree the overall funding requirements of the business.
 17. To undertake any other matters considered relevant by the Board or referred to the Board by the Council.

The Board is delegated the following powers to act:

- Agree the form of the transactional arrangement with Watercare.
- Negotiate with Watercare and recommend to Council the final, or any amended, contract value for waters management.
- Conclude the contract (after Council approval of contract value) and terms and conditions, including any amendments, with Watercare.
- Ensure that transitional contract requirements are met by Watercare and Council.
- Hold Watercare to account for their performance at all levels.
- Monitor and oversee the performance of staff and Watercare in terms of the water activity.
- Consider and ensure improvements or innovation are implemented by Watercare or through the Chief Executive as appropriate.
- Approve changes to the operation of the contract with Watercare.
- Develop strategies to improve contractual performance or to improve business practices.
- Recommend to Council infrastructure strategy and Asset Management Plans for adoption.
- Develop an annual works programme (operating and capital) and submit to council for final approval.
- Approve alterations and transfers within the programme of capital and operational works as prepared for the Long Term Plan and Annual Plan, subject to the overall scope of the programme remaining unchanged and the programme remaining within overall budget.
- Set and ensure Watercare's adherence to health and safety requirements, and wellbeing practices.
- Set and maintain standards of ethics and corporate behavior.
- Consider development opportunities for the Waters' business.
- Define and set levels of service for Waters' management now and in the future.
- Responsible for the financial performance of the contract and operation.

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- Approve and/or amend existing or new contracts relating to the delivery of three waters' services and operation unless additional funding by the Council is required or the approval or amendment is inconsistent with Council Policy.
 - Recommend to Council any new or additional funding requirements over and above that contained within the Long Term Plan.
 - Develop plans to improve the overall resilience of the Waters' networks and allow for growth.
 - Consider the impact of growth on the Waters' infrastructure.
 - Implement and monitor the risk management framework for the waters' management and activity.
 - Approve the annual and half yearly financial statements for the Waters' operation and provide any relevant commentary to the Council.
 - Annually review the Board composition, structure and succession and make recommendations to council on these matters.
 - Ensure the Waters' business delivered by Watercare provides value for the community in terms of the four wellbeings.
 - Determine the approach for resource consent applications for the Waters' business, and monitor progress of those applications on behalf of the Council.
 - Review and monitor existing strategic resource consents.
 - Ensure that Kaitiakitanga and environmental outcomes are key decision making considerations for the Board.
 - Uphold the vision and strategy of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010.

To	Waters Governance Board
Report title	Confirmation of Minutes
Date:	Thursday, 29 September 2022
Report Author:	Elizabeth Saunders, Democracy Advisor
Authorised by:	Gaylene Kanawa, Democracy Manager

1. Purpose of the report

Te Take moo te puurongo

To confirm the minutes for a meeting of Waters Governance Board held on Tuesday, 30 August 2022.

2. Staff recommendations

Tuutohu-aa-kaimahi

THAT the minutes for a meeting of the Waters Governance Board held on Tuesday, 30 August 2022 be confirmed as a true and correct record.

3. Attachments

Ngaa taapirihanga

Attachment 1 – WGB Minutes – 30 August 2022

MINUTES for a meeting of the Waters Governance Board Meeting of the Waikato District Council held at Matahuru Marae, 19 Johnson Road, Ohinewai on **TUESDAY, 30 AUGUST** commencing at **9.00AM**.

Present:

Mr D Wright (Chair)
Ms R Schaafhausen
Mr G Dibley
Mr GJ Ion (Chief Executive, Waikato District Council)
Ms J Colliar (Intern)

Attending:

His Worship the Mayor, Mr AM Sanson
Cr AD Bech
Cr JD Sedgwick
Ms C Nutt (Waters Contract Relationship Manager)
Mr K Martin (Waters Manager)
Mr D Sharma (Three Waters Reform Project Manager)
Ms Z Al-Khaleefa (Three Waters Contract Engineer)
Mr S Toka (Iwi & Community Partnerships Manager)
Ms N Armstrong-Nield (Iwi & Community Partnerships Advisor)
Mr R Pullar (Watercare)
Mr S Howard (Watercare)
Mr M Telfer (Watercare)
Mr G Miers (Watercare)
Mr P Crabb (Watercare)
Ms K Flavell (Waikato Tainui)
Ms A Taio (Waikato Tainui)
Mr G Tupuhi (Nga Muka)
Mr P Kingi (Nga Muka)
Mr P Tupuhi (Nga Muka)
Ms K Johnson (Nga Muka)
Ms E Jonathan (Nga Muka)
Mr T Nikau (Matahuru Marae)
Mr S Nikau (Matahuru Marae)
Ms J Kelly (Te Kauwhata Water Association)
Ms P Ranga (Waikato)

Ms E Saunders (Democracy Advisor)

5 Members of the Public

APOLOGIES AND LEAVE OF ABSENCE

No apologies were received and all members were present.

CONFIRMATION OF STATUS OF AGENDA ITEMS

Resolved: (Mr Wright/Mr Dibley)

THAT the agenda for a meeting of the Waters Governance Board Meeting held on Tuesday, 30 August 2022:

- a. be confirmed and all items therein be considered in open meeting, with the exception of those items detailed at Agenda item 7, which shall be discussed with the public excluded;
- b. in accordance with Standing Order 9.4 the order of business be changed with agenda item PEX2 – Action Register being considered at the conclusion of all other PEX agenda items.

CARRIED

WGB2208/01

DISCLOSURES OF INTEREST

It was noted that Mr Wright is no longer a Trustee of The Solomon Island Development Fund.

ACTION: Democracy Team to update the register of interest to the changes to Mr Wright's roles.

CONFIRMATION OF MINUTES

Resolved: (Mr Ion/Ms Schaafhausen)

THAT the minutes for a meeting of the Waters Governance Board Meeting held on Tuesday, 19 July be confirmed as a true and correct record.

CARRIED

WGB2208/03

NOTE: Ms Collier made a comment around mana whenua and how they were notified around overflow events particularly with Huntly Wastewater Treatment Plant. Mr Ion responded that a discussion was had after a visit to the Huntly Wastewater Treatment Plant last week and Mr Martin confirmed that a process was in the works with notification to iwi and hapu taking place by staff and gaining an understanding of what they would like to take place as part of the notification process. A meeting had been arranged to occur over the next few weeks to confirm the process.

REPORTS

Actions Register Agenda Item 5

The Waters Manager noted the following matters:

Huntly Wastewater Treatment Plant

Council and Watercare had started the work on the report regarding the plant upgrade. It was noted Council had approved \$2.1 million being bought forward in the Long Term Plan to enable the development of a concept design and resource consent application. A site visit was held on 22 August 2022 by Council staff and Watercare.

Port Waikato and Onewhero

Port Waikato and Onewhero Options Assessment was due in September 2022. No further updates for the board at this meeting.

Pokeno Tuakau Wastewater Network

Proposal to bring Stages 2 & 3 was approved by Council and will bring together a Capital Works Programme to deliver that.

Consent Compliance

Mr Telfer to speak to this verbally in item 6.5. Mr Telfer apologised for the lateness in getting the reports into the board for consideration.

TK Wastewater Network

Funding solution and reduction in scope approved by WGB and Council. Ministry of Housing and Urban Development had acknowledged the change to scope within the HIF funding agreement and have approved provided the original scope is achieved via other council funding mechanisms.

ACTION: Retain action from previous meeting for a brief report to be provided at the next meeting showing the progress being made on the audit's recommendations.

Resolved: (Mr Wright/Mr Ion)

THAT the Actions Register be received.

CARRIED

WGB2208/04

Public Hui – Discharge into Lake Waikare and the Environmental Effects Agenda Item 6.1

Lake Waikare – Discharge in Lake

Discussion was held around the cultural and environmental impacts of continued discharge to Lake Waikare - Mr Tupuhi opened the forum and gave a brief history of the discharge into the Lake and the steps Nga Muka have taken to date to rectify the discharge and partnerships that have been formed with local farmers to control the effects.

Ms K Johnson provided a historical background into the concerns of Nga Muka and why they were against further discharging into Lake Waikare and the frustrations they had encountered when big developments had taken place without any acknowledgement or consideration to Nga Muka.

Mr S Howard provided an attachment to the group with the following key themes:

- Awareness (Recognition)
- Open Discussion (Broad Items)
- Discharge Workshopping
- Key Technical Queries

Mr Howard acknowledged the steps taken to date by Nga Muka and the discussion that was taking place.

Mr P Crabb provided an engineering background into the different options that were on the table for consideration:

- Pipe to wetland adjacent to Ruahine Northern Flood Gate
- Pipe to Pungarehu Canal North Side of Waerenga Road (Long Swamp) bridge

Mr Howard and Mr Crabb tabled seven (7) options that could be further investigated and sought feedback on the preferred options from the group. The group determined that the three (3) preferred options were:

- discharge to the pumice area or the area on the other side of the river.
- land discharge to the Maramarua forest noting this is to confirm this option is acceptable because of soil types and clay.
- Free-Flowing Option.

It was agreed that Watercare would continue to engage with both iwi and hapū throughout the process including the continuation of the partnership with iwi and Matahuru Marae with a view to keeping the dialogue open with the option of regular meetings if required.

ACTION: Watercare engineers to conduct further investigations into the options and provide detailed funding and analysis on the above options with final recommendation as to the best solution by February 2023.

The meeting adjourned at 12.08pm and resumed at 1.04pm.

Three Waters Reform Project Update
Agenda Item 6.2

Mr D Sharma spoke to the report which was taken as read. The following discussion was held:

- Mr Sharma provided an update on the Better Off Funding applications. It was anticipated that shortlisting the applications would be done by Friday and then presented to both the JMA Committee and WGB.
- The asset management plan (AMP) working group at the NTU had begun their programme of works. Under the Water Service Entities (WSEs), there would be four AMPs developed by the WSEs and approved by the WSE Board, instead of councils. The DIA was seeking to develop a national growth and land development framework between councils and WSEs.
- The Board required some assurance that the AMP was indeed factual, fair, reasonable and understood particularly for those that aren't engineers. Acknowledgement that there was limited time around these issues.
- Confirmed that the Management Working Group is being led by Hamilton City Council in conjunction with Waikato District Council.
- The Chief Executive would begin negotiating the terms of the Transition Support Package Funding Agreement with the DIA.
- Council would continue to collaborate with DIA for any information requests and advocate for the needs of our communities in the process.
- Staff are assessing whether external resources would be required to deliver on business as usual whilst responding to those requests.

ACTION: Recommended Better Off Funding applications to be provided by the end of September 2022.

Resolved: (Mr Wright/Mr Dibley)

THAT the Three Waters Reform Project Update Report be received.

CARRIED

WGB2208/06

2021/2022 Long Term Plan Performance Results & Service Summaries

Agenda Item 6.3

Ms Nutt spoke to the report which was taken as read and the following discussion was held:

- No new abatement notices received during the year
- The target was met but result slightly slipped from last year
- Real Water Loss – met the target but slight deterioration

The Board confirmed that this was a good report with good results achieved.

Ms Nutt confirmed that it would have been nice to achieve more capital spend through the capital works programme.

Other achievements noted:

- Construction of the Ports of Auckland pump station commenced in Horotiu, which would become the primary pump station delivering wastewater flows to Ngāruawāhia.
- Stage I (bridge crossing) of the Ngāruawāhia pipeline from Waikato Esplanade to the Ngāruawāhia treatment plant was completed.
- We completed the renewal of Wainui Road rising main in Raglan.
- Continued collaboration with neighbouring councils to improve wastewater service delivery in the Waikato region.
- Cross-organisational collaboration was being conducted to assess options for the Huntly Wastewater Treatment Plant upgrades and renewal of resource consent.
- Continued consultation and engagement on issues and projects with iwi, hapū and community groups.

Ms Schaafhausen reiterated her acknowledgement of what had been achieved over the year with all the different challenges to contend with – particularly Covid.

The Board wanted it noted in the minutes that they extended their gratitude to the Team for the work that had been done.

Resolved: (Ms Schaafhausen/Mr Dibley)

THAT the Waters Governance Board:

- a. receives the 2021/22 Long Term Plan Performance Results and Service Summaries report; and
- b. notes the performance targets for the 2021/22 financial year have been met.

CARRIED

WGB2208/07

Three Waters Governance Report August 2022

Agenda Item 6.4

Mr Telfer spoke to the report and gave an overview of the key points.

- No Lost time injuries in July.
- All performance measures were achieved except water 'Resolution of urgent call-outs'. This failed measure reflects the complex repairs.
- The Scada delivery project was completed at the end of July, with the close-out completed in the first week of August.
- There was significant rainfall within the district across June and July. The teams managed three significant events across the district in July at the Ngāruawāhia Water treatment plant, the Huntly and Raglan wastewater plants, and the Ngāruawāhia bridge crossing. The events related to the heavy rainfall and the high river levels (detailed below). The Regional Council will be provided detailed reports for the wastewater events.
- Visits to the Meremere and Te Kauwhata sites were held in early August with Iwi, community representatives, and Council staff. The meetings were successful, and at the request of attendees, a similar visit was planned for Huntly WWTP before the next Water Governance Board meeting.
- Injury to highlight - An injury to shoulder at the start of August when pulling a 70mm hose on top of Clarifier # 5 to arrange drain down, currently on a sling and is put on light duties.

Mr Ion asked the question around Sub-Contractors and whether due diligence was being done to ensure Health & Safety procedures were being followed. Mr Telfer reiterated that due diligence was indeed being done with all staff and contractors.

Health & Safety report discussed by the Board in some length with clarification sought over the recorded injuries and what occurred. Mr Telfer answered questions raised by the board and gave clarification.

Raglan WWTP resource consent application preparation was discussed with questions raised by Ms Colliar. Mr Martin & Mr Telfer confirmed the progress that was being made and that the private land option remains a superior solution in contrast to the public land option. The complexities associated with land securement involving third-party agreement has been explained clearly throughout engagement to the key stakeholder group, which included Waikato Regional Council (WRC) representatives. A key issue experienced was the uncertainty of lodgement timelines.

The Board acknowledged the work of the Watercare Team in getting the SCADA project over the line by the due date.

Resolved: (Ms Schaafhausen/Mr Ion)

THAT the Three Waters Governance Report be received.

CARRIED

WGB2208/08

Resource Consent Compliance Summary Update

Agenda Item 6.5

Final Taumata Arowai Drinking Water Quality Assurance Rules.

Level 3 treatment plant compliance adoption is proposed for Port Waikato and Onewhero WTPs to utilise continuous monitoring and avoid frequent site visits by operators but level 1 and 2 rules may be a preferred option for source and distribution modules.

- Overall, many existing supply operations adequately met the new Quality Assurance Rules that were published in July.
- General rules set out new reporting requirements that are significantly different to existing drinking water compliance regime reporting. Strict reporting processes are required. Compliance platforms (e.g., Wateroutlook, Infrastructure Data) require updating and a well-supported compliance platform will support meeting the rules.
- New continuous monitoring instruments were required at large treatment plants and there was a new option to use continuous monitoring instruments in the network to demonstrate compliance. This would be investigated further.
- Small supplies have lesser compliance requirements, but Watercare will utilise existing continuous monitoring instruments to demonstrate compliance and provided a higher level of assurance.
- Recommendations were made for reviewing the ultraviolet systems at Huntly and (soon to be installed) Ngaruawahia to create multi compliance barriers and improve treatment barrier resilience.
- Recommendations were made for reviewing the compliance monitoring points for Huntly and Ngaruawahia with regards to those supplies' connectivity to ensure compliance is met.
- Network rules required a more comprehensive oversight of backflow prevention systems by the water supply operator. Compliance with network hygiene rules would be achieved through the adoption and adherence of Watercare protocols.
- Sample schedules, sample points and supply zones require further review and updating to align with the new compliance rules and current operations.

Consent Compliance Summary points were raised with questions answered by Mr Telfer. Ms Colliar raised a question around the Ngaruawahia Wastewater Treatment Plant and the request to have relevant information detailed in the tables.

Ms Schaafhausen asked whether social media could be better utilised to promote the highlights and success of the team to the wider communities. A great opportunity to showcase some the work being done by the team.

Resolved: (Mr Ion/Mr Dibley)

THAT Waters Governance Board Receive the Update

CARRIED

WGB2208/09

EXCLUSION OF THE PUBLIC

Agenda Item 7

Resolved: (Mr Ion/Ms Schaafhausen)

THAT the public be excluded from the following parts of the proceedings of this meeting.

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

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
Item PEX 1 Confirmation of Minutes Item number PEX 2 Action Register	Good reason to withhold exists under Section 6 or Section 7 Local Government Official Information and Meetings Act 1987	Section 48(1)(a)
Item PEX 3.1 Waters Financial Results to 31 July 2022		
Item PEX 3.2 Waters Financial Results 2021/2022		

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

Item No.	Section	Interest
Item PEX 1 Confirmation of Minutes Item number PEX 2 Action Register	Refer to the previous Public Excluded reason in the agenda for this meeting.	
Item PEX 3.1 Waters Financial Results to 31 July 2022	7 (2) (b) (ii)	To protect information that would otherwise unreasonably prejudice a person's commercial position.
	7(2)(h)	To enable commercial activities to be carried out without prejudice or disadvantage.

Item No.	Section	Interest
Item PEX 3.2 Waters Financial Results 2021/2022	7 (2) (b) (ii)	To protect information that would otherwise unreasonably prejudice a person's commercial position.
	7(2)(j)	To prevent use of the information for improper gain or advantage.

CARRIED**WGB2208/10**

Resolutions WGB2208/11–WGB2208/15 are contained in the public excluded section of these minutes.

Having resumed open meeting and there being no further business, the meeting was declared closed at 3.07pm.

Minutes approved and confirmed this day of 2022.

David Wright
CHAIRPERSON

To	Waters Governance Board
Report title	Actions Register
Date:	Tuesday, 11 October 2022
Report Author:	Gavin Ion, Chief Executive

1. Purpose of the report

Te Take moo te puurongo

To update/inform the Waters Governance Board on actions following the Waters Governance Board meeting held on Tuesday, 30 August 2022.

2. Staff recommendations

Tuutohu-aa-kaimahi

THAT the Waters Governance Board receives the Actions Register to September 2022.

3. Attachments

Ngaa taapirihanga

Attachment 1 – Action Register

Waters Governance Board¹⁸ Actions Register

OPEN MEETING

Meeting Date	Action	To Action	When	Status
15/3/2022	Report to come to the next Water Governance Board meeting regarding the Huntly Wastewater Treatment Plant upgrade, including a cost return comparison for a temporary upgrade versus managed compliance in the short term.	Watercare	July 2022 September 2022	<p>\$2.1 Million LTP funding approved by Council to be bought forward to enable concept design and resource consent application to be developed. A copy of the Council report is included in this month's Agenda.</p> <p>Sleepyhead Development Agreement is being negotiated with possibility of Sleepyhead undertaking an interim upgrade to enable Ohinewai wastewater discharge to be sent to a compliant plant.</p> <p>Sleepyhead have engaged BECA to look at possible interim upgrade options. BECA have provided an option as feasible for the incorporation of an additional return side stream process. The option is being further developed by BECA to enable commercial evaluation by Sleepyhead as part of their due diligence prior to a proposal being developed for Councils acceptance and approval.</p>
7/06/2022	<p><u>Port Waikato, Te Akau and Onewhero Options Assessment Report</u></p> <p>A report to come to the Board with more accurate costings for the assessment options for the three small water supplies.</p>	<p>M Telfer, Watercare</p> <p>Keith Martin</p>	<p>September 2022 November 2022</p>	<p>The assessment of the three plants has been completed to determine the upgrades required to meet the new drinking water standards. The Onewhero and Port Waikato plants upgrades are minimal, but a complete redesign of the Te Akua plant will begin in September.</p> <p>Detailed paper planned for the next meeting.</p>

Waters Governance Board Actions Register

Meeting Date	Action	To Action	When	Status
30/08/2022	Retain action from previous meeting for a brief report to be provided at the next meeting showing the progress being made on the Health and Safety audit's recommendations.	M Telfer Watercare	October 2022	This has been included in the Three Waters Governance report.
30/08/2022	<u>Te Kauwhata Wastewater Discharge</u> Watercare engineers to conduct further investigations into the options and provide detailed funding and analysis on the above options with final recommendation as to the best solution by February 2023.	M Telfer Watercare	February 2023	Further investigations are underway to review options. Aiming for a confirmed shortlist in terms of viability by the end of 2022.

To	Waters Governance Board
Report title	Three Waters Reform Project Update – October 2022
Date:	11 October 2022
Report Author:	Deron Sharma Three Waters Reform Project Manager
Authorised by:	Gavin Ion Chief Executive

1. Purpose of the report

Te Take moo te puurongo

To update the Waters Governance Board of current workstreams, activities, and key matters under the Three Waters Reform Project.

2. Executive summary

Whakaraapopototanga matua

Te Rapunga – The Staffroom

Ten Council staff have been identified as having significant touchpoints with waters activities, which means they may be offered a position at the water service entities (WSEs), once established. Council's People and Capability (P&C) team are working on providing support to these staff members during the transition period.

Long Term Plan (LTP) and Asset Management Plan (AMP)

Council and Watercare are collaborating on the development of AMPs to ensure Council's aspirations will be given due precedence by the WSEs. The Waters Governance Board will be given oversight of the LTP and AMP development for feedback and incorporation into the document sent to the DIA.

Finance and Corporate Request for Information

Council and Watercare staff will need to collaborate on the finance and corporate RFI and the upcoming data and digital requests to achieve desired outcomes under the Heads of Agreement Council signed with the DIA. Staff are anticipating that the data and digital workshop will provide guidance to begin the planning and execution of digital transition, with applied learnings from Council's transition to Watercare.

Water Services Entities Bill

The National Transition Unit (NTU) has indicated that a second piece of legislation will be introduced to parliament in October, which will likely see Council providing a public submission.

Better Off Funding

The shortlisted and contingency projects in the better off funding portfolio have been approved by Council. Subsequently, a program of works will be submitted for approval from Department of Internal Affairs on 30 September 2022. A copy of the better off funding paper is attached to this update.

3. Staff recommendations Tuutohu-aa-kaimahi

That the Waters Governance Board:

- a. receives the report.
- b. notes that the project management for three waters reform is ongoing.

4. Discussion Matapaki

4.1 Te Rapunga – The Staff Room

Council's Executive Leadership Team (ELT) have identified 10 staff members that may meet the requirements for job guarantee at the Water Service Entities.

The P&C team will administrate Te Rapunga at Council and provide support to these identified employees.

4.2 Asset Management Plans

A review of the current AMPs and LTPs is being undertaken by Council and Watercare Waikato staff. A workshop with the WGB will follow.

4.3 Data and Digital Workshop

On 9 November 2022, Council and Watercare staff will attend an interactive workshop delivered by the NTU's data and digital workstream leads. The purpose of this workshop is to enable the NTU to provide relevant Council staff with technical details of the data migration approach and for staff to provide feedback, thereto.

4.4 Entity B Chief Executive Roadshow

On 13 September 2022, key NTU staff from each workstream held an Entity B Chief Executive Roadshow (**Attachment 1**). A high-level roadmap of transition activities was presented at this roadshow (**Figure 1**).

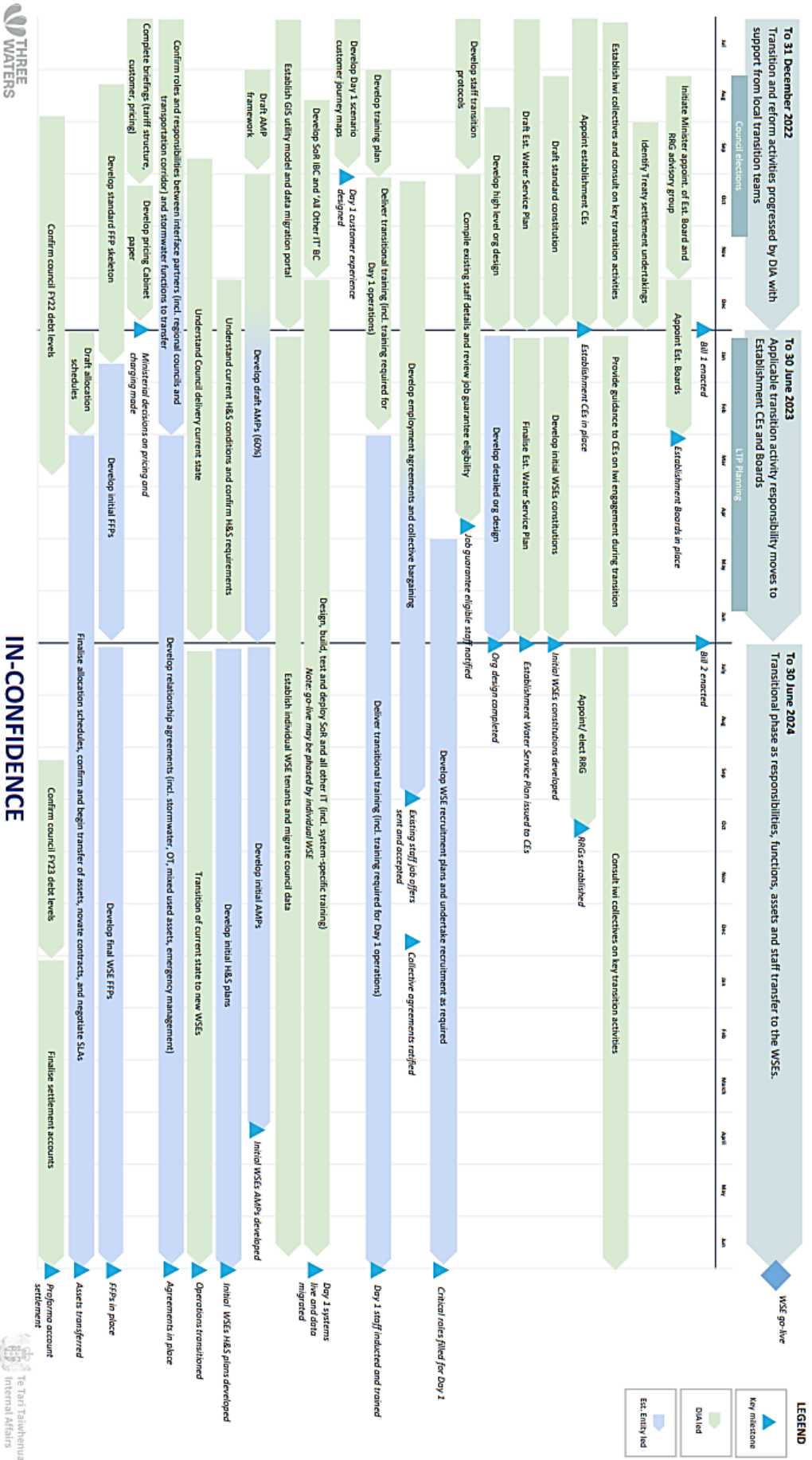


Figure 1: Roadmap to WSE establishment

4.5 Finance and Corporate Request for Information

The finance and corporate workstream at the NTU has requested financial information on Council's debt, revenue, operating expenses, assets, and reserves.

The request focuses on the financial year ended 30 June 2022 (FY22), with comparative figures for the prior year ended 30 June 2021 (FY21) and budget information for the year ending 30 June 2023 (FY23). The NTU has been advised that Council's auditing has not been completed.

4.6 Water Service Entities Bill

The second piece of legislation related to the establishment of the WSEs has been scheduled to be delivered to the Minister of Local Government in October 2022.

4.7 Better off Funding

The better off funding assessment panel has carried out its function in shortlisting the projects. A total of 115 applications, with a cumulative value of \$50 million, were received; 19 projects, valued at \$6.86 million, were shortlisted. With the remainder of the \$1.02 million, minus delivery costs, Council's aspiration of having CCTV in the district can also be realized through the better off funding.

The shortlist and recommendations have been presented and approved at the final Council meeting of the triennium (**Attachment 2**).

5. Next steps Ahu whakamua

Staff will need to develop bespoke, back-to-back funding agreements with each, successful recipient of the better off funding to minimize the financial risk to Council. A recommendation has been made to Council that Council's newly established Enterprise Project Management Office provide project management oversight during the delivery period. A lessons-learned report will be developed in review of the different, co-governance-based process undertaken to shortlist the projects to better equip Council should tranche two become available in 2024.

