

Document No: A438938

Report To: Council



Meeting Date: 27 August 2019

Subject: Progress Report - State Highway 30 – New Zealand Transport Agency Kopaki Bridge Replacement Project

Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to update Council on the New Zealand Transport Agency's (NZTA) State Highway 30 Kopaki Bridge Replacement project.

Background

- 2.1 NZTA is planning a new bridge and slight re-alignment of the highway at the SH30 Bridge at Kopaki, 27 km south of Te Kuiti. The SH30 Mokau Bridge will also have work done on the deck structure while the Kopaki Bridge replacement is underway. Both these structures are NZTA assets.
- 2.2 **BRIDGE RESTRICTIONS**
- 2.3 NZTA issued their annual Bridge Posting Restrictions for Waikato and Bay of Plenty on 19 October 2018. This included, for the Kopaki Bridge, a new posted speed limit of 10km/hr for all vehicles, and reducing the allowable freight loading to 80% of Class 1.
- 2.4 J. Swap Contractors Ltd raised a number of concerns with these restrictions with Waitomo District Council ('WDC') on 22 October 2018.
- 2.5 The key points made, as they apply to WDC, are as follows:
1. The weight restriction will force a significant increase of heavy trucks onto the Waitomo local road network.
 2. All the fully loaded trucks to and from Te Kuiti to the likes of Tokoroa, Whakamaru, Taupo etc. will be forced onto the Waitomo local road network to avoid the bridge.
 3. The alternative route via Kopaki Road isn't ideal, but also the maintenance of these roads will cause an extra burden upon WDC.
 4. The Road Transport Association will be lobbying NZTA for a speedy resolution to this, and will support any similar moves by WDC.
- 2.6 At a meeting held between NZTA and WDC on 19 November 2018 the issues identified in 2.5 above were discussed. NZTA committed to fund the cost of extra maintenance or upgrades to Kopaki Road which may be required for it to be used as an alternate route.

2.7 **PROJECT BRIEFING**

2.8 NZTA also provided a project briefing at the 19 November 2018 meeting, including the reasoning behind some of the decisions made to date:

1. Regular bridge inspections by the NZTA Bridge Consultant have identified that a previous repair to Kopaki Bridge had not lasted as long as expected. NZTA has therefore decided to accelerate the program for the SH30 Kopaki Bridge Replacement.
2. A meeting was convened by NZTA (hosted by the WDC) on 10 December 2018 to explain the above approach to invited representatives from the road freight industry and WDC staff.
3. NZTA awarded a Capital Improvement Professional Services contract for a consultant to design and manage the construction of the new bridge. This contract was awarded on 19 December 2018 to Bloxam Burnett & Olliver Ltd (BBO) for \$927,650.
4. The Detailed Business Case phase of the SH30 Kopaki Bridge Replacement project is **now complete**.
5. Construction is expected to begin in **early 2020 and take 12 to 18 months**.
6. A bridge deck replacement is scheduled for another bridge on the same route, SH30 Mokau Bridge, between Kopaki and Te Kuiti. This will be done about the same time as the SH30 Kopaki Bridge.
7. BBO invited a representative from WDC to attend a “Safety in Design” meeting on 21 February 2019. This was attended by Johan Rossouw, Asset Manager – Local Roads.

Discussion

3.1 **IMPACT TO ROAD USERS**

3.2 The following impacts for road users can be expected as a result of the two projects (SH30 Kopaki Bridge Replacement and SH30 Mokau Bridge deck replacement):

1. There could be an extended period of time (more than one year) of Kopaki Road being used as a bypass for heavy freight; and
2. All road users will be required to use Kopaki Road as a detour for a period of up to two weeks during the SH30 Mokau Bridge deck replacement.

3.3 **WDC AS ASSET OWNER OF KOPAKI ROAD**

3.4 A Safety Assessment was carried out to define the current condition of the route and identify any component assets that need to be upgraded.

3.5 The *Kopaki Bridge Detour Safety Assessment* was forwarded to WDC on 7 March 2019 for comment.

3.6 The report recommends the Bypass Route between SH30 and SH4 be via Kopaki Road and Pukerimu Road.

- 3.7 This proposed route is much longer over local roads than it would be if only Kopaki Road was used. However there are potential hazard considerations along the section of Kopaki Road between the Pukerimu Road intersection and SH4 that have been considered. These considerations include a one-way bridge at Route Position (RP) 5.595 on Kopaki Road with barriers which are not compliant to the intended new temporary use as a bypass route. There is also a narrow section at RP6.47 on Kopaki Road due to an underslip. Because these two considerations would be very costly to repair, the report recommends the use of Pukerimu Road rather than this section of Kopaki Road.
- 3.8 The report states that the time duration this bypass will be required is not yet known, but from what was learned at the Safety in Design meeting for this project, the duration could be significant, possibly more than a year. For this reason, WDC has indicated its preference to have an appropriate upgrade implemented on the Kopaki Road route.
- 3.9 Also not evaluated or addressed in the report is the pavement strengths of the roads. This may be critical, especially in light of the long duration expected. This may be a reason to reconsider the Kopaki Road section between Pukerimu Road and SH4, because it is shorter and pavement repair costs may perhaps tip the balance on the choice? Further investigation should clarify this.
- 3.10 NZTA has been advised that WDC would prefer an appropriate upgrade to the Kopaki Road route and that WDC required that the pavement strengths of the roads in question be taken into consideration when making the decision as to which route should be used.

Progress as at 31 July 2019

- 4.1 On Friday 21 June 2019 WDC's Manager – Local Roads attended a meeting at NZTA Hamilton to discuss the safety assessment recommendations on both the local road and state highway in association with the Kopaki Bridge detour on SH30. At the meeting it was agreed that NZTA would fund and install additional delineation (road marking) and signage on the Pukerimu Road portion of the detour route in order to improve road user safety. Due to an oversight, the project budget did not include any funding for upgrades of the detour route. NZTA Hamilton committed to apply for the additional funding required, from NZTA's Low Cost Low Risk budget.
- 4.2 At the time of the 26 March 2019 report, it was thought that all road users would be required to use Kopaki Road for an as yet undefined length of time while the SH30 Kopaki Bridge is being replaced. However, on 29 July 2019, NZTA's preferred option was indicated to WDC, where the existing Kopaki Bridge will remain open for the duration of the project for cars and light freight (loading to 80% of Class 1).
- 4.3 On 29 July 2019, NZTA and BBO staff visited WDC and provided an update on the SH30 Kopaki Bridge replacement. Three options for the new bridge alignment have been considered by NZTA (plan attached A438918) and the preferred option is Option 1 (A438919).
- 4.4 The new bridge will be higher than the existing bridge, allowing removal of a current constriction on the river flood plain caused by the built up western approach to the existing bridge. The alignment of Option 1 has the least impact of all three options and also avoids an identified bat roosting tree.
- 4.5 NZTA is presently going through an internal process to approve their preferred Option 1, that approval process is expected to take less than one month.

- 4.6 NZTA also reported verbally to WDC on cultural interests that have recently been brought to their attention. Concerns about Myrtle Rust will be addressed by a wheel wash and sanitation for vehicles. Re-planting of the site is to be with plants that are resistant to Myrtle Rust. NZTA will monitor all excavations for cultural sensitivity.
- 4.7 On 30 July 2019, NZTA provided a report to WDC "SH30 Kopaki Heavy Commercial Vehicle (HCV) Bypass Signs Completion Report" (Doc A438957). The report shows the location of the signs which have been erected to encourage HCV compliance with the Kopaki Bridge weight restrictions (described in section 3.2 (1) above).
- 4.8 In the covering email dated 30 July 2019 with the above report NZTA advised that the funding application for the safety delineation and signage needed on the Pukerimu Road detour route (described in 4.2 above) was still in progress.

Suggested Resolution

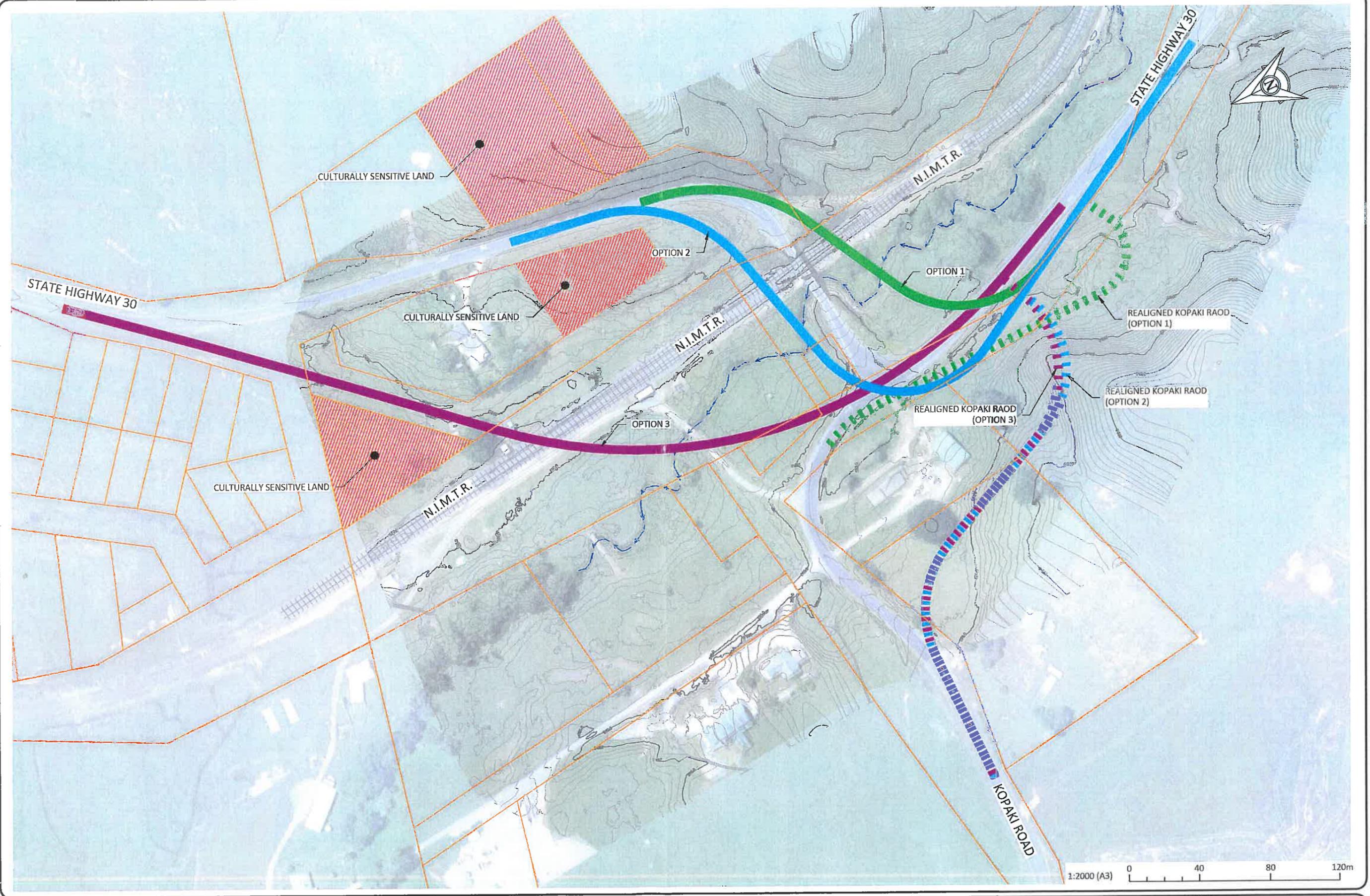
The business paper on State Highway 30 – New Zealand Transport Agency Kopaki Bridge Replacement Project be received.



JOANNA TOWLER
MANAGER – LOCAL ROADS

30 July 2019

- Attachments:
- 1 SH30 Kopaki Bridge Replacement - Option Overview Plan (A438918)
 - 2 SH30 Kopaki Bridge Replacement – Overall Plan Option 1 (A438919).
 - 3 SH30 Kopaki HCV Bypass Signs Completion Report (A438957)



K:\146040 SH30 Kopaki Bridge Replacement\Drawings\146040-02-0131.dwg 24/05/2019 2:50 PM mlm
 Version 3.0 - September 2017

DESIGNED	CHECKED	ML	BH
DRAWN	APPROVED	ML	BH
DATE	ISSUED FOR INFORMATION	ML	CM
21.06.19		BY	CHK
	ISSUE/REVISION DETAIL	BH	APPR

BLOXAM
 BURNETT
 COLLIVER
 Phone: 464-7-838 0144, Fax 464-7-839 0431

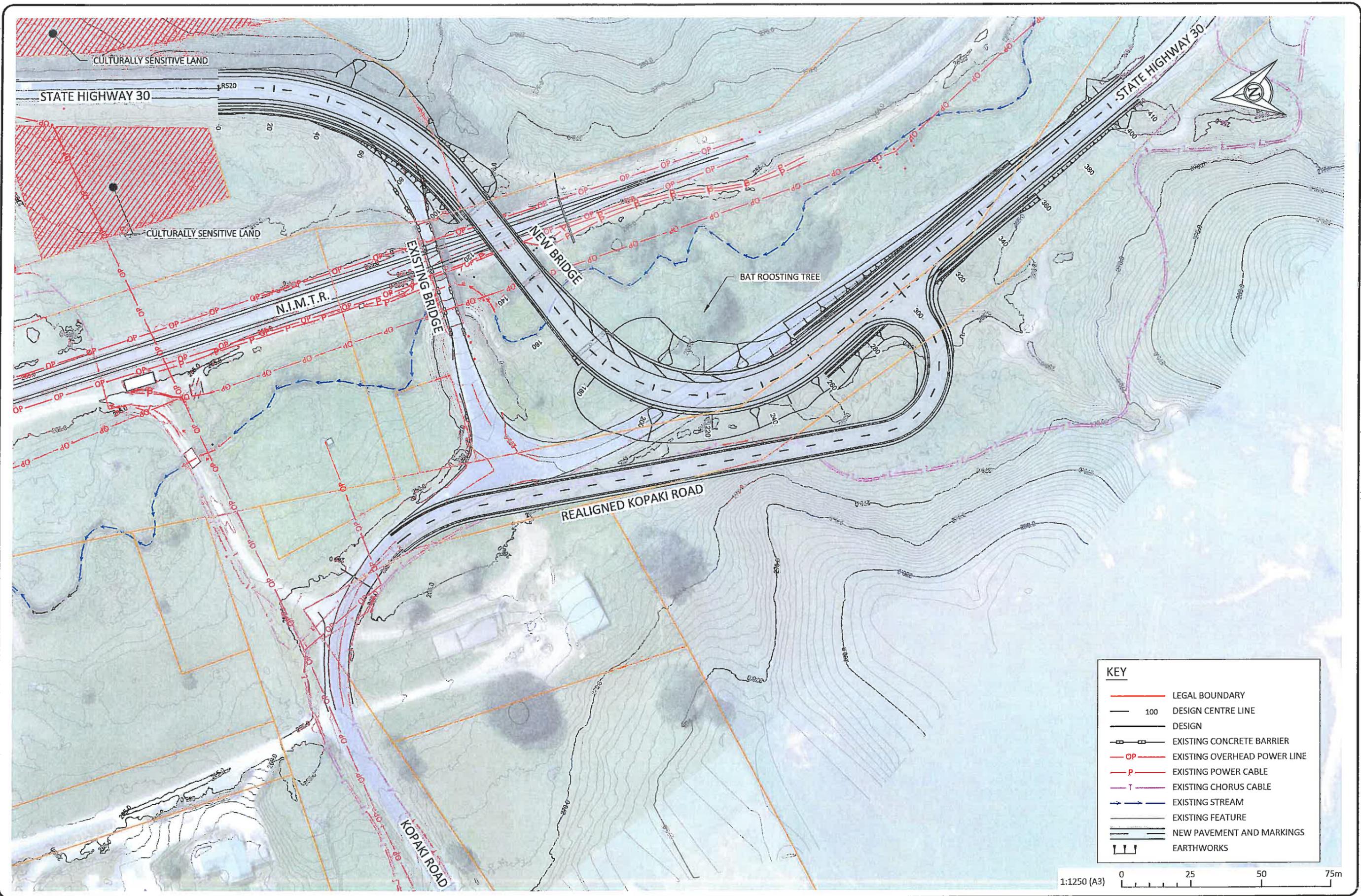
NZTRANSPORT
 AGENCY
 WAKA KOTAHĪ

PROJECT
 SH30 KOPAKI BRIDGE REPLACEMENT

DRAWING
 OPTION OVERVIEW PLAN

STATUS
PRELIMINARY

DATE	14.05.2019	SCALE (ORIGINAL SIZE A3)	1:2000
DRAWING NUMBER	146040-02-0131	REVISION	A



KEY

- LEGAL BOUNDARY
- 100 DESIGN CENTRE LINE
- DESIGN
- EXISTING CONCRETE BARRIER
- OP EXISTING OVERHEAD POWER LINE
- P EXISTING POWER CABLE
- T EXISTING CHORUS CABLE
- EXISTING STREAM
- EXISTING FEATURE
- NEW PAVEMENT AND MARKINGS
- EARTHWORKS

1:1250 (A3) 0 25 50 75m

K:\146040 SH30 Kopaki Bridge Replacement\Drawing\146040-02-0132.dwg, 24/6/2019 2:50 PM milu

DESIGNED	CHECKED			
ML	BH			
DRAWN	APPROVED			
ML	BH			
DATE	ISSUED FOR INFORMATION	ML	CM	BH
21.06.19	ISSUE/REVISION DETAIL	BT	CHK	APPR

mx model version:



PROJECT
SH30 KOPAKI BRIDGE REPLACEMENT

DRAWING
OVERALL PLAN
OPTION 1

STATUS PRELIMINARY	
DATE 14.05.2019	SCALE (ORIGINAL SIZE A3) 1:1250
DRAWING NUMBER 146040-02-0132	REVISION A

KOPAKI BRIDGE DETOUR SIGNS INSTALLATION

PROJECT DESCRIPTION

This project involved installing a total of 11 detour signs. These signs are meant for vehicles exceeding 80% class 1, so that they don't use the Kopaki Bridge which is at the end of its life. These signs will remain in place until a replacement bridge is constructed.

The sign-posted detour route is now in place via Kopaki Road, Pukerimu Road, SH4 and SH3.

Signs have been installed at these locations:

1. SH3-SH4 intersection
2. SH4-SH3 intersection
3. SH4-Pukerimu Road intersection
4. Pukerimu Road-SH4 intersection
5. Kopaki Road-Pukerimu Road intersection
6. Pukerimu Road-Kopaki Road intersection
7. SH30-Kopaki Road intersection
8. SH30-in advance of Kopaki Road intersection
9. SH30-Rora Street intersection
10. SH3-SH30 intersection
11. SH30-SH3 intersection

PROJECT DETAILS

LOCATION: Various locations in Te Kuiti, 8-mile junction, Kopaki and Pukerimu

PROGRESS UPDATE: 30th July 2019

VSF ESTIMATE: \$8,802.61

ATTACHED:

- Project Photos

PROJECT PHOTOS

1. SH3-SH4 INTERSECTION



INSTALL DATE: 24/07/2019

2. SH4-SH3 INTERSECTION



INSTALL DATE: 24/07/2019

3. SH4-PUKERIMU ROAD INTERSECTION



INSTALL DATE: 24/07/2019

4. PUKERIMU ROAD-SH4 INTERSECTION



INSTALL DATE: 24/07/2019

5. KOPAKI ROAD-PUKERIMU ROAD INTERSECTION



INSTALL DATE: 25/07/2019

6. PUKERIMU ROAD-KOPAKI ROAD INTERSECTION



INSTALL DATE: 25/07/2019



7. SH30-KOPAKI ROAD INTERSECTION



INSTALL DATE: 25/07/2019

8. SH30-IN ADVANCE OF KOPAKI ROAD INTERSECTION



INSTALL DATE: 25/07/2019



9. SH30-RORA STREET INTERSECTION



INSTALL DATE: 24/07/2019

10. SH3-SH30 INTERSECTION



INSTALL DATE: 24/07/2019



11. SH30-SH3 INTERSECTION



INSTALL DATE: 24/07/2019

Document No: A439409



Meeting Date: 27 August 2019

Subject: **Progress Report – Roads and Footpaths**

Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to update Council on progress with the key projects and programmes under the Roads and Footpaths activity, as approved in the Waitomo District Council Long Term Plan 2018-2028 (the LTP).

Background

- 2.1 The Roads and Footpaths activity is the single largest area of expenditure for Council. The budget for 2018/19 period for operations is \$12,445,000. The total capital expenditure for roads for the same period is \$6,293,000.
- 2.2 NZTA subsidy is 73% in 20119/20. This represents an accelerated financial assistance rate compared with the original five year transition originally proposed by NZTA. It will allow increased programme levels within the same WDC budget contribution.
- 2.3 This Activity Group exists to provide safe and reliable transport infrastructure (including footpaths) to facilitate the movement of people and goods, consistent with the strategic goal. An efficient, safe and sustainable road network is essential for the economic well-being of our district. Roads provide access to properties (together with footpaths), and enable both passage of through traffic, and transportation of goods and services.
- 2.4 Given the scale of the activity, it is important to keep a close eye on the possible influences on the activity and to assess the impacts.
- 2.5 The Roads and Footpaths Asset Management Plan (AMP) has been reviewed to reflect the expected influences as far as possible.
- 2.6 The Roothing AMP reflects current service levels and the accompanying expenditure forecasts required to maintain those levels of service, it is a key input to the LTP containing details of operations, maintenance, development, risk and demand management planning for Council's roading and footpath assets.

Managing and Maintaining the District Roothing Network

- 3.1 The maintenance and renewal of the road surface, pavement and other roading assets can be analysed under three headings: operational and maintenance, renewals, and new works.

3.2 Operational and Maintenance includes:

- Network Maintenance
- Bridge and structures maintenance
- Environmental maintenance
- Emergency reinstatement
- Street Light Maintenance
- Level crossing warning devices
- Stock effluent facility maintenance
- Asset Management

3.3 Renewals include:

- Bridge replacements
- Road Rehabilitation (Rehabs)
- Footpaths (widen existing)
- Road resealing

3.4 New Works include:

- LED Streetlight Upgrade
- New footpaths
- Signs (new)

Operations and Maintenance

4.1 The Transport Agency granted approval for the full amount applied for by Waitomo DC for their road maintenance, operations and renewal activities for the 2018 – 2021 period. In addition, a significant programme of footpath renewals has been provided in the 2018-28 LTP, commencing in 2018/19, enabled by an NZTA shift in funding policy and its accelerated FAR.

4.2 **NETWORK MAINTENANCE**

4.3 The vast majority of road network maintenance activities on the Waitomo District are carried out under the current Roding Maintenance Contract, which started on the 1 March 2017. The incumbent Contractor is Inframax Construction Ltd.

4.4 An average score of 400 over the first three years will qualify the Contractor for an extension to the Contract term.

4.5 The monthly scores for the current Road Maintenance and Reseals Contract (500/16/028) are as follows:

	2017	2018	2019
January		440	460
February	Start of Contract	427	450
March	435	411	460
April	440	455	450
May	400	455	460
June	410	470	470
July	430	470	Under Review
August	410	430	
September	430	470	
October	425	470	
November	420	487	
December	430	445	

4.6 The different maintenance activities undertaken on the network are:

Description of Service	FYR 2018/2019 Budget	Expenditure for 2018/2019	Comments
Total Direct Expenditure	\$6,151,790	\$6,258,789	Expenditure to end June 2019 is 101.7% of the 2018/19 budget.
Community Co-ordination 431	\$65,000	\$71,500	Driver Training Program is delivered under contract by Community House for WDC.
Emergency Reinstatement 140	\$370,000	\$510,091	Unforeseen weather events requiring emergency first response work under this category (include trees blown down, slips, and erosion).
Environmental Maintenance 121	\$560,000	\$604,402	Typical works include Hazardous Trees, Pest Plant Control, Mowing, Spraying, Drainage control, etc.
Level Crossing Warning Devices 131	\$30,000	\$9,251	Kiwi Rail determines repairs and does the work required and then invoices WDC.
Network and Asset Management	\$220,000	\$437,835	RATA including, Data Collection, Traffic Count, also RAMM hosting fee paid annually.
Allocated Roading Business Unit	\$636,386	\$498,001	Roading staff RBU time except Capital projects.
Professional Services	\$200,000	\$288,714	Includes consultant fees for Professional Services. Increased expenditure in this work category due to the current staffing shortage.
Administration Services for Ro	\$690,404	\$535,752	Administrative Services-AMP, LTP, EAP, Budget, Policy, Standards, Audits, Invoices, Claims, Timesheets, Roading S/R's, P/O'S accounts, NZTA compliance activities.
Routine Drainage Maintenance	\$440,000	\$395,424	Water table, Side drains and Culvert maintenance.
Sealed Pavement Maintenance	\$1,400,000	\$1,675,336	Pre-reseal repairs and general sealed pavement maintenance.
Footpath Maintenance	\$80,000	\$47,321	Repair and Maintenance of Existing Footpaths.
Structures Maintenance 114	\$170,000	\$104,087	Routine maintenance on guardrails and bridge decks.
Stock Effluent Facility Maintenance	\$20,000	\$32,474	On-going Maintenance of the Stock Effluent facility, including water, electricity and trade waste levies.
Stock Effluent Maintenance - Staff time	\$10,000	\$20,900	On-going Maintenance of the Stock Effluent facility, including water, electricity and trade waste levies.
Traffic Services Maintenance	\$150,000	\$132,623	District wide maintenance of signs and road furniture.
WDC Street Lights	\$150,000	\$147,315	Cyclic maintenance and electricity costs. The maintenance of street lights is affected by the number of lights that have to be replaced.
TNZ Street Lights	\$60,000	\$34,593	Fully Subsidised by NZTA.

Description of Service	FYR 2018/2019 Budget	Expenditure for 2018/2019	Comments
Unsealed Pavement Maintenance	\$900,000	\$713,170	Grading, Flanking, spot metalling, restoration and maintenance of unsealed roads.
Asset Management Plans	\$0	\$0	The Asset Management Plan is updated and a new LTP has already been published.

4.7 **BRIDGE AND STRUCTURES MAINTENANCE (W/C 215)**

4.8 A contract is let annually for the replacement of structural bridge components on various bridges.

4.9 Retaining walls are maintained on a case by case basis as required.

4.10 **ENVIRONMENTAL MAINTENANCE (W/C 121)**

4.11 The Environmental Maintenance budget is used to fund preventative maintenance works to remove potentially hazardous trees where appropriate.

4.12 Other works funded under environmental maintenance include pest plant control, mowing and roadside weed spraying. The annual spraying of the plant pest tutsan is presently underway. Also ice control, litter, graffiti, stock effluent, detritus, minor slips, pruning and abandoned vehicles.

4.13 Resource consent fees for the necessary encroachment on waterways for roading works is also paid out of this budget.

4.14 **EMERGENCY REINSTATEMENT (W/C 140)**

4.15 The emergency reinstatement budget is used to pay for unforeseen weather events requiring emergency first response works under this category (including trees blown down, slips and erosion), for minor events (<\$100,000).

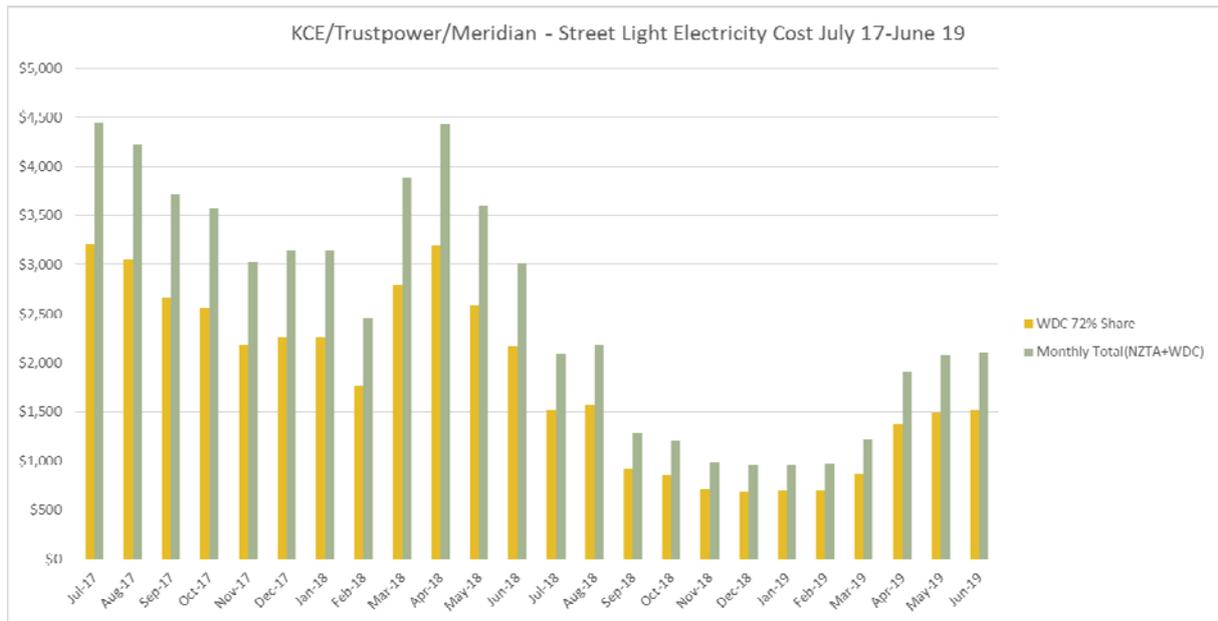
4.16 **STREET LIGHT MAINTENANCE (W/C 122) TRAFFIC SERVICES MAINTENANCE**

4.17 Maintenance activities on the street lights in Waitomo District are carried out under the current Street Lighting Contract 500/16/006, which started on the 26 June 2017. The incumbent Contractor is Alf Downs Street Lighting Ltd (ADSL).

4.18 The street light cyclic maintenance activities are undertaken by ADSL. Maintenance costs of street lights are affected by the amount of lights that need to be replaced. Due to the recent LED street light upgrade, maintenance costs for 2018/19 were low compared to previous years.

4.19 Electricity costs for street lighting are also paid out of the street lighting maintenance budget.

4.20 The LED streetlight upgrade commenced in February 2018 and was completed in July 2018. The monthly street lighting power bill is now reduced by between 50% and 70% as shown in the graph and table below:



4.21 Based on the Wattage report the street light electricity bill is split into 72% (WDC) and 28% (NZTA).

- Waitomo DC share of the street light electricity bill is 72% for WDC streetlights on which the council currently receives 73% FAR from NZTA.
- The rest 28% of the street light electricity bill is for lighting on the state highway (100% funded by NZTA) which WDC pays then claims.

4.22 The 72% and 28% share may change in the future because of LED upgrades, and may also need minor adjustment in December due to festive lighting.

KCE / Trustpower / Meridian

Month	Monthly Total (NZTA+WDC)	WDC Share
Jul-17	\$4,454	\$3,207
Aug-17	\$4,237	\$3,050
Sep-17	\$3,715	\$2,675
Oct-17	\$3,568	\$2,569
Nov-17	\$3,028	\$2,180
Dec-17	\$3,150	\$2,268
Jan-18	\$3,141	\$2,261
Feb-18	\$2,450	\$1,764
Mar-18	\$3,883	\$2,795
Apr-18	\$4,437	\$3,195
May-18	\$3,594	\$2,588
Jun-18	\$3,011	\$2,168
Jul-18	\$2,097	\$1,510
Aug-18	\$2,180	\$1,570
Sep-18	\$1,284	\$925
Oct-18	\$1,198	\$863
Nov-18	\$989	\$712
Dec-18	\$955	\$688
Jan-19	\$967	\$696
Feb-19	\$975	\$702
Mar-19	\$1,206	\$868
Apr-19	\$1,906	\$1,372
May-19	\$2,081	\$1,498
Jun-19	\$2,099	\$1,512

4.23 **LEVEL CROSSING WARNING DEVICES**

4.22 Safety related and asset maintenance work on level crossings is identified by Kiwi Rail, who schedule and complete the repair work required then invoice WDC.

4.23 **STOCK EFFLUENT FACILITY MAINTENANCE**

4.24 On-going maintenance of the stock effluent facility in Cotter St, including water, electricity and trade waste levies.

4.25 **ASSET MANAGEMENT**

4.26 The professional services activities involved in managing the network are described as asset management. The asset management budget is used to pay Waikato Road Asset Technical Accord (RATA), RAMM Software Fees and other specialist consultants.

4.27 RATA (Road Asset Technical Accord) is the centre of excellence for road asset management and planning in Waikato. It is the forum through which Waikato's councils co-operate over roading issues. Its work is carried out under the auspices of the Waikato Mayoral Forum, involving the region's mayors and regional chair.

4.28 WDC and other councils participate in the joint procurement of services for a Bridge Inspections Contract. The current contract started on 1 July 2017. The incumbent bridge inspection consultant is WSP-Opus. This contract includes the tendering and Contract Management of the Bridge Structural Maintenance Repairs, carrying out bridge posting and rating evaluation. Also included is the processing or overweight permit applications.

4.29 RATA also provides required services in terms of RAMM support, Technical support, and assistance with Forward Works Programmes.

4.30 RATA participating Councils also make use of a shared services contract for a high speed data truck to measure a range of road surface conditions, such as rutting, cracking and roughness indicators.

4.31 The WCLASS Multi Party Funding and Services Agreement entered into by Waitomo DC from 1 July 2016 included an initial two year term (now completed) plus provision for two extensions of three years each.

4.32 The services provided by RATA in the first two year term have been very good. The Chief Executive has signed a revised WCLASS Multi Party Funding and Services Agreement agreeing to receive services from Rata for the next term.

4.33 The finances for the next two-year period includes provision for an additional \$30,000 in order to participate in a "step change" to a higher level of investment in data collection. Benefits include:

- improved optimisation of road maintenance funding,
- more cost effective renewals, and,
- better evaluation of the needs of the roading asset

4.34 As a condition of receiving funding assistance for road maintenance, the Transport Agency requires Council's to make use of a road asset management system for treatment selection. Continuing to participate in the WCLASS Multi Party Funding and Services Agreement, including the benefits of the above services, is a smart way to meet our obligations while benefiting from available expertise at competitive rates.

4.35 Roads and Footpaths Activity Management Plans (AMP) and the Road Efficiency Group (REG)

4.36 The Road Efficiency Group (REG) programme supports the New Zealand transport sector to deliver a modern integrated system to align with the objectives of local, regional and central government. It is partly funded by the NZ Transport Agency, and also relies on volunteer input from Road Controlling Authorities (RCAs).

4.37 REG's work is divided into four work groups that undertake projects to support and guide RCAs to ensure a modern, integrated transport network. They are:

- Community outcomes
- Sector excellence
- Evidence and insights
- Strategic Delivery

4.38 Projects include:

- One Network Road Classification (ONRC) (essentially implemented)
- Performance measured reporting tool (PMRT) (in use)
- Asset Management Data Standard (AMDS) (ongoing project)
- One Network Framework (aims to provide a common language to reflect the role transport corridors play in the movement of people and freight across all land transport modes and the community space these corridors provide in our urban areas). In progress.
- Data Quality (ongoing project)

4.39 In 2015-16, a radical change in the transport sector occurred. The traditional forms, calculations and asset management plans (AMPs) used to apply for road maintenance funding were essentially done away with and a new Business Case Approach (BCA) was introduced by NZTA. NZTA's intention was for BCAs to provide a robust, evidence based investment case to support planning & investing for outcomes, achieve value for money and ensure early stakeholder collaboration.

4.40 REG began to run an extensive series of nation-wide workshops in 2016. At these workshops, Roading Asset Engineers were coached step-by-step in skills required to write business cases, e.g. developing their strategic cases (the first step to building a business case).

4.41 Under the BCA, Asset Management Plans became Activity Management Plans (also having the acronym AMP). WDC's AMP was delivered on time, and the first for the region, in December 2017. REG workshops have continued, usually five per year, throughout 2018 and 2019, for Roading Asset Engineers. REG workshops have provided information and support as RCAs prepare their next AMP, due in 2020.

4.42 On 6 August 2019, WDC's Chief Executive, the Acting General Manager – Infrastructure Services and RBU staff were visited by REG and NZTA representatives to engage WDC in the next REG project. "Smarter Together – Realising Enduring Excellence – by Enabling Innovation and Leading Change" is the latest REG initiative. WDC has been invited to trial the "REG Excellence Programme Self-Assessment & Scoring Framework – Working Draft".

4.43 WDC will be formally responding to REG that we "Support in principle" the project Smarter Together – Realising Enduring Excellence – by Enabling Innovation and Leading Change". However, the outcomes for this project are not clear and have not been endorsed at a local government governance level. The scope exceeds the role of REG by encroaching on the statutory purpose of local government. Discussions with REG are continuing.

Renewals

- 5.1 The need for asset renewals (replacing assets at the end of their useful lives) are identified through analysis of condition assessments, failure history and in some cases, predictive modelling. Treatment selection and work prioritisation are determined from an economic analysis of options considering all asset life cycle costs.
- 5.2 Renewals in 2018/19 include road rehabilitation, road resealing and footpath widening.
- 5.3 **ROAD REHABILITATION**
- 5.4 Candidate road sections for rehabilitation are selected using the road asset management system. Site visits and further calculations including Net Present Values confirm the sites for rehabilitation. The stages following site confirmation include pavement design, professional services (including writing the physical works document) and the physical works (construction) phase.
- 5.5 Pavement Design for the road rehabilitation sites for 2018/19 was carried out by a specialist consultant and is now complete.
- 5.6 The Professional Services Contract for Road Rehabilitation 2018/19 Contract 500/17/015C was awarded to the consultant GHD on 31 July 2018.
- 5.7 The annual Pavement Rehabilitation Contract for physical works includes the sites listed below. Tenders closed on 23 January 2019. One tender was received and the contract was awarded to Inframax.
- 5.8 Due to budget constraints, Ramaroa Rd and Taharoa Rd road rehabilitation sites were completed in the year ending 30 June 2019. As negotiated with Inframax and agreed by Tender Subcommittee, work on the Totoro Rd road rehabilitation site has been delayed to start in the 2019/20 financial year.

Road Name	RP Start	RP End	Length (m)	Width	Area (m ²)	Notes
Ramaroa Road	0038	2,299	2,261	6.4	15,194	Completed June 2019
Taharoa Road	5,160	5,800	640	6.1	3,904	Completed June 2019
Totoro Rd	5,807	7,205	1,398	6.0	8,807	Due to start after July 2019

5.9 **FOOTPATHS (WIDEN EXISTING)**

- 5.9 The Transport Agency has granted approval for the amount applied for by WDC to fund a significant programme of footpath renewals in the 2018-28 LTP, enabled by an NZTA shift in funding policy and its accelerated FAR.
- 5.10 The procurement plan for the footpath programme was approved by Tender Subcommittee in December 2018. The programme includes both widening of existing footpaths, and new footpaths.
- 5.11 Tenders closed on 22 January 2019 for Contract 500/18/024 WDC Footpaths and Associated Works 2018/19. Four tenders were received and the contract was awarded to Cambridge Excavators (CAMEX) Ltd.

5.12 Budget constraints mean some footpath improvement projects have been delayed, to start in the 2019/20 financial year, a decision made with the agreement of the Tender Subcommittee. The programme of 2018/19 projects was completed by 30 June 2019.

5.13 The programme includes:

Footpath Widening

Road Name	Start	End	Progress
Hill Street	Eketone Street	King Street West	Underway (started July 2019)
Ward Street	Hill Street	Haines Tce	To start by end of August 2019
Te Kumi Road	#8 Te Kumi Road	#68 Te Kumi Road	To start by end of August 2019
King St [West]	King St [West] at Pukenui School		Completed
North St (SH3)	Rangi Street		Completed
Moa St in Piopio	LHS From 50kph sign East end	Tui Street	Completed
Moa St in Piopio	RHS from #68	#72	Completed
Carroll St [SH3]	Craig Tce	Awakino Road	Completed
Te Kuiti bowling club	Esplanade North	Footbridge	Completed
Taupiri Street	27 Taupiri street	29 Taupiri Street	Completed

New Footpaths

Road Name	Start	End	Progress
John Mandeno St	Hospital Street	St Andrews Court	Completed
Rora St	Public toilets in front of Warehouse	Ward Street	Completed
Rora St	Ward Street	88 Rora Street	Completed
Footpath at Benneydale School			Completed
Les Munro Park	King St East		Completed
Les Munro Park	Jennings St		Completed

5.14 CAPITAL EXPENDITURE

5.15 The different activities undertaken on the network classed as capital expenditure (including renewals and new works) are:

Description of Service	FYR 2018/2019 Budget	Expenditure for 2018/2019	Comments
Total Capital Expenditure	\$6,293,364	\$5,092,731	Capital expenditure to end June 2019 2018 is 80.9% of the 2018/19 budget
Footpath Improvements	\$113,132	\$159,288	Building New Footpaths. Contract 500/18/024 Footpaths and Associated Works. The programmed projects were completed by 30 June 2019. A slight overspend is balanced by reduced expenditure in "Footpath Renewals" below.

Description of Service	FYR 2018/2019 Budget	Expenditure for 2018/2019	Comments
Minor Improvements (341)	\$650,000	\$62,096	Identified and NZTA approved minor projects to improve hazards like sharp curves, slip prone cuttings and slip repairs. Traffic islands on Robin Azariah Place and Rora Street were built to improve safety of road users. The rest of this budget is carried forward into the new financial year.
LED Street Light Upgrades	\$0	\$78,218	The funding for the LED streetlight upgrade was 85% funded by NZTA. This project was completed in July 2018.
Footpath Renewals	\$395,232	\$250,731	Improving, widening and replacing narrow footpaths. Contract 500/18/024 Footpaths and Associated Works. The programmed projects were completed by 30 June 2019.
Drainage Renewals 213	\$250,000	\$205,968	Upgrading of Network wide drainage issues. This activity is weather dependant.
Pavement Rehabs Renewals	\$1,700,000	\$1,625,502	The 2018/19 Road Rehabilitation Contract 500/17/015. Pavement rehabilitation works at Ramaroa Road are complete. A pavement rehabilitation project at Taharoa Rd was 95% complete as at 30 June 2019.
Sealed Road Surfacing Renewals	\$1,385,000	\$1,396,278	The annual resealing program was completed in March 2019.
Structures Components Renewals	\$350,000	\$82,792	Work completed in July 2018 under the annual Bridge Structural Repair contract. The rest of this budget is carried forward into the new financial year and works planned for the 2018/19 year will be merged with works planned for the 2019/20 year. This work is at the tender documentation stage.
Traffic Services Renewals 222	\$150,000	\$328,267	Annual Traffic Signs replacement and the District-wide Line Remark project has been completed. In addition, professional services are being charged to this GL in response to a current government drive for changes to speed limit legislation. These costs will be capitalised upon the purchase of new signs at the end of the project. Overspend is balanced by reduced expenditure for Unsealed Road Metaling.
Unsealed Road Metalling Renewals	\$600,000	\$470,503	Unsealed Road Metalling is done under the Maintenance Contract, during the wet season, and was delayed due to unseasonably dry weather January 2019 – May 2019. The unspent budget offsets the additional costs experienced in Traffic Services Renewals.
Emergency Reinstatement Renewals	\$700,000	\$433,088	Extra funding was requested from, and provided by, NZTA to repair damage to the network from Cyclones Debbie and Cook in April 2017, and also storm events in August and September 2017. A substantial programme of work under this budget to complete repairs of the many small slips remaining from this period was completed in May 2019. In addition, the repair of the Te Mahoe Rd slip in July/August 2018 was journaled to this GL with the agreement of NZTA.

New Works

6.1 **LED STREETLIGHT UPGRADE**

6.2 The LED streetlight upgrade project started in February 2018 and is now complete.

6.3 New street lights will need to be added to the network in order to fill in dark patches in poorly lit pedestrian areas.

6.4 The incumbent street lighting contractor is Alf Downs Street Lighting. They will complete a night-time survey for WDC and assist us with planning and programming for the in-fill street lighting needed.

6.5 **PEDESTRIAN OVERBRIDGE**

6.6 Construction of a replacement pedestrian overbridge is dependent on NZTA funding assistance. If NZTA funding is approved, the project will be completed in 2019/20.

6.7 Significant progress has been made towards preparation of the prerequisite business case in support of NZTA funding assistance.

6.8 The estimated cost to design and construct the replacement bridge is \$1.2M. If approved by NZTA, the subsidy rate will be 73%, making the local share \$324,000.

6.9 The project may qualify for NZTA's Targeted Enhanced Funding Assistance Rate (TEFAR), in which case the FAR would be 86.5% and the local share would reduce to \$162,000. Application has been made for TEFAR funding.

6.10 WDC's local share funding has been included in WDC's 2018 – 28 LTP over the next three years. As reported to Council 27 November 2018, the second year's allocation will need to be brought forward to 2019/20.

6.11 Work has started on obtaining the pre-construction approvals required ahead of the detailed design stage, with the latter dependent on NZTA funding approval.

6.12 Changes to the current Kiwi Rail lease agreement has been discussed with Kiwi Rail and a draft agreement will be sent for review.

6.13 On 20 May 2019 NZTA advised WDC the Te Kuiti Pedestrian Rail Overbridge funding has been approved. Funding is at WDC's Normal FAR of 73%.

6.12 **SIGNS**

6.13 Additional new work is anticipated as a result of the current government drive for changes to speed limit legislation.

6.14 **TE WAITERE SLIPS**

6.15 Two slips both 30m long on Te Waitere Road in the vicinity of RP5. These two slips caused by Cyclones Debbie and Cook in April 2017 are now impacting on the road carriageway and will continue to remove the available road width until addressed.

6.16 Professional services for the above closed on 14 February 2019. No tenders were received. WDC's road maintenance contractor will continue with remedial works as a short term measure.

Suggested Resolution

The Progress Report – Roads and Footpaths be received.



GREG BOYLE
(ACTING) GENERAL MANAGER – INFRASTRUCTURE SERVICES

8 August 2019

Document No: A439313	
Report To: Council	
	Meeting Date: 27 August 2019
	Subject: Progress Report – Housing and Other Property
	Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to brief Council on current work streams within the Housing and other Property activity.

Background

- 2.1 This activity involves the provision of Housing and Other Property in order to support and fulfil Council's role in promoting the interests of the community.
- 2.2 Council provides a number of housing and other properties that are grouped according to their primary purpose. The different groups of Housing and Other Property are – Housing, Corporate Property, Community Halls, WDC Depots, Quarries, Te Kuiti Railway Hub, and General Property (includes miscellaneous and strategic land holdings). This service offer resources, places for community activities, affordable housing, preservation of history/culture and a place from which Council can undertake and support its functions.
- 2.3 A full stock take of all Housing and Other Property facilities is being undertaken to ensure all lease agreements, H&S and other legislative requirements are in place. This stock take also includes condition assessments and maintenance inspections to determine the current structural condition of these facilities. This will enable better planning and inform further maintenance works which may need to be done to bring these facilities up to standard.
- 2.4 A Tenancy Management Services arrangement has been made with a local provider, to ensure prompt and quality management of tenancy matters regarding WDC housing stock.
- 2.5 The three monthly maintenance inspection report is being completed every three months by WDC's local provider. This includes the Redwood flats and Jennings Street flats.

Commentary

- 3.1 **LEASE AGREEMENTS**
- 3.2 An initial investigation and assessment of the current status of existing lease and deed documentation has identified a range of administrative matters.

- 3.3 Many of the agreements operate on expired terms. One consequence is that rent reviews or increases to annual fees are required. In some cases historical or terms and conditions of agreements may not adequately address needs.
- 3.4 Lease agreements are required to meet applicable New Zealand legislation such as the Residential Tenancies Act 1986, Property Law Act 2007 and Land Transfer Act 1952.
- 3.5 The use of the WDC NCS portal with an electronic tracking system, to better management property review has been adopted. Existing leases have been entered, with new templates created for leases, licenses to occupy and general agreements. Reviewing the expired leases will be an ongoing process for some time, but this new system will greatly assist property management.

3.6 **WAITOMO DISTRICT COUNCIL HOUSING**

- 3.7 Waitomo District property portfolio consist of 20 housing units for the Elderly, comprising of six bedsits and fourteen single bedroom units and 3 residential dwellings situated in Piopio and Te Kuiti.
- 3.8 Elderly - The initial eight single bedroom units were built between 1949 and 1954, along with eight bedsits in 1955-1956. Newer single bedroom units, – four in total, were constructed in 1985. In 2005, Council converted two bedsits into single bedroom units by adding a bedroom on to each and undertook some roofing replacement. These units have been renovated at time of vacancy.
- 3.9 Residential Housing stock consists of 3 residential dwellings - 4 Moa Street Piopio, 47 Te Kumi Road Te Kuiti, 59 Esplanade Te Kuiti.
- 3.10 The residence at 4 Moa Street is situated section on State Highway 3 north of Piopio. The lot also contains WDC's Piopio depot. After a maintenance inspection the residential property requires a small amount of maintenance to the exterior of the building.
- 3.11 Recently the tenant vacated the property. WDC is currently awaiting an insulation inspection to be conducted. If there is a requirement for additional insulation to be installed, this will be done prior to new tenants moving in.

3.12 **REDWOOD FLATS**

- 3.13 Maintenance work has been completed on 17 of the 20 flats, with the balance of the work to be completed early next month.
- 3.14 Three flats are still to be renovated and will be completed between tenancies. This will ensure there is no disruption to tenants.
- 3.15 With the recent change in legislation around insulation requirements for rental properties and the responsibility of landlords to install a minimum 'R' value insulation rating, a recent inspection was undertaken of the insulation in both the ceiling cavities and under flooring. As a result, the current insulation in all the Redwood flats is deemed to be compliant and no further action is required at this stage.

3.16 **JENNINGS STREET FLATS**

- 3.17 Maintenance to the exterior has commenced with the interior to be completed early next month after the tenants temporarily relocate.
- 3.18 The renovations to these flats has now been completed.

- 3.19 With the recent change in legislation around insulation requirements for rental properties and the responsibility of landlords to install a minimum 'R' value insulation rating, a recent inspection was undertaken of the insulation in both the ceiling cavities and under flooring. Access to the ceiling cavity was not possible due to the confined space and the floor is concrete so no further action is required. There are exceptions contained in the new requirements for areas which are unable to be accessed, as in this case, so therefore the Jennings Street flats are deemed compliant with the new rules.
- 3.20 **59 THE ESPLANADE**
- 3.21 With the recent change in legislation around insulation requirements for rental properties and the responsibility of landlords to install a minimum 'R' value insulation rating, a recent inspection was undertaken of the insulation in both the ceiling cavities and under flooring.
- 3.22 Access to the sub floor is not possible due to the confined space and the roof cavity had no insulation. No insulation can be installed to the floor but an order has been placed to install the required 'R' value insulation to the roof cavity. Due to the allowable exceptions, once the ceiling cavity has been insulated, the premise will be compliant.
- 3.23 The required insulation upgrade to the ceiling space is scheduled to be undertaken on the 28 August this year.
- 3.24 **WAITOMO DISTRICT COUNCIL ADMINISTRATION BUILDING**
- 3.25 CCTV cameras have been installed at various external locations around the building as a deterrent to vandalism and to keep our place of work safe. The CCTV camera system is now fully operational.
- 3.26 The seismic strengthening project has been deferred to the 2019/20 FY.
- 3.27 A review of DMC Consultants' Seismic Assessment Report from July 2017 is currently being carried out by GHD Consultants. GHD's review will determine the next steps and whether further investigation of the building is required prior to any preliminary design work taking place.
- 3.28 The GHD review determined that a Detailed Seismic Assessment (DSA) was required. This has now been completed and WDC are awaiting for the final outcome of what is required to bring the building up to the required seismic standards for a Civil Defence Headquarter base. This process is expected to be completed by the end of September this year.
- 3.29 **LIBRARY**
- 3.30 The repainting of the blue facades, steel windows and some concrete block areas will be undertaken this financial year.
- 3.31 The repainting of the library exterior has now been completed.
- 3.32 A sensor light has been installed above the main entrance to the library to increase safety for staff and visitors.
- 3.33 **TE KUITI COMMUNITY HOUSE** (Upstairs from the Library)
- 3.34 The repainting of the hallway walls and doors at the Community House has been completed giving the offices a fresh and well maintained appearance.

3.35 **RAILWAY BUILDING 1 & 3**

- 3.36 A leak was identified in the roof structure, this has now been repaired.
- 3.37 Railway Building 3 is listed on the WDC website as an available venue for hire.
- 3.38 Railway Building 1 (Rooms 2 & 3) are unable to be hired out at present as there are no restroom facilities.
- 3.39 A quote to install a toilet and hand basin has been received and installation of a toilet and basin budgeted for in the 19/20FY.
- 3.40 Pricing for the completion of concrete surfacing of the Railway Platform (alongside the Gallery) is underway with approval for this work pending from Kiwirail.
- 3.41 The concrete work which was scheduled to complete the platform (alongside the Gallery) has been postponed due to budget constraints.
- 3.42 A timber planter box has been constructed at the north end of the unfinished platform. This will give the end of the platform a more attractive look.
- 3.43 WDC has been in contact with KiwiRail about completing a length of fencing approximately 20 metres long between the south end of Railway Building 3 and the Citizens Advice Bureau (CAB). This fence would restrict pedestrian access to the train lines. Once an approved Health and Safety Plan has been approved by Kiwirail the works can commence.
- 3.44 Contact with KiwiRail has also been made regarding the need to reapply the fluorescent line marking the edge of the full length of the Railway Platform beside Stoked Eatery, warning visitors of the drop off to the rail tracks. Once an approved Health and Safety Plan has been approved by KiwiRail the works can commence.
- 3.45 **BUILDING MAINTENANCE**
- 3.46 A maintenance schedule is being worked on to ensure WDC owned commercial buildings receive appropriate maintenance work.

Suggested Resolution

The Progress Report: Housing and other Property be received.


 GREG BOYLE
ACTING GENERAL MANAGER - INFRASTRUCTURE SERVICES

2 August 2019

Document No: A439314

Report To: Council



Meeting Date: 27 August 2019

Subject: Progress Report: Parks and Reserves

Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to brief Council on service delivery within the Parks and Reserves Activity.

Background

- 2.1 This activity involves the provision of parks and reserves in order to support the health and well-being of the community by supplying and maintaining areas for sport and recreation, as well as green places and landscapes that are restful and enhance the visual amenity.
- 2.2 The parks, reserves and play areas are grouped according to their primary purpose under the following categories - Active reserves, Passive reserves, Esplanade reserves, Leased reserves and Play Equipment.
- 2.3 Currently a review on all property arrangements is being taken to ensure all required lease agreements, H&S and other legislative requirements are in place. This also includes condition assessments and maintenance inspections to determine the current structural condition of playgrounds and other structures located on these facilities. This will assist future planning and inform further maintenance works.

Commentary

3.1 LEASE AGREEMENTS

- 3.2 An initial investigation and assessment of the current status of existing lease and deed documentation has identified a range of administrative matters.
- 3.3 Many of the agreements operate on expired terms. One consequence is that reviews or increases to annual fees are required within the agreements. In some cases historical agreements or terms and conditions may not adequately address Council's current liability under the law in certain circumstