

Notice of Meeting

A meeting of the Infrastructure, Climate Change and Emergency Management Committee will be held in the Council Chamber, 136 Main Street, Pahiatua on **Wednesday 11 December 2024** commencing at **1:00pm**.

Bryan Nicholson Chief Executive

Agenda

- 1. Welcome and Meeting Opening
- 2. Apologies
- 3. Public Forum

A period of up to 30 minutes shall be set aside for a public forum. Each speaker during the public forum section of a meeting may speak for up to five minutes.

Standing Orders may be suspended on a vote of three-quarters of those present to extend the period of public participation or the period any speaker is allowed to speak.

With the permission of the Chairperson, members may ask questions of speakers during the period reserved for public forum. If permitted by the Chairperson, questions by members are to be confined to obtaining information or clarification on matters raised by the speaker.

4. Notification of Items Not on the Agenda

Major items not on the agenda may be dealt with at this meeting if so resolved by the Committee and the Chairperson explains at the meeting at a time when it is open to the public the reason why the item was not listed on the agenda and the reason why discussion of the item cannot be delayed until a subsequent meeting.

Minor matters not on the agenda relating to the general business of the Committee may be discussed if the Chairperson explains at the beginning of the

meeting, at a time when it is open to the public, that the item will be discussed at that meeting, but no resolution, decision or recommendation may be made in respect of that item except to refer it to a subsequent meeting.

5. Declarations of Conflicts of Interest in Relation to this Meeting's Items of Business

6. Confirmation of Minutes

3

Recommendation

That the minutes of the Council meeting held on 16 October 2024 (as circulated) be confirmed as a true and accurate record of the meeting.

- 7. Reports
- 7.1 Infrastructure Management Report

9

7.2 Cyclone Gabrielle Recovery Update

31

7.3 Capital Portfolio Report

35

- 8. Items not on the Agenda Accepted in Accordance with the Procedure Outlined as per Agenda Item 4
- 9. Closure



Minutes of a meeting of the Infrastructure, Climate Change and Emergency Management Committee held in the Council Chamber, 26 Gordon Street, Dannevirke on Wednesday 16 October 2024 commencing at 1:00pm.

1. Present

Cr K A Sutherland (Chairperson), N L Chase, A K Franklin, S M Gilmore, P A Johns, M F Long, S A Wallace and S M Wards

In Attendance

Mr C French - Rationale

Mr B Nicholson - Chief Executive

Mr H Featonby - Group Manager - Infrastructure
 Mr D Watson - Manager - Special Projects
 Mr P Wimsett - Chief Advisor (via Teams)

Mr M Dunn - Manager – Programmes and Projects

Ms A Rule - Policy and Planning Advisor
 Mr A Desmond - Capital Projects Manager
 Mr M Clifford - 3Waters Asset Engineer
 Mr R Cannon - Engineering Services Manager

Mrs A Dunn - Manager – Democracy Services
Ms S Ellis - Democracy Support Officer

2. Welcome and Meeting Opening

The Chairperson opened the meeting with prayer.

3. Apologies

That the apologies from Her Worship the Mayor and Councillor Peeti-Webber, and apologies for lateness from Councillor Chase, be approved and leave of absence granted for the meeting.

Wards/Sutherland

Carried

4. Public Forum

There were no requests for Public Forum.

5. Notification of Items Not on the Agenda

Nil

6. Declarations of Conflicts of Interest in Relation to this Meeting's Items of Business

Nil

7. Confirmation of Minutes

That the minutes of the Council meeting held on 18 September 2024 (as circulated) be confirmed as a true and accurate record of the meeting.

Johns/Wallace Carried

8. Reports

8.1 Infrastructure Management Report

The Infrastructure, Climate Change and Emergency Management Committee considered the report from the Group Manager - Infrastructure dated 03 October 2024 which provided an update on key activities and items of interest over the period 10 September to 8 October 2024.

It was noted that information would be provided to the Dannevirke and Eketāhuna community boards regarding the impact of the reduced footpath maintenance budget.

The need to communicate the reduced footpath maintenance budget to the public was noted.

An enquiry was made regarding when bulk flow meters would be installed. It was responded that several DMAs were in place already, but more were required to provide an adequate estimation of the total loss.

It was noted that the tyrewise scheme drop off point was still being implemented.

That the report from the Group Manager - Infrastructure dated 03 October 2024 concerning the Infrastructure Management Report be received.

Gilmore/Franklin Carried

8.2 Three Waters Infrastructure Strategic planning and Three Waters Advisory Group - Update

The Infrastructure, Climate Change and Emergency Management Committee considered the report from the Group Manager - Infrastructure dated 07 October 2024 that presented a memorandum providing an update to the strategic planning activities, including the preparation of the "Case for Change" document — a strategic document to set the direction for future options, development and analysis for investment in Three Waters infrastructure. In addition, the memorandum confirmed next steps and involvement of the Three Waters Advisory Group in ongoing strategic planning, and noted how the strategic planning activity will interface with water service delivery planning as per Local Water Done Well Policy.

That the report from the Group Manager - Infrastructure dated 07 October 2024 concerning the Three Waters Infrastructure Strategic planning and Three Waters Advisory Group - Update be received.

Wallace/Johns Carried

8.3 Water Demand Management Strategy and Universal Water Metering Programme

The Infrastructure, Climate Change and Emergency Management Committee considered the report from the Group Manager - Infrastructure dated 07 October 2024 which noted key findings and actions from the Demand Management and Water Conservation Plan, and outlined the objectives, approach, scope and programme of water demand management activities described in the Plan over the next ten years, including details on key programmes of work, which included:

- A major renewals programme to address non-revenue water (leakage).
- Universal water metering.

It was queried whether more take could be permitted in drought conditions; it was responded that this would not be viable here, as well as in other areas.

It was noted that encouragement of the use of tanks in Norsewood, Akitio and Pongaroa should be prioritised), and that this could be done in conjunction with messaging regarding alternate day water restrictions.

That the report from the Group Manager - Infrastructure dated 07 October 2024 concerning the Water Demand Management Strategy and Universal Water Metering Programme be received.

Johns/Wallace Carried

8.4 Climate Change - Update October 2024

The Infrastructure, Climate Change and Emergency Management Committee considered the report from the Chief Advisor dated 10 October 2024, which provided a brief update on climate related matters and recent reporting to the Region's Joint Climate Change Action Committee.

It was noted that, with the exception of electricity records, most of the data presented was based on models. No margin of error was outlined, but it was established that, should the models be out by a significant factor, it may mean that other areas – such as fuel – may require further prioritisation.

That the report from the Chief Advisor dated 10 October 2024 concerning the Climate Change - Update October 2024 be received.

Wards/Johns Carried

8.5 Capital Portfolio Report

The Infrastructure, Climate Change and Emergency Management Committee considered the report from the Manager - Programmes & Projects dated 04 October 2024, which updated the Infrastructure, Climate Change and Emergency Management Committee on the capital programme and key project statuses.

It was underlined that district town signage was still in the process of being negotiated with NZTA. It was asked that information regarding the amount of staff time spent on negotiations be provided.

That the report from the Manager - Programmes & Projects dated 04 October 2024 concerning the Capital Portfolio Report be received.

Wards/Chase Carried

9. Items not on the Agenda

Nil

There being no further business the Chairperson thanked those present for their attendance and contributions, and declared the meeting closed at 3:31pm.

Chairperson





Report

Date: 5 December 2024

To : Chairperson and Committee Members

Infrastructure, Climate Change and Emergency Management Committee

From : Hamish Featonby

Group Manager - Infrastructure

Subject: **Infrastructure Management Report**

Item No : **7.1**

1. Recommendation

1.1 That the report from the Group Manager - Infrastructure dated 11 November 2024 concerning the Infrastructure Management Report be received.

2. Reason for the Report

2.1 This report is to update the Infrastructure, Climate Change and Emergency Management Committee on key activities and items of interest over the period 12 November 2024 to 1 December 2024.

3. Group Manager update

With this being the last meeting of the calendar year, I would like to reflect on the achievements of all of the Infrastructure teams.

The Tararua Alliance have celebrated 10 years of the contract with a major national award from CCNZ, they have performed a restructure to align better with a network ownership approach and implemented a new performance framework to stretch themselves, they have navigated a tricky time with changes to Government Policy Statement for Transport while applying for funding on Tararua's behalf and have advocated strongly for our community against tolling. They have continued to foster a great relationship with stakeholders through the structured meetings they have and other Infrastructure areas of Council have emulated this approach. This occurred on top of record spends with local companies to deliver Cyclone Gabrielle repairs as well as their business-as-usual renewal and maintenance activities.

The three waters teams have had a combination of infrastructure, compliance and staffing challenges throughout the year which they have successfully worked through. Delivery of the Dannevirke DAF plant, continued improvement in compliance and the required reporting, delivery of a Asset Management Plan in a rush following the DIA's departure from that work at the last second, a very successful beginning to the Waters Advisory Group that's demonstrating the strength of the relationships with our lwi partners and strategic plans that set Tararua up for successful delivery into our Long Term Plan are some of the many examples of the work happening within the team. There have been multiple notable personal sacrifices within that team to ensure the lights have stayed on so I want to highlight that and thank them publicly.