The P&C team will work in alignment with the people and workforce stream at the NTU to provide Council staff with guidance during the transition period. The first step in this process is to establish the administration requirements for the Staff Room to become available to Council staff affected by transition.

It is expected that the data and digital workshop will provide staff with the guidance required to establish a project team comprising Council and Watercare Waikato to undertake necessary assessments of current state digital systems, the resources, and pathway needed to meet the future state requirements.

Staff will work alongside Watercare to develop the AMPs and respond to the finance and corporate request for information by 21 October 2022.

Moreover, Staff are anticipating the codicillary WSE Bill to be passed through parliament, which will likely require a submission from Council.

6. Attachments

Ngaa taapirihanga

Attachment 1 - Three Waters Roadshow September 2022 Slides

Attachment 2 – 20220929 Better Off Funding Assessment Panel Shortlist
Recommendations

Three Waters Reform Transition Programme

Roadmap to day 1 of the new Water Services Entities
September 2022



IN-CONFIDENCE

Find out more at www.dia.govt.nz/Three-Waters-Reform-Programme



Te Tari Taiwhenua
Internal Affairs

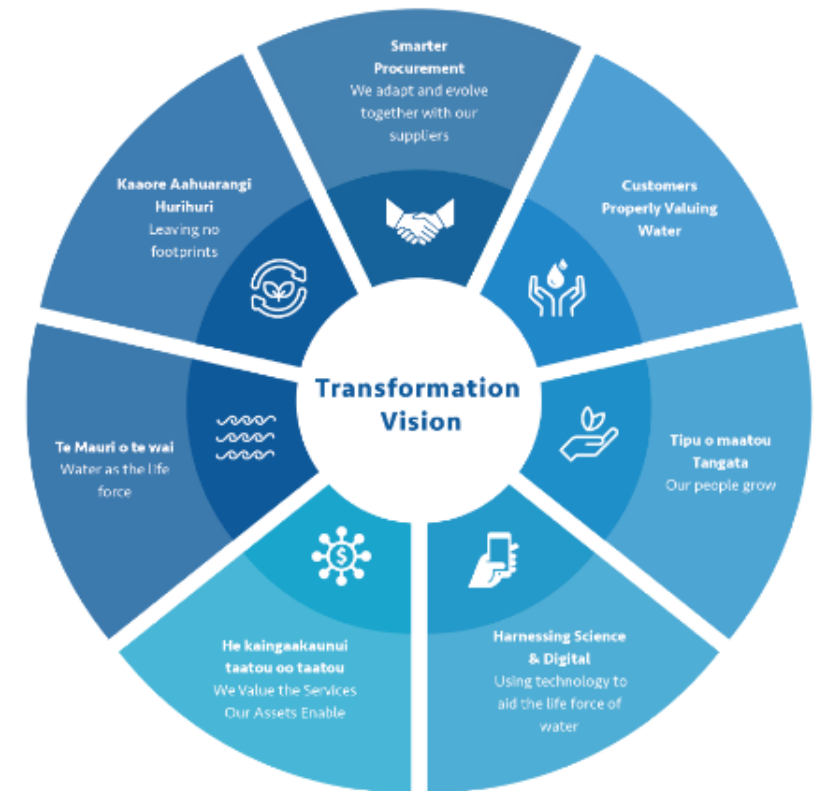
Why are we here today?

- We have **identified the outcomes that must be achieved to enable the four new Water Services Entities** (WSEs) to operate in a way that is consistent with the new legislation from Day 1
- This **clarifies the roadmap** of activity required to get there, including critical inputs and decision points
- We are sharing this with you to provide you with a clear picture of what we will be working on over the next 22 months, and **what we will be asking of you in the near term**, to inform your planning
- We also want to hear from you about **how you would like us to work with you to achieve the milestones** in this roadmap of activity and to collectively deliver the Day 1 outcomes
- While there are already processes in place to enable us to work together, we want to hear your views on opportunities to improve on these to support results-oriented engagement
- **Your contribution is critical** not only to ensure to ensure Day 1 delivery remains on track but also to ensure the interests of your respective communities are best served in the transition process and beyond
- The importance of your involvement in this is reflected by the recent allocation of Government funding to councils to support transition-related activity, and by changes made to date in our approach in response to feedback from the local government sector
- **Getting the transition right, with your input, will lay the foundations for longer-term transformation** in water services management and delivery to enable us to meet the challenges ahead from population growth, climate change and natural disasters

The opportunity

We have a once in a lifetime opportunity to transform how we deliver our water services:

- A uniquely New Zealand approach to building a world-class water system guided by Te Mana o te Wai
- Creating the scale and other structural changes that will enable the significant investment required in water infrastructure that is out-of-reach of individual councils alone
- Creating the conditions to build and sustain a highly skilled and adaptable water workforce that can innovate and collaborate to drive outcomes for NZ and is seen as world-leading
- Customer-focused, leveraging new technologies, while also building customer awareness of their role in the water system and the value of water



First, we need to transition successfully in order to lay the foundations for long-term transformation

Te Mana o te Wai

- Developed by iwi through the Fresh Water Iwi Leaders Forum as a way of describing the importance of fresh water within a Te Ao Māori framework and has formed part of the National Policy Statement
- Requires people, organisations and decision-makers to think about water as a living breathing taonga in its own right that needs to be looked after, rather than a commodity to be taken until it is gone or pushed to the limits of its survival
- Is shaping the delivery of NTU's programme and will be recognised and provided for in service delivery arrangements for the new Three Waters system
- It will be one of the guiding principles by which each WSE will be expected to make decisions (and report) on how best to deliver water services to all communities
- The programme is engaging with iwi and hapū to determine how Te Mana o te Wai is best applied to the respective water service entities

Six principles

- **Mana whakahaere**
- **Kaitiakitanga**
- **Manaakitanga**
- **Governance**
- **Stewardship**
- **Care and respect**

What does day 1 of the new WSEs look like?

- All legislation is enacted, Crown role defined, and regulations needed for Day 1 are in place
- All governance arrangements and documents are in place for each WSE, including Regional Representative Groups
- WSEs understand and have a plan to fulfil their statutory and compliance obligations, including Treaty Settlements, and address enterprise risk
- Staff are in place and have the necessary information, support, and tools to work on Day 1
- WSEs have control of assets required to deliver Day 1 water services and a clear understanding of Te Mana o te Wai as it applies to their region
- The WSEs have the requisite financial management, securities, insurance, and contracts or initial agreements in place with councils, private suppliers and other third parties
- WSEs have the functions, tools, policies and procedures necessary for Day 1 operations
- The WSEs have the agreed financial model and funding required for Day 1 operations and obligations
- Customers experience no interruption to service and know who to contact for support

What do we need to do to get there?

To 31 December 2022

Transition and reform activities progressed by DIA with support from local transition teams

To 30 June 2023

Applicable transition activity responsibility moves to Establishment CEs and Boards

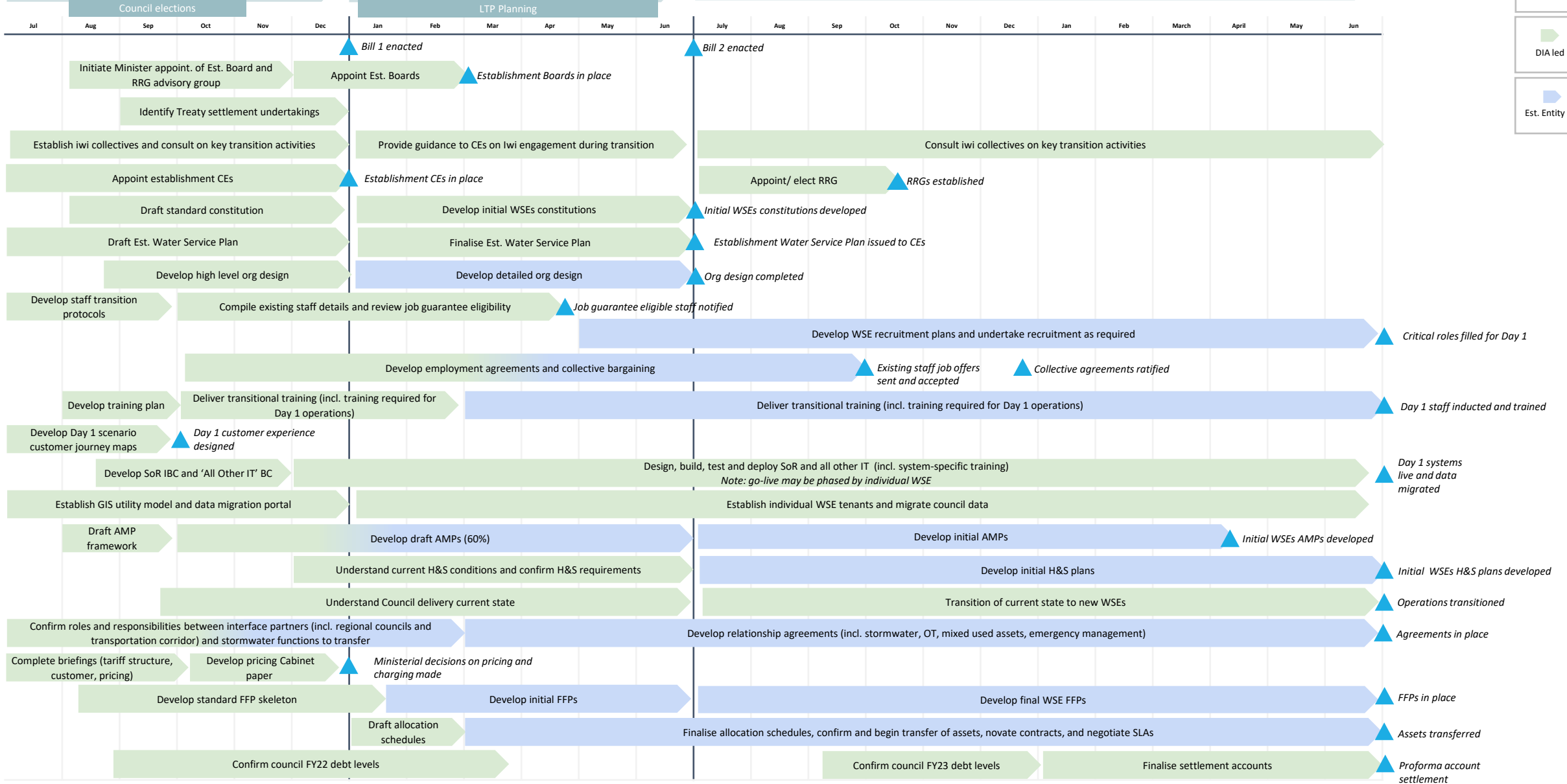
To 30 June 2024

Transitional phase as responsibilities, functions, assets and staff transfer to the WSEs.

WSE go-live

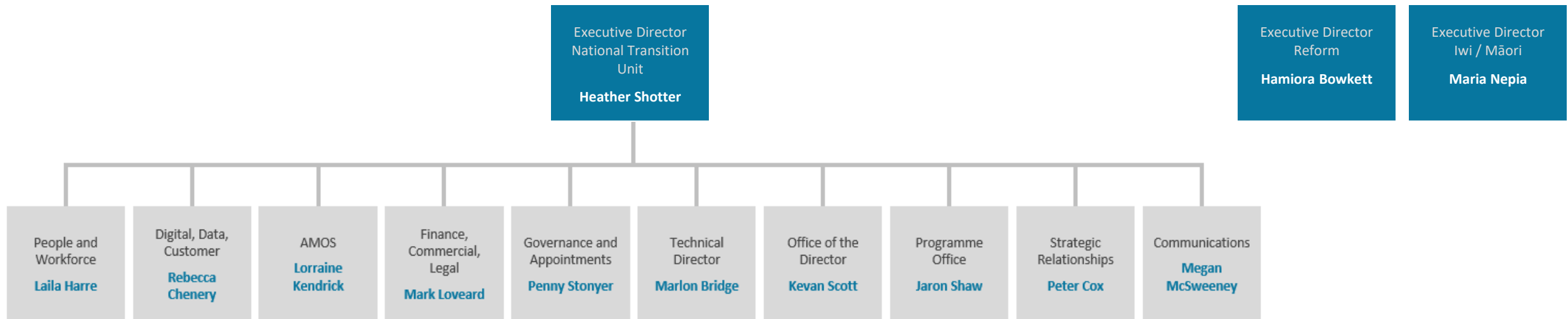
LEGEND

-  Key milestone
-  DIA led
-  Est. Entity led

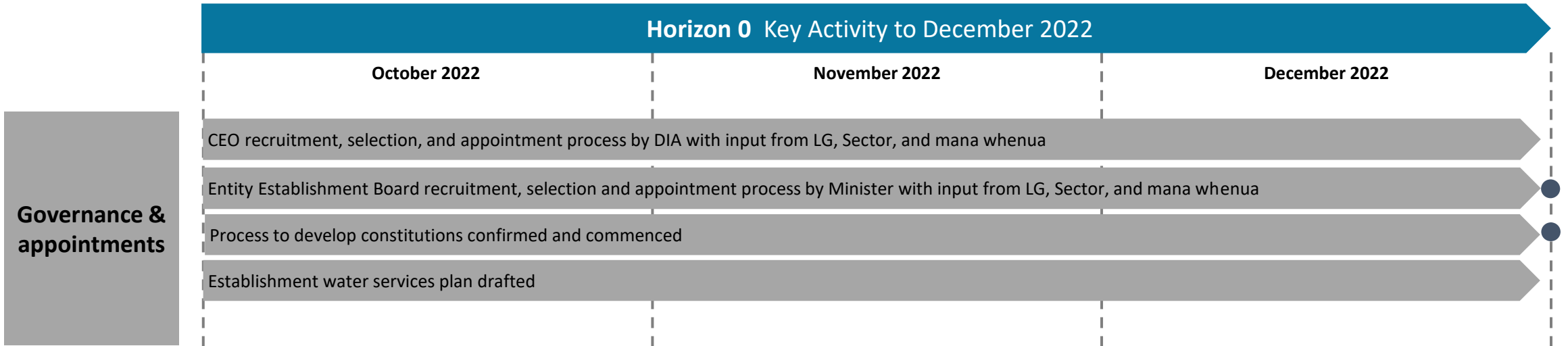


How do we get there?

NTU delivery structure



Governance and appointments workstream



	Governance
Delivery approach	Primarily delivered by the NTU
What we will need from councils and when	Representative group of Mayors and mana whenua in each entity area will be involved in the selection of shortlisted establishment CEO and Board candidates.
How we plan to engage for this contribution	LGNZ facilitated process
Key activities to 31 December 2022	<ul style="list-style-type: none"> • Chief executives appointed • Shortlisting of candidates for Establishment Boards with the Minister • Development of draft Establishment Water Services Plan

AMOS workstream

Three sub-workstreams working collaboratively to manage interdependencies to transition from the current environment to new entities

Key deliverables expected from this workstream include:

Asset management (led by Emily Botje)

- AMP delivery working collaboratively with councils; will also include engagement with iwi
- National growth and land development framework and practice guides
- National code of practice for 3 Waters

Operations (led by Tim Hammond)

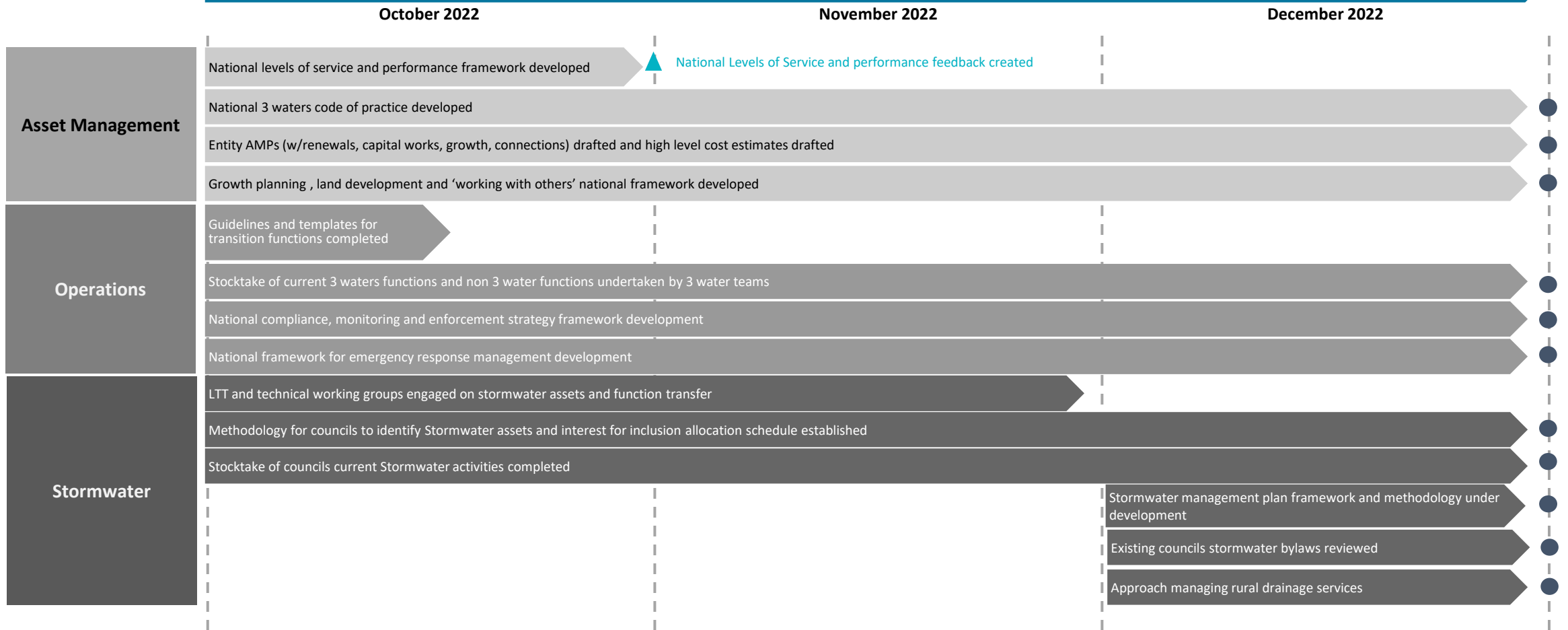
- Transfer of operational functions from current Water entities to the new WSEs
- Development of Day 1 regulatory expectations, taking into account Health and Safety and Resource Consent

Stormwater (led by Philip Eyles)

- Develop approach for asset/function transfer and roles and responsibilities for stormwater management
- Development of relationship arrangements and service level agreements

AMOS programme to 31 December 2022

Horizon 0 Key Activity to December 2022



AMOS workstream engagement

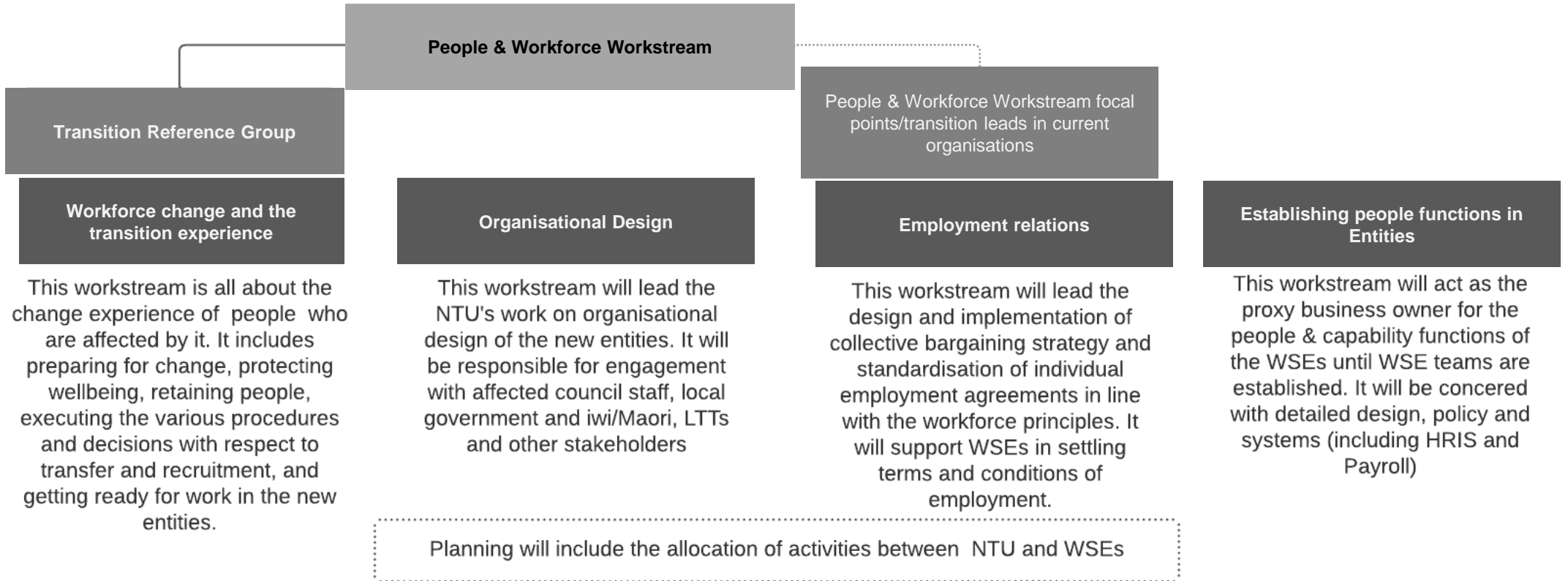
	Asset Management	Operations	Stormwater
Delivery Approach	Primarily delivered with council staff and consultants		
What we will need from Councils and when	<ul style="list-style-type: none"> Council staff available for membership on working groups. Councils to provide their first draft of the capital financials (by end of October) and direct operational costs (by early December) 	<ul style="list-style-type: none"> Council 3 water staff and team managers to input into stocktake of current operations Wider engagement via National working groups (1-2 representatives per entity) 	<ul style="list-style-type: none"> Seeking input from individual council staff to participate in Technical Working Groups Council involvement and input kicks off in 2023
How we plan to engage for this contribution	<p>Entity Local Transition Teams (LTTs) have been approached to recommend best method for engagement in their area</p> <p>Ongoing engagement through LTTs to provide updates on workstream progress and milestones</p> <p>Using AMOS technical working group for technical advice and access to council staff</p> <p>Direct engagement with individual councils and staff to provide sector expertise (and perspectives)</p>		
Key activities to 31 December 2022	<ul style="list-style-type: none"> Development of National Levels of Service performance framework Develop draft capital and renewals programmes Begin the development of the growth and land development national frameworks 	<ul style="list-style-type: none"> Commence a stocktake of current operations Commence a compliance risk and readiness framework for each entity Commence development of a National Framework for Emergency Management Commence development of a register of current trade waste arrangements 	<ul style="list-style-type: none"> Commence development of approach and methodology for stormwater assets and function transfer Continue engagement on stormwater transfer and roles and responsibilities with LTTs

People and workforce workstream

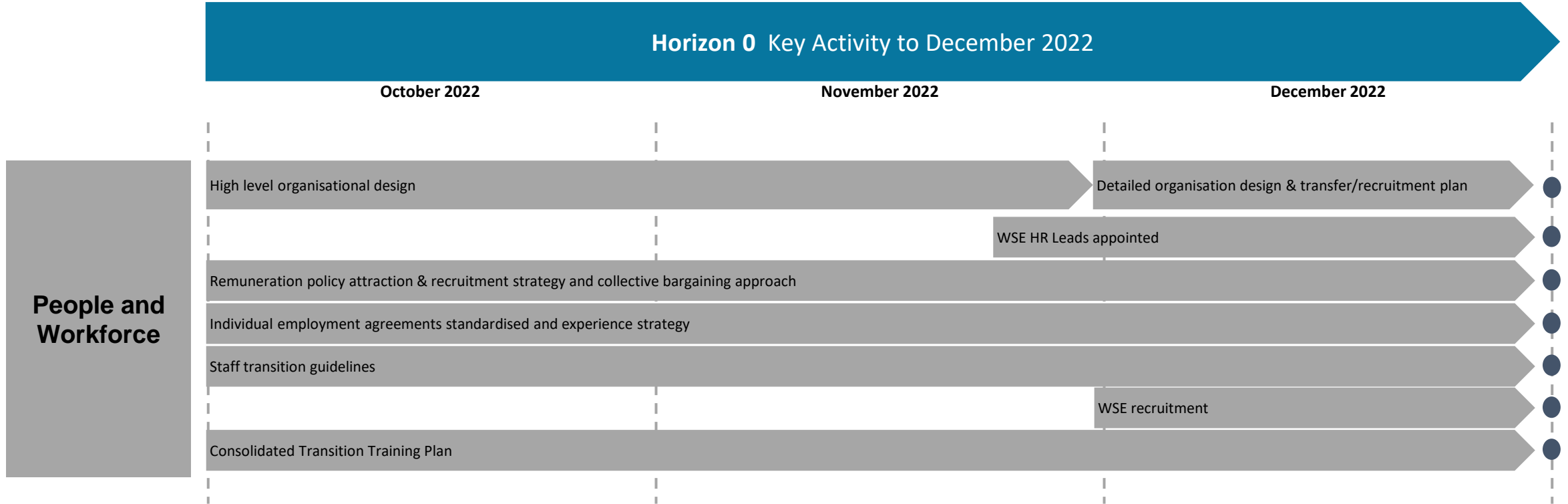
Tasked with designing and staffing the new Water Services Entities in a way that is both operationally sound and delivers a positive and inclusive transition experience for new and existing staff.

Some of the key deliverables for this workstream include:

- Organisational design of the Water Services Entities
- Reviewing current roles and eligibility for the legislated job guarantee, or other pathways to roles in the WSEs
- Supporting entities to settle terms and conditions of employment, manage transfers and recruitment and provide job offers to current and new staff
- Design and implement a Consolidated Transition Training Plan to ready staff for roles in the WSEs
- Establishing people and capability functions of the WSEs



People and workforce programme to 31 December 2022



People and workforce workstream engagement

	People & Workforce
Delivery approach	<ul style="list-style-type: none"> • Primarily delivered by the NTU, and with the WSEs once established • Key workstreams are workforce change, organisational design and employment relations • Collaborative, recognising the respective legal and operational responsibilities of all parties and the importance of aligning council change processes with the transition-related change
What we will need from councils and when	<ul style="list-style-type: none"> • Provide access for staff to The Staff Room (current), maintain and periodically update data • Support the review of roles to determine the appropriate pathway for affected staff as per legislation and Staff Transition Guidelines (October 2022 – March 2023) • Input into high-level and subsequent detailed organisational design and support staff engagement in this work (now to mid-2023) • Provide information on current terms and conditions of employment, pay and benefits (expect next request for information September 22) • Generally support affected staff in partnership with the NTU and provide input and feedback throughout the transition
How we plan to engage for this contribution	People & Workforce Local Leads will work directly with council HR and transition focal points to plan and support delivery of these activities; Transition Reference Group provides technical and engagement advice
Key activities to 31 December 2022	<ul style="list-style-type: none"> • The Staff Room implementation • Complete high level organisation design • Commence review of roles to support determination of pathways; engagement with councils to confirm transferring functions; engagement with staff as required • Further development of staff transition guidelines in response to feedback, staff experience strategy, attraction/recruitment strategy and develop Consolidated Transition Training Plan • Collective bargaining working party with national unions established; commence work on remuneration framework(s) and individual employment agreements

Data & digital workstream

The Data and Digital workstream is accountable for the implementation of systems, data, tools and digital processes required to enable the Water Services Entities to operate on Day 1.

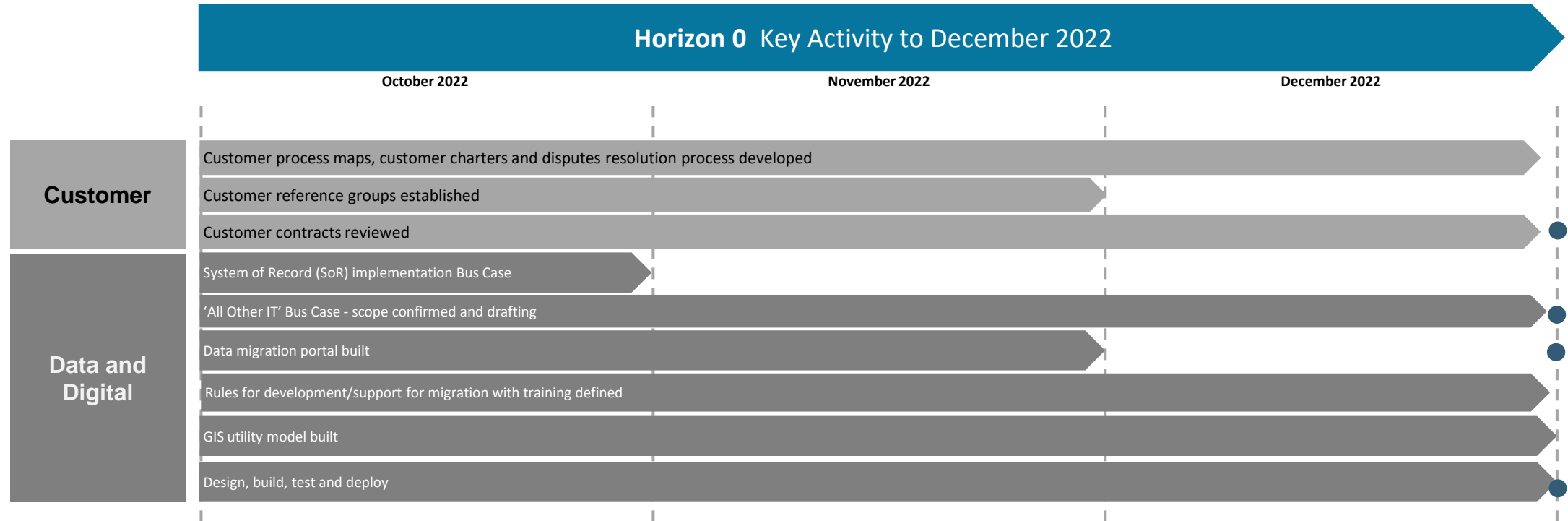
The key deliverables are:

- Establishment of full technical foundations/capability for the four Water Services Entities
- Migration of the minimum datasets from Council to the WSE environments
- Change management across three waters workforce and external stakeholders (e.g. maintenance contractors) for D & D activities – Comms/Training/Education/Adoption
- Establishment of technology in physical working environments (e.g. head office)
- Procurement of devices (laptops etc)
- Digital operating model, sourcing decisions and establishment of ongoing ICT support arrangements
- Hypercare (post-go live)

The technology establishment approach

Systems of Record	Leverage & scale existing working solutions Largely data migration rather than greenfields build Business processes are largely set
Operational Technology	Secure and provide access to existing operational technology for WSEs
Modelling and Reporting	Leverage & scale existing working solutions Tightly coupled to Systems of Record investment decision
Corporate Systems	Build new; born in the cloud
Systems of Differentiation	Build new but minimal

Data & digital programme to 31 December 2022



Data and digital workstream engagement

	Customer	Data & Digital
Delivery approach	<ul style="list-style-type: none"> Some activities, like the establishment of a disputes resolution process, will be managed centrally Most of the focus of this workstream will be to understand the nuances of different customer groups across entities and ensuring seamless service through the transition 	<ul style="list-style-type: none"> Managed and delivered centrally Establishment entities would deliver across some areas; this will be managed on a case by case basis.
What we will need from councils and when	Nomination of a 'lead' for customer engagement activities	<ul style="list-style-type: none"> Nomination of subject matter experts (SMEs) to understand current state data structures and for ongoing engagement (September) ICT managers and SMEs to participate in the Data & Digital roadshows (October) Participation in the data migration training sessions and subsequent data migration activities (from October, ongoing)
How we plan to engage for this contribution	Engage with the customer 'lead' as nominated by the Councils	Council cohorts will be created within each entity; the cohorts will be engaged to work on data migration and onboarding activities
Key activities to 31 December 2022	<ul style="list-style-type: none"> Day 1 customer experience designed Customer reference groups (per entity) established 	<ul style="list-style-type: none"> System of record implementation and other business cases drafted and submitted for approval Establishment of GIS utility model and data migration portal Develop network security design and 'to-be' architecture

Finance & commercial workstream

Will develop the financial plans and structures which the WSEs will operate under, as well as frameworks to ensure WSEs can begin operating on Day 1 and can continue operating as financially independent entities. Three key teams within this workstream, each with specific goals and deliverables:

Financial & settlements team

- Goal: Successfully deliver a seamless financial transfer and settlement for the water “businesses” being acquired from the councils based on “true and fair” financial statements
- Key deliverables: Financial accounts (including debt); settlement process; issue resolution

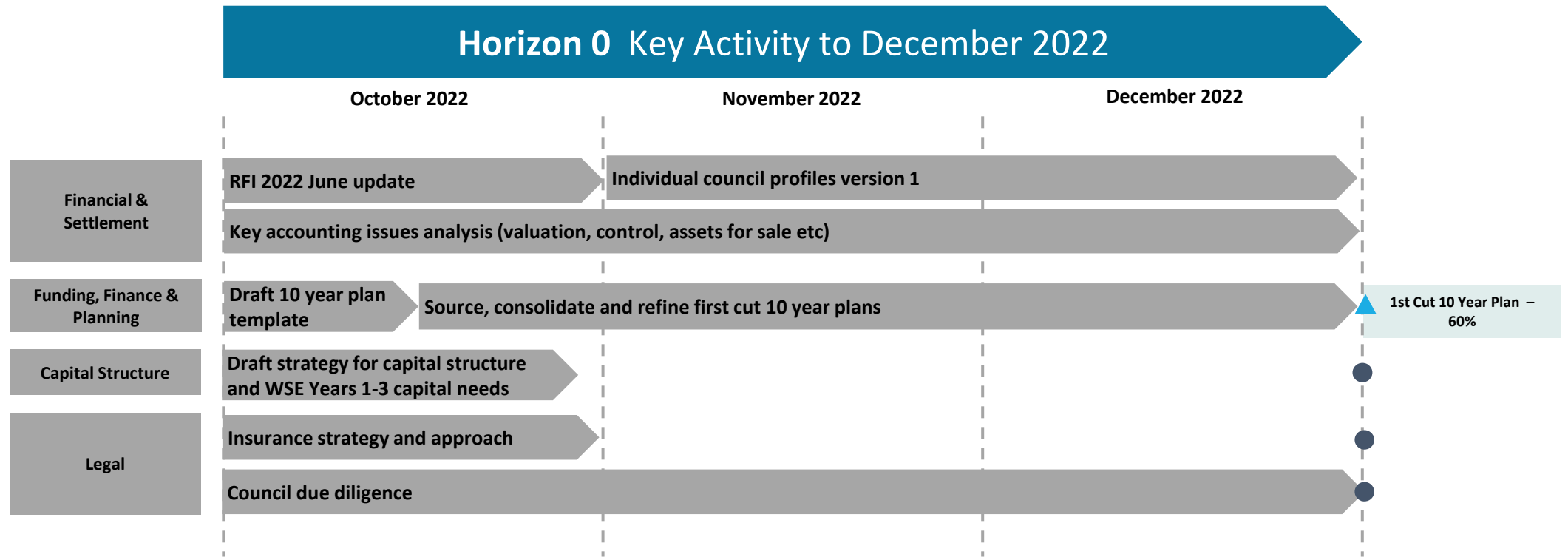
Funding, finance & planning team

- Goal: Develop the 10-year Finance & Funding plans which will enable decision makers to determine the optimal operating expenditure, capital investment, price path and debt levels to enable the four new entities to thrive
- Key deliverables: 10-year operating and capex forecasts; funding & pricing; 10-year funding & financing plans; issue resolution

Capital structuring team

- Goal: Determine, agree and secure opening capital structure for each WSE
- Key deliverables: Capital structure; capital sourcing strategy; relationships; credit ratings; issue resolution

Finance & commercial programme to 31 December 2022



Finance & commercial engagement

	Finance and commercial
Delivery approach	Primarily delivered by the NTU, in partnership with councils
What we will need from councils and when	<ul style="list-style-type: none"> • RFI for actual FY22 financial information (Sept - Oct) • Will be working with councils to clarify financial position following the RFI
How we plan to engage for this contribution	<ul style="list-style-type: none"> • Engagement will be directly with councils, initially through CEs • Setting up single points of contact with CFOs/GMs Finance
Key activities to 31 December 2022	<ul style="list-style-type: none"> • As per chart on previous slide

Transfer of three waters debt

- Mid-September 2022, the NTU will send each council a pro forma key financial information template, which we will ask you to complete by mid-October based on the council accounts as at 30 June 2022.
- The goal is to confirm 30 June 2022 three waters debt levels with Councils by 31 March 2023, having given councils the opportunity to review the debt calculation approach.
- The agreed three waters debt balance at 30 June 2022 will be updated to reflect FY23 actual results during the period October-December 2023 based on a template we will ask councils to complete similar to that used in September 2022.
- A similar process will be used to determine the final three waters debt position for each council as at 30 June 2024; recognising that the final outcomes will not be known until after completion of councils' audited accounts as at 30 June 2024.
- Councils should continue to manage their financial and treasury position as they usually would, with the expectation of receiving cash payments on or about 1 July 2024.

Ongoing sector engagement

NTU Activity	Council Representatives	Primary Engagement Channels	NTU Representatives	Level of Detail
Programme updates to provide a brief overview	Council and CCO chief executives	<ul style="list-style-type: none"> Fortnightly email Face to face 	Executive Director	Lower level of detail
Programme updates to seek input and advice		<ul style="list-style-type: none"> CEs roadshow CE monthly forums Face to face Webinars Working groups 	<ul style="list-style-type: none"> Executive Director Programme lead Council Interface Manager Engagement lead 	Medium level of detail
Brief in workstream programme/request for information seek input and advice	Functional General Managers	<ul style="list-style-type: none"> Face to face Local Transition Team meetings 	<ul style="list-style-type: none"> NTU workstream leads and/or local workstream leads Council Interface Manager 	Higher level of detail
Workstream updates for feedback/advice	<ul style="list-style-type: none"> Transition Manager Water Services staff 	<ul style="list-style-type: none"> Existing council forums Local reference/working groups Webinars 	<ul style="list-style-type: none"> NTU workstream leads and/or local workstream leads Council Interface Manager 	Higher level of detail

Funding support

THREE WATERS STIMULUS FUNDING

Purpose

\$523 million in funding has resulted in (up to 30 June 2022):

- 291 km of drinking water pipe upgrades
- 159 km of waste-water pipe upgrades
- 101 drinking water treatment plant upgrades
- 128 wastewater treatment plant upgrades

Funding

\$523 million has been provided to councils to invest in three waters infrastructure

Timing

In July 2022 the Minister of Local Government and Minister of Finance agreed to extend the end date for the programme to 31 December 2022. All projects that were due to be completed by 30 June 2022 can now be completed by 31 December 2022. 95% of the total funding value will be paid to your council upon completion of your programme of works. The final 5% will be paid upon submission of a final report.

BETTER OFF FUNDING PACKAGE

Purpose

- Funding will be used to invest in infrastructure or services that meet any of the following criteria:
 - Supporting communities to transition to a sustainable and low-emissions economy, including by building resilience to climate change and natural hazards
 - Enable housing development and growth, with a focus on brownfield and infill development opportunities where those are available
 - Support local place-making and improvements in community well-being

Funding

The package dedicates \$2 billion to councils with \$500 million available from 1 July 2022 and the following \$1.5 billion available from 1 July 2024

Timing

Applications for the first \$500 million tranche are open and will close on 30 September 2022. Councils may seek a waiver.

Funding support

COUNCIL TRANSITION SUPPORT FUNDING—TRANCHE 1

Purpose

- Gathering transition-related information, including responding to requests for information from the National Transition Unit
- The supply of information and resource to support councils' preparation for transition
- Participation in local transition activity and local transition teams.
- Responding to any additional requirements or processes mandated by the Water Services Entities Bill (once enacted) and supplementary legislation
- Water Services Entity asset management plans; and Water Services Entity funding and pricing plans

Funding

\$44 million to councils to support activities related to the Three Waters Reform ensuring each council receives at least \$350,000 paid in instalments across the 12 months until 30 June 2023

Timing

Funding agreements were sent to Council CEs in July and are to be signed and returned by 30 September 2022

COUNCIL TRANSITION SUPPORT FUNDING – TRANCHE 2

Purpose

- To provide additional funding to reimburse councils for council staff engaged in specific transition-related activity
- This activity will include the development of Water Services Entity asset management frameworks and plans; operations and stormwater transition requirements; funding and pricing plans; transition reference groups; and other transition-related activity

Funding

Up to \$41 million to contribute to councils' participation in local establishment activity, including covering the cost of seconded council staff and/or providing for staff backfill. The split of funding by council will be determined by the resources contributed from each council to transition activity.

Timing

Guidance on this second tranche of council transition support funding will be provided to councils by the end of 2022

Funding support

NO WORSE OFF FUNDING PACKAGE

Purpose

The \$500 million “no worse off” package is to acknowledge the costs and financial impacts on local authorities directly as a result of the Three Waters Reform.

Funding

Of the \$500 million, \$250 million will satisfy stranded costs associated with three waters transfer, and \$250 million will support the financial stability of non water related roles.

\$250 million for stranded costs includes: \$150 million distributed to councils (excluding Auckland, Christchurch and councils involved in Wellington water); \$50 million distributed to Auckland, Christchurch and councils involved in Wellington water; and \$50 million to cover materially greater stranded costs.

Timing

By end of 2022, DIA will work with LGNZ and Taituarā to develop assessment principles and processes.

The determination of allocations will be worked through next year. Payment of funding will occur on or around 1 July 2024.

Water Services Entity Bill – key dates

Date	Milestone
First Reading	9 June 2022
Referred to Select Committee	9 June 2022
Submission process underway	10 June 2022
Submission process closes	22 July 2022
Select Committee deliberation commences	August 2022
Select Committee deliberations report back	11 November 2022
Revisions tracked version	November 2022
Second Reading Committee of the Whole House	November/December 2022
Third Reading	December 2022

Further legislation to come

Further legislation alongside Bill 1 will be necessary to:

- Provide the functions and powers relating to service delivery;
- Implement the new arrangements (for example, transfer assets, liabilities and contracts);
- Make any changes to preserve Treaty settlements or other arrangements between mana whenua and councils, and arrangements under Takutai Moana Act;
- Establish economic regulation and consumer protection regimes; and
- Make detailed, technical changes to other legislation (for example, the Local Government Act 2002).

To be progressed towards the end of 2022 or early in 2023

Let's talk

What opportunities do you see in this roadmap e.g. to tweak the timing of specific inputs for better quality information/improved outcomes?

What are the biggest pinch points for you and how can we work with you to mitigate these?

What's the best way to engage with you in relation to specific milestones?

What's the best way to keep you and your teams updated?

What questions do you have for us?

Thank you!

To	Waikato District Council
Report title	Three Waters Reform - Better Off Funding Assessment Panel Recommendations
Date:	29 September 2022
Report Author:	Deron Sharma, Three Waters Reform Project Manager
Authorised by:	Gavin Ion, Chief Executive

1. Purpose of the report

Te Take moo te puurongo

To provide Council a shortlist of submitted projects that have been assessed and evaluated against the Department of Internal Affairs (**DIA**) Better Off Funding Criteria by the Better Off Funding Assessment Panel (the **panel**). This will enable Council to select and approve the projects that will be incorporated into the Three Waters Reform – Better Off Package (Tranche 1 Funding) Funding Agreement (the **Funding Agreement**) with the DIA.

2. Executive summary

Whakaraapopototanga matua

The better off funding application process saw a total of 115 applications being received, with a cumulative value of over \$50 million. Through a different process for Council, which saw staff working in collaboration with iwi partners to empower our communities, a shortlist of 19 projects, valued at \$6.864 million, was developed. Whilst a standard, procurement process was followed in the evaluation of the longlist to the shortlist, the recommended projects have a mix of Council led, community led, and iwi led projects.

There are recoverable costs for staff time, administration, and project management that will be disbursed from the funding. Accounting for recoverable costs, project management and contingency during the delivery period, there was still available funding to realize Council's aspiration for fortifying community safety through the installation of, and upgrades to, CCTV cameras with automatic plate number recognition capabilities across different districts within the rohe (region).

Staff have provided a list of contingency (backup) projects that also scored highly during the qualitative evaluation, indicating high alignment with DIA and Council criteria. These projects will be submitted to the DIA for consideration to be used as a substitute project

in the event that a shortlisted project cannot be delivered or does not meet the better off funding requirements from DIA's perspective.

Staff consider the contents of this report to be of high significance and have engaged with the community directly, Waikato-Tainui, and DIA during the process. Staff will continue to engage with applicants to provide progress updates until a decision is made by DIA.

It is the recommendation of staff that Council accept **Option 1**, which encompasses the contingency list and the shortlist, with the CCTV project as an addendum to reflect Council aspirations. Moreover, staff recommend that the Chief Executive be delegated the authority to sign the Funding Agreement.

3. Staff recommendations Tuutohu-aa-kaimahi

That Council:

- a. **accepts Option 1 that the recommended shortlist and contingency projects from the better off funding assessment panel, and the addition of CCTV to the program of works, be put forward for funding from the DIA via the Three Waters Reform – Better Off Package (Tranche One Funding) Funding Agreement.**
 - b. **acknowledges that all of the better off funding applications have been assessed and evaluated by the better off funding panel and the shortlisted submissions provided to Council have ranked highest against the DIA evaluation criteria as well as Waikato District Council's strategic vision.**
 - c. **notes that, under the agreed Terms of Reference with iwi, Council has the right to select and approve any project submitted for better off funding that meets the DIA better off funding criteria.**
 - d. **approves Council entering into the Three Waters Reform – Better Off Package (Tranche One Funding) Funding Agreement with the Department of Internal Affairs.**
 - e. **delegates to the Chief Executive, authority to sign the Three Waters Reform – Better Off Package (Tranche One Funding) Funding Agreement with the Department of Internal Affairs on behalf of Council.**
 - f. **recommends that the approved better off funding projects are allocated to Council's Project Management Office (PMO) to enable Council to either deliver internally or provide project management oversight to community groups self-delivering for the purpose of ensuring projects are delivered within scope and DIA reporting criteria.**
 - g. **notes that, where approved projects are community delivered, appropriate contracts are signed with those community groups ensuring projects outcomes**
-

and deliverables are aligned with Council's obligations under the Funding Agreement with the DIA.

- h. **notes that a lessons learned report will be prepared to reflect the learnings from the novel process developed for tranche one and utilize it for improvements for tranche two.**

4. Background **Koorero whaimaarama**

The better off funding package from the DIA is an investment by the Crown into local government and communities for future wellbeing.

Territorial authorities will be required to demonstrate that the use of this funding supports the three waters service delivery reform objectives and other local wellbeing outcomes whilst aligning with the priorities of central and local government, through meeting all or some of the following criteria:

- supporting communities to transition to a sustainable and low-emissions economy, including building resilience to climate change and natural hazards;
- delivery of infrastructure and/or services that:
 1. enable housing development and growth, with a focus on brownfield and infill development opportunities where those are available,
 2. support local place-making and improvements in community well-being.

Council recognises that the criteria for the funding package requires local authorities to engage with iwi/Māori in determining how it will use its funding allocation.

The Department of Internal Affairs' minimum expectations of Council regarding iwi/Māori engagement for the first tranche of funding are:

- Identify Māori impacted by the kaupapa (purpose) of the work, with a focus on hapū, iwi, post-settlement government entities, other mana whenua
- Evidence of genuine engagement, extending beyond standing committees
- Identify issues/concerns arising from the engagement, and steps taken to accommodate and support these interests.

At the Infrastructure Committee meeting on 22 May 2022, Council agreed to the establishment of an assessment panel to consider applications for better off funding and make recommendations to Council on how the first \$7.88 million putea (grant) should be allocated.

At this meeting, Council agreed that Council staff and our treaty partners should be equally represented on the panel and that the panel should operate under a Terms of Reference that needed to be approved by Council.

On 30 June 2022, Council approved this Terms of Reference, giving the panel the authority to assess the incoming applications and make recommendations to Council on projects best suited to receive the funding based on:

- alignment with DIA criteria
- assessment of the projects against the Local Government Act's wellbeing mandates
- Waikato District Council's vision of liveable, thriving, connected communities

With Council seeing fit to appoint four iwi representatives with four council representatives, the panel appointed Haydn Soloman (Western Iwi Representative) and Everard Whangapirita (WDC Procurement Manager) to look at the requirements and build a methodology that would be able to support the criteria requirements, timelines, and governance oversight.

With tight timelines, the team saw the value of working within the community, utilising marae infrastructure, connectivity, and established relationships. Furthermore, the DIA partnership matrix provided the context, highlighting Council's foresight to enable the opportunity for early partnership through the establishment of the panel.

By establishing a Mātauranga Māori approach, Council recognized the requirement to *Inform, Consult, Collaborate, and Partner* to enable a successful transition for future funding within Tranche two while building on an established relationship with Waikato-Tainui and their representatives in tranche one.

5. Discussion and analysis

Taataritanga me ngaa tohutohu

The assessment panel's process was broken down into two phases, the former being qualitative and the latter, quantitative. This enabled the panel to objectively assess projects solely on the merits against the funding criteria and WDC's strategic focus areas before considering projects based on financial information. This involved utilizing a marae-based, engagement model wherein the panel members and applicants were welcomed through a Pōwhiri facilitated by iwi panel members.

Wāhanga Tuatahi – Phase One

Phase one reviewed all projects while focusing on a qualitative approach. While the DIA only required projects to meet one of the funding criteria to be eligible for funding, the assessment panel developed an evaluation methodology that rewarded projects for meeting multiple criteria. The purpose of doing this was two-fold: firstly, to set the bar higher than DIA to increase likelihood of success for Council's recommendations, and secondly, to ensure that projects were scored fairly and holistically against all the available criteria. This method gave the panel the ability to be consistent while reviewing to a high standard under tight turnaround times.

After the marae presentations, phase one saw paired panel members (one Council staff and one iwi representative in each pair that was assigned to each ward) independently score each application before reaching a consensus amongst themselves. Projects scored higher than 7 out of 10 points were presented to the entire panel for further consideration until consensus amongst the quorum was reached. During this phase, if panel pairs had uncertainties or concerns about a particular application, it was raised with the remainder of the panel as a point of discussion. This constituted the qualitative phase wherein the panel considered each application based on its merits against the DIA and WDC criteria under probity in practice.

Wāhanga Tuarua – Phase Two

In this phase, the philosophy distinguishing the differing levels of experience between Council or Community is explained by the approach of tuakana and tēina, or big brother and little brother. The panel acknowledged the disparities in resources available to, and capabilities of, tuakana and tēina projects during the assessment, whilst maintaining alignment to the DIA criteria.

Once the panel moderated on projects that best fit the DIA criteria and WDC’s vision, the pricing associated with each application was released to the panel. Based on the criteria, the scoring of each project, its value for money, and deliverability, a secondary moderation was carried out to develop a shortlist. Projects that were filtered out during this phase was classified as a contingency project. Contingency projects are a list of projects that can be substituted into the programme of works (by virtue of meeting the DIA criteria) if a shortlisted project cannot be achieved during the delivery period or not approved by DIA.

The panel used auxiliary prioritization factors to litmus test projects during moderation:

- credibility of applicant
- likelihood of successful delivery
- profiteering
- number of beneficiaries within the community
- shovel readiness
- delivery timeframe (realistic/compliant)
- independence/reliance on other funding sources
- balance of stakeholder benefits (fair representation)
- value of request against the funding available to ensure equitable distribution of funds.

In total, 107 applications, with a cumulative value of over \$50 million, were received and assessed using the process outlined above. The distribution of projects within the North, South, East, and West wards have been tabulated (**Table 1**).

Table 1: Summary of application numbers and project costs by ward

	East	North	South	West
Number of Applications	24	23	26	31
Cost of Projects (\$ million)	12.797	5.866	17.505	13.833

Out of the 107 projects, the Taupiri Community Shared Pathway was split into two stages as it was a multi-stage project, and the Te Paina project was split into seven different

projects as the application form referenced seven discrete projects. Once this splicing was applied, it brought the total application count to 115.

Out of this total count, 19 projects were shortlisted, and 11 projects were classed as contingency projects.

The mahi (work) undertaken by staff to deliver the three waters reform better off funding is above business as usual activities; the costs associated with delivery has been attributed to project costs, thereto.

Council has already incurred around \$180,000 to date (**Table 2**) and will continue to incur recoverable costs for staff time, project management, and administration.

Commented [DS1]: DS to flesh out PM/admin/contingency costs with Linda and add to this table

Commented [CB2]: Everything from here onwards needs to be included in Discussion and analysis, and summarised in the Executive Summary. Finance Considerations is for funding and risk issues.

Table 2: Summary of costs incurred

Activity	Cost (\$)
Community engagement costs	10,000
Recovery of staff time on assessment panel	70,000
Remuneration of iwi panel members	30,000
Project management and administration	70,000
Total costs incurred	180,000
Total available funding for projects	7,700,000

These costs will be drawn down from the available funding of \$7.88 million, which brings the available funding down to \$7.7 million.

The assessment panel's shortlisted projects have a cumulative value of \$6.018 million. When a 10% contingency and 20% project management cost is applied, this brings the total to \$6.86 million, leaving a remainder of \$840,000 (**Table 3**).

The Whaingaroa Wharf Walkways project already has contingency and project management programmed into the application costs so additional disbursements should not be required.

Table 3: Summary of shortlisted projects with associated delivery costs

Shortlisted Project	Value (\$)	Contingency (10%)	Project Management (20%)	Project Total
Whaingaroa Wharf Walkways	3,200,000	-	-	3,200,000

Taupiri Community Shared Pathway (Stages 1 and 2)	529,750	52,975	105,950	688,675
Whatawhata Playground	250,000	25,000	50,000	325,000
T.A.S.K (Te Akau South Kaitiaki)	44,022	4,402	8,804	57,229
Te Kauwhata Community Transport Service Electric Car Project	45,000	4,500	9,000	58,500
Te Ao Moana Whaingaroa	17,957	1,796	3,591	23,344
Whatawhata Country Tennis Club Upgrades Lights	90,000	9,000	18,000	117,000
Naike Wellness Hub/Community Gym	142,024	14,202	28,405	184,631
Waerenga Community Hub Feasibility	116,390	11,639	23,278	151,307
Accessibility Lift for Creative Space Building at Raglan Old School Arts Centre	29,536	2,954	5,907	38,397
Restoring Mauri to Davies Park	421,500	42,150	84,300	547,950
Te Kowhai Structure Plan	250,000	25,000	50,000	325,000
Kimihia Lakes Irrigation and Picnic Site	96,040	9,604	19,208	124,852

Community Heartsaver Defibrillators	29,490	2,949	5,898	38,337
Raglan Bowling Club Irrigation Upgrade	7,018	702	1,404	9,123
Te Paina Project 2 - Te Paina Restoration	485,000	48,500	97,000	630,500
Te Paina Project 1 - Pest Eradication	130,000	13,000	26,000	169,000
Te Paina Project 4 – 3 Waters Program	75,000	7,500	15,000	97,500
Waka Energy Resources & Papakainga Project	60,000	6,000	12,000	78,000
SUB-TOTAL	6,018,727	281,873	563,745	
TOTAL				\$6,864,345.10

In addition to the above projects, Council have indicated a desire to include an application for CCTV cameras across a number of district locations. These include Pōkeno, Ngāruawāhia, Rāhui Pōkeka Huntly, Whaingaroa Raglan, and Tamahere. Staff have undertaken high level estimates of installing and maintaining CCTV in these locations based on the CCTV installation in Rāhui Pōkeka Huntly. Estimates totalled approximately \$540,000 for 20 cameras with pan, tilt, zoom capability as well as automatic plate number recognition in 10 locations. With the available funding of approximately \$840,000 Council's aspiration of having safer communities through CCTV can also be realised (**Table 4**).

Table 4: Breakdown of estimated CCTV project costs

Activity	Value (\$)	Contingency (10%)	Project Management (20%)	Project Total (\$)
Capital Expenditure				
Design	18,000	1,800	3,600	23,400

Hardware - Cameras	40,000	4,000	8,000	52,000
Hardware - Storage & Networking	180,000	18,000	36,000	234,000
Hardware - Poles	25,000	2,500	5,000	32,500
Traffic Management	30,000	3,000	6,000	39,000
Security (2x static Armourguard)	-	-	-	-
Electrical Work	30,000	3,000	6,000	39,000
Installation Contractor	50,000	5,000	10,000	65,000
SUBTOTAL CAPEX	373,000	37,300	74,600	484,900
Operational Expenditure				
Grid connection annual fee	2,000	200	400	2,600
Network Management cost per node	100	10	20	130
Monitoring of cameras	20,000	2,000	4,000	26,000
Repairs and Maintenance	20,000	2,000	4,000	26,000
SUBTOTAL OPEX	42,100	4,210	8,420	
SUBTOTAL	415,100	41,510	83,020	
TOTAL				\$539,630

The assessment panel has also recommended a list of 11 contingency (backup) projects to Council (**Table 5**). These contingency projects also scored well against the DIA criteria and can be substituted into the better off funding delivery program if one of the shortlisted projects cannot be delivered or if, in the future, Council finds itself incurring lesser project management and delivery costs than current estimates.

Table 5: Summary of contingency projects

Backup Project	Value (\$)	Contingency (10%)	Project Management (20%)	Project Total (\$)
Taupiri Community shared Pathway (Stage 3)	925,425	92,543	185,085	1,203,053
Hinemoa H2O - Feasibility	1,000,000	100,000	200,000	1,300,000
Durham Precinct Revitalisation	625,000	62,500	125,000	812,500
The Refinery Health and Fitness Ltd	143,000	14,300	28,600	185,900
Pura Whetu ki Whaingaroa	99,500	9,950	19,900	129,350
WDC Shades of Playgrounds	92,000	9,200	18,400	119,600
Te Paina Project 3 - Water, Air & Soil Testing	750,000	75,000	150,000	975,000
Te Paina Project 5 - Taiao Safe Marae	50,000	5,000	10,000	65,000
Te Paina Project 6 Mātauranga Māori Academy	20,000	2,000	4,000	26,000
Te Paina Project 7 Land Wars Heritage Trail	2,000	200	400	2,600
TIAKI Feasibility - Huntly Green Energy	590,000	59,000	118,000	767,000
SUB-TOTAL	3,901,250	390,125	780,250	
TOTAL				\$5,586,002.50

5.1 Options Ngaa koowhiringa

Staff have assessed that there are two reasonable and viable options for the Council to consider, which are set out below.

Option One:

Council accepts the assessment panel's recommendations for shortlisted projects and contingency projects as well as the addition of CCTV to the program of works.

Option Two:

Council does not accept the recommendations of this report and does not proceed with the better off funding application to DIA.

Staff recommend **Option One** as it aligns with expectations which have already been set with community and iwi partners.

5.2 Financial considerations Whaiwhakaaro puutea

Funding of the individual projects, allocation of funds received from the DIA, and the preparation of reports and supporting information will be done following the accepted Council processes in respect of Grant Funding.

Council can make monthly payment requests to DIA under the Funding Agreement. DIA has confirmed that such payment requests must include a copy of an invoice (paid or unpaid); however, if an invoice is not received but is imminent, information explaining this and any supporting documentation will be sufficient.

Payments by Council to funding recipients are required to be in advance (either in a lump sum or by instalment) of works completed, otherwise the recipients will likely not have the cashflow to commence works. Accordingly, as payment claims to DIA are in arrears of Council, providing funding to the funding recipient poses a financial risk to Council. This risk can be partially mitigated by ensuring advance payments to recipients are no more than one month ahead of actual expenditure, supported by invoices and appropriate documentation. Caps will also be placed on all projects to ensure no more than the project sum is advanced to the recipients.

5.3 Legal considerations Whaiwhakaaro-aa-ture

The Funding Agreement that Council will sign with DIA does not account for Council empowering communities to lead their projects. There are certain risks to Council in administering the better off funding to community groups. Applicants will be advised that funding will be administered on the basis that said applicant has the appropriate legal authority to exercise rights to carry out the proposed works on the asset(s) referenced in the application.

Council's Legal Team have reviewed the Funding Agreement, highlighted key terms and have attempted to negotiate some clauses with DIA, with the DIA confirming that it has no appetite to negotiate the terms. The Legal Team has concluded that, on balance, the

Commented [DS3]: Not sure how to phrase this section.

Commented [CB4]: Thanks Sarah, I have used all your text and added a few lines about mitigation.

Commented [DS5]: Note to Sarah/Christine:

Yesterday in CCL workshop, Cr Church mentioned that Te Pauna applicants may not have the correct ownership over the land they want to do projects on and the recommendation was that we express in this report that the funding agreement we develop will take those matters into account?

Commented [DS6R5]: I have added in some identified risks in the risk section for your reference also

Commented [DS7]: Sarah/Christine to elaborate

terms of the Funding Agreement are not unreasonable or onerous. Of importance to note is that Council is responsible for all cost overruns and shortfalls.

There is additional, legal risk associated with Council passing on the funds to funding recipients (as opposed to Council using the funds on its own project). This is because Council will be reliant on the funding recipient to provide invoices/required documentation to make payment claims and provide reports to the DIA and for overall compliance with the terms of the Funding Agreement between Council and the DIA to not give rise to a right of termination for DIA.

This risk can be mitigated in part by a “back-to-back” agreement between Council and the funding recipient (who must be a legal entity), essentially passing on Council’s obligations to DIA to the funding recipient and providing “claw back” provisions so that, if for any reason the DIA will not pay Council, Council could seek the money back from the funding recipient. However, Council is still reliant on such information being provided and if the funding recipient breaches its agreement with Council, Council will in turn breach its agreement with DIA. Furthermore, recovering any money from the funding recipient is contingent upon the financial standing of the funding recipient, if they are a small community group, they are unlikely to have the means to repay and to provide security. There are also clauses that funding recipients/community groups may find difficult to adhere to such as compliance with professional codes of conduct, carrying out the works in accordance with best industry practice, ensuring transactions are arm’s length and best value for money. Council’s Legal Team, in conjunction with Brookfield’s lawyers, will draft the back-to-back Agreement should Council resolve to enter into the Funding Agreement and for the funds to be provided to the funding recipients.

5.4 Strategy and policy considerations **Whaiwhakaaro whakamaaherehere kaupapa here**

The report and recommendations are consistent with Council’s policies, plans, prior decisions, and vision of “Liveable, thriving and connected communities - He noohanga aahuru, he iwi whai ora, he hapori tuuhono tahi.”

Furthermore, the report and recommendations are congruent with Council’s community outcomes and goals of:

- Supporting our communities by fortifying accessibility to this fund
- Building our economy by investing in jobs and opportunities within our district
- Working together with our communities by enabling face-to-face discussions between panel members and project submitters and providing support to project submitters that need help in developing their proposals
- Modernizing infrastructure where it is appropriate to do so
- Maintaining existing assets

5.5 Maaori and cultural considerations **Whaiwhakaaro Maaori me oona tikanga**

Through the formation of the panel and the subsequent mahi that has been achieved in these timeframes, Council has exceeded the minimum expectations of engagement from DIA.

The formation of the Panel has given Council the opportunity to:

- work together with iwi/Māori
- determine issues together
- develop solutions together
- involve iwi/Māori in the decision-making process

With reference to the DIA’s matrix for building partnership (**Figure 1**), it is evident that Waikato District Council is not only engaging but partnering and working in collaboration with treaty partners and iwi. This level of engagement is also congruent with Council’s Significance and Engagement Policy, wherein Council staff and iwi panel members demonstrated “Working together to develop understanding of all issues and interests to work out alternatives and identify preferred solutions.”

		1 Current State			2 Future State
		Inform	Consult	Collaborate	Partner
Principles of Effective Engagement	Engage early	▶ Advise iwi/Māori of what is happening			
	Be inclusive	▶ Provide information to iwi/Māori	▶ Keep iwi/Māori informed ▶ Seek feedback from iwi/Māori	▶ Work together with iwi/Māori	▶ Pre-existing relationship with iwi/Māori
	Think broadly		▶ Listen to iwi/Māori ▶ Acknowledge iwi/Māori concerns & aspirations	▶ Determine issues/problems together	▶ Determine issues/problems together
Principles of Partnership	Plan and co-design together			▶ Develop solutions together	▶ Develop the solution together
	Share decision-making			▶ Involve iwi/Māori in the decision-making process	▶ Co-design the process
	Relationship built on trust and respect				

Figure 1: Department of Internal Affairs partnership matrix

The panel has given equal consideration to the needs of Council and our wider community, including the needs of tangata whenua. Reflected in the preferred option of this report, the denouement of the panel’s shortlisting process also realizes iwi aspirations for the district.

While the panel was unable to report directly to the Waikato River Settlement-Joint Management Agreement Committee due to scheduling conflicts, the work undertaken gives effect to the principles of ‘Co-Management’ and ‘Integration’ outlined in the Agreement and has elemental foundations on the principle of Pātuitanga (Partnership) in Te Tiriti o Waitangi.

5.6 Climate response and resilience considerations Whaiwhakaaro-aa-taiao

The DIA criteria for this putea (fund) places an emphasis on building a low emissions economy and resilience to climate change and natural hazards. Staff have to consider and plan for natural hazards that are unique to our district's geography.

Council's commitment to improving emissions and building resilience to climate change is exemplified through the preferred option, wherein 11 of the 19 shortlisted projects were, in the panel's view, found to meet this criterion. Similarly, 8 out of the 11 contingency projects were assessed to meet this criterion. The next step would be for staff to work with applicants to devise mechanisms through which these can be measured and reported.

5.7 Risks Tuuraru

There are reputational, financial, and strategic risks that staff have considered and planned treatments for (**Table 6**).

Table 6: Risks to Council

Risk	Consequence	Treatment
Applicants failing to meet reporting requirements.	<ul style="list-style-type: none"> DIA does not pay Council. Redirection of WDC resources for mitigation. WDC potentially in breach of Funding Agreement. 	<ul style="list-style-type: none"> WDC likely to administer funding on receipt of invoice. WDC project manager to act as monitor. Bespoke legal agreements between WDC and successful applicants to mitigate risks to WDC.
Applicants' conduct or practices does not align with WDC values or contravenes WDC's Funding Agreement with DIA.	<ul style="list-style-type: none"> Reputational damage to WDC. WDC potentially in breach of Funding Agreement. Regulatory Compliance issues. 	<ul style="list-style-type: none"> WDC project manager to act as monitor. Bespoke legal agreements between WDC and successful applicants to mitigate risks to WDC.
Public scrutiny over project shortlist.	Reputational damage to WDC.	<ul style="list-style-type: none"> Panel members given process and evaluation training. ELT involvement in assessment panel. Retrospective and live probity administered. DIA involvement and support in the process.

Public perception of Council's acceptance of better off funding in relation to wider three waters reform program.	<ul style="list-style-type: none"> • Reputational damage to WDC. • Strategic/Political issues. 	<p>Communications strategy, contingent upon Council direction.</p> <ul style="list-style-type: none"> • Legal agreement to reflect that applicants responsible for overspending as WDC cannot be committed beyond the available funding. • WDC project manager to act as monitor.
Project overspends.	Going over budget from available funding.	

6. Significance and engagement assessment Aromatawai paahekoheko

6.1 Significance Te Hiranga

The decisions and matters of this report are assessed as of high significance, in accordance with the Council's [Significance and Engagement Policy](#).

AND

The following criteria are particularly relevant in determining the level of significance for this matter:

- The degree to which the issue has a financial impact on Council or the rating levels (both targeted and general) of its communities.
- The likely impact on present and future interests of the community, recognising Māori Tikanga (culture values) and their relationship to land and water.
- The proposal affects the level of service of a significant activity.
- The community interest is likely to be high.
- The likely consequences are controversial.
- There is more than one viable option.

6.2 Engagement Te Whakatuutakitaki

Engagement on the contents of this report has been high.

Council has engaged with the applicants on 8 different occasions, including four online drop-in sessions and four kanohi ki te kanohi (face to face) sessions held at marae. The next step in the communications and engagement plan is to give applicants a progress report and expected timeframe for notification of success, which is dependent on DIA.

The following areas have been priorities in the communications and engagement approach:

- keeping Waikato-Tainui informed through iwi panel members
- keeping the Department of Internal Affairs informed and ensuring the activities undertaken are aligned with any relevant policies or contractual obligations

Highest level of engagement	Inform	Consult	Involve	Collaborate	Empower
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>Tick the appropriate box/boxes and specify what it involves by providing a brief explanation of the tools which will be used to engage (refer to the project engagement plan if applicable).</i>	<p>Staff have worked collaboratively with our iwi/hapū to maximise engagement with the community, which has also strengthened the relationship between Council and its treaty partners in the process.</p> <p>Staff have maintained consistent engagement with the Department of Internal Affairs through John Mackie, Council's Relationship Manager at Crown Infrastructure Partners, whereupon it was indicated that Waikato District Council is one of the leading territorial authorities in the engagement space.</p> <p>Through this process, staff are gearing Council for the future for local government, a co-designing partnership between Council and treaty partners, and securing Tranche Two of the Better-off Fund, if available.</p>				

Stakeholders have been or will be engaged with:

Planned	In Progress	Complete	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Internal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Community Boards/Community Committees
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Waikato-Tainui/Local iwi and hapuu
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Affected Communities
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Affected Businesses
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other (Please Specify) Waters Governance Board

Planned	In Progress	Complete	
			Department of Internal Affairs Crown Infrastructure Partners

7. Next steps Ahu whakamua

The next steps for staff would be to:

- Submit the funding application to DIA
- Inform applicants of application progression and anticipated DIA timeframes
- Upon approval from DIA, Council's delegated authority will sign the Funding Agreement
- Further refine project management and administration cost projections and estimates
- Engage with relevant staff and suppliers for CCTV project delivery
- Create bespoke funding agreements with each successful applicant
- Work with applicants to devise reporting templates and strategies
- Prepare financial reporting documentation for DIA
- Prepare a handover of project delivery to the PMO.

8. Confirmation of statutory compliance Te Whakatuuturutanga aa-ture

As required by the Local Government Act 2002, staff confirm the following:

The report fits with Council's role and Terms of Reference and Delegations. Confirmed

The report contains sufficient information about all reasonably practicable options identified and assessed in terms of their advantages and disadvantages (*Section 5.1*). Confirmed

Staff assessment of the level of significance of the issues in the report after consideration of the Council's Significance and Engagement Policy (*Section 6.1*). High

The report contains adequate consideration of the views and preferences of affected and interested persons taking account of any proposed or previous community engagement and assessed level of significance (*Section 6.2*). Confirmed

The report considers impact on Maaori (*Section 5.5*) Confirmed

The report and recommendations are consistent with Council's plans and policies (<i>Section 5.4</i>).	Confirmed
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The report and recommendations comply with Council's legal duties and responsibilities (<i>Section 5.3</i>).	Confirmed
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9. Attachments Ngāa taapirihanga

There are no attachments for this report.

To	Waters Governance Board
Report title	Three Waters Governance Report – September 2022
Date:	11 October 2022
Report Author:	Carole Nutt – Waters Contract Relationship Manager
Authorised by:	Gavin Ion - Chief Executive

1. Purpose of the report

Te Take moo te puurongo

To update the Waters Governance Board of the current workstreams, key matters and metrics under the three waters operational and maintenance agreement with Watercare Serviced Ltd.

2. Executive summary

Whakaraapopototanga matua

Please refer to the Highlights and Lowlights summary section in the attached report prepared by Watercare Services Ltd.

3. Staff recommendations

Tuutohu-aa-kaimahi

That the Waters Governance Board:

- a. receives the report.**

4. Attachments

Ngaa taapirihanga

Attachment 1 – Waikato DC Three Waters Governance Report – September 2022

WAIKATO DC

THREE WATERS GOVERNANCE REPORT

SEPTEMBER 2022



Mathew Telfer
Operation Manager
Watercare Waikato
September 2022

1. Highlights and lowlights

- There were no recordable injuries or lost time in August.
- All performance measures were achieved in August, and the year-to-date results are achieved in all areas except water 'Resolution of urgent call-outs'. This failed measure reflects the complex repairs in July.
- Production staff have worked extremely hard and covered extended work hours during June/July/August to ensure that all plants maintained compliance. I must acknowledge their efforts as it is only a small team thinly spread across the WDC region.
- Due to on-going fluctuations in the raw water quality, the Huntly WTP filter set point criteria were reduced from 4 log settings to 3 log setting on 8 September to ensure that the filters stayed in service to maintain production. A 'reduce usage' notice was required for the Huntly area from 8 to 19 September. The plant remained fully compliant with NZ Drinking Water standards throughout this time.
- While there continued to be heavy rainfall in August, the teams managed the impact to ensure there were no other events in the network or at the wastewater plants.
- There was an injury to an operator's shoulder at the start of August when they pulled a 70mm hose on top of Clarifier # 5. They were in a sling and on light duties for a week.
- Watercare is supporting several activities related to the coming three waters reform. A resourcing plan will be produced with Council staff to enable support of the on-going engagement, which is expected to increase.
- The asset revaluation was completed, and the focus now moves to ensure all assets are loaded.

2. Health and Safety

- The actions related to the Impac seven recommendations are as follows,
 1. The review of the HSMP has been completed and agreed upon with Council staff
 2. Agendas and minutes are now produced for H&S management and Health and Safety Improvement Committee meetings. On-site meetings and discussions are recorded in ICare
 3. Formal meetings are recorded in ICare - informal meetings e.g. site visits, are not unless there is an H&S issue identified.
 4. JSA's are used for all non-standard activities and take five and site assessment for reoccurring activities supported by an SOP.
 5. We have a pandemic response and procedures produced for COVID; it appears this was not represented well enough. Watercare Waiakto's response to COVID was very successful with limited impact on the business or customers.
 6. A consolidated training matrix has been produced and is in use.
 7. A new vehicle inspection process is being implemented where vehicles used by the same person are inspected weekly, and when a vehicle is used for the first time, an inspection is completed.
- At the last board meeting, a question was asked if a floatation device had been used during a repair to a pipe on a bridge that required a specialist abseiling company. We can confirm no floatation device was attached to the person. The rigging system has a secondary failsafe rope and the main lead line. The rationale behind not actively wearing floatation devices is that both ropes would need to fail for the abseiler to fall into the water, and due to the bulky

nature of floatation devices, this has the potential to interfere with the ropes and cause a hazard. The risk assessment determined that a floatation device (float buoy) and double roping were sufficient to prevent a drowning hazard.



Abseilers carrying out gibbalt repair work

2.1. What we've seen this month

- There was no Lost Time Injury (LTI) and 1 Restricted Duties Injury (RDI) involving Watercare employees in August.
- There were zero recordable injuries involving contractors in August
- The focus for August was Digging and working in excavations.
- There was an injury to an operator's shoulder at the start of August when they pulled a 70mm hose on top of Clarifier # 5. They were in a sling and on light duties for a week.
- Huntly WWTP contractor (Pump and Electrical Services Ltd) working on-site with a Hiab crane operator was distracted and struck the high voltage overhead wires with the crane boom tripping the power to the plant. No injuries occurred, but it was a serious close call. This incident has been thoroughly investigated and has resulted in the contracting company being stood down from Hiab work until staff has been retrained and focused on the tasks, methodology, hazard analysis, and JSA procedure. The operator was training two new staff members at the time of the incident. Watercare has confirmed only one staff member should be taught at a time to avoid distracting operators.

2.2. Looking ahead and wellbeing

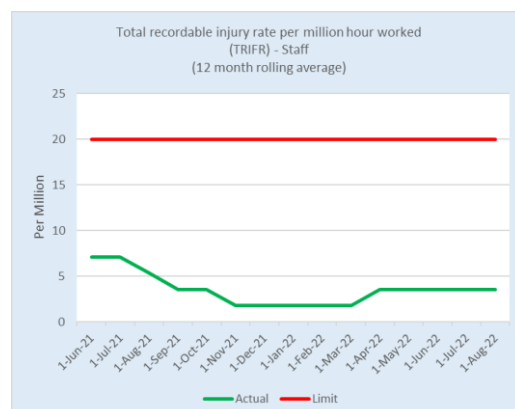
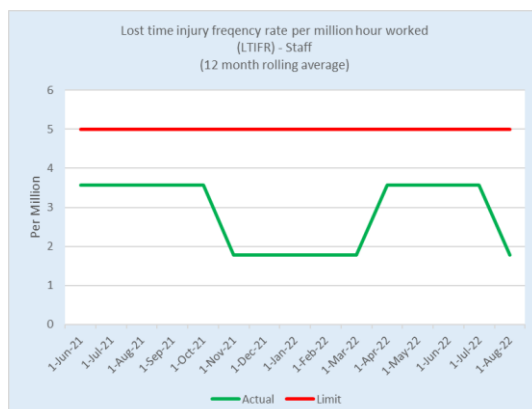
- The focus for September is Working at height.

2.3. Critical risks

Watercare is assessing one of our critical risks (Appendix 1) each month (excludes Nov and Dec) as per the schedule below.

2.4. August metrics

- Close call - a Hiab crane operator was distracted and struck the high voltage overhead wires (details above)



3. Operations

3.1. Production

Water

- Production staff have worked extremely hard and covered extended work hours during June/July/August to ensure that all plants maintained compliance.
- A vacancy was created when a Water/Wastewater Treatment Operator resigned on 19 August. The replacement operator started with the team on 19 September.
- Following heavy rain events throughout June/July/August, the Waikato river raw water quality has been unpredictable and variable, with fluctuating turbidity, pH, and organics (UVT) at all water plants. This required several actions at each plant which stretched the capacity of the production team.
- SOP's are being developed for chemical dilutions in booster stations.
- Following heavy rain events throughout June/July/August, all pond levels are being monitored and managed to maintain compliance.
- The Huntly WTP Chemical storage container near the raw water inlet has been relocated to be more visible under floodlighting. A recent site security breach initiated this move.
- The TeKauwhata WTP new Treated Water pumps have been commissioned. Schneider has made minor VSD and Duty module modifications to tune the process control.
 - Filter 3 project works – Tie-In has been completed. The Media installation has been delayed until the filter passes a dispersion bubble test.
 - The new Filtered Water Turbidity analyser has been commissioned. The calibration kit is now on-site.
- The Port Waikato WTP Clarifier desludging was completed on the 30th Aug. The Scada Kingfisher upgrade was completed on 30 August.
- Wharf Road surface to Te Akau WTP is deteriorating due to the weather conditions. Council and the Road Alliance were notified of the risk if access was lost to the point of supply.

Wastewater

- A single final effluent pump is keeping up with the wetland flows at the Huntly WWTP. Massive infiltration flows to the plant are impacting the pond levels.
- Due to crown corrosion, the Ngaruawahia WWTP headworks to the pond inlet pipe are in poor condition. Options to upgrade and relocate the inlet screens are under investigation.
- Te Kauwhata WWTP Plant upgrade project has been awarded to Spartan contracting for the next upgrade phase.
- The plant was operated on the generator for one day to allow the new Wel Transformer to be commissioned.
- A pond-level instrument will be installed in September.
- The installation of the new Solar array has commenced at the Raglan WWTP.
- Following the heavy rain event, the new plant has coped well. Massive infiltration flows to the plant are impacting the pond level. This will be included in the I&I project currently being proposed. The installation of WAS tanks is planned for Sept.
- Massive infiltration flows to the Matangi, Te Kowhai, and Maramarua WWTP plants impact the processes.

- A Matangi 30 vacuum truck loads were removed from the plant to maintain levels. This is an expensive activity and needs to be addressed in the network.
- At Maramarua Treated Water Effluent pump was replaced on 2nd August. The disposal field needs to be replaced. Clearing vegetation is planned as the first step.

3.2. Networks

- RTU Upgrade Project – The seven additional sites added to the project (left out of the original scope) have completed as-built drawings. SPS 909 – Waikaha PS has been built, and Northern Electrical (contractors engaged by the developer) have been engaged to install Kingfisher hardware and bring this site in line with the NCU design. Full installation and commissioning for this will occur in late December / early November.
- Sample tap upgrades – Plinths for all the high criticality sample points (6 total) have been constructed, and 3 sample taps have been installed and are now operational. The remainder of these taps will be completed in September by Nivec Civil.
- Fuller’s Pump and Crane have been engaged in rehabilitation works at several pump stations throughout the district. This involves replacing new pump impellers on worn units, replacing chains, replacing corroded or broken guide rails, inspecting and repairing safety grates, and other remedial work as required. This work will optimise the pumped sewer network and improve the overall H&S aspects of the sites.
- Pump Station Cleaning programme – Insight CCTV & Jetting have been engaged to carry out deep cleaning of all wastewater PS’s throughout the district. This involves the removal of fat and grease build-up on wet well chamber walls and vacuuming accumulated debris and sediment from the base of the well to ensure blockages and wear on pumps are minimised. This programme is scheduled to run for over two months and critical sites will be revisited before Christmas to ensure network optimisation.
- Faults of significance – Fortunately, no major faults of significance occurred throughout August. The WW team addressed a line fault at 5 Snowden Place, Raglan. A Y connection had dropped, causing a decoupling on this portion of the line. Streamline initially CCTV’d the line, and the WW crew actioned the repair.



Before and after images of the line repair

3.3. Stormwater

- Donnie Choi, the new Stormwater engineer, began at Watercare on the 5 September. This will help improve the traction against Stormwater delivery.
- Current Raglan abatement notice work is still on-going. WRC has approved the latest proposed option (a combination of pipe and open channel) for Cambrae Road, the final outstanding item on the abatement notice.
 - The consent application for the work will be lodged in September.
- We are awaiting feedback from WRC on the annual report.
- Stantec has commenced assisting Watercare's SW deliverables being:
- The final assessment of the new standards is underway
- WSL is undertaking sediment and shellfish testing in the Raglan Harbour – Sampling completed – awaiting a report from T+T.

4. Planning and project delivery

4.1. Infrastructure Planning

There are several work packages underway, including.

- Southern Districts Water Network Model – updating model.
- Tuakau Water Network Model – updating model
- The Raglan WW model - has been finalised with WDC population data and system performance analysis completed. We are installing a new Magflow meter to improve data from Nero and Wallace St pumpstations before progressing option development.
- Huntly Wastewater network model - Consultant, assessed asset data, installing Magflow meters at key pump stations.
- Installation of permanent rain gauges in WDC's townships is completed for all six sites. The gauges are now connected to the SCADA system.

Internally staff worked on/with:

- Continuing work with Watercare's Auckland staff on the Infor asset management system.
- Preparation of next WDC AMP/LTP for Entity B; the 1st cut is due at the end of October
- The Completed Asset revaluation.
- Rangiriri WW Pump station in legal road study completed

4.2. Development and growth

- On-going discussions with WDC and Washer Rd Horotiu Developer revolving around WW pump station are required to service the area.
- Involvement in discussions with WDC on servicing for WW and WS for Ohinewai and the Huntly WWTP upgrade options.
- Regular catch-ups with the WDC Growth team to ensure alignment.
- Te Kowhai WS and WW servicing strategy completed

4.3. Asset Management

- Loading of new water supply assets into GIS and IPS as part of the renewal process (that are recently completed) is currently underway. Capitalisation of these assets will commence when the final dollar values are finalised.
- In August, we received 17 (224c) subdivision approval documents from WDC.

- AECOM provided the final valuation report and supporting spreadsheets to WSL and WDC. WDC has accepted the new asset values and has instructed WSL to load the updated financials back into Infor.

4.4. Project delivery

- Ngāruawāhia Pipeline - Work on the section that conveys flows from the railway to the treatment plant has commenced, and procurement of long lead items is underway.
- The POAL WWPS – The pump station services are currently being installed, and work on the control room is underway. The remainder of the gravity sewer awaits the new road, a project led by Waikato District Council.
- Te Kauwhata Reservoir preload remains until the settlement completes. Only minor works can progress at this stage;
- Tuakau Interceptor Pump Station Upgrade: The reduced scope is being priced, and a power supply upgrade application is underway.
- Tuakau to Pokeno pipeline: The detailed design is complete, and the tender documents are being prepared. Meetings with landowners are underway to secure access agreements to enable the survey and main works.
- Construction and installation of three permanent filling stations at Pokeno, Ngaruawahia, and Raglan are progressing.

4.4.1. Network Renewals

Water Network Renewals are well underway.

- The Raglan-bulk main installation is nearing completion. Manifold and network tie-in works are underway
- Tuakau Dominion Road extension, the first stage, is complete. Planning is underway for the watermain extension and under-rail crossing.
- Two Tuakau renewal sites have been added to the rolling water renewals programme, with utility mapping and route planning underway. Works are scheduled to be completed by November.
- Te Kauwhata water main renewals are well underway with 1800m of upsized water supply pipeline installed on Hall Road replacement.
- Utility mapping and route planning are underway for the next mid-Waikato renewal site on Te Kauwhata Road.



Hall Road WS Renewal – 315mm MDPE pipe drill string (200m) installed via horizontal directional drilling along with modifications to the existing network to support future connections.

Water Network Renewals planning phases include:

- Taupiri water supply reticulation upgrades. Planning is underway for a new water booster pump station and a new upsized transmission main.
- Raglan water supply reticulation extensions. Planning is underway to improve network connectivity in the Hills Road pressure zone.
- Southern Districts boundary modification. Planning is underway to extend pressure zones to increase levels of service.

4.5. Treatment plant Upgrades

- Three small water schemes – the assessment of the three plants has been completed to determine the upgrades required to meet the new drinking water standards. The Onewhero and Port Waikato plants upgrades are minimal, but a complete redesign of the Te Akua plant will begin in September.
- Ngaruawahia WTP Upgrade – The installation of the new UV treatment system has commenced. Tie-ins are planned once production challenges due to the river turbidity are clear. The alignment of the new run-to-waste system has been mapped, and the pipe has been ordered for instantiation by horizontal directional drilling.
- Whangamarino WTP 4.5MLD Upgrade – Mechanical testing and commissioning of the new BAC3 filter are complete. The installation of new media has been scheduled for September.
- Te Kauwhata WWTP Phase 2 – The plant upgrade is underway with commencement and early procurement activities.
- Huntly WWTP upgrade – Design scoped is underway.
- Matangi WWTP upgrade – Minor process improvements and upgrades are planned for the upcoming months to support the discharge consent renewal process.

A water monitoring bore has been constructed as an early indicator of contamination between the WWTP disposal system and neighbouring bore/water takes.



Matangi WWTP – Shallow piezometer monitoring bore installed via direct-push C.P.T rig.

- After delays with the delivery of equipment for the new solar array at Raglan, the project construction is now underway and making good progress.

1 September



16 September



19 September



5. Compliance

5.1. August updates

- All August drinking water monthly reports demonstrated compliance.
- An updated Quality Assurance Rules report has been produced, focusing on those areas that require changes or may require changes to meet the rules.
- Taumata Arowai still sets out the reporting methods required to meet the Quality Assurance Rules. It is expected to be linked to compliance platforms (e.g., WaterOutlook, Infrastructure Data). Recommendations have been made to modify existing internal reporting processes and KPIs.

- An updated draft lab schedule has been produced to meet the Quality Assurance Rules requirements and to align with the Auckland WQS team approach. Due to the zone configurations, populations, and structure of the Quality Assurance Rules, to maintain a similar frequency of sampling above the minimum requirements, many smaller zones will require a considerable increase in site visits.
- A review of network operations to understand how water quality may vary around networks and how operations are managed geographically has been undertaken, along with a comparison of quality data to determine where drinking water zones currently exist. A discussion paper has been prepared for the Waikato team to review zone structures and populations to best support the purposes of a monitoring programme (assurance of safety and quality and compliance requirements) and align with network operations.
- Resource consent water takes annual operational reports were completed and submitted in August for Huntly/Ngaruawahia, Raglan, Port Waikato, and Te Akau. No major non-compliance was identified. Minor non-compliances were consistent with the previous year's reporting, and corrective actions have either been implemented or are planned.
- A Project Advisor, Taiao for Waikato Tainui, has been found as an appropriate stakeholder contact point for those resource consents that require quarterly and/or annual reporting to Waikato Tainui.
- Waikato DC Communications team has been engaged to review and provide information to support adequate incident/emergency communications processes and plans that would be required to fulfill a response to a large-scale water quality/loss incident.
- As part of the resource consent wastewater plant annual operational reports, reporting of Peak Wet Weather Flow vs. Average Dry Weather Flow has been identified as requiring further review. The Infrastructure Planning Team has provided a detailed update on large network inflow and infiltration investigations and management approaches.
- A review of the Taukau and Pokeno figures in the annual water balance/loss report has indicated that there may be some issues with the data sources/accuracy, and this requires further review by the Waikato team. For the next water balance/loss report, a review of the method and alignment with the resource of Water NZ water loss guidelines has been recommended.
- All August compliance reports for Wastewater are due to be submitted to Waikato Regional Council during the second week of September 2022 with relevant notes, updates, and other resource consent reporting requirements as scheduled. All July reporting was completed in full and on time.
- Water safety plan updating has progressed with identifying key Water Service Act requirements, reviewing Critical Control Set Points, and developing new water safety plan/compliance sections before November 2022.
- Data requests were received for Fluoride in WDC supplies, residual disinfection in Te Kauwhata, and wastewater inflow at Ngaruawahia

6. Customer

6.1. Billing

- While the team is down due to a resignation, the meter reading and billing have not been disrupted. A secondment is planned with Watercare Auckland to support the customer team.

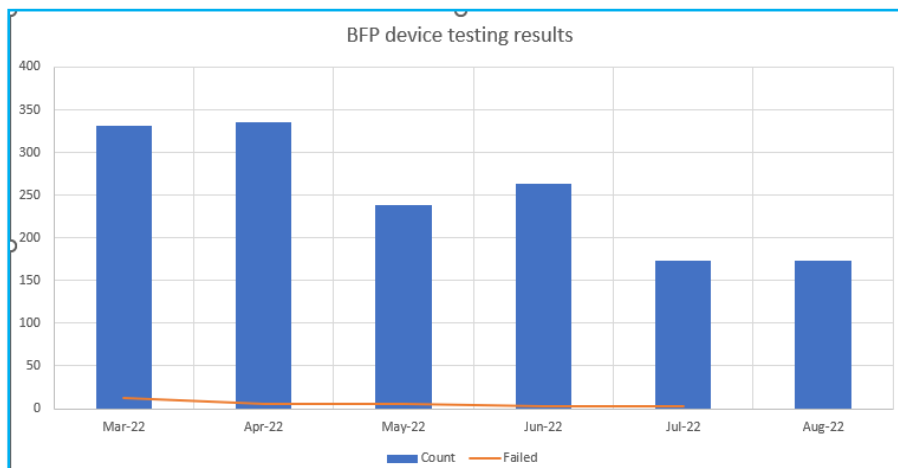
6.2. Complex Water meter installation project

- Waikato District Council issued a public notice for Schedule 12 action for the ability to complete the separation work without owner approval.

Backflow Preventor Device Testing

- Backflow Control Services Limited emails weekly updates
- While the contractor has confirmed they are still on track to be completed by December 2022. A meeting will be held in September to confirm their delivery plan.

BFP Testing to 30 August 2022	Tested	Passed	Failed
	1475	98%	2%



6.3. Tradewaste

- Septage tanker consents all issued and online induction for Huntly WWTP septage site in use
- Review and issuing of conditional consents for Huntly KFC, McDonald's, Countdown, Goodman Fielder, and Taco Bell is underway.
- Haven Funeral home Huntly consented – classed as low risk
- Training completed for confined spaces

Tradewaste Consents	Conditional Consents	Permitted Audited	ITWA	Septage Tankers
Active Consents	13	107	3	6

7. Strategic resource consents.

Raglan WWTP resource consent application preparation

- The July WGB update highlighted that a task of Manaaki Whenua and project sub-surface drip irrigation (SDI) specialists (Nexgen Waters) was a refinement of theoretical irrigation fields using GPS tracking. This work has been completed, where there is expert confidence that there is approximately 12ha of high-rate area, 8ha of high-rate area, and 5.5ha of a slow-rate area within the investigation boundary of the proposed Maungatawhiri Road site.
Key points are:
 - Securement of high-rate areas significantly enhances the ability of a viable year-around land discharge option at the property, where;
 - Given the small amount of annual water these areas could receive, it is questionable whether there is a positive benefit vs. cost in securing theoretical slow-rate areas for contributing to a discharge solution.
- Presenting theoretical securement scenarios to the landowner is a key task now. Advanced property discussions can then occur with any agreeable land solution that can be documented within a legal document. WDC Property Team experts have the in-house skills and experience to oversee this specialist work.
- There are interrelated factors when considering such scenarios, particularly wastewater treatment's influence on the land's capability to take water. A higher level of treatment that fully removes nutrients (i.e., Membrane Bioreactor) *could* lessen areas needed to secure as only hydraulic consideration of soils is required. Treatment recommendations from Project Engineers are being considered now, with advice to be presented to the WGB within a business case (includes a cost/benefit comparison). Engineering commentary is to be received regarding the ability of differing treatments to lessen Emerging Organic Contaminants (EOC) from permeate. This could be an important consideration for an overall treatment solution.
- In anticipation that a workable land securement solution can be found at the Mangatawhiri Road site alongside the landowner, a water quality and ecological assessment have been undertaken in August. This assessment has collected baseline environmental information and identifies specific areas (wetland extent and waterways) that require an evaluation against the National Policy for Freshwater Management as part of any discharge recommendation.

Te Kauwhata WWTP resource consent application preparation

- The recent discharge solution discussions have advanced an understanding of likely short-listed discharge options. Requests for necessary scopes from specialist technical consultants have now been made, allowing engagement and assessment to be undertaken.
- Documenting the project decision-making so that those decisions can be explained at a later date (hearings) is a critical need for any RMA resource consent application for discharge consent. There will be an ability to progress investigative studies for known short-listed options, alongside the documentation of:
 - Project objective setting and the;
 - Identify a long list of options to refine to a short list set of options.
 The best practice is to undertake the above tasks alongside key stakeholders.
- Key components for any viable solution will be:
 - property agreement with any necessary third party (i.e. conveyance & any areas for discharge to land etc); and
 - robust engagement with hapuu, tangata whenua, and key partners.

It is understood that WDC Project Representatives will oversee the above activities, with full technical project management supplied by WSL to support them.

8. Key performance indicators

KPI – description	Results	Target 2021/2022
Water		
<i>The extent to which the Council's drinking water supply complies with Part 4 of the drinking water standards (bacteria compliance criteria).</i>	18	18
<i>The extent to which the Council's drinking water supply complies with Part 5 of the drinking water standards (bacteria compliance criteria).</i>	15	15
<i>Attendance for urgent call-outs: from the time that Council receives a notification to the time that service personnel reaches the site.</i>	August - 35 Year to date - 40	≤ 60 mins
<i>Resolution of urgent call-outs: from the time that Council receives a notification to the time that service personnel confirms resolution of the fault or interruption.</i>	August – 55 Year to date - 161	≤ 120 mins
<i>Attendance for non-urgent call-outs: from the time that Council receives a notification to the time that service personnel reaches the site</i>	August – 1 Year to date - 1	≤ 3 days
<i>Resolution of non-urgent call-outs: from the time that Council receives a notification to when service personnel confirms resolution of the fault or interruption.</i>	August – 1 Year to date - 1	< 3 days
<i>The total number of complaints related to Water services received by Council (expressed per 1000 connections to the networked reticulation system):</i>	August – 1.03 Year to date Result -2.52	≤ 22/1000
Wastewater		
<i>The number of dry weather sewage overflows from Council's system (expressed per 1000 sewage connections to that sewage system.) - Non-sensitive receiving environments</i>	August – 0.00 Year to date Result – 0.00	≤ 2/1000
<i>The number of dry weather sewage overflows from Council's system (expressed per 1000 sewage connections to that sewage system.) - Sensitive receiving environments</i>	August – 0.00 Year to date Result – 0.00	≤ 2/1000
<i>Attendance time: from the time that Council receives a notification to the time that service personnel reaches the site.</i>	August – 15 Year to date Result – 25	≤ 60 mins

<i>Resolution time: from the time that Council receives a notification to the time that service personnel confirms resolution of the blockage or other fault.</i>	August – 127 Year to date Result – 101	≤ 240 mins
<i>The total number of complaints received by Council about any of the following (expressed per 1000 connections to the sewage system):</i>	August – 0.08 Year to date Result – 0.95	≤ 10/1000
Stormwater		
<i>The number of Stormwater flood/blockage events that affected habitable floors (expressed per 1000 connections):</i>	August – 0 Year to date Result – 0	< 5
<i>The total number of complaints received by Council about the performance of the stormwater system (expressed per 1000 connections):</i>	August – 0.00 Year to date Result – 0.00	< 1.25
<i>Level of compliance, number of the following, Abatement, infringement notices, enforcement orders or convictions</i>	2020/21 - 0 (1 existing Abatement from 2018/19)	0
Health and Safety		
<i>Safety: Lost time injury frequency rate (LTIFR) per million hours worked</i>	1.78	≤ 5
<i>Safety: Total recordable injury frequency rate (TRIFR) per million hours worked</i>	3.56	≤ 20
<i>Safety: 100% of Notifiable (or serious non-notifiable) Events reported to WDC within 2 hours of the occurrence</i>	100% No events YTD	100%
<i>Safety: 100% of Notifiable Event reports supplied to WDC within 21 business days</i>	100% No events YTD	100%

<i>Safety – the percentage of complaints resolved within ten working days</i>	100%	95%
<i>Safety- Health and safety Audit programme and action plan completed (6 monthly and then annually)</i>	100%	1
<i>Safety - All site emergency plans to be drilled six-monthly as per drill schedule</i>	100%	> 100%
<i>Safety - Monthly Health and safety meeting held with all workers</i>	1	> 90%
<i>Safety-Critical risk audit to be conducted by HSW BP Bi-monthly</i>	100%	1
<i>Safety -Actions required to be closed within one month</i>	100%	> 90%


Appendix 1


Back to Basics

SITE CALENDAR


July 21	Week	Event
	1-4	Distribution and communication of B2B program and tools


Aug 21	Week	Event
 Working in Confined Spaces Watercare	1	Are We Safe to Start? Toolbox activity
	2	Take Care of the Gear Discussion and inspection activity
	3	When Something is Different Team discussion
	4	What Works Well? Site based learning teams Nominations for reward and recognition


Sept 21	Week	Event
 Working with flammables or in explosive atmospheres M'CONNELL DOWELL	1	Are We Safe to Start? Toolbox activity
	2	Take Care of the Gear Discussion and inspection activity
	3	When Something is Different Team discussion
	4	What Works Well? Site based learning teams Nominations for reward and recognition


Oct - Nov 21	Week	Event
 Working on or near underground & overhead services Pipeline & Civil	1-2	Are We Safe to Start? Toolbox activity
	3-4	Take Care of the Gear Discussion and inspection activity
	5-6	When Something is Different Team discussion
	7-8	What Works Well? Site based learning teams Nominations for reward and recognition


Dec - Jan 21-22	Week	Event
	Holiday period	Organisations to focus on staying safe up to and over the holiday period.


Feb - March 22	Week	Event
 Suspended loads Futon Hogan	1-2	Are We Safe to Start? Toolbox activity
	3-4	Take Care of the Gear Discussion and inspection activity
	5-6	When Something is Different Team discussion
	7-8	What Works Well? Site based learning teams Nominations for reward and recognition


April - May 22	Week	Event
 Working with or around mobile plant MARCH CATO	1-2	Are We Safe to Start? Toolbox activity
	3-4	Take Care of the Gear Discussion and inspection activity
	5-6	When Something is Different Team discussion
	7-8	What Works Well? Site based learning teams Nominations for reward and recognition

June - July 22	Week	Event
 Working with live traffic Fletcher	1-2	Are We Safe to Start? Toolbox activity
	3-4	Take Care of the Gear Discussion and inspection activity
	5-6	When Something is Different Team discussion
	7-8	What Works Well? Site based learning teams Nominations for reward and recognition

Aug 22	Week	Event
 Digging and working in excavations HEB construction	1	Are We Safe to Start? Toolbox activity
	2	Take Care of the Gear Discussion and inspection activity
	3	When Something is Different Team discussion
	4	What Works Well? Site based learning teams Nominations for reward and recognition

Sept 22	Week	Event
 Working at height BRIAN PERRY CIVIL	1	Are We Safe to Start? Toolbox activity
	2	Take Care of the Gear Discussion and inspection activity
	3	When Something is Different Team discussion
	4	What Works Well? Site based learning teams Nominations for reward and recognition

Oct 22	Week	Event
Fixed and portable plant and equipment  Ghella ABERGELDIE	1	Are We Safe to Start? Toolbox activity
	2	Take Care of the Gear Discussion and inspection activity
	3	When Something is Different Team discussion
	4	What Works Well? Site based learning teams Nominations for reward and recognition

Nov 22	Week	Event
Fatigue  Watercare	1	Are We Safe to Start? Toolbox activity
	2	Take Care of the Gear Discussion and inspection activity
	3	When Something is Different Team discussion
	4	What Works Well? Site based learning teams Nominations for reward and recognition

Dec - Jan 22-23	Week	Event
	Holiday period	Organisations to focus on staying safe up to and over the holiday period.

To | **WATER GOVERNANCE BOARD**
Report title | **SMART NETWORKS**

Date: | 11 October 2022
Report Author: | Mathew Telfer - Operations Manager (Watercare)
Authorised by: | Gavin Ion - Chief Executive

1. Purpose of the report

Te Take moo te puurongo

To inform the Water Governance Board and Council on the options and planned approach to a smart network trial and the Inflow and Infiltration (I&I) programme.

2. Executive summary

Whakaraapopototanga matua

Following a workshop on 9 September with Council and Watercare staff to discussed the options currently being explored or implemented by Watercare. This report provides detail of the options and the recommendations for the implementation of a smart network trial within the Waikato District. This trial will support the broader leak detection and I&I programme of work.

3. Staff recommendations

Tuutohu-aa-kaimahi

Recommendation 1: Implement a trial including detailed network data analysis and improved data collection using smart technology for leak detection, network operations (Tuakau) and I&I (Huntly and Raglan).

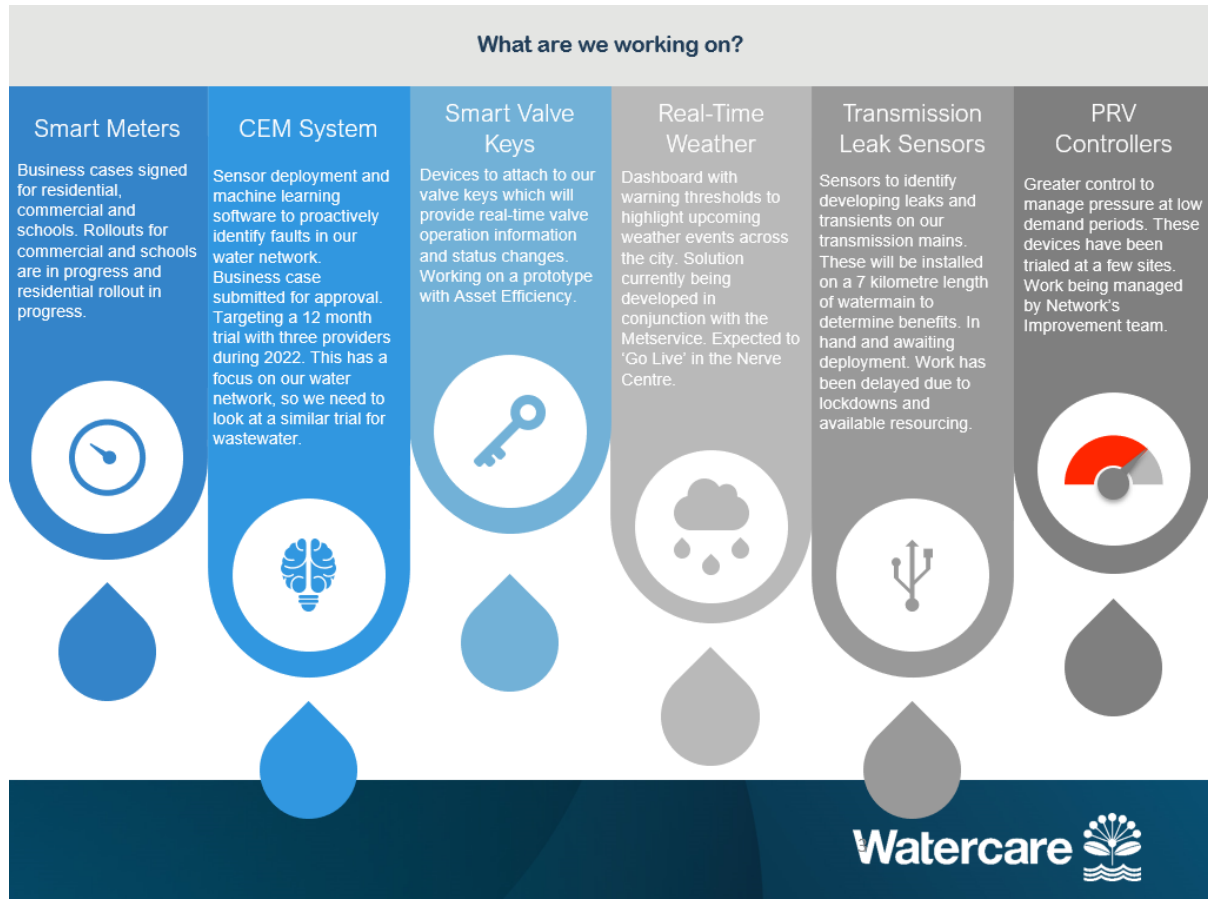
Recommendation 2: A Smart meter trial is implemented utilising Watercare technology once further discussion is held with the NTU about smart meter planning for entity B.

That the Waters Governance Board receives the report.

4. Background

Koorero whaimaarama

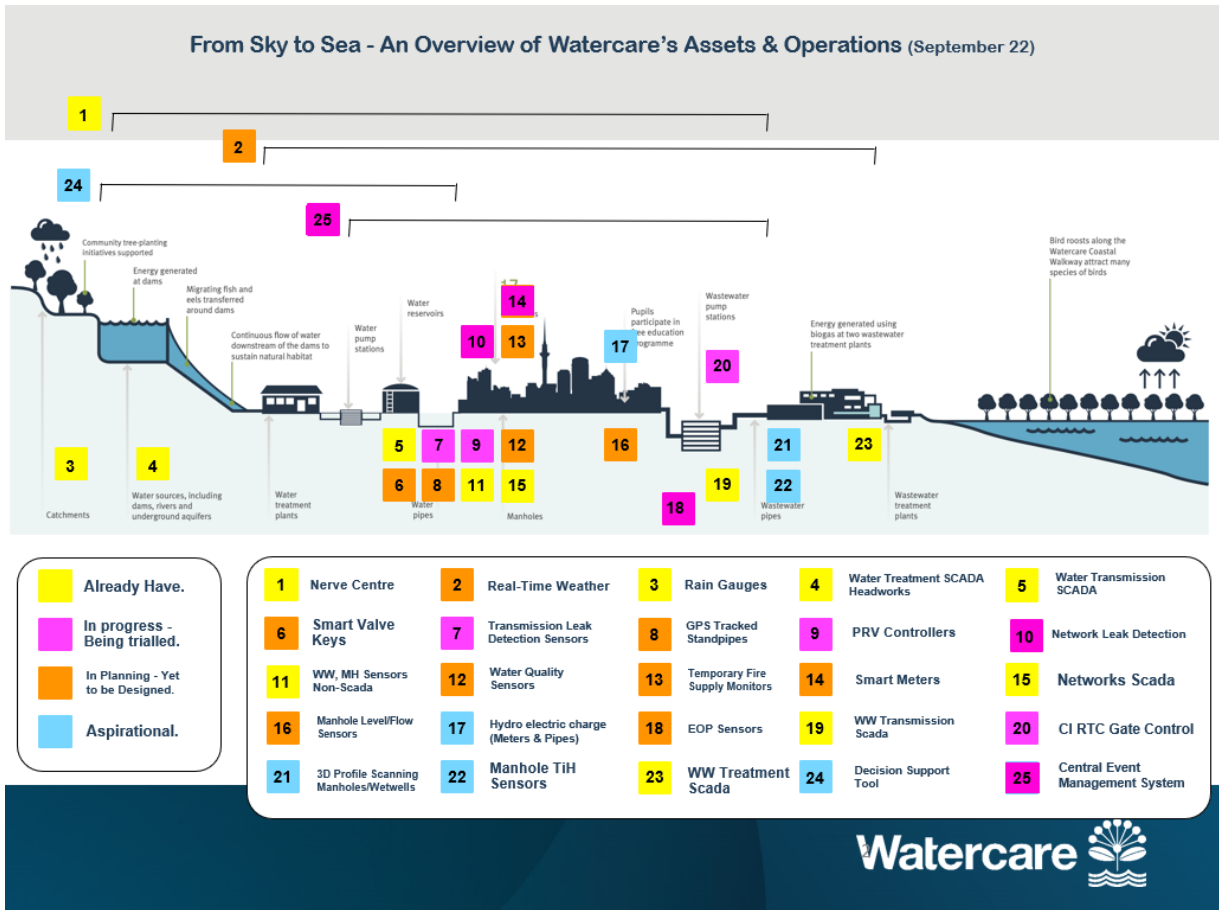
Watercare has been on a journey to understand and implement smart network opportunities to improve the information available to staff to support decision-making. The expected outcome is for the organisation to operate more efficiently and cost-effectively and support the operation and management of the Auckland Water and Wastewater infrastructure. This includes better-informing customers so they can work with Watercare to achieve more sustainable outcomes.



The Waikato District Council is at the start of this journey and supported by the recent implementation of Watercare systems; the opportunity is now available to build on that success.

The overview (below) of the Watercare Auckland operation shows the capabilities already in place and those currently being trialed. With the implementation of the centralised Nerve Centre the opportunities to consolidate and utilise the information now available have increased significantly.

For the Waikato District, it is essential to identify what opportunities can be leveraged from the Watercare experience. At the same time, consider the implications of transferring any new technology to the new entity under the reform.



5. Discussion Matapaki

Smart Metering

Watercare is currently rolling out an App with the ability for customers to access their water usage data from anywhere and to be notified of possible leakage or irregular usage. They can also pay their bill and access other customer service functions.

The smart meter technology has been through several trials and is primarily a data collection tool. Key outcomes of earlier trials show the importance of connectivity for the devices and the longevity of the communication method, e.g. battery life.

The option to leverage the work done by Watercare to date is available as the Digital infrastructure is now in place. WDC could deploy the same products Watercare is using relatively simply. The constraint for this current technology is in less-urban environments where cellular coverage can be poor. With that in mind, most of the population in the District live in Ngaruawahia, Huntly, Raglan, Pokeno, Tuakau, and Te Kauwhata should have good coverage, excluding isolated small pockets.

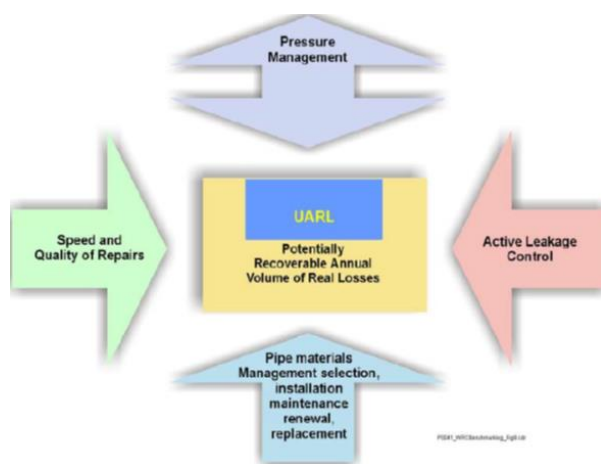
Another constraint is the time to replace current meters with smart meters across the network. Under the current replacement approach, all meters will be replaced with a 15-year cycle. Any change to the meter technology is a long-term commitment and should be made considering the Three Waters reform and future improvements that could occur in this area.

The information collected can inform network operations of leakage, improve non-revenue water monitoring and reporting and inform customers using a customised app recently developed by Watercare.

A risk to consider about the customer service app is ensuring the service will be maintained after amalgamation. Customers will not want this functionality removed by Entity B. The recommendation is to confirm the NTU's direction in this area before progressing with the investment from Entity B and a commitment of service from Entity A.

Leak Detection and management

Leak management, at its core, has not changed significantly over time and is still managed through simple practices described below. The improvements in this area relate to the increased frequency of monitoring using new technology and the ability to provide access to and analysis of the information provided on a much broader scale.



The trial will focus on utilising smart loggers and pressure management devices to improve zone management, identify possible leakage, and manage and reduce areas of high pressure, which can contribute to leakage and pipe degradation.

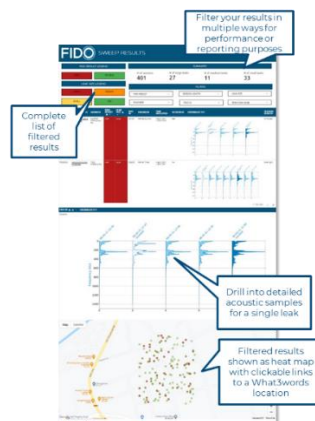
This information will be available to staff for efficient and informed decision-making.

Additional improvement in Geospatial views of data can be progressed in the future based on the implementation of Geomaps Watercare tools.

Real time reports

Accurate performance visibility for immediate actioning

- One 24-hour sweep delivers a complete area leakage profile.
- Results are delivered straight to an engineer's phone and as a heatmap direct to the back office team.
- GIS data, asset ID numbers and FIDO Sweep IDs are used to create a visual heat map
- See where Bugs are being dropped and collected in real-time along with the results for immediate actioning



Inflow and Infiltration

The aim is to reduce the volume of stormwater entering the wastewater network through defective/broken pipes, surface runoff, or incorrect stormwater connections. The focus is on geographical areas with overflows, high network flows, and wastewater volume to the treatment plants.

This trial will be based on two key activities: the pump station and network data analysis and the expansion of the data capture utilising the Fido Tech bug technology to increase our understanding of the wastewater network operations during storm and high river events. Due to the recent storm events, the initial focus areas will be within the Huntly and Raglan networks.



This technology and supporting analysis allow the team to reduce the area of effect and focus our on-site investigations more cost-effectively. Once critical areas of high risk of inflow or infiltration are identified, inspections are carried out on private & public drains using:

- Non-toxic smoke
- Dye
- Pressure testing
- CCTV survey where necessary

The last step is to engage the property owners to complete corrective action and may include support from Council if customers are reluctant to address any non-compliance.

Return on investment

Once the trials are complete, a review of the RTI for the trial will be completed to understand the benefit the investment can bring on a district-wide scale and the limitations that need to be considered for the smart technologies rollout.

6. Next steps

Ahu whakamua

1. Complete the brief for the trial and implement
2. Utilise existing proven relationships through Watercare trials and deployments.
3. Review the current renewals programme and complete corrective actions
4. The trial scope includes validating the investment in technology and analysis.
5. Report the outcomes to Water Governance Board and Council

7. Attachments

Ngaa taapirihanga

Attachment 1 – Smart network workshop presentation.

Attachment 2 – Smart Metering and App presentations

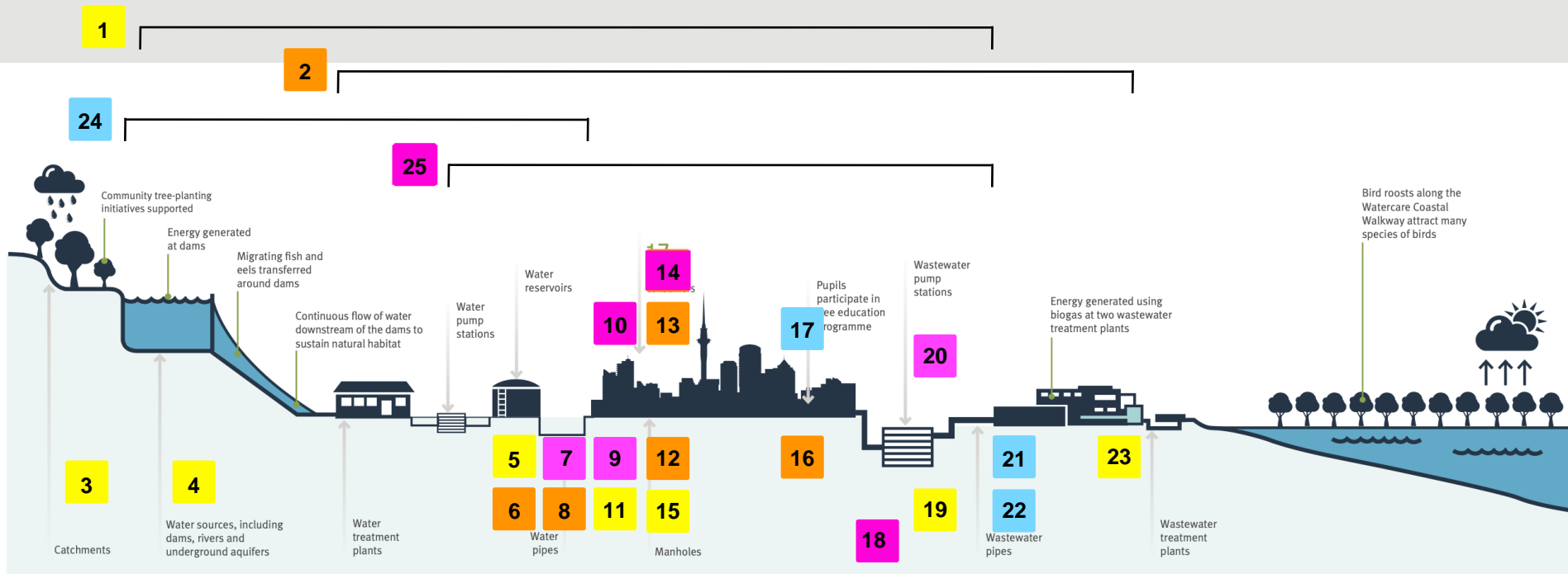
Smart Networks Workshop

09/09/22

David Moore

Manager Network Improvement Programme

From Sky to Sea - An Overview of Watercare's Assets & Operations (September 22)



Already Have.

In progress - Being trialled.

In Planning - Yet to be Designed.

Aspirational.

- | | | | | |
|---|--|--|--|---|
| 1 Nerve Centre | 2 Real-Time Weather | 3 Rain Gauges | 4 Water Treatment SCADA Headworks | 5 Water Transmission SCADA |
| 6 Smart Valve Keys | 7 Transmission Leak Detection Sensors | 8 GPS Tracked Standpipes | 9 PRV Controllers | 10 Network Leak Detection |
| 11 WW, MH Sensors Non-Scada | 12 Water Quality Sensors | 13 Temporary Fire Supply Monitors | 14 Smart Meters | 15 Networks Scada |
| 16 Manhole Level/Flow Sensors | 17 Hydro electric charge (Meters & Pipes) | 18 EOP Sensors | 19 WW Transmission Scada | 20 CI RTC Gate Control |
| 21 3D Profile Scanning Manholes/Wetwells | 22 Manhole TiH Sensors | 23 WW Treatment Scada | 24 Decision Support Tool | 25 Central Event Management System |

What are we working on?

Smart Meters

Business cases signed for residential, commercial and schools. Rollouts for commercial and schools are in progress and residential rollout in progress.

CEM System

Sensor deployment and machine learning software to proactively identify faults in our water network. Business case submitted for approval. Targeting a 12 month trial with three providers during 2022. This has a focus on our water network, so we need to look at a similar trial for wastewater.

Smart Valve Keys

Devices to attach to our valve keys which will provide real-time valve operation information and status changes. Working on a prototype with Asset Efficiency.

Real-Time Weather

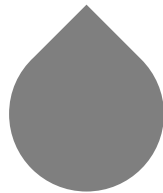
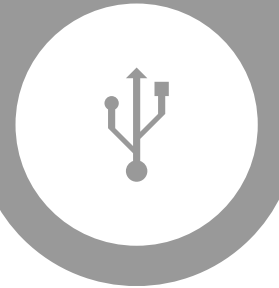
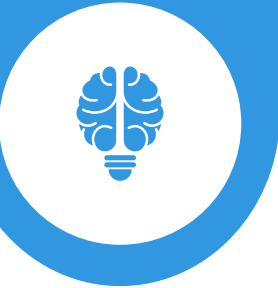
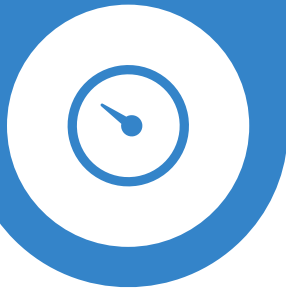
Dashboard with warning thresholds to highlight upcoming weather events across the city. Solution currently being developed in conjunction with the MetService. Expected to 'Go Live' in the Nerve Centre.

Transmission Leak Sensors

Sensors to identify developing leaks and transients on our transmission mains. These will be installed on a 7 kilometre length of watermain to determine benefits. In hand and awaiting deployment. Work has been delayed due to lockdowns and available resourcing.

PRV Controllers

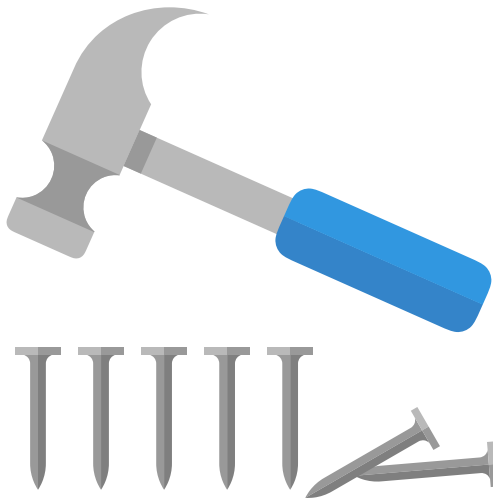
Greater control to manage pressure at low demand periods. These devices have been trialed at a few sites. Work being managed by Network's Improvement team.



At the same time we've been building strong foundations!

Beyond the larger initiatives in progress, background work has and is taking place to enable and support the delivery of our smart networks approach.

Foundational Activities



Digital Team



Data Lake
Design &
Architecture



Smart Meter
Core Services &
Architecture



Future
Customer Portal
& App



Open Standard
Data Protocol.
Data extract &
Analytics



Guidelines for
future IOT
Protocols &
Services

Customer Team



Data Privacy



Leak Insurance
& Plumbing
Services



Proactive
Communication
(Targeted Outbound)



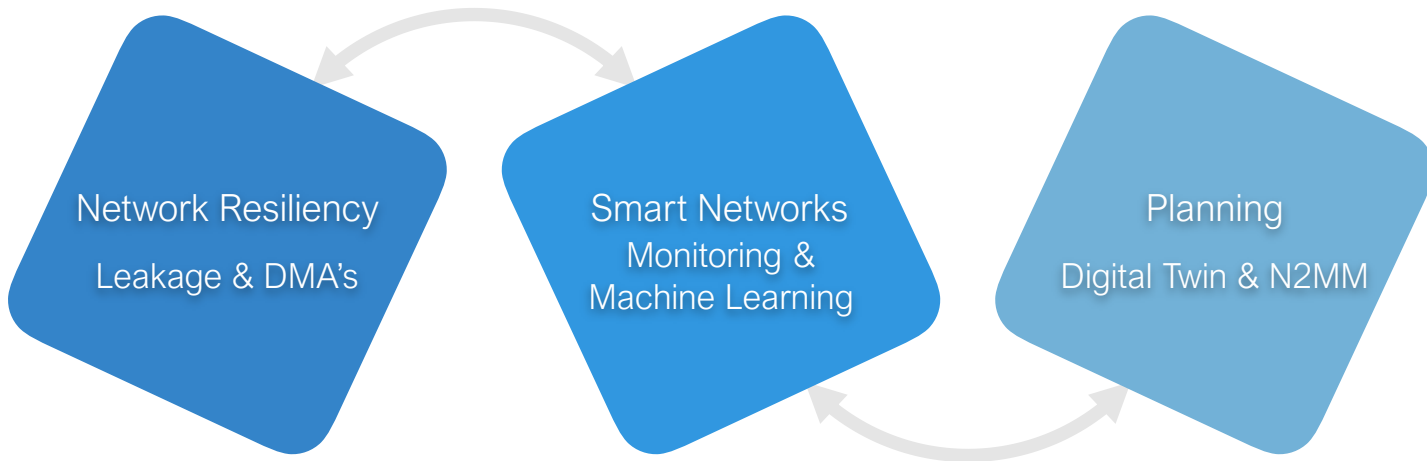
Mobile App &
Web Portal
Procurement



Priority Services

Our Nerve Centre and Infrastructure collaboration is up and running and we're working on the following:

- Tightly controlled supply zones with understood inputs and outputs;
- Water balance;
- A known starting point for leakage management;
- Field verification.
- Real-time feedback of network performance;
- Event Alarms;
- Assist in calibrating & improving models.



- Ongoing & low-effort leak detection;
- Identify changes in real time & pinpoint reasons for changes to zone balances.
- Theoretical baseline for system operation;
- Off-normal event identification;
- Support establishment of analytical tools and driving an accurate CEM system.

A day in the life of....



EVA
NERVE CENTRE OPERATOR

EARLY MORNING

Eva receives an alarm predicting a major water main leak. **IOT sensors in the CBD network are reporting unusual water pressure flows.** Based on historical data models Eva concludes that **something's not right.** Reviewing the predicted customer impact zone Eva can see a Hospital & a number of large businesses will be disrupted, if Watercare doesn't proactively address the issue. Eva checks the Field Services Activity Tracker, logs a P1 incident and dispatches a Field Crew.



ARIE
OPERATIONS ENGINEER

MORNING

Arie picks up the job & checks for any other planned works in the area that may need to be rescheduled, if the leak is confirmed. Arie confirms the leak exists, but concludes that the risk of an immediate break is low risk. Arie begins to assemble the resources he needs to proactively complete the repair. Arie receives an alert due to water demand forecasts indicating higher than normal demand. **Using current demand, forecasted demand, planned works & reactive works.** Arie decides to postpone the work to the afternoon.



ARIE
OPERATIONS ENGINEER

AFTERNOON

The crew arrive on site, the Hospital & large businesses are notified & are able to activate their BCP's & connect to their temporary water supply. The earthworks are completed, fortunately the pipe is easy to fix. **While the pipe is exposed the crew collect asset attributes to feed into the Nerve Centre data analytics engine.** This data will be used to predict potential breaks in the future. A smart hydrant is connected to the pipe & the pipe is flushed. **The smart hydrant flow rate, pressure & other variables are sent to the Nerve Centre to ensure the flush has been effective, prior to switching the water on again.** Customers are notified the repair has been completed.



EVA
NERVE CENTRE OPERATOR

EVENING

Eva receives an alerts low chlorine reading is coming from the Bulk Supply Point (BSP). Eva compares this level to other instruments which confirms there's no meter failure. **It appears a chlorine decay issue is real and the digital twin is used to confirm what levels of chlorine Boosting is required.** Arie reviews Eva's request, logs in and remotely increases the chlorine and then continues to monitor the network. Arie will continue to monitor the network until BSP levels are back within recommended levels.

DATA SOURCE

- Network performance
- Voice of the customer DATA
- Faults Data
- Truck Location
- Weather
- Geo spatial data
- Asset management data
- Asset financial Data
- Operational Time Series
- Contractor Maintenance data

NERVE CENTRE

- The hydraulic model
- Internet of things
- AI & machine learning
- Voice of customer
- Predictive modelling
- The smart city
- Data hub integration

TODAY

TOMORROW

- High Reactive
- Low Planned
- High Planned
- Low Reactive

#1

Reactive to Predictive & Proactive

- Identify faults before they occur so we can repair our assets before they fail and notify customers before they notify us;
- Less customer disruption will enhance the customer experience.

#2

Greater Insight & Tighter Control

- Insight led will provide greater control of complex and network assets;
- Utilise machine learning to optimise performance;
- Better water balance & less non-revenue water.

#3

Service Outcomes

- Improve the longevity and reliability of our assets and network
- Water quality surety;
- Use data analysis to inform Renewals programme.

#4

Safe & Speedy Resolution

- Dispatch the right resource at the right time to resolve a customer issue;
- Provide field crews with more information about the fault (location & severity) prior to arriving on site;
- Feedback from assets, employees & customers will close the loop on system health.

Smart Metering

Inflow and Infiltration

What is our response to overflows?

Inflow & Infiltration Programme

- Aim is to reduce the volume of stormwater entering the network through defective/broken pipes, surface runoff or incorrect stormwater connections
- Focus is on geographical areas with highest number of overflows at the start of the programme and is assessed throughout
- Inspections are carried out on private & public drains using:
 - Non-toxic smoke
 - Dye
 - Pressure testing
 - CCTV survey where necessary

Letter sent to residents informing them of the inspection

Non-toxic smoke testing



We will soon be inspecting and testing the public and private wastewater systems in your neighbourhood



These inspections are part of our region-wide programme to reduce the volume of stormwater entering the private wastewater network through defective or broken pipes, surface runoff or incorrect stormwater connections.

Why we are investigating?
 In the event of heavy rain, pipe blockages or breakages, our wastewater network is designed to protect public health by directing wastewater overflows away from streets and homes, however problems in private wastewater drains are a major contributor to wet-weather overflows.
 By ensuring your private wastewater and stormwater pipes are well maintained and compliant, you are playing an important role in improving the water quality of Auckland's streams and beaches.

Assessing your property
 Our contractors will visit your property next week, sometime between 8am and 5pm, to inspect any manholes as well as private drainage, including gully traps and downpipes.
 They will require access onto your property but will not enter your house. They will be wearing identification cards for your security. If access will be an issue, please call (09) 442 2222 or email info@water.co.nz to arrange a suitable time.

Fixing problems in private wastewater drains

Working together to improve stream and beach water quality.

Our wastewater network is designed to protect public health so in the event of heavy rain, pipe blockages or breakages, wastewater will overflow into the environment – through manholes and engineered overflow points – rather than backing-up in pipes and flowing onto streets or back into your home.

Why is it important to ensure your private drainage is maintained?
 Every property should have separate stormwater and wastewater connections. The stormwater drain collects roof, surface and ground water, and stormwater pipes carry this runoff to streams and ultimately to the sea. Private wastewater pipes connect to our wastewater network, and all household waste is treated at a wastewater treatment plant.
 Problems in private wastewater pipes are a major contributor to wet-weather overflows: old and leaky pipes allow stormwater to seep into the wastewater network, and incorrectly connected downpipes and low lying gully traps channel stormwater into the wastewater network.
 Following heavy rain, this can greatly increase the volume of wastewater being transported and treated by the wastewater plant. Overflows occur when this volume exceeds the network's capacity and can pollute Auckland's streams and beaches.
 You can help prevent wet-weather overflows from happening in your neighbourhood by ensuring your private drainage pipes do not connect to our wastewater network, and do your bit to improve the quality of our environment.



KEEPING STORMWATER OUT OF YOUR WASTEWATER DRAINS



Stormwater downpipes

Your property is required to have separate stormwater and wastewater pipes.

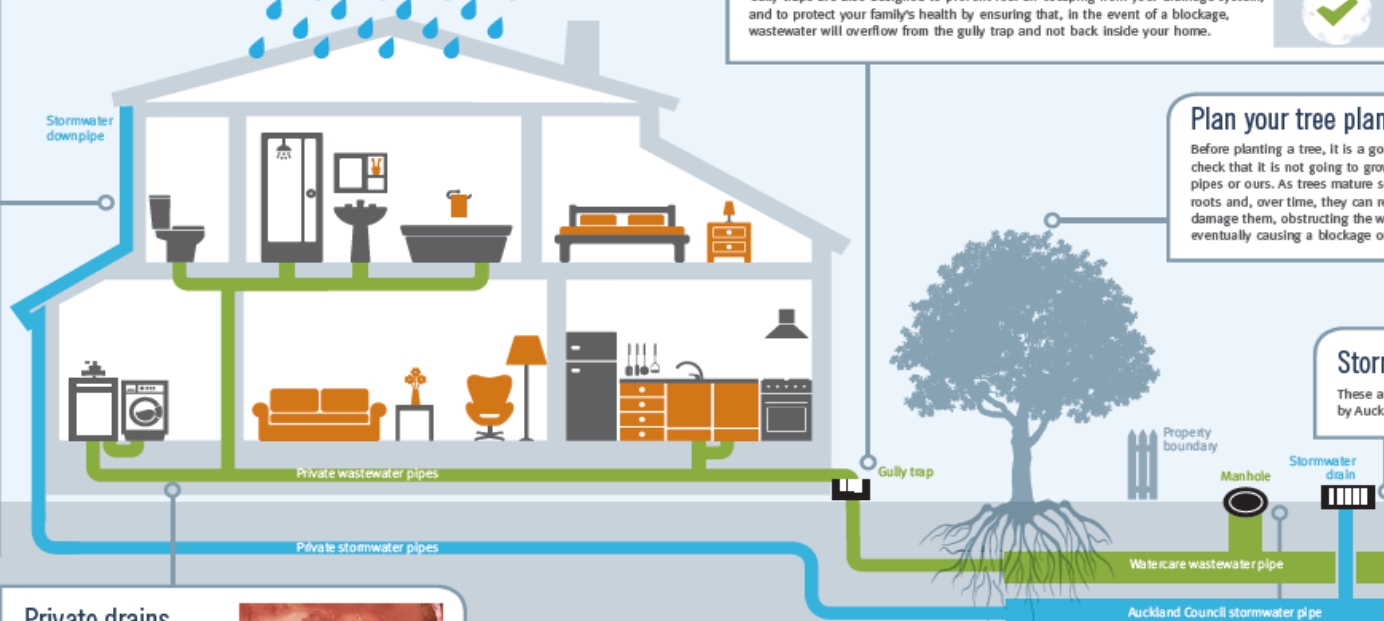
Your stormwater pipes should collect water off the roof and ground and should connect to the stormwater network only. When stormwater from your pipes enters the wastewater network, the increase in volume puts pressure on our network and contributes to wet-weather overflows.

By making sure your stormwater downpipe is separate to the wastewater network, you are helping to reduce the frequency and volume of overflows.

A compliant stormwater connection:



A non-compliant stormwater connection:



Gully trap

Ensure your gully trap is covered by a grate and raised off the ground to prevent rainwater from entering the wastewater network.

A gully trap is a fitting used to receive the discharge from the wastewater pipes in your home. All dwellings have at least one gully trap located against an outside wall, usually adjacent to the kitchen, bathroom or laundry.

If your gully trap is flush with the ground, rainwater can flow into it during wet weather and cause overflows onto public and private land, as well as into waterways.

Gully traps are also designed to prevent foul air escaping from your drainage system, and to protect your family's health by ensuring that, in the event of a blockage, wastewater will overflow from the gully trap and not back inside your home.

A compliant gully trap:	A non-compliant gully trap:
<ul style="list-style-type: none"> • Raised off the ground • Covered by a grate 	<ul style="list-style-type: none"> • Not raised off the ground • Not covered by a grate

Plan your tree planting

Before planting a tree, it is a good idea to check that it is not going to grow over your pipes or ours. As trees mature so do their roots and, over time, they can reach pipes and damage them, obstructing the water flow and eventually causing a blockage or break.

Stormwater drain

These are owned and maintained by Auckland Council.

Private drains

Ensure your private drains are maintained

Old, cracked and leaky pipes allow stormwater to seep into the wastewater network, overloading the pipes and causing overflows.



Cracked pipes like this one allow rainwater and ground water to enter the wastewater network and must be repaired.

Manholes

Give us a call

If you come across a spillage from a manhole, please phone us on (09) 442 2222.



Infiltration and inflow overflows

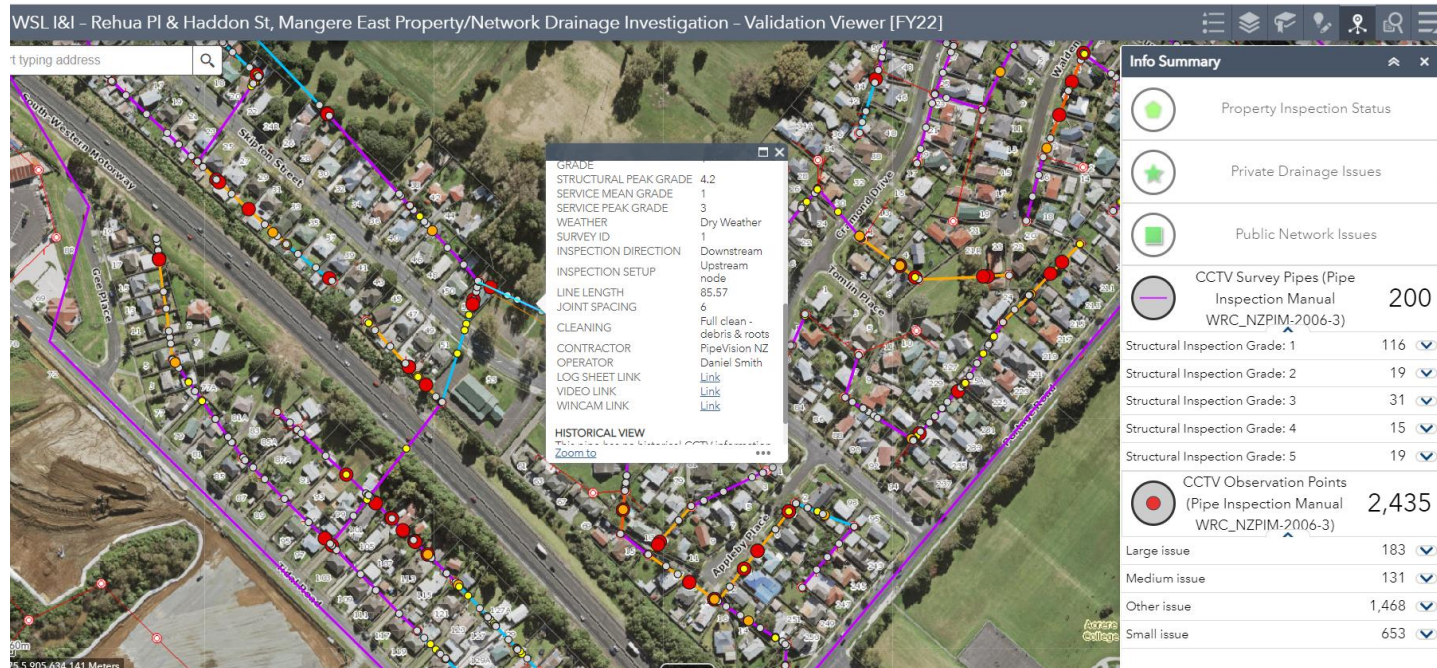


Digital – GIS and I&I Programme Support¹¹⁰

- Development of Private Property/ Network Drainage Collector Applications:
 - Drainage CCTV survey APPs
 - Drainage Property Inspection APPs
 - Drainage Separation Investigations APPs
- The Collector Application system is designed for capturing (in real time), managing and displaying private property and network drainage information. The applications record public and private network issues found during field investigations from discovery to resolution. It also includes display of CCTV survey results and access to logsheets, videos and pipe condition grading.

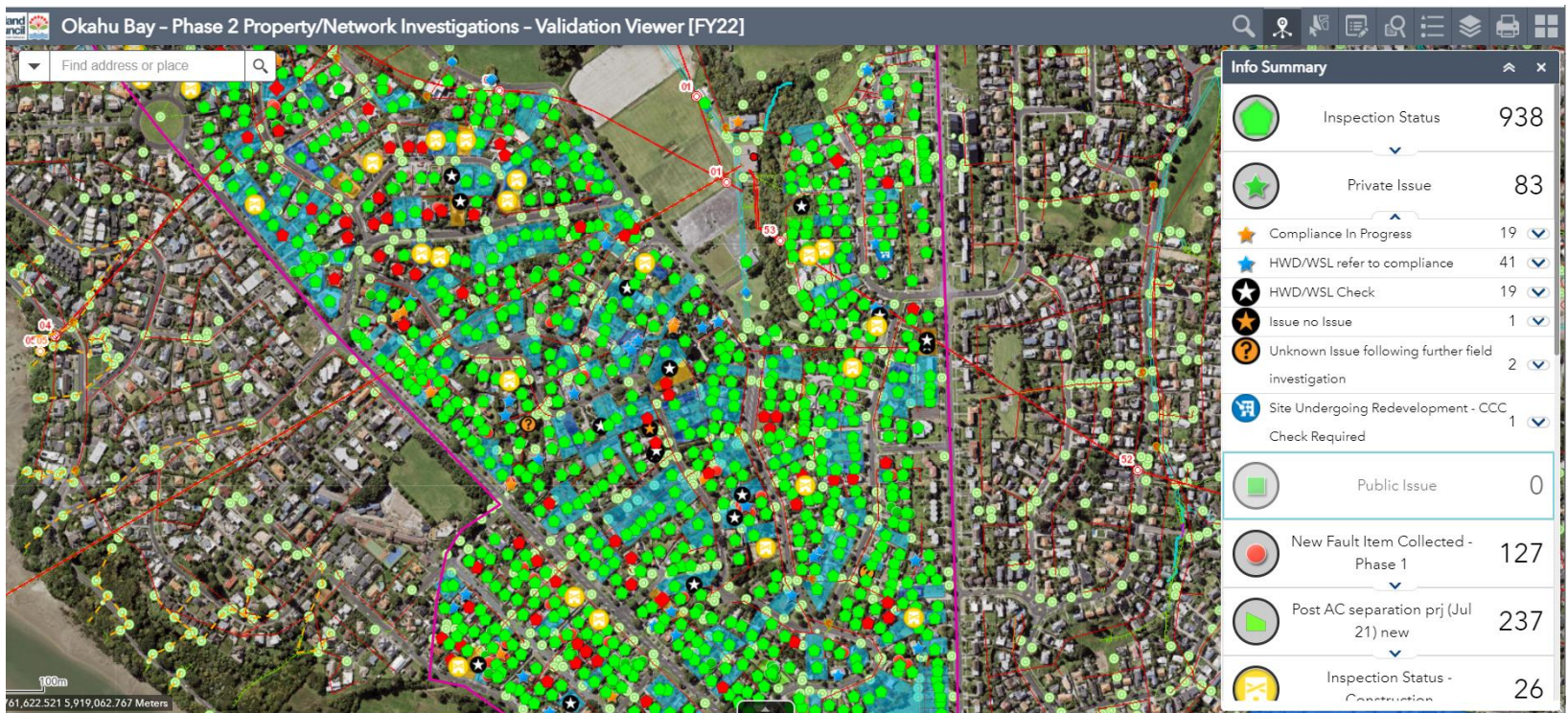
111 Networks CCTV Survey

- Easy/ quick access to spatial CCTV survey results including pipe grading, logsheet, video and survey summary info



Property/ Network Inspections

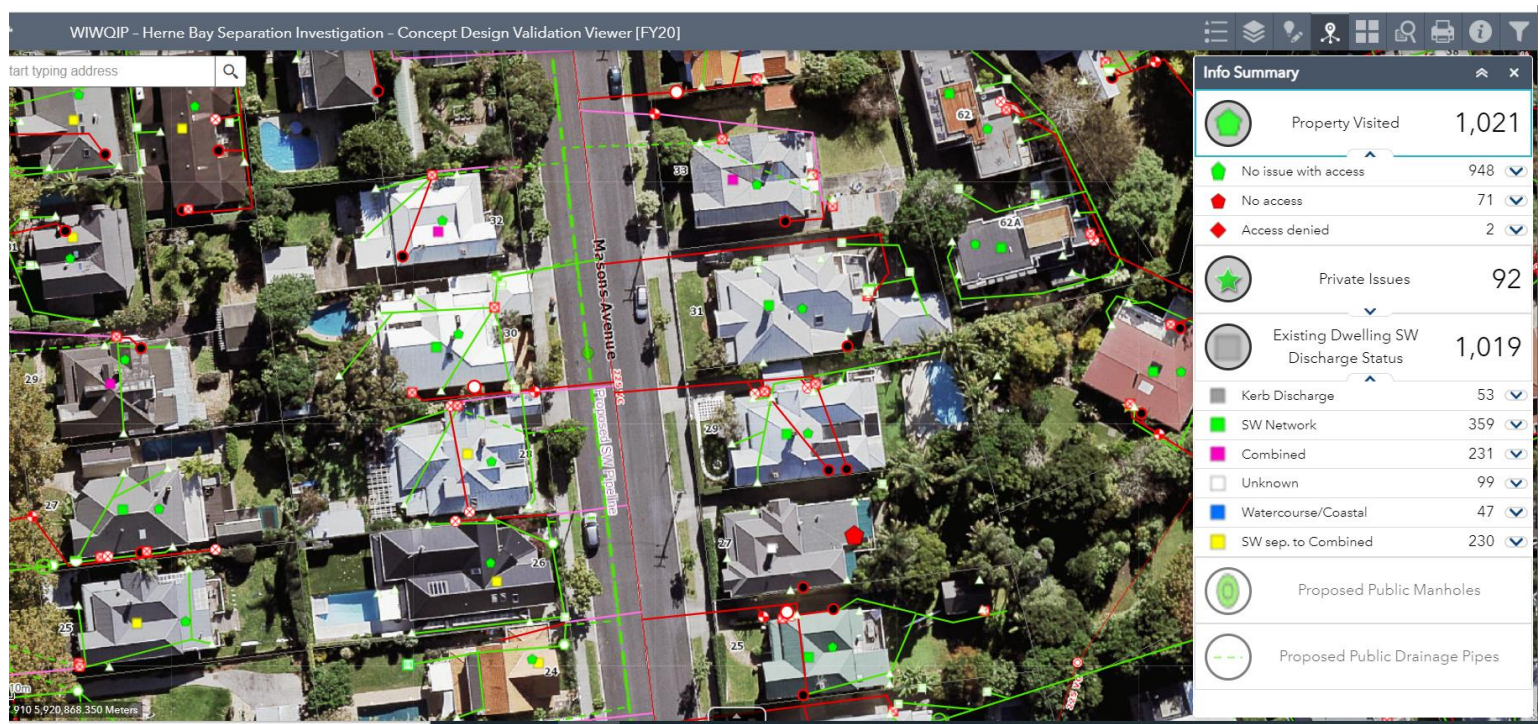
- Easy/ quick access to property inspection/ network drainage information and issue tracking



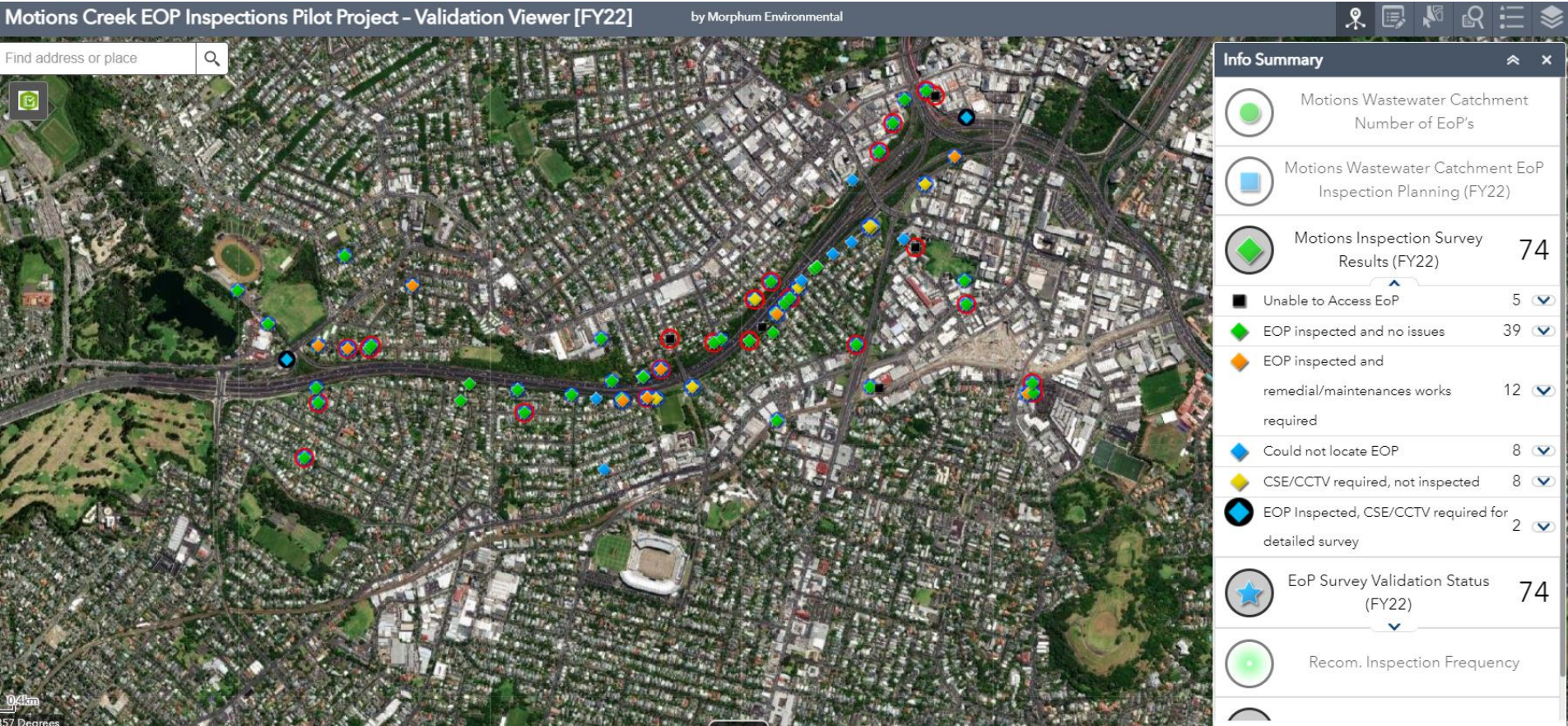
Separation Drainage Investigations (combined catchments)

113

- Digitising private drainage networks and designing separation options



EOP Inspection APP Pilot Project – Planned Maintenance



115
Leakage



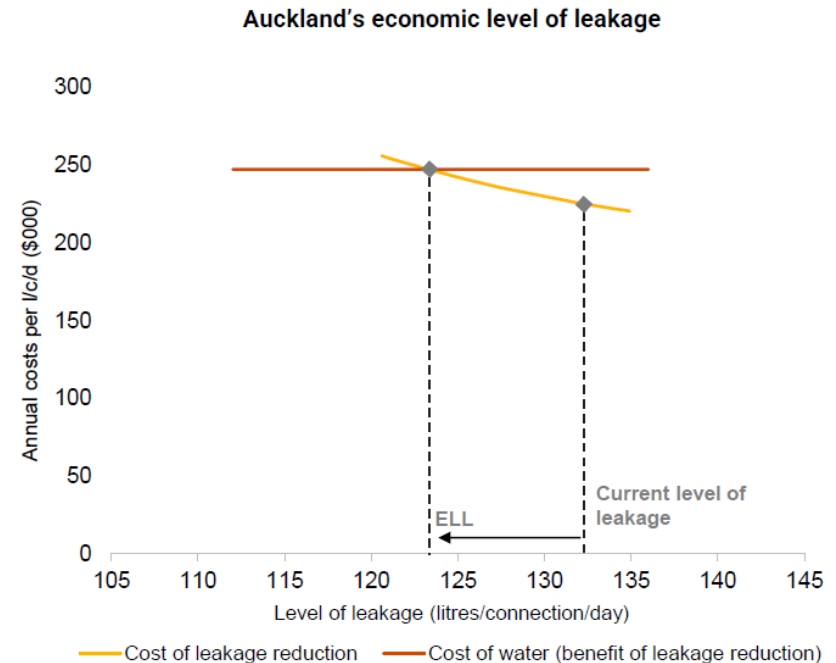
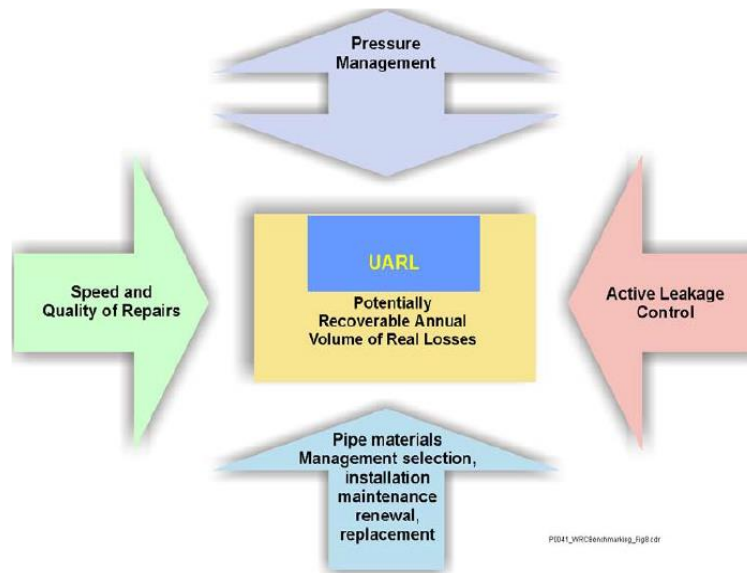
Current practice

- Leakage detection



Current practice

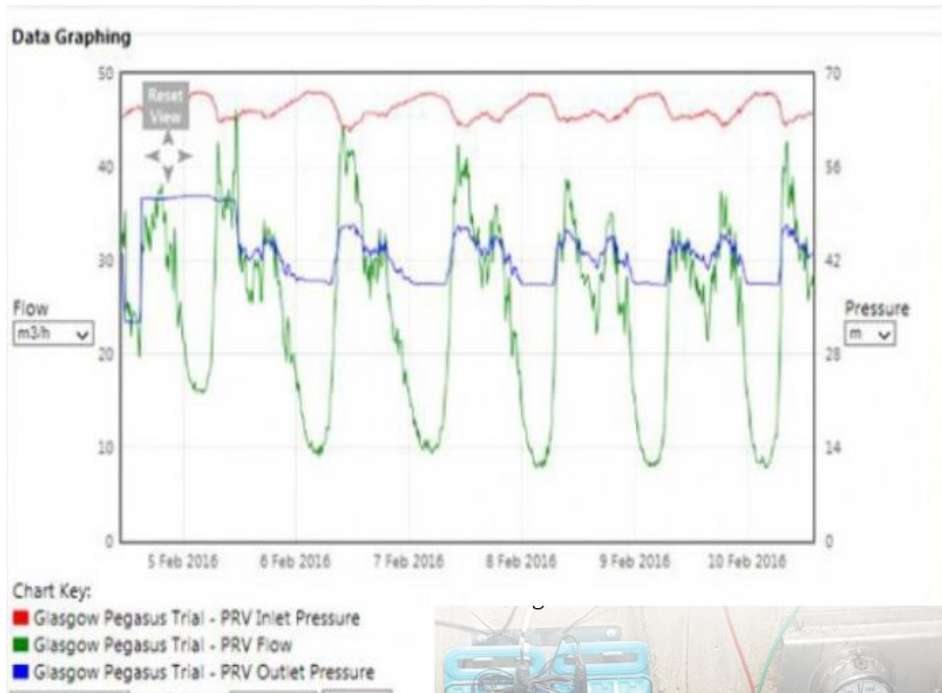
- Economic level of leakage



- From the work PWC (PWC 2021) has calculated, Watercare's ELL is at 123 l/c/d while the current level is estimated at 133 l/c/d or 8% above the ELL

Improvements

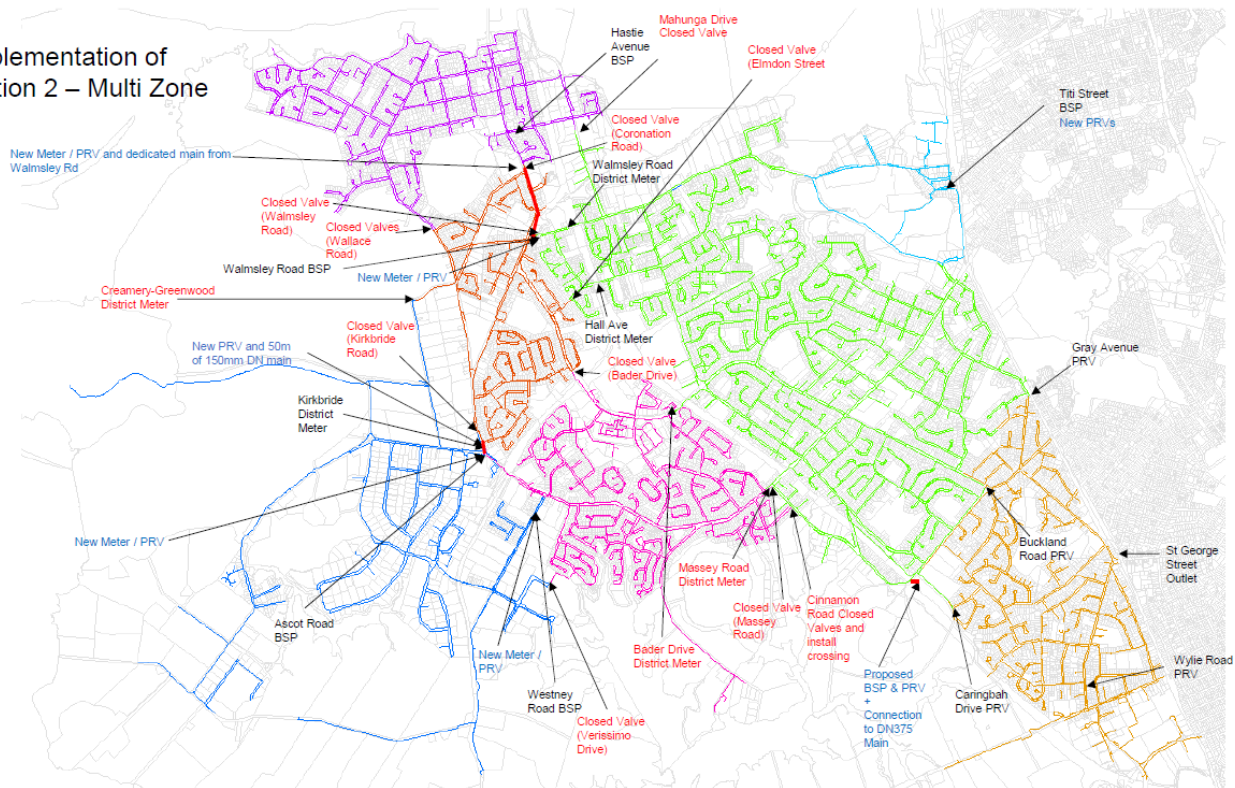
- Pressure management



Improvements

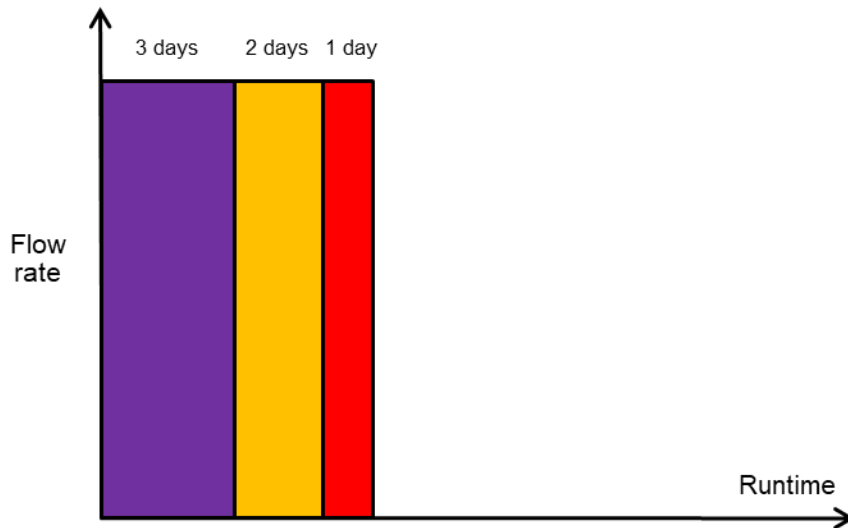
- Pressure management

Implementation of Option 2 – Multi Zone



Improvements

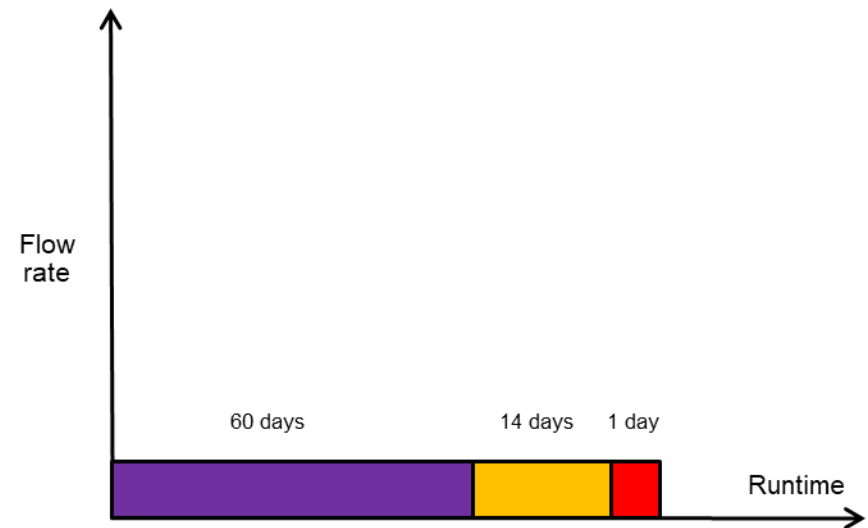
Leakage management system



Burst Leakage - Distribution Main
burst with flow rate of $4\text{m}^3/\text{hour}$

Total run time of leak = 6 days

Total loss of water = **576 m^3**



Background Leakage - Service Pipe leak
with flow rate of $0.4\text{ m}^3/\text{hour}$

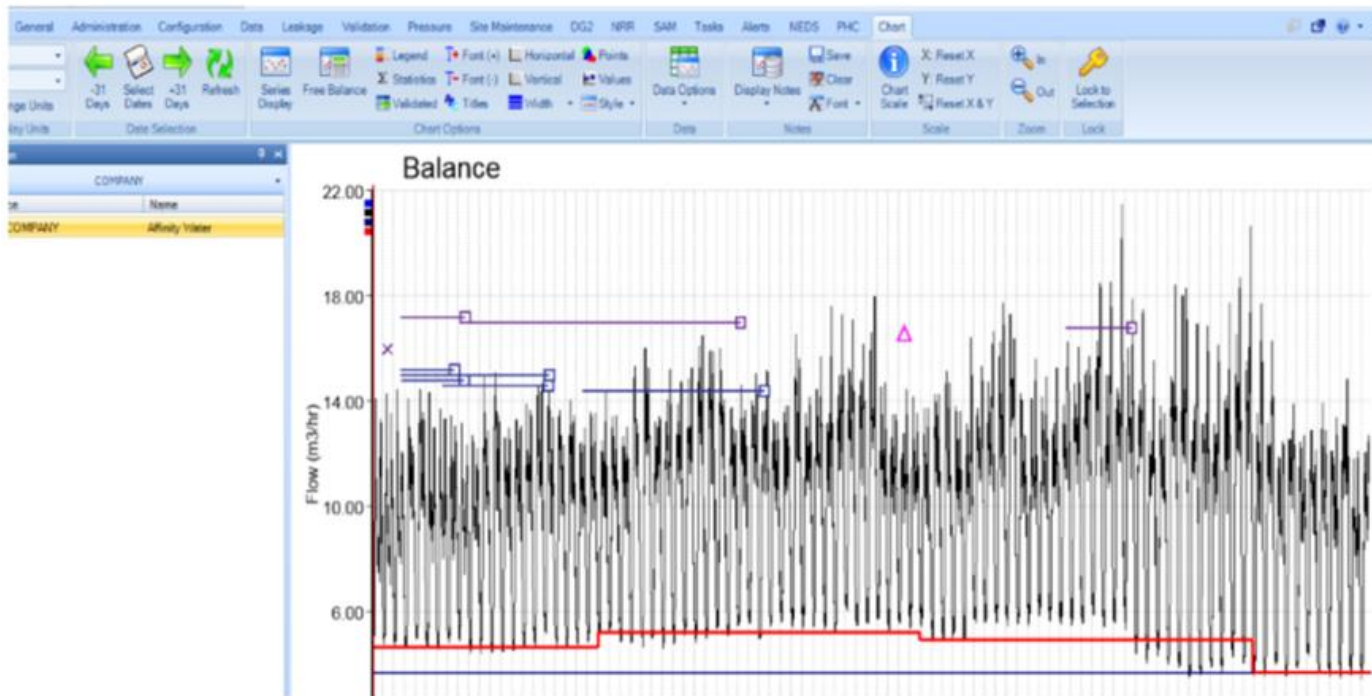
Total run time of leak = 75 days

Total loss of water = **720 m^3**

Improvements

Leakage management system

- Have reviewed systems from UK – Netbase and Waternet



Example of DMA Balance Chart with Job Data (Squares), Target (Blue) and Reported Figures (Red)

Improvements

Leakage detection

- Noise loggers



Permalog



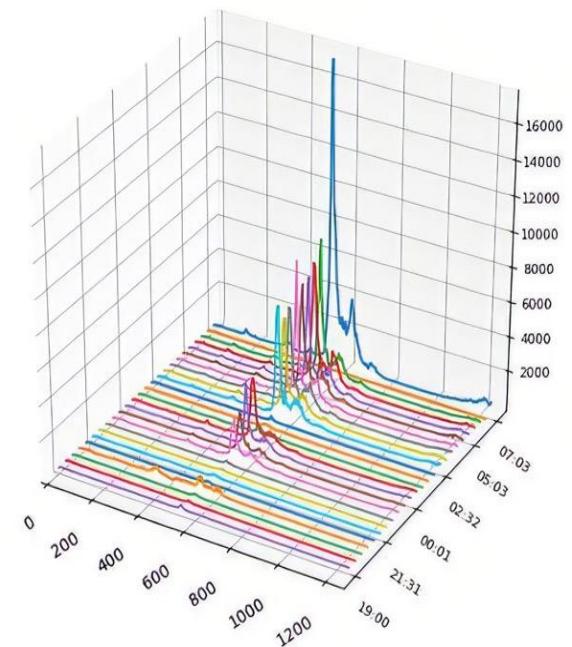
Fido Tech Bugs

Improvements



FIDO AI:

- Deep learning AI platform
- Unique neural network of on-pipe and in-pipe leak signatures
- Patented differential algorithm
- Analyses any acoustic or kinetic file, on any platform on any material
- Instant results at scale: **leak/no leak and leak size**
- Takes data from multiple sources: sensor and platform agnostic
- Increased accuracy & speed of data analysis (>1000s of files/hour versus 12/hr for a human)

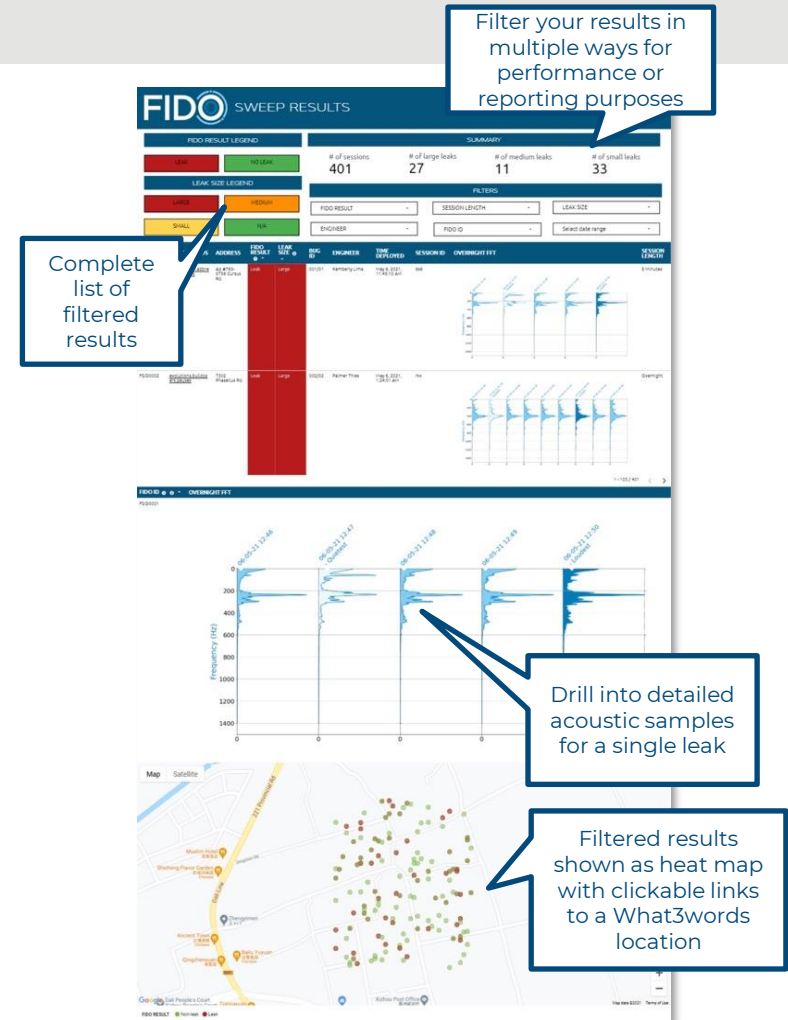


Improvements

Real time reports

Accurate performance visibility for immediate actioning

- One 24-hour sweep delivers a complete area leakage profile.
- Results are delivered straight to an engineer's phone and as a heatmap direct to the back office team.
- GIS data, asset ID numbers and FIDO Sweep IDs are used to create a visual heat map
- See where Bugs are being dropped and collected in real-time along with the results for immediate actioning



Improvements

Business Benefits Case: across whole workflow



From point of interest to detection to post-fix audit

**PREDICTION
ACCURACY –
Generating
points of
interest**



Human analysis of
multiple data sets

VS

FIDO
92% accurate for
leak POI

**Resource
prioritisation**



No leak size data

VS

FIDO
leak sizing =
find the largest
leaks 1st

**Accurate and
fast detection**



40% engineer visits
- no leak found

VS

FIDO
increases detection
hit rate to 94%
(case study UU June
2020)

**FIND and fix
1st time**



4% - dry digs
Average \$600
each
VS

FIDO
accuracy =
fewer dry digs

**Evidential
reporting**



Difficulties
evidencing
reduction of NRW

VS

FIDO
audit trail reporting



FIDO GO!*

The gamification of leak detection

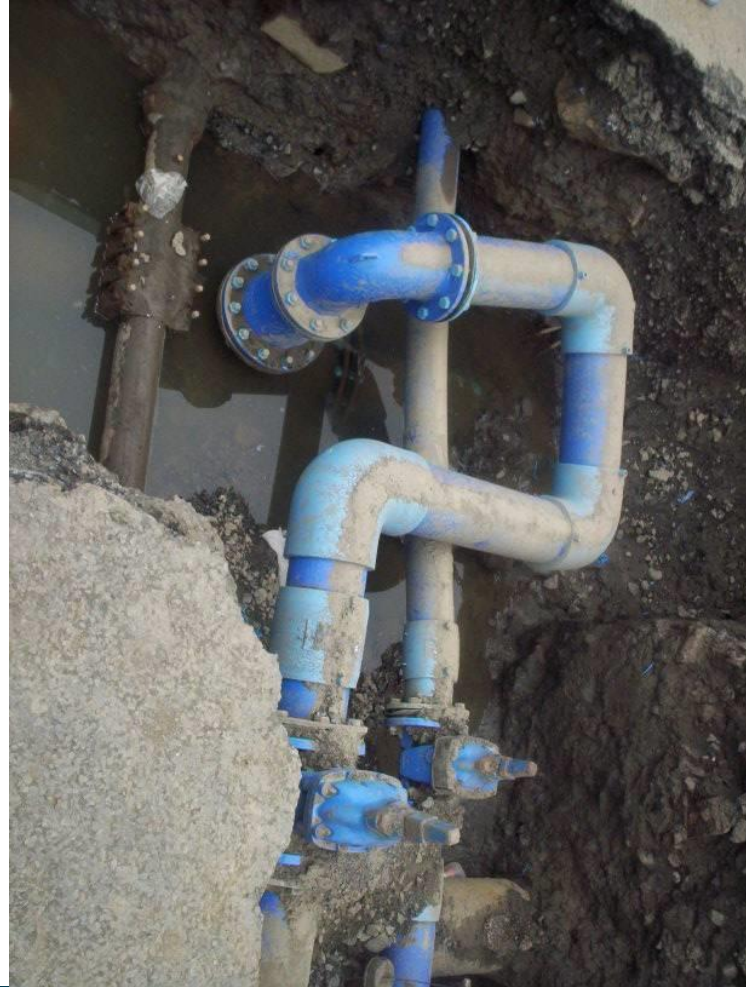
Agency for communities

- Beacons from bugs can be collected by staff or customers
- FIDO tokens:
 - Donate to charity
 - Donate to other countries
- User feedback on water saved
- Potential health and educational applications



* Not real or intended name or imagery, illustrative purposes only

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Questions



Smart Meters

Operational & Digital Enablement

Smart Networks Workshop

09-09-2022



Putting the SMART in Meters

- Key issues – Water efficiency & Customer experience
 - Leak detection
 - Behaviour change
 - Revenue gain
 - Data gaps



Nish Dogra

Smart Waters Specialist

Smart Network Operations

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Operational Challenges



You may have noticed some quirks with your data - here a sneak peak on what's going on behind the scenes..

To keep our business functioning, we need our smart meter data to be available. If data from a device is not present after 3 days, an investigation is triggered to our Watercare Smart Networks team to resolve with our partners.

Here are examples of what could be going on:

- 👷 • **Install fault - installed incorrectly or left of flight mode**
- ☁️ • **Submerged meter**
- 📶 • **Meter lid resulting in reduced connectivity**
- 🚗 • **Obstacle resulting in reduced connectivity - such as a car or boat parked over smart meter**
- 📶 • **No telco coverage**
- 🐛 • **Software bug**

Our Mission

*Provide Watercare teams & customers **timely insight** and **motivation** to **improve** their relationship with our **most precious resource***



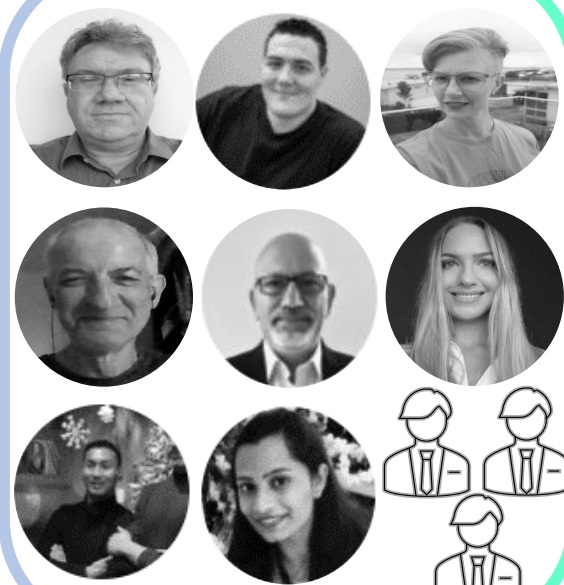
Meet our Team

Streamers

Enabling Smart Meter Data & Processes

Smarties

Watercare Mobile-App (Rush & WSL)



Dave Taito, Sagar & Bashaar



Our Amazing SMEs & Co-Designers



Our Sponsors & Executive Team



Rebecca Chenery Amanda Singleton Mark Bourne

Our Partnerships

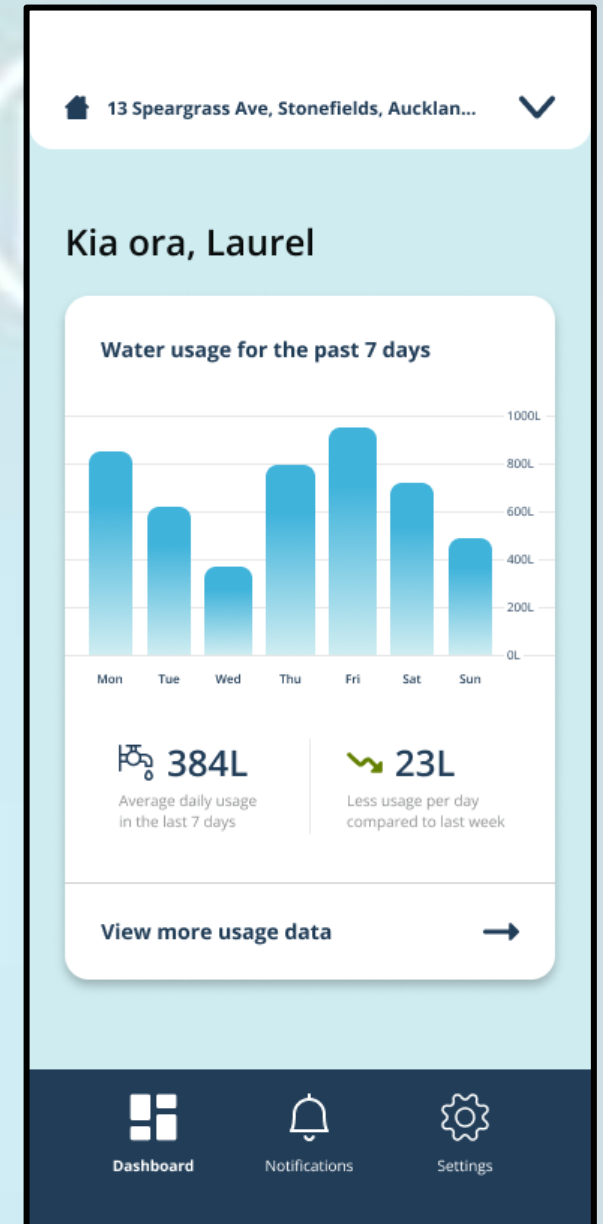


Watercare Mobile-App Live Demo

134

Delivered

- An app
- Single credentials for MyAccount and App
- Ability to add a single or multiple property
- Rich data visualisation for weekly, daily and 30mins
- Week on week usage Comparisions
- Push and in-app messaging capabilities for automated messages
- Continuous usage alerts
- Showing latest bill info
- Ability to make one-off payments via credit/debit/apple pay etc
- E-billing activation and management
- Help page
- Live chat with Watercare



Questions?



We want your
feedback!

To	Water Governance Board
Report title	Drinking water supply and zone registrations, and population updates.
Date:	21 September 2022
Report Author:	Grant King for Mathew Telfer - Operations Manager
Authorised by:	(Watercare) Gavin Ion - Chief Executive

1. Purpose of the report

Te Takemoo te puurongo

To inform the Water Governance Board and Council of changes to the Water Services Act and drinking water supply Zones within the District.

2. Executive summary

Whakaraapopotanga matua

This report details the changes to the Water Services Act and the actions by Watercare to align with the Act across the supply zones within the Waikato District. This will ensure Watercare achieves compliance with the Act both cost-effectively and efficiently.

To align with the Act and the recommendations, the changes detailed in the report have been made with Taumata Arowai.

3. Staff recommendations

Tuutohu-aa-kaimahi

- Recommendation 1: Advise Taumata Arowai and correct the registration of Huntly and Ngaruawahia supplies to reflect one supply system.
- Recommendation 2: Update water safety plan descriptions, risk tables, and contingency/incident response.
- Recommendation 3: Create new drinking water supply zones:
- Recommendation 4: Update the Taumata Arowai register with population data as per Appendix 2 based on the indicated data sources.

That the Waters Governance Board receives the report.

4. Background

Koorero whaimaarama

The Water Service Act 2021 requires drinking water supply registration similar to the previous Health Act regime. The new quality assurance rules that have replaced the previous performance aspects of the existing drinking water standards are markedly different.

To meet the Water Services Act requirements to register a drinking water supply accurately, the connection between Huntly and Ngaruawahia needed to be reflected in the registration and description of these supply systems. Watercare's review of the requirements is that Huntly and Ngaruawahia supply systems are a single water supply as defined by the Water Services Act. Preliminary advice from Taumata Arowai supports this conclusion.

In order to update and reflect on how the drinking water networks are currently managed, and to implement a pragmatic and risk-based approach to meet the new quality assurance rules, the existing registered drinking water supply zones have been combined (Huntly, Ngaruawahia, and Tuakau). This follows a review by the Water Quality Scientist and the Network Operations Team.

Drinking water supply populations are required for the Water Service Act registration. The correct application of the quality assurance rules and updated population figures have been recommended following Taumata Arowai guidance on calculating populations.

5. Discussion

Matapaki

Registration – Supplies

Huntly and Ngaruawahia are connected by a bulk supply line from Huntly WTP to the Ngaruawahia WTP via the Ngaruawahia distribution zone. This supply line is used regularly for supply demand and to exercise the line for turnover. If the connection was emergency-only, then a case could be made that the supplies were not linked except in an emergency.

The Water Services Act defines a water supply:

In this Act, unless the context otherwise requires, drinking water supply—

- a) means the infrastructure and processes used to abstract, store, treat, transmit, or transport drinking water for supply to consumers or another drinking water supplier*

And what is required for registration of drinking water supplies. In particular:

- a) the legal name and contact details of the owner of the drinking water supply, and the owner's trading name (if applicable):*
- b) the location of the drinking water supply, including, if applicable, the location of each abstraction point for the drinking water supply:*
- c) the area the drinking water supply supplies:*
 - the estimated number of consumers:*
 - a description of the drinking water supply..."*

The connection between Huntly and Ngaruawahia is captured by the definition of a water supply and by the registration requirements and, therefore, should be reflected accurately in Taumata Arowai's register for the correct application of the Water Service Act, either as a link on their individual registrations or as a combined single supply. Irrespective, the water safety plan descriptions, risk tables, and contingency/incident response plans should reflect connection and any relevant risks and benefits. Taumata Arowai has provided preliminary advice that the supply systems would require to be combined for registration. Huntly-Ngaruawahia is recommended as an updated supply name. The supply name can change at any time following a decision from the water supplier.

Registrations - Zones

The Water Quality Scientist completed a review of the historically registered zones, which included:

- A review with experienced members of the Network Operations team to understand the history and current operations of the drinking water network, and to
-

gather an understanding of any differences in operations (booster pumps, network reservoirs, valve operations), construction materials, service provision (full flow or trickle feed), numbers and types of complaints and the Network Operations team's understanding of water quality.

- A review of comprehensive lab monitoring data (*E. coli*, total coliforms, HPCs, turbidity, pH, disinfection by-products, plumbosolvent metals) to compare differences *within* and *between* registered zone areas to identify any significant differences.
- Expert opinions from other water supply operators and technical experts on the history of zone classification and the first principles of lab monitoring programmes.

Historically distribution zones were defined to assign public health grades. Water suppliers could differentiate where zones differed sufficiently by geography, pressure, and construction materials. The outcomes may have been areas that achieved better grades than others. Grading was primarily abandoned following the 2007 Health Act change, although some suppliers (Watercare Auckland) continued grading.

The current zone configurations for WDC were not well defined or documented. Boundaries between some zones needed to be inferred based on supply components rather than a map or documented description. Water safety plans do not currently define zones. Distribution zones on separate WTP supply lines are more clearly defined, e.g., Te Kauwhata town and Whangamarino rural.

Service areas exist for long-term infrastructure and demand management. Service areas broadly align with drinking water supplies. Regarding Huntly and Ngaruawahia, the Network Operations team reports that there are no known differences in how these supply areas are operated, water quality results, construction materials, numbers or types of complaints, or operations in between these areas that would define certain zones. Put another way, the differences and similarities *within* the currently registered zones are comparable to the differences and similarities *between* the currently registered zone areas.

The Quality Assurance Rules provides distribution rules for the three above population sizes and stipulates that:

- *if a Networked Supply serves 10,000 people, level 3 Rules must be used for all source, treatment, and distribution zone compliance, regardless of the number of people served by any single source, treatment plant, or distribution zone.*

Level three distribution rules apply to any zone attached to a large supply of up to 25,000 people. Therefore, having very small zones attached to large zones creates higher lab monitoring requirements that sometimes are out of proportion to the population and/or risk.

A water supplier must determine supply distribution zone boundaries and populations and ensure registrations are correct and up to date. Annual registration is a requirement set out in the Water Services Act.

As an example of the rule changes for lab monitoring, the Ngaruawahia zone and the Taupiri zones would go from a site visit every four and six days to three per week each. The Hopuhopu and Horotiu zones would go from a site visit every 15 days to three site visits per week each.

Watercare has an opportunity to review supply distribution zones before compliance rule reporting begins in January 2023. The number of compliance samples should first meet the minimum requirement and then be based on risk assessment e.g., taking more than the minimum number of *E. coli* samples for all zones. Therefore, reducing the number of zones shouldn't mean less sampling but greater control over where samples should be distributed based on risk.

Areas where zones are not clearly defined:

- Huntly and Rotongaro zones – Rotongaro is a long supply line rather than a zone.
- Ngaruawahia central and Horotiu zones – Central reservoir and River Road valve provide a separation point. Other service areas have similar arrangements that are not currently zoned (e.g., Huntly West).
- Hopuhopu and Taupiri zones – Supply line to Hopuhopu reservoir is a separation point between these areas and Ngaruawahia central. Taupiri has lower pressure issues but is insufficient to manage it separately from the Hopuhopu area.
- Taukau North and Tuakau South zones.

Other supply areas:

- Pokeno, Raglan, Port Waikato, Onewhero, and the Southern zones are all single-zone supplies.
- Te Kauwhata WTP has individual supply lines to Whangamarino and Te Kauwhata/Rangariri; therefore, these are clearly defined zones.

The new Quality Assurance Rules allow for the use of continuously monitored analysers in the distribution network to monitor for residual disinfection. This enables a reduction in the number of lab samples and provides a greater level of assurance of the network's microbiological safety. The new Quality Assurance Rules stipulate the minimum number of analysers per *zone*. This continuous monitoring option becomes prohibitive for relatively small drinking water supplies (less than 25,000 people) with multiple zones, particularly from a maintenance and operation perspective. The geographically long supply of Ngaruawahia would support the adoption of continuous monitoring if operating as a single zone.

The review concluded that the water quality in each supply is of similar quality.

Populations

Taumata Arowai provides guidance in determining the water supply population. Supply and zone populations must be defined to apply the new Quality Assurance Rules correctly.

Unlike the existing drinking water standards, the new Quality Assurance Rules state that the base population should be the registered population. Therefore, Raglan would be around 4000, rather than trying to account for the very high summer population. As the scheme is over 500 people, new Varying Population rules do not apply.

The Taumata Arowai website states that meshblock data is the preferred method for calculating populations in larger supplies. For smaller static populations of 50-500 then, an alternative way of estimating the drinking water supply population is to obtain the number of household connections associated with a supply and multiply it by the average number of people per household (where the average number of household occupants is determined by Census data relevant to the supply or to the appropriate mesh block). The average household occupancy for WDC at the 2018 census was 2.8 (slightly higher than other regions). Noting that the Water Demand Management Plan uses 2.7 per connection

for population estimates based on the RITS (RITS appears to be for wastewater connections and specifies dwellings, not connections).

Current drinking water supply registrations and populations as per Taumata Arowai registration and as listed in the current 2018 water safety plans are listed below in Appendix 1.

Huntly, Ngaruawahia Te Kauwhata, Southern, Tuakau, and Pokeno supply require updating based on population growth. Meshblock data is the prescribed method for this population calculation, but the rural nature of Huntly, Ngaruawahia, Whangamarino, and Southern make using meshblock data difficult. The Raglan population is likely adequate and was updated in 2021.

Western, North Western, and Ta Akau are more appropriately updated using connections data.

Western, North Western registered populations don't reflect connection numbers. Western (Stonebridge) is registered as 33 but is likely greater than 100 people. North Western is registered as 115 but likely to be around 30. It's possible there was an admin error, and the two were mixed up.

Of note, Hamilton City Council has one large zone (175,000 people); therefore, Southern Western and North Western are receiving water of the same quality. Possible to combine these registrations into one, but there is little to gain with regard to compliance requirements.

Port Waikato registered population doesn't adequately account for the normal resident population. Connections to the system are presently mainly limited to public facilities such as public toilets, motor, and school camps, Marae, surf club, yacht club, etc. The Holiday Park manager reports that they have a resident population, including staff, of 50 during the winter and 150-200 during summer, with an average of 100 people across the year. The School camp website lists a maximum occupancy and a booking calendar; an average of 35 people per day is estimated. Taumata Arowai guidance sets out that Marae and clubs are expected to be

calculated on base population + maximum occupancy. Varying population rules apply if the supply population exceeds 500 at any stage.

Therefore, the expected registered population for Port Waikato could be much higher than the 60 people registered. 350 people is recommended as an updated registered population.

Southern may have several non-connected properties or connected properties without a dwelling; therefore, a meshblock calculation may not be accurate, and a dwelling multiplier may be more appropriate.

The new Quality Assurance Rule population bands are quite large compared to the existing drinking water standards. Change points are above 500 and above 25,000. Therefore, adopting conservative population figures for larger supplies has a negligible impact. All population estimates in appendix 2 are considered higher than the actual population, in line with a precautionary approach.

6. Next steps

Ahu whakamua

- The zone changes have been implemented with Taumata Arowai
- The sampling schedule will now be reviewed and changed to align with the new supply zones and sampling requirements.

7. Attachments

Ngā taapiri hanga

Appendix 1 Current drinking water supply registrations and populations.

Supply	Supply population	Zone code	Zone population
Huntly	7340	HUN002HU	7,210
		HUN002RO	130
Ngaruawahia	6879	NGA002HO	459
		NGA002HP	200
		NGA002NG	5691
		NGA002TA	529
North Western Dist, Waikato DC	115	NOR013NO	115
Onewhero	36	ONE004ON	36
Pokeno	4,567	POK001PO	4,567
Port Waikato	60	POR005PW	60
Raglan	4,000	RAG001RA	4000
Southern Districts, Waikato DC	5,466	SOU009SO	5,466
Te Akau	78	TEA009TE	78
Te Kauwhata	2149	TEK001TR	1,410
		TEK001WH	739
Tuakau	4719	TUA002TN	944
		TUA002TS	3,775
Western District, Waikato DC	33	WES014WE	33
Totals	35,442		35,442

Appendix 2 Updated population data

Supply	Quality Assurance rule	Proposed population	Source of calculation
Huntly	Large >500 people	8,500	Based on connection data and Stats NZ Statistical area population count
Ngaruawahia	Large >500 people	9,000	Based on connection data
North Western Dist, Waikato DC	Small 26 - 100 people	50	Based on connection data
Onewhero	Small 26 - 100 people	35	Based on connection data
Pokeno	Large >500 people	5,000	Based on Stats NZ Statistical area population count
Port Waikato	Medium 101 - 500	350	Based on premises potential occupation
Raglan	Large >500 people	4,500	Based on connection data and Stats NZ Statistical area population count
Southern Districts, Waikato DC	Large >500 people	8,500	Based on connection data
Te Akau	Small 26 - 100 people	75	Based on connection data
Te Kauwhata	Large >500 people	4,000	Based on connection and Stats NZ Statistical area population count
Tuakau	Large >500 people	5,750	Based on Stats NZ Statistical area population count
Western District, Waikato DC	Medium 101 - 500	150	Based on connection data

To	Waters Governance Board
Report title	Huntly Wastewater Treatment Plant Upgrade
Date:	11 October 2022
Report Author:	Keith Martin - Waters Manager
Authorised by:	Gavin Ion - Chief Executive

1. Purpose of the report

Te Take moo te puurongo

To inform the Waters Governance Board that Council has approved bringing forward the funding of \$2.1 million to commence Huntly Wastewater Treatment Plant design, consenting and pricing to better understand the necessary work, and cost, required to upgrade the plant.

2. Executive summary

Whakaraapopotanga matua

The upgrade of Huntly WWTP is identified in Council's 2021-32 Long Term Plan (LTP) for 2025/26 to 2028/29. The upgrade is required to improve discharge quality to meet cultural and environmental requirements (renewals and level of service) and to increase its capacity to cater for growth in Huntly. Significantly, the timing of the upgrade is important to ensure the plant is able to remain compliant when the resource consent is renewed and for the plant to be sufficiently sized to accommodate Huntly's growth and to enable the plant to receive wastewater from the Sleepyhead Development in Ohinewai beyond some initial factory buildings (which are serviced onsite).

3. Staff recommendations Tuutohu-aa-kaimahi

That the Water Governance Board:

- a. Receives the report.

4. Background Koorero whaimaarama

The key enabling infrastructure to allow full realisation of Sleepyhead and the Ohinewai Lands Limited Future Urban Zone (FUZ) is conveyance of water and wastewater as well as treatment plant upgrades.

Key treatment plant projects are included within either the infrastructure strategy or LTP (Huntly wastewater treatment plant and Te Kauwhata water treatment plant). There is alignment of potable water capacity however not wastewater capacity. The largest hurdle for development, in terms of funding and timing of infrastructure, is an update of the Huntly WWTP.

Huntly WWTP is programmed in the LTP to be upgraded between 2025/26 and 28/29. That upgrade can be designed and consented to accommodate growth in Ohinewai. As the LTP timing does not align with Sleepyhead's aspirational development timeline (capacity required in 2024), Council are endeavouring to bring forward the Capital Works program, starting with the resource consent and concept design.

5. Discussion Matapaki

The bringing forward of the budget includes design, consenting and refined costing of the Huntly WWTP upgrade. Council has approved the business case and authorised budget to be brought forward from the 2025-29 LTP projects (1WW10610 - WWTP Upgrade and 1WW10410 - Consent Renewal). Whilst this work is required regardless of Sleepyhead, Sleepyhead is driving the timeframes forward to avoid having to suspend (or limit the duration of delaying) development of Ohinewai due to the Huntly WWTP not being able to cater for its land use demands.

6. Next steps Ahu whakamua

A high-level cost estimate from Watercare for the design (\$350-500k) and consent (simple pathway \$500-550k, complex pathway \$1-1.1M) plus contingency is \$2.1M. Watercare has been tasked to obtain quotes for design. Engagement is planned with mana whenua which will help inform design parameters from the outset and to ensure our obligations under Te Ture Whaimana are delivered upon. Watercare Waikato staff will take a lead in the consenting work. ELT has recommended that a joint project team be set up between Council and Watercare staff.

7. Attachments Ngaa taapirihanga

There are no attachments for this report.

To	Waters Governance Board
Report title	Exclusion of the Public
Date:	Thursday, 29 September 2022
Report Author:	Elizabeth Saunders, Democracy Advisor
Authorised by:	Gaylene Kanawa, Democracy Manager

1. Staff recommendations

Tuutohu-aa-kaimahi

THAT the public be excluded from the following parts of the proceedings of this meeting.

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

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
Item PEX 1 Confirmation of Minutes Item number PEX 2 Action Register	Good reason to withhold exists under Section 6 or Section 7 Local Government Official Information and Meetings Act 1987	Section 48(1)(a)
Item PEX 3.1 Waters Financial Results to 31 July 2022		
Item PEX 3.2 Scada RTU Business Case		

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

Item No.	Section	Interest
Item PEX 1 Confirmation of Minutes Item number PEX 2 Action Register	Refer to the previous Public Excluded reason in the agenda for this meeting.	
Item PEX 3.1 Waters Financial Results to 31 July 2022	7 (2) (b) (ii)	To protect information that would otherwise unreasonably prejudice a person's commercial position.
	7(2)(h)	To enable commercial activities to be carried out without prejudice or disadvantage.
Item PEX 3.2 Scada RTU Business Case	7(2)(b)(ii)	To protect information that would otherwise unreasonably prejudice a person's commercial position
	7(2)(h)	To enable commercial activities to be carried out without prejudice or disadvantage.
	7(2)(j)	To prevent use of the information for improper gain or advantage.
Item PEX 3.3 Tuakau/Pokeno Wastewater Network Upgrade Price Escalation	7(2)(b)(ii)	To protect information that would otherwise unreasonably prejudice a person's commercial position
	7(2)(c)(i)	To protect information that is subject to an obligation of confidence and to ensure the information avenue remains open, when it is in the public interest for it to do so.
	7(2)(g)	To protect legally privileged information
	7(2)(h)	To enable commercial activities to be carried out without prejudice or disadvantage.

	7(2)(i)	To enable negotiations to carry on without prejudice or disadvantage.
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2. Attachments

There are no attachments for this report.