Our Solid Waste team has transitioned from a position of stress to one of strength. The uptake of in-house management of the Transfer Stations and then of the Mixed Recycling and logistics while a significant change and challenge has proven to be a successful change. The improvement in costs to the rate payer as well as an improved level of service has shown the value of the decision and is a credit to that team. Continued positive feedback from the Public and Elected Members has spurred them on and they continue to take amazing ownership of the service while enjoying an amazing team culture.

Finally, our Project Management Office (PMO) has shown to be a strong workforce for the Council. They have brought structure and delivery to some of the most complicated and challenging projects Council has delivered this year - Norsewood Water Treatment Plant being one. The PMO completed last financial year with a strong showing in budget spends and minimal carry forwards and has Year 1 of the Long Term Plan well placed to deliver well again. They have also created a great relationship with stakeholders through their regular engagement which has ensured a positive path forward.

The Infrastructure group is well placed for the remainder of the financial year and begin 2025 in a position of strength to be able to deliver the remainder of Year 1 of the Long Term Plan. We have filled key positions in the 3 Waters team with Mike Dunn taking the reins as Manager and a new team member joining as Waste and Water Operations Manager. The Section 17A Review for Solid Waste will begin to provide options to make decisions on for a wider future for the district and the Transport team are making progress on the differential levels of service thinking which allow us to right-size our approach to Road Infrastructure as well. And our PMO have forecasted to have a good run through to the end of the financial year with a projected good number of delivered projects on behalf of the rest of Council.

4. Transport

4.1 Alliance Management Overview

As mentioned in the October report, the audits below were carried out in November. Although the final results need to be confirmed before it is reported, the Alliance leadership team is happy with how they went. Once the Alliance

receives the audit reports of the outcomes and recommendations, these reports will be shared with the committee.

- 2023/2024 Performance Audit
- NZTA Technical Audit
- 2023/2024 Financial Audit
- Asset Management Maturity Assessment (AMMA)

The team will be working up to 20 December and closing up sites, with a skeleton crew monitoring sites and able to respond as needed through the Christmas and New Year break. The Alliance will be back in full operation from Monday 6 January 2025.

The Alliance was represented at the Future Roads conference in Hamilton on 20-21 November by Alliance Manager Daniel Erard, who was invited to be part of a panel discussion on prioritising roading budgets and the role of innovation. The panel discussion canvased the perspectives of councils and contractors on how they are making the roading dollar go further - a theme that is a key priority for the Alliance.

4.2 **Transportation Network Management Overview**

Levels of Service Review

The Asset team within the Alliance continue to progress the Level of Service review in line with the approved NLTP budgets. This work establishes the basis for when developing this, we are also developing the options for Differential Levels of Service intended for implementation in 2027/30 NLTP period.

District Plan / Engineering Standards review

Aligning with the District Plan update, the Tararua Alliance have developed draft Engineering Standards for the Tararua District. These have been adapted from the Wairarapa Combined Engineering Standards, which have recently developed and a in line with current National Engineering Standards.

A plan for communicating these is in the early stages of development and will be provided in due course.

Speed Management Plan

On the 30th of October, NZTA provided guidance as to the implementation of the updated Land Transport Rule: Setting of Speed Limits 2024.

This can be view at the link below.

https://www.nzta.govt.nz/assets/Safety/docs/speed-management-resources/Guidance-Setting-of-Speed-Limits-Rule-2024-.pdf

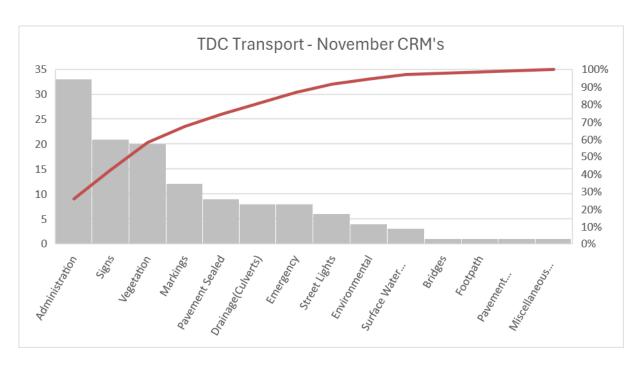
On the 26th of November, Hamish Featonby attended the Road Controlling Authority Forum in Wellington, with the following key points noted.

Key Points	Actions Required/Planned
Speed Management Plans are now optional for Local and Regional Authorities.	Nil
Future proposed speed changes must be supported by assessments on travel times and other economic/safety factors, with a release of Benefit/Cost statement to the public.	Nil
Any roads where the speed has been dropped since 2020 needs to be reverted back excluding schools. (i.e. The Saddle Road will revert back to 100km/hr unless justified through a Benefit/Cost assessment)	Review of historic Speed Zone changes underway.
Area of impact has been refined to become more targeted to the 'out front of the gate' area rather than the "neighbourhood" All School Speed Zones must have variable times. School Zones must have treatments applied before the end of June 2026.	Review of approved scope underway. Updating costing being developed. Schools to be advised of changes.
	Funding to be secured to implement programme (was part of Low Cost, Low Risk which received \$0 funding.)

4.3 <u>Transport Operational Delivery Management Overview</u>

Customer Requests

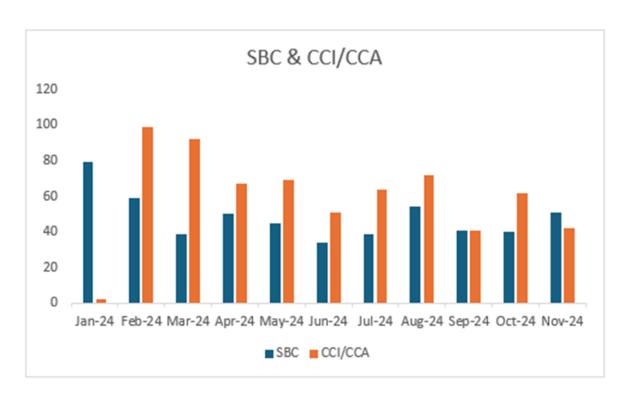
128 CRMs were received throughout November with 40% resolved. The remainder have been prioritised and placed into programme months accordingly. 23% CRMs have been identified as not requiring any action resulting in unnecessary deployment of resources.



Zero Harm

As the Christmas break approaches, it is critical that we ensure safety remains the key focus. Trends from historic data shows that incidents spike at this time of year. With this in mind, Downer have rolled out a two-day Zero Harm training course for all managers, supervisors and front-line leaders where the 'Just Culture' initiative is being introduced, which will be implemented within the Alliance.

'Just Culture' is a framework that provides guidance for fairly and consistently managing employee behaviour and conduct. It assists employees with decision making for when teams should be recognised for their positive contributions, need coaching to improve their Zero Harm knowledge and behaviour, and when people need to be held accountable. On top of this, the Alliance continue to carry out their safety behaviour conversations, critical control audits and inspections focusing on vehicle and mobile plant operation, traffic management and isolated or remote work.





4.4 Maintenance Overview

Maintenance Strategic Planning

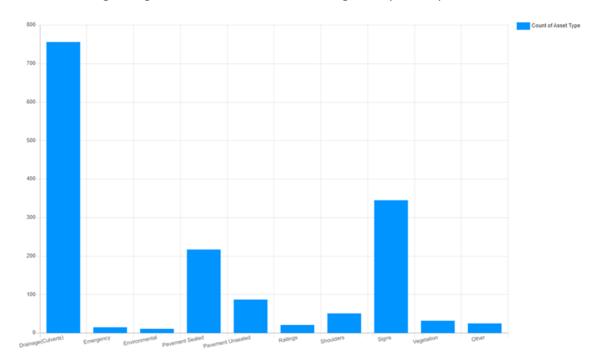
Maintenance programming is progressing as per plan, with focus now shifting away from winter activities (potholes, metalling), to summer maintenance.

Post winter also brings a review of Maintenance Budgets, given certain activities are weather dependent (i.e. has the investment in filling potholes been greater /

less than / similar to what was budgeted and what do we expect to spend by the end of the financial year)

Maintenance Delivery Overview

The Roadside mowing is 50% through the first round. The first round of rural roadside spraying is in progress and second round of urban kerb and channel spraying has been completed. With the improved weather, pavement repairs is the focus with the priority being completing all the pre-reseal repairs. Maintenance metalling of unsealed roads will significantly reduce as the roads will not require the same amount of metalling as what has been applied over winter. Maintenance grading will continue to ensure the right shape is kept.



All Works – Dispatches Completed November 2024 – By Asset type.

Routine Maintenance

- 741 urban sumps were cleaned
- 1142m of low shoulder were repaired
- 168 potholes filled on the sealed road network
- 345 signs replaced, cleaned or repaired
- Graded 157 km of unsealed road
- 8325m2 maintenance pavement repairs completed

Planned Maintenance

The 2024/2025 pre-surfacing pavement repairs are progressing well with 17,256m2 of the 35,000m2 completed year to date. November was a successful month with 7,883m2 completed. Drainage maintenance continue to be completed on next season's reseal sites with 18km of roadside high shoulder vegetation removed along with 32km of roadside drain clearing.

4.5 Renewals Overview

Reseal Planning

A draft reseal programme for 2025/26 has been developed and is now being validated in the field. This validation is expected to be completed by March '25.

Reseal Delivery

With the good weather, the reseal programme was able to begin ahead of schedule with 18km of the 67km completed in November. The total reseal programme is planned to be completed by the end of March.

Rehabilitations

2024/25 Programme			
Road	Start RP -End RP	Length	Phase
Maunga Road	7439 - 7839	400m	Under Construction
Aerodrome Road	361 - 1650	1289m	Design in development
Maharahara Road	3256 - 3657	401m	Design in development
52-0063	16333 - 17066	733m	Design in development
	Total	2,823m	

Rehabilitation Planning

Alongside the Reseal planning for the 2025/26 FY, our Asset team is working to develop candidate sites for the 2025/26 and 2026/27 financial years.

Rehabilitation Design/Engineering

Design for Maunga Road was completed in time to handover to the delivery team to begin construction in November. Aerodrome Road is the next priority which the handover will be completed in early December.

Rehabilitation Delivery

Construction for the 2024/25 rehabilitation season is underway with Maunga Road being the first site that has begun and is expected to be completed by the end of December. Aerodrome Road is the next site on the programme with construction expected to begin in January.

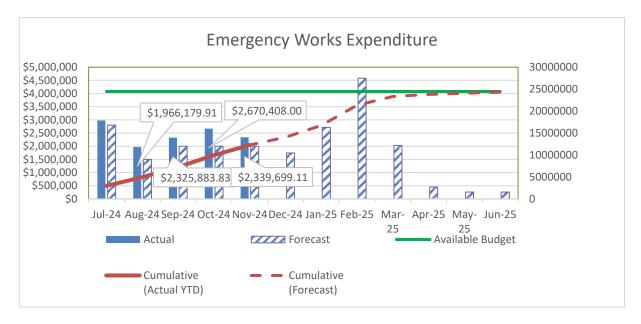
4.6 Emergency Works Recovery

August 2024 Storm Events

Emergency Works applications have been reviewed by NZTA's Investment Advisor for the Tararua District. On completion of the review, the Advisor has forwarded the funding request with his endorsement within NZTA for approval. The value of this work in total for the application is \$2.2 million. We expect to get a response by end of December.

2024/25 FY - Emergency Works Forecast Expenditure

Our forecasted expenditure for the 2024/25 FY for WC141 (Emergency Works) is \$24,472,823 based on available approved funds in TIO and the ability to complete design and engage suitable contractors over the financial year. There may be further funding requested to accommodate some extra work that has been identified to the value of approximately \$5m. With the total funding request approved of Cyclone Gabrielle being \$95m, we intend to bring forward \$5m from the 2025/2026 budget into the 2024/2025 budget meaning that this is not a request for more total funding. This will also mean we are able to utilise the 97.5% FAR for the \$5m if we can bring it forward.



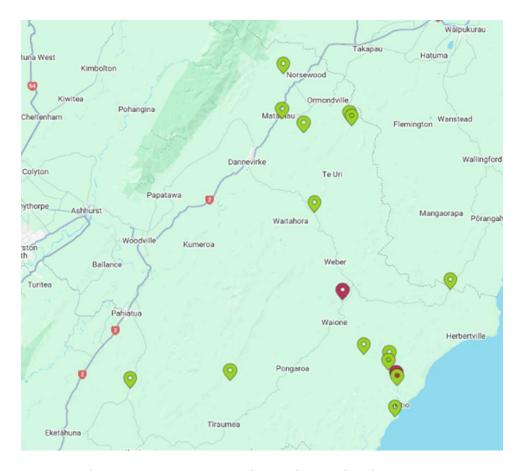
Total Approved Emergency Works Funding (2024/25+)	\$24,472,823
(NZTA Work Category 141)	

2024/25 Spend to Date (end of November 2024)	\$12,279,398.22
Expenditure in Month	\$2,339,899.37
Forecasted Monthly Expenditure	\$2,729,946.31

4.7 <u>Emergency Works Delivery</u>

High Complexity works

The emergency works recovery team have been managing 14 current worksites around the district, whilst planning for seven high complexity sites coming up in January.



Picture above: Current active worksites depicted with green tags.

Rakaiatai Bridge replacement

The replacement of the Rakaiatai Road bridge that spans the Manawatu river is underway. The screw piles and end beams have been installed with the main beams, which are 46m in length (single span), and are planned to be lifted into place this month. We are currently a little behind schedule and are aiming to have the bridge built and usable by the end of January 2025.



3 x screw piles installed 15m deep with steel capping beam in place ready for receiving beams.



The two 46-meter beams each weighing 24 tonne built in place waiting to be lifted.

Weber Road 16km

Emergency works on Weber Road "Symonds Hill" at the 16km has been extended 275m toward Dannevirke to tie into an existing rehab. Work involved includes roadside tree removal, further extensive drainage works, subgrade stabilisation by engineered wrapped fill, building out the shoulder with fill and pavement overlay including widening the carriageway and shoulder. This project is planned to be complete mid February.



Above: Weber Road

River Road, Akitio, A-071 bridge

Resillience work has been completed on River Road Akitio at the 'Cadmus bridge' A-071. This work involved abutment sheet piling and concrete formwork creating capping beams between the bridge and a cantilevered bridge deck. The intention is with future flood events, the fill material at the abutments will be retained, preserving access to the Akitio community and surrounding farmside residents.

This work required a road closure for several weeks, which was timed for night-works to minimise disruption to residents and communicated to the local community and emergency services with plenty of notice. This worked well.

Below: The sheet piles which are 9m deep, now covered and filled.





Pahiatua-Pongaroa Road 33km

The Pahiatua-Pongaroa 33km retreat is progressing well. We have received great feedback from key stakeholders on how this has been delivered through the environmental considerations put in place, the communication and support from lwi and the Department of Conservation, being the bounding property owner with having native regenerating forest.



Current high complexity work phase for 2024-2025 programme



Progress since November 2024 is depicted below (snapshot taken 2 December 2024). There is work to do in the scope development and detailed design through December, which the recovery team will be concentrating on.

Phase	October Number	November	Change
		number	

Scope development	13	13	0
Detailed design	7	7	0
Approval/startup	2	2	0
Construction	18	15	-3
Review	38	39	1
Complete	18	20	2
On hold	6	6	0

5. 3-Waters

5.1 Water Supply

Summer Water Restrictions – Early Preparation Work

All towns are being closely monitored for increased demand and supply levels — with no current significant red flags in the data. Supply/Demand Analysis for the four main towns is being completed weekly and Reservoir levels and Water plant runtimes monitored daily via dashboards. IoT (Internet of things) Water meters for the Dannevirke raw water users are being procured and project works planning almost complete.

The Water Shortage Management Committee has its first meeting for the season on Tuesday 10th December and will meet monthly unless conditions dictate more reactive response. Recommendations from that group will likely include preemptive communications to the community around restrictions for the other townships — with Akitio already under restrictions. Contingencies, contacts and support services for the festive break will also be confirmed at that meeting.

Norsewood Water Treatment Plant (WTP) Chlorination Failure and Boil Water Notice

Following the Boil Water Notice week of 4 November, as a result of low disinfection dosing and reduced iron and manganese treatment, a number of 'snags' have been addressed as part of the Treatment Plant upgrade and commissioning. It was identified there was an issue with water over pressuring a pipe and causing a non-return valve to let-by with water subsequently diluting the disinfection chemical and reducing Free Available Chlorine (FAC) in treated water. It was also noted there was a lag in disinfection monitoring and subsequent dosing issues due to instruments not being in the optimum position, in addition to suboptimum instrumentation in the process. It was also found the ion exchange

softener required some further adjustments and fine-tuning to improve ion exchange to improve iron and manganese (Fe & Mn) removal.

As a result, the following actions have taken place:

- Replacement instrumentation has been installed and now in the optimum part of the process to remove dosing lags and monitoring
- An improved non-return valve and pressure reducing valve have been installed to eliminate backflow of water and subsequent disinfection chemical dilution
- Softener regenerations have been increased and optimised to improve Ion exchange performance

The plant is being continuously monitored as routine plant operations and additional monitoring throughout the duration of commissioning and snagging period. Weekly iron and manganese samples are taking place to monitor iron and manganese removal, these are being monitored closely, currently indicating improving results and anticipating reduction will consistently meet performance standards with plant enhancements completed over the last few weeks.

The Tararua Alliance are moving forward with network line flushing now that the plant is operating within its designed iron and manganese removal parameters. Flushing points have been located and parts are being ordered so that they can be installed in late January. Network flushing will take place after this installation is complete.

Akitio Water Supply

In preparation for the summer and Christmas period a thorough walk over of the reticulation system and review was undertaken W/C 25 November.

A number of potential issues were identified and actions taking place to remediate anything that can be done to reduce impact on water supply during this period.

- Two potential small leaks at manifolds were identified and will be investigated
- One sluice valve was found to have a small leak
- Three storage reservoirs have been noted as leaking and have been identified for replacement as part of renewals, set for replacement this financial year
- The plant is capable of producing maximum 40m³/day
- Each person on Average in NZ uses 227 litres per day and with the 57 connections in Akitio using the 40,000 litres between them, we can only

sustain 3 users per connection – or we can only manage there being 176 'average' users in Akitio at any one day before the system cannot keep up with demand.

 The challenge above supports the requirement in the bylaw for each connection to have their own water tank to try to buffer the peaks in demand that occurs at that location.

1 December 2024 – Total Outdoor Ban put in place with no use of:

- Sprinklers
- Soak hoses
- Irrigation systems
- Garden hoses
- Water blasters
- Washing vehicles, buildings or boats

Leak Detection and Management

The 3 Waters team are embarking on a programme of leak detection across the District's four main towns to help identify public and private leaks that require remediation. Multiple techniques are being used to detect leaks in our networks, as outlined below.

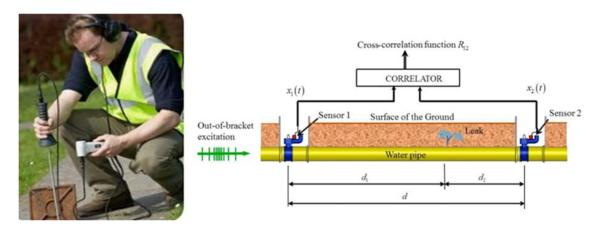
Acoustic Leak Detection:

This involves 'listening' for unusual or abnormal noise on pipes. It is deemed non-intrusive as it generally does not require water to be turned off. This method is deemed to be 90% accurate for detecting leaks.

The manual method, generally used on small pipes such as laterals or beyond the point of connection, a technician places a microphone and amplifier at a point on a pipe such as a valve, hydrant or manifold and listens for continuous noise that may indicate a leak. To differentiate between normal use and a leak, unless obvious, generally a return visit is completed to determine if the 'noise' is genuine or not.

For larger pipes with significant length or complexity, more technical equipment is used to help differentiate between normal water flow and unusual flow. This technology utilises correlators and a central control unit. These sensors work by converting sound waves into electrical signals that can be analysed further. Once a sensor detects an unusual noise or vibration pattern associated with a potential leak, it sends this information to a central control unit for analysis and interpretation.

The central control unit analyses and interprets acoustic signals received from the sensors. Advanced algorithms and signal processing techniques are employed to differentiate between normal background noise and potential leak-related sounds.



Listening for leaks

Technology - Correlation

Step Testing:

This is an additional method for detecting leaks and helps determine unusual or high water flows in particular zones, complimenting traditional detection methods or where acoustic methods cannot or difficult to deploy.

Step-Testing is a flow-based method for localising water loss within a zoned distribution system. It works by continually measuring the flow of water into a zone as valves are shut off in sequence. As this is an intrusive method it is carried out at night when it is less disruptive to consumers.

By monitoring flow before and after isolation, this can determine if high or unusual flow is entering a particular zone.

As this is the first time TDC have utilised this method, a trial was undertaken in Dannevirke and Woodville to determine if this technique would prove beneficial.

Leak Detection has been completed across the four main towns – we are currently waiting for completion of analysis and final report for Dannevirke. All leaks will be investigated and fixed or, where deemed private, reported to the property owner by phone and letter with follow-up to ensure resolution.

Summary of findings to date:

	Faults	Estimated loss I/min	Equivalent m³/day
Private leaks	26	188	271
Reticulation network	19	87	125

Universal Water Metering

Further to the update provided at the Infrastructure, Climate Change and Emergency Management Committee Meeting in July 2024, planning for the universal water metering programme is now underway. Universal water metering is a critical aspect of our water demand management strategy, so that the scale and investment in any future water supply infrastructure is kept to a minimum.

The focus of this financial year (to June 2025) is to undertake the detailed planning and early public engagement at a high level. The current planning activities include:

- Nomination of a project manager Priscilla O'Neale-Searancke from the PMO has been nominated to this role and will continue to be supported by Marcus Clifford and Chris French.
- Development of a detailed communications plan between Tararua DC and the Tararua Alliance.
- Early community engagement about high level aspects of the project, including why Tararua District Council is undertaking the project, the importance of water conservation, and how the public can help. A draft of engagement material and the communications plan will be presented to the ICCEM Committee in due course.
- Key technical decisions, including the types of meters to be used, data management and how to manage specific types of properties (for example, those where one lateral feeds multiple units). Consultation is underway with other Councils on how they have addressed this and other technical challenges so that we can learn their lessons.
- Resource planning across the multiple workstreams involved, including data management, field work and engagement.

It is expected that trials on water meter technology and meter installations will take place in Year 2 (before June 2026) to enable us to learn key lessons before a full programme roll-out in subsequent years.

5.2 Wastewater

Wastewater Treatment Plant Upgrades

The following is a summary of key activities occurring on upgrades across the wastewater treatment plants:

Eketāhuna:

• Detailed design nearing completion on pipeline and discharge structure to wetland, and on the discharge structure to the river.

- The pipeline between the wastewater treatment plant and the wetland passes through a golf course, requiring disruption to the fairway. To minimise disruption, pipeline installation cannot commence until after February 2025 when golf tournaments end.
- An interim measure to sustain nutrients and water to the wetland plants is being implemented.

Pahiatua:

- Design is now well underway for the DAF system and wetlands.
- To progress the design, consideration is being given to potential variations to the resource consent, which will be discussed at the upcoming District wastewater forum on 5 December, including:
 - Whether to pause or set aside the proposed UV disinfection, because
 at other sites the DAF treatment has been successful in substantially
 reducing E. coli. This would reduce costs of the upgrades.
 - Provide a bypass around the surface wetland to the biodiversity wetland, so that the surface flow wetland does not become overwhelmed during wet weather.

Woodville:

The replacement screen has now been installed but not yet commissioned.

Sludge Management

Detailed planning is underway to commence composting of sludge from old geobags at the Dannevirke Wastewater Treatment Plant site. This will be an initial phase to closely monitor the operation before wider application to other geobags at the Dannevirke and Pahiatua sites. This is considered to be a short-term measure to manage current stockpiles and is more sustainable than discharge to the nearest commercial landfill who are able to take the sludge (Hampton Downs Landfill), which is not environmentally or economically sustainable.

In parallel to this, engagement continues with iwi and technologists on potential long-term solutions for sludge that are environmentally and economically sustainable.

5.3 **Consenting and Compliance**

No consenting or compliance issues to report this month.

5.4 **Staffing**

Recruitment Update:

• 3 Waters Manager – Mike Dunn has been appointed to the role and started on 2 December 2024

• Water and Wastewater Operations Manager – Vito Lim has accepted the role and joins us early in January 2025.

Recruitment utilising Better Off Funding:

• Trade Waste Officer – remains on hold pending Trade Waste / Backflow Audit Report.

6. Solid Waste

6.1 **Operational Activities**

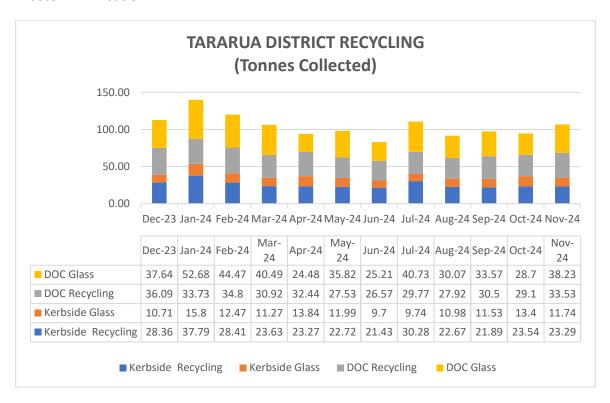
Budget/Activity	
 Refuse Transfer Stations (RTS Sites) 	 Dannevirke Transfer Station has now had its line-marking completed. (See below picture) We still have the new signage to come which will support the new line marking. We also now have a Cardboard Only Drop off Bin at Dannevirke, this is to accommodate the commercial volumes or larger pieces, that no longer requires the public to enter our high-risk area of the Transfer Station where the loader frequently operates. (See below picture) Pahiatua Transfer Station has been broken into again with some damage done to the on-site Loader. Cameras are being installed, although with no power onsite this is proving a little challenging. NOVEMBER: Waste diverted from landfill 2.68 Tonne Contaminated recycling to Landfill
Recycle Drop-off Centres (DOC Sites)	 We have been experiencing high contamination in the Town Drop off Bins. Cameras are in the process of being put up at Woodville on 5mtr steel poles.
 Kerbside Recycling Services 	 Kerbside collections are going well, and we are experiencing some improvements, although our solid waste Team are continuing to pull contamination out of the load. Our first load to New Plymouth Material Recovery Facility (MRF) was successful, and we received fantastic feedback from the Audit they ran on our load with only 5.8% contamination! Keep in mind our staff had already manually pulled a lot out of this load. PNCC were no longer able to assist us with accepting our recycling loads at their Material Recovery Facility (MRF) due to peak volume increases.

Budget/Activity





6.2 Waste Minimisation



Attachments

Nil.



Report

Date: 5 December 2024

To : Chairperson and Committee Members

Infrastructure, Climate Change and Emergency Management Committee

From : Bryan Nicholson

Chief Executive

Subject : Cyclone Gabrielle Recovery Update

Item No : **7.2**

1. Recommendation

1.1 That the report from the Chief Executive dated 04 December 2024 concerning the Cyclone Gabrielle Recovery Update be received.

Recovery Update:

Progress on Updated Recovery Plan:

A workshop was held in August with Sandra James to solidify the plan for the recovery team moving forward. This plan outlines the remaining actions from October 2024 – June 2025.

Presentation to Coordinating Executive Group.

The Recovery team was asked to present at the November meeting of CEG. Mitchell Guile, Sarah Fountaine and Anna Howell presented the Tararua District recovery story covering the event, setting up of recovery and the actions/lessons to date.

Economic:

Economic Outlook Project:

Infometrics report received. A briefing session on 16 December 2024 has been set to present the report to Mayor and Councillors.

Second stage of project being undertaken by MCI to understand the state of local level rural businesses is on track. Expected to be completed in February 2025.

Social:

Community Hub Expansions:

Met with Eketāhuna, Norsewood to complete the needs assessment for the community hub. Working to ensure all the five additional communities have needs assessments.

Rural

RST Fencing Project – MSD Funded:

Over 16 farms supported through this fund with approximately 7.5km of fencing completed. Wet weather continues to be an issue, postponing work on farm. Update provided in November.

Completed a meeting with MSD more funding is available if required. RST to work out if there is a need for more and then work this out with contractors to make sure they have capability.

Farmer Sentiment:

There is growing concerns around dry conditions over summer. The community feels like they "can't get a break" with continuous events.

DIA Funding Reports due 30 October 2024:

Wellbeing Events – \$25,000:

In October 2023 the Tararua District Recovery team conducted a well-being survey to assess the needs of our impacted communities. The feedback highlighted a desire for events that allow people to step away from their farms or homes We have completed another survey between 28th July 2024 – 9 September 2024 to evaluate how our affected communities are coping with the current impacts and assessing their overall well-being. Responses to this survey were limited.

An additional six community lead events were supported in Alfredton, Waitahora, Herbertville, Makuri, Otope, Rangitāne o Tamaki nui-ā-Rua, through this fund.

Final Report was submitted in October.

Deployable Generators - \$30,600:

Three Generators have been purchased for deployment during adverse events. All 3 are currently being stored in the civil defence shed in Dannevirke. Two of these will remain in Dannevirke while one will be permanently deployed in Pongaroa at the Community Hub.

The Pongaroa generator has an apple tag attached for security.

Final report submitted in October.

Akitio Cell Tower - \$44,000:

The backup generator has been built and deployed to Akitio. Being held at the Fire station and ready for towing to the cell tower in an emergency.

Other Projects:

Food Distribution Hub:

The recovery team is exploring the option of establishing a food distribution hub. The intention of this food distribution hub is as a back up resource for food banks, iwi and other social services in times of crisis. In terms of this project a crisis can be defined as either a declared civil defence emergency or a severe operational shortage of food for our partnering agencies. Crates of food will be delivered on irregular intervals/ as required by NZFN/Watties/Feed the Need/Meat the Need/ to be stored for distribution.

This hub will be managed by the community. A project plan has been drafted.

Photo Book:

The recovery team is in the final stages of drafting a photo book as a historic record of the event.

Attachments

Nil.



Report

Date: 5 December 2024

To : Chairperson and Committee Members

Infrastructure, Climate Change and Emergency Management Committee

From : Mike Dunn

Manager - Programmes & Projects

Subject : Capital Portfolio Report

Item No : **7.3**

1. Recommendation

1.1 That the report from the Manager - Programmes & Projects dated 08 November 2024 concerning the Capital Portfolio Report be received.

2. Reason for the Report

2.1 This report is to update the Infrastructure, Climate Change and Emergency Management Committee on the capital programme and key project statuses.

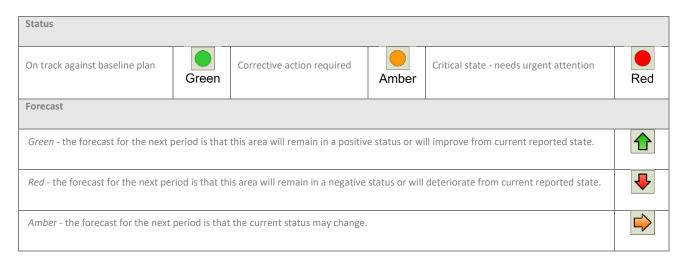
3. Capital Portfolio Report

3.1 This report focuses on the infrastructure portfolio minus the facilities portfolio (reported on separately in the Community Development and Wellbeing Committee).

Portfolio Health Status	Forecast	General Comment	
Green		Onboarding staff, resourcing projects and working through the history of our issues has been key in order to effectively resource and manage our projects. We continue to make good progress on our infrastructure portfolio and can be noted in the increase in the number of initiatives that we currently are reporting on within this report.	

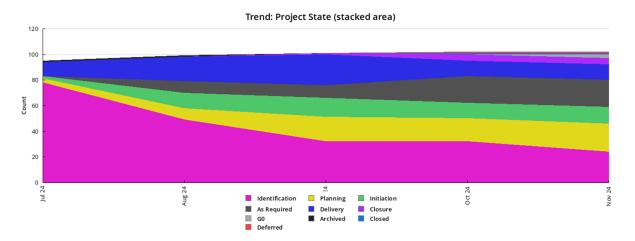
Portfolio Health Status		Forecast	General Comment
Schedule	Green		No significant changes to schedules. The Woodville Reservoir and Universal water metering having been brought forward in planning are now scheduled, handed over and working through project planning. The Dannevirke Impounded supply programmes individual projects are being compiled to report on individually, while the Programme overall will also feature in these reports. Once we have our technical data and resourcing confirmed we will start presenting one page report.
Budget	Green		Budget risks are primarily concerning the Dannevirke Impounded Supply works, Pahiatua Stormwater and the Pahiatua wastewater programme. Annual Plan revision is currently underway.
Risk	Green		Project risks to note are the review of the Dannevirke Impounded supply programme and the implementation of the Scada upgrades phase 2. These are well mitigated and are being monitored closely.
Resourcing	Amber		Resourcing constraints are a still a challenge as we continue to navigate our projects alongside our operational requirements. We are still navigating some resource limitations, particularly with specialised skills and contractor availability.

Legend



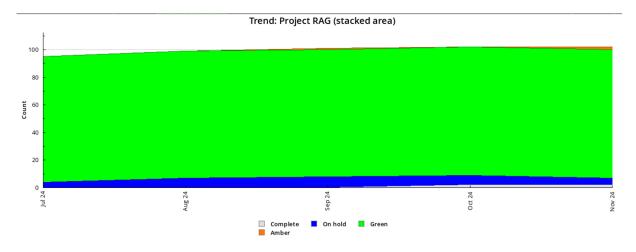
4. Capital Projects by State

4.1 Our project management framework stipulates Gates for approval processes as depicted by G0, G1 etc. Monitoring the overall inflight project states is crucial as this enables greater oversight and ensures transparency and accountability throughout the project's lifecycle.



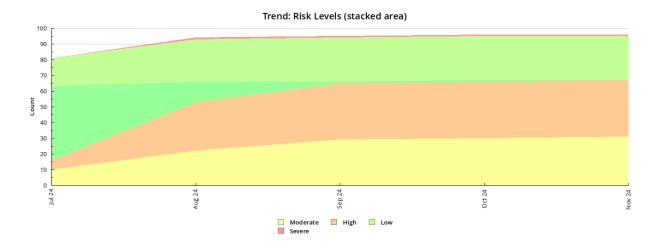
5. Capital Project by Status

5.1 By tracking the above project status indicators over time, stakeholders can identify emerging patterns, assess the portfolio, and proactively address potential issues. A consistent green status indicates progress according to plan, while amber signals caution, suggesting potential risks or delays that require attention. Red status indicates critical issues that demand immediate action to mitigate negative impacts. Regular review of RAG status trends enables leaders to make data-driven decisions, allocate resources strategically and optimise project outcomes.



6. Infrastructure portfolio – Projects Risk levels

6.1 The below graph displays our efforts to start compiling project risks into our project management software to better mitigate, manage and report on our risk registers at a portfolio level.



7. Project Updates

Complete	On Hold	On Track	Revised but on	Off Track
			track	

Project	Managed by	Comments	Status
Lindauer walkway	TBC	Design is currently on hold, and it is assessed that the work won't be started this financial year. The project is likely to be done in conjunction with Waka Kotahi NZTA road revocation process. Waiting for the Toll Road decision.	
Land Stabilisation Project	Mitchell Guile	Progressing forward. Looking at the 220 proposed sites to see what can be reduced. Comms work to be done.	
Dannevirke DAF	Sue Lawrence	Project closure. Snag list close out.	
Woodville Wetlands	Eugene Priest	Concept design being developed.	
Woodville Reservoir	Priscilla O'Neal- Searancke	Ongoing work for design and electrical work. RFP for Geotech investigations.	
Dannevirke Impounded supply Programme	Mike Dunn	Alignment, scheduling, and scoping taking place. Monitoring Programme – Finalising contracts and timeframes. Internal monitoring programme to be finalised i.e. timeframe and staffing requirements. Land purchase – Peter Wimsett Ongoing negotiations.	
Dannevirke Impound – Pretreatment Plant	Mike Dunn	Reviewing technical specification list. Exploring options for a static installation. Project sheet to be used.	

Project	Managed by	Comments	Status
Dannevirke Impound – Treated Reservoir	Priscilla O'Neal- Searancke	Handed over to Priscilla to manage the Reservoirs as a programme of works. Reviewing technical specification list. Exploring options for installation, ground site to be determined. RFP will be ready for start of next calendar year. Project sheet to be used.	
Dannevirke alternate water source investigations	Dave Watson	Meeting to be established between TDC and Horizons to discuss avenues and options in particular around the Dannevirke proposed bore sites.	
Dannevirke Water – Generator	Sue Lawrence	Scanpower have put a datalogger into the treatment site to understand what size generator would be needed.	
District Town Signs	Ray Cannon	Ray still working with NZTA, awaiting their agreement.	
Universal Water Metering	Priscilla O'Neal- Searancke	Consultation plan discussed. Delivery plan along with detailed specifications being finalised.	
Norsewood Water Treatment Plant Upgrade	Eugene Priest	New analysers installed. Refined regen cycle established and is producing good sample results. Flushing programme is scheduled for late January before schools go back. Handover back to operations officers to occur on close out.	
Dannevirke Fluoridation	Eugene Priest	Final stages of commissioning and close out.	

Attachments

- 1. 3 Waters Enhancement Project Committee Report November 2024
- 2. Eketahuna WWTP Upgrade Committee Report November 2024
- 31. Pahiatua WWTP Upgrade Committee Report November 2024
- 4<u>U</u>. I & I Wastewater Strategy Committee Report November 2024
- 5. SCADA Upgrade Phase II Committee Report November 2024
- 61. Woodville Headworks Refurbishment Committee Report November 2024
- 7. EW Rakaiatai Bridge Committee Report November 2024
- 81. Huarahi Tuhono Weber to Wimbledon Committee Report November 2024

3 Waters Infrastructure Enhancement Project



Report date:	Start date:	Approved end date:	Projected end date:	Status update:								
Nov-24	Jul-24	Jun-27	Jun-26		PREVIOUS CURRENT STATUS STATUS							
Purpose:	and or structures. This will ensur conditions for providing safe dri requirements effectively.	re the council meets its legislative resp	nent of new water services delivery plans onsibilities, complies with consent ppropriately, and administers Trade Waste	Overall:	G	G	The recruitment process for the Asset Information Technician position is nearing completion, with two of the four roles under this project are currently filled. Analysis of options for the Dannevirke Impound Supply is underway. A draft project plan for the Backflow Prevention Strategy and Policy has been shared with key stakeholders, and a workshop is being planned. A sludge disposal trial is scheduled to commence in early 2025. The project schedule for delivering plans and outputs is being finalised.					
Project team: Key stakeholders:	Sponsor: Mike Dunn Project Manager: Sue Lawrence Horizons Regional Council Department of Internal Affairs Iwi Public TDC Staff	e		Scope:	G	G	The scope of work includes: • The development of a Water Services Delivery Plan • Demand Management Strategy • Quality data collected • Monitoring equipment installed • Information verified across network • Ensure TDC meets drinking water allocation consent conditions • Support consent applications • Coordinate response to any consent breaches • Completion and implementation of a Trade Waste strategy • Waste Water Strategy • Engage additional resources to enhance water management, regulatory adherence, and operational resilience within the district.					
	Contractors Crown Infrastructure Partners			Time:	G	G	Project end date is June 2026.					
				Budget:	G	G	Forecasted across the various milestones.					
Project budget:				Quality:	G	G	Quality is to be closely monitored during the delivery of milestones by both Project Manager and the Activity Manager.					
Plan			Whole of Life	Risks:	G	G	Risks include difficulty in sourcing qualified consultants, budget constraints, hiring challenges and insufficient capacity within the 3 Waters Team.					
-			Approved budget:	Opportunities:	G	G						
Budget			\$1,950,000 Actuals:	Health & Safety:	G	G	N/A					
-			\$37,430	Resources:	G	G	Specialist consultants will be engaged to meet deliverables.					
EAC				Comms:	G	G	Comms plan is to be developed .					
0 ,							Next steps: Reporting Structure finalised. The schedule for delivery of plans and outputs is completed.					



Actual Forecast to Complete

Eketahuna Wastewater Treatment Plant Upgrade



Report date:	Start date:	Approved end date:	Projected end date:	Status update:			
Nov-24	Jul-24	Jun-26	Sep-27		PREVIOUS STATUS		
Purpose:	current and future resource co 2. To reduce Eketāhuna Inflow prevent unconsented discharg	water indirectly discharged from the plonsent conditions. A Infiltration (I & I) to allow for a fit foges. I would be a served to be a se	lant to the Makakahi River complies with or purpose WwTP to reduce cost and te outcomes that align with district and	Overall:	G	G	A fifth meeting of the Stakeholder group was held on the 21st November with some excellent progress and buy in from Iwi and Horizons. Horizons have indicated that TDC will need to apply for a variation to the consent condition to put a hold on building the vertical wetland, iwi have given TDC support with this decision. It was agreed to have early contractor engagement to assist in the pipeline design to ensure constructability. Pipeline to wetland. This will convey water via a floating pump on Pond 2 to completed wetland to ensure plant life is maintained. The intention is to change the current discharge point so that it is after the wetland. I & I remediation works. This is a separate standalone project but as it directly impacts the size
Project team: Key stakeholders:	Sponsor: Mike Dunn Project Manager: Eugene Prie Horizons Regional Council Elected Members Ngāti Kahungunu & Rangitāne						and scope of Eketāhuna WwTP it will be considered and reported as part of this project to ensure continuity of works. Four flow meters have been installed and are recording flow data with a mid-point validation/calibration carried out. Smoke testing & property inspections to start 3rd December. Draft detailed design for pipeline is being reviewed and priced along with temporary pontoon
	Rate payers/general public Landowners ELT/PMO			Scope:	G	G	pumping solution. All scope will detailed in all separate agreements and will be workshopped to account for
	Compliance Manager			Time:	G	G	possible variables This programme of works is intended to work towards the 2028 consenting periods and account for current consent conditions
Project budget:			Whole of Life	Budget:	G	G	Pipeline - From Wetland Budget I & I - From Infiltration Strategy & Implementation Budget Budgets will be closely monitored to ensure overspend does not occur. Change management procedures will be adhered to and stakeholders notified if significant changes are likely
-			Approved budget:	Quality:	G	G	Will be outlined in any separate agreements and to be covered by any NZ Standards that apply
Budget			\$250,000 Actuals:	Risks:	G	G	Risk workshops to be held to identify risks and provide mitigation. Risk workshops will support scoping documentation
EAC			\$23,466	Opportunities:	G	G	By following the approach provided TDC will be able to drastically reduce the cost of the WwTP upgrade.
				Health & Safety:	G	G	All contractors to adhere to NZ & TDC standards
200 0	10 10 00 10 10 10 10 10 10	2,60,30,50,50,50		Resources:	G	G	Currently all resources are available
Plar	\$ (000's	•		Comms:	G	G	Comms plan to be drafted
For	ecast to Complete			Next steps: Evaluate Pipeline Construct Temp pumping op Temp Flow to Wei	ion tion insta	lled	
	Investigation I & I Investiga ocurement Starts	tion Pipeline Detailed I & Design Received	& I Investigation Complete Pipeline Works Start	I & I Investigation Report		ι I Public/ nbers Cor	/Elected I & I Remediation Pipeline Works Temporary Flow to nsultation Works Procurement Complete Wetland Commences FINISH

lun-24

Oct-24

Nov-24

Nov-24

Dec-24

Dec-24

lan-25

Feh-25

Feh-25

Pahiatua Wastewater Treatment Plant Upgrade



Report date:	Start date:	Approved end date:	Projected end date:	Status update:				
Nov-24	Jul-24	Jun-26	Oct-25		PREVIOUS STATUS			
Purpose: Project team:		design and build of the required waster .	hat will meet current and future consent water wetlands that will be constructed				Detailed design and costs have been reviewed with costs being higher than what was originally forecast. This can be attributed to raising of DAF plant and some inflationary and design costs. The extra costs with 4 other options were presented to the PMO Stakeholder Working Group (SWG) for consideration. The SWG unanimously preferred the costed option minus the raised platform. This project has been part of the Stakeholders Working Group (SWG) and has involved four	
Key stakeholders:	Horizons Regional Council Elected Members Ngāti Kahungunu & Rangitāne Rate payers/general public Landowners ELT Compliance Manager			Overall:	G	G	meetings, with one site visit involving TDC/Horizons/Iwi & Subject Matter Experts (SME) to assi in steering the project towards the best outcomes for the associated stakeholder. Also, being able to align with the current WwTP wetland design and build has created efficiencies in collaboration and design. Tonkin & Taylor (T&T) are currently drafting the wetland detailed design portion of this project with an aim for completion early next year. They will produce a preliminary detailed design to issue to Horizons for the 14th December deadline. Bridge replacement of culvert will be carried out in the new year.	
Project budget:				Scope:	G	G	A full scope for the WwTP upgrade will be available on release of the detailed design and costs	
Plan			Whole of Life	Time:	G	G	It is expected to have this project completed in 2025	
-			Approved budget: \$589,000	Budget:	G	G	This will be confirmed on release of detail design and costs	
Budget			Actuals:	Quality:	G	G	Will be determined by any agreement with the constructor and SME's assisting with this projec ITP & adherence to NZ standards will be paramount for this project	
EAC			\$57,465	Risks:	А	А	Risk workshop to be held on receipt of design and costs Culvert is inadequate for heavy construction traffic	
0 200	, %0, %0, %0, %0, %0, %0, %0, %0, %0, %0	~*************************************		Opportunities:	G	G	Efficiencies in design with wetland. Collaboration with Stakeholders Culvert replacement	
■ Plar	\$ (00 n B as		90% Under budget	Health & Safety:	G	G	NZ H&S standards to be followed in all instances	
Fore	ecast to Complete			Resources:	G	G	Resources are being utilised as expected	
				Comms:	А	А	Comms plan to be drafted	
				Next steps:				
				Confirm final design iteration and costs Re-evaluate budgets Receive T&T prelim wetland design Negotiate construction agreement				
Project timeline:				resonate constitu	2000011 4610			

Jan-25

Sep-25

Oct-25

Detailed Design & Costs

Nov-24

START

Negotiate Construction Agreement

FINISH

Nov-25

District Wastewater Infiltration and Inflow Strategy Implementation



Report date:	Start date:	Approved end	date: Proj	jected end date:	Status update:			
Nov-24	Jul-24	Jun-25	Jun-2	5		PREVIOUS STATUS		
Purpose: Project team: Key stakeholders:		ene Priest ncil maki nui-a-Rua		Overall:	G	G	Four flow monitors have been installed into Eketahuna's wastewater network to collect the da required to assess catchment area I&I issues. This data collection will be carried out over 6-8 weeks. TDC is receiving weekly data downloads from the vendor flow monitors. Mid-point validation/calibration has been carried out to ensure data validity. Communication with the Eketahuna community and their associated community groups will be paramount during both the investigation and the rehabilitation phases. TDC will start reaching out to these groups to ensure that they are across what is happening in their community. Smoke testing and private property inspections will carried out during the period 3 - 13th December. Vendor will deliver notices on 26th November with TDC comms team to push out notifications on website and social media	
Project budget:					Scope:	G	G	A targeted investigation into the towns wastewater network utilising technology such as UAV, cameras and Smoke testing coupled with any previous I & I investigation data that TDC can ma available. Utilising the data gathered in 1. to design and cost remediation works, and supply a programme of works to target the main areas of concern to be able to realise a greater than 50 reduction in I & I. Delivering the works programme as prioritised by TDC to best suit, or assist, it delivering infrastructure upgrades for growth or consenting purposes.
rian				Whole of Life	Time:	G	G	Currently on schedule. The milestones that this project is going by will be confined by the required wastewater treatment plant upgrade.
Budget				Approved budget: \$592,000 Actuals:	Budget:	G	G	Costs for remediation will be known after investigation report has been delivered later in the year. Cost for investigation is confirmed at \$197k. Some extra services if required might need t be employed and have been outlined in the Modular Agreement with the vendor
				\$112,548	Quality:	G	G	This will be covered off in procurement process and any agreements between TDC and selected vendor. All NZ standards to be adhered to.
EAC	\$0 \$0 00 ¢	\$ (000's) Raseline Actual	, io	81% Under budget	Risks:	А	А	Community engagement is critical to the success of this project therefore we need to ensure good communications with the Eketahuna community to ensure they are aware of the investigations. This project poses many risks, through vendor selection, carrying out investigation and remediation, and the public facing private network issues that will arise due to investigation findings. This will require a substantive risk workshop to involve many facets of TDC and community to be able to solve what could potentially be a large net saving to TDC and community.
For	ecast to Complete	- Sassane - Actual			Opportunities:	G	G	1. Reducing treatment plant upgrade capacities to fit reduced I & I flows. 2. Creating extra capacity in current network to allow for planned district growth. 3. Reducing the need to have construct larger infrastructure to meet growth expectations.
					Health & Safety:	G	G	All TDC requirements to be adhered to by any Vendor/Contractor and their associated sub- contractors
					Resources:	G	G	Current resource requirements are low but will need to be increased in due course
					Comms:	G	G	Comms plan completed and reviewed. Comms has been pushed out to the community advising them of the upcoming and ongoing works.
					Next steps: Receive & analyse Plan source detect Conduct source de Private property in	tion meth	nods esting	ata
roject timeline:		Agreement Negotiated &		Flow Monitoring &	Investigation Findir	ngs	Remed	diation Options Selected Option to be
START	Procurement (RFP)	Signed	Contract Delivery Starts	Investigations	Released	-63		onsidered Implemented Implementation Complete
	Jun-24	Aug-24	Oct-24	Dec-24	Dec-24			Dec-24 Jan-25 Jun-25

Telemetry and SCADA Upgrade Phase 2



Report da	ate: Start dat	te:	Approved end d	ate: Proj	ected end date:	Status upd	ate:							
Nov-24	Jul-24		Jun-26	Jun-26	6		PREVIOUS STATUS							
Purpose:	This project has been initiated to align and comply with new requirements for recompliance with NZ water standards. This project will pull the different upgrade rationalise SCADA and Telemetry framework, architecture, software and dashboa visibility across the entire TDC treatment and network systems. Phase 1 is to dete Stocktake, Framework, Architecture and system implementation to achieve oper network. Phase II is the implementation and delivery of agreed recommendations provide of the Phase I vendor.				upgrade funding together to develop and I dashboarding that provides operational is to determine asset and system eve operational visibility across the		Overall: G	erall: G	Overall: G G		Risk and priorit recommendation Due to the char system it is pru Request for Pro	ons for proceeding to delivery nge in scope to mitigate cyber ident to seek other proposals f oposal (RFP) is currently on GE	security concerns and provide a more roor the infrastructure portion of this pro	obust ject.
Rey stakehold	Horizons R TDC 3-Wate TDC IS Tear	Sponsor: Mike Dunn Project Manager: Eugene Priest Horizons Regional Council							necessary work This project has	c in capturing Asset informatio	en allocated to this project to facilitate to n, P&ID and to write plant functional de nclude up to 4 vendors all operating in a st outcome for TDC.	escriptions.		
Project by						Scope:	G	G	successful resp		ler process with detailed solution providors	led by		
Project buc	igei:					Time:	G	G	_	n budget has allowed for up to nat are outlined in the Risk Reg	3 years to deliver this project. It has maister	nny		
Plar	-				Whole of Life Approved budget: \$431,760	Budget:	G	А	LTP budget. Pri	to \$1.2m has been allocated in the LTP years 1-3. Recommended upgrades exceed curren budget. Prioritisation of works will need to be carried out to ensure project stays within Ligets. BOF has been allocated to cover asset data collection.				
Budge	t					Quality:	G	G	To follow best p					
EAC				Es	Actuals: \$71,789 stimate at completion: \$431,760		A	A	Extra cost for p	ohysical separation of main ser	ld on 11/7 for Phase II of project rvers e to possible physical server separation			
	0 00 0	8 % %	,000 ,200 ,1	% <u> </u>		Opportuni	ties: G	G	mercasca cybe	is security and redundancy duc	e to possible physical server separation			
	ν Þ	\$ (000,		, o ^o	0%	Health & Safety:	G	G	No health and s	safety items to be reported				
	Plan Forecast to Co	Base	line 📕 Actual		Under budget	Resources.	G	G	Appropriate res	sources are available and work	kloads are currently sufficient.			
'	- rolecuse to co	prese				Comms:	G	G	Due to interest	in project we will be doing ext	ternal and internal communications.			
Project time	oline:					Infrastructu RFP Evaluat	greements with	ection	5					
	endor Agreement	Infrastructure Upgrade RFP	Select Infrastructure Vendor	Start Communications Infrastructure Upgrade	Complete Comms Infrastructure Upgrade	Complete Infrastructure Upgrade	rioritised WTP Upgrades		rioritised WwTP Site Upgrades	Satellite/Telemetry Sites Upgraded	Wastewater Pumpstation/Flowmeters Upgrades	FINISH		
	Nov-24	Nov-24	Dec-24	Feh-25	Anr-25	Anr-25	Oct-25		lan-26	Anr-26	lun-26			

Woodville Headworks Refurbishment - Carryforward



Report date:	Start date:	Approved end date:	Projected end date:	Status update:							
Nov-24	Jul-23	Jan-25	Dec-24		PREVIOUS STATUS						
Purpose:	Woodville township) upstream of the W 1. Improving the capacity of the headwo 2. Improving the screening system to m		orks to deal with higher flows from storm events. ninimise un-screened wastewater bypasses.		G	Α	The commissioning of the upgraded Headworks system on November 21, 2024, revealed an issue with the overflow pipe connecting the wet well to the pond. High pond levels caused backflow into the wet well, disrupting proper influent pumping and preventing the completion of commissioning. One potential solution is to install an actuated knife gate valve that would open only during pump station failures, enabling controlled overflow when required. Pricing for this option and other alternatives is currently being obtained.				
Project team:		to accurately measure all flow entering the tis practical and cost effective to construct		Scope: G G	G	The project scope involves refurbishing the pump inlet to ensure sufficient capacity during peak wet weather and reinstating the previously redundant flow meter for consent reporting. However, upon discovering that the existing flow meter was inoperable, the decision was made					
	Project Manager: Sue Law	rence					to replace it with two new flow meters. Furthermore, the installation of a SCADA system was added, necessitating an upgrade to the PLC hardware as a variation to the original scope				
Key stakeholders:	TDC Staff Iwi			Time:	G	А	The project timeline will be adjusted once the solution is confirmed.				
	Horizons Regional Council Contractor staff			Budget:	А	А	The estimated completion cost for the project is \$490,571, representing a negative variance of \$18,347 (4%). This variance is due to the scope change that encompassed the installation of internet connectivity, SCADA system upgrades, PLC hardware enhancements, and the addition of two new flowmeters.				
Project budget:				Quality:	G	G	A Quality Assurance Plan is in place.				
Plan			Whole of Life	Risks:	G	G	The Regional Council is being kept informed throughout the process.				
			Approved budget:	Opportunities:	G	G	N/A				
Budget			\$472,224 Actuals:	Health & Safety:	G	G	A Health and Safety Plan is in place.				
-			\$374,571	Resources:	G	G	The contractor will provide details on resource availability once the resolution approach is confirmed.				
EAC			Estimate at completion: \$490,571	Comms:	G	G	A Comms plan is completed.				
				Next steps:							
O တိ	\$(0	နှ ^{င့} နှ ^{င့} နှင့် နှင့် DO's) Iseline ■ Actual	4% Over budget	Pricing received for options Confirm proposed solution Schedule installation Re-commissioning of the new Headworks							

Project	roject timeline:												
START	Project Concept	Procurement process underway	PMP drafted and Request for Funding completed	Contractor Assigned	Huber Screen Ordered	Design signed off	Construction work begins on site	Huber Screen arrives	Flow meters and electrical installation	SCADA installation	Re-commissioning of new Headworks	Handover and Project Close	FINISH
	Oct-23	Nov-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Sep-24	Nov-24	Nov-24	Dec-24	Dec-24	

Emergency Works—Rakaiatai Bridge



Report date:	Start date:	Projected end date:								
Nov24	Feb 23 TBC Jan 24									
Purpose:	To provide suitable access to the properties affected by the loss of the bridge during Cyclone Gabrielle.									
	Senior Responsible Office									
	Project Manager: Andrew Desmond									
Key stakeholders:	Waka Kotahi, NZTA, Affec	ted landowners, lwi, TDC,	Tararua Alliance, Hori-							

Project budget	Recovery of ous structing porary crowns & Design Investigation	ure, Tem- ssing	Replace ter structure	anent			
Thousands	250	548	0	500	1000	1200	1400
Actual spend to date:							
Planned spend to date:							
Projected project budget:							
Approved project budget:	\$1.4M (inc. contingency)						

Status upda	te:		
	PREVIOUS STATUS	CURRENT STATUS	
Scope:			Design/Build contractor for the construction of a 42m full span bridge elevated ~1.5m above the old bridge to replace the bridge that failed during Cyclone Gabrielle.
Key progress for month.			All piles and headstock are now installed. Bridge beams are assembled onsite Crane to lift bridge beams assembled onsite in preparation for lift.
Time:			Preparation of the crane pad has required additional works, resulting in a delay to the lifting of beams. This has pushed the programme out by at least 1 week—we have moved the projected End Date to January to reflect the likely end date.
Budget:			Following development of the design, the contractor has confirmed there is no change to that offered during Early-Contractor-Engagement. Horizons have indicated that the temporary ford must be removed. This is currently being discussed with Latteys about how this can occur. This will be able to be delivered within the budget.
Quality:			The basis for the selection of Lattey Group is based on an innovated piling solution, that reduces the cost of construction, as well as their, capability and track record.
Risks:			Time—The idealistic target placed around having the bridge open by Christmas is likely to be overrun due to the additional works required for the crane pad. Ensuring the pad is stable for the crane is a high & safety priority.
Opportuni- ties:			
Health & Safety:			Access is severely compromised for the land owners placing them at risk.
Resources:			Tararua Alliance have requested that Lattey Group engage local contractors where possible to deliver portions of the project. Local contractor HES have been engaged to construct the bridge approaches.

Next steps:

- 1. Establish contractor onsite (complete)
- 2. Construction of piles (complete)
- 3. Construction of Superstructure (commencing)
- 4. Construction of approaches





Steel beams at fabrication workshop



Western Piles and Headstock installed



280ton (lifting capacity) crane established onsite



Bridge Beams onsite ready for test lift



Huarahi Tūhono – Weber to Wimbledon (Route 52 Upgrade)



Report date:	Start date:	Approved end date:	Projected end date:			
Nov 2024	Dec 2020	Nov 2024	Nov 2024			
Purpose:	The PGF funded upgrade of tral Hawkes Bay boundary To engage talented w Covid-19					
Project team:	Senior Responsible Officer: Daniel Erard Project Lead: Andrew Desmond Project Manager: Jamie Hughes					
Key stakeholders:	Kanoa, Local Community, Iwi, TDC, Tararua Alliance					

Project budget												13	
Millions	4	5	6	7	8	9	10	11	12	13	14	16.	16.6
Actual spend to date:													
Planned spend to date:													
Projected project budget:													16.6
Approved project budget:													16.6

Status update:			
Status update:	PREVIOUS STATUS	CURRENT STATUS	
			November has seen the completion of the Project scope, with all Pavement, Guardrail and Signage completed.
Overall:			Activities to continue; - 2nd Coat reseals (part of the Road Renewals programme) continue into December One large Emergency Works site is in progress - 1x pavement rehabilitation is programmed for the 2024/25 FY
			Priority 1: Bridges to assessed for HPMV capability and strengthen if required Outcome: Detailed Engineering assessment of all structures completed with bridges determined to be HPMV compliant. Priority 2: Improve Route Resilience Outcome: All Pre-scoped areas of instability have been retreated, with additional stabilization works occurring alongside
Physical Works Scope:			Emergency Works repairs. Key treatments; 6km of high risk carriageway retreated on more stabile ground. Upslope water diversion drains constructed, new culverts installed at deeper levels to allow for improved sub-surface drainage.
			Priority 3: Treat High-Risk corners (narrow corners) and Out-Of-Context Curves Outcome: All identified high-risk corners widened to allow safe vehicle passage (corners widened). Guardrail installed on tight corners with steep drop-offs.
			Priority 4: Widen carriageway width to achieve a consistent Level-of-Service throughout site, aligning with adjoining roads (Weber Road and CHB) Outcome: Average seal width throughout site is now 7.5m+
			Priority 5: Route Consistency Improvements—undertake minor treatments throughout site to ensure the 26km project length provides a consistent journey from End-to-End. Where this is not physically possible. Outcome: This has largely been achieved throughout the 26km project length, with 600m of the Wimbledon Gorge remaining out-of-context and 500m of pavement near Kelvin Grove farm. This 500m section is being treated as part of the Rehabilitation programme.
Social Outcomes Priorities			To be reported on next month as data is finalized (awaiting Kanoa data)
Time:			Reseals are expected to be completed in December 2024 The remaining Emergency Works repair is underconstruction with completion due April '24 The pavement Rehabilitation adjoins the above Emergency Works site and will be completed in conjunction with this.
			Project completion celebration scheduled for Wednesday 29th January 2025 @ 1.30pm Current Stage

Riddell Slump

Sergeants Hill Slump



23 storm events.

Airstrip Rehabilitation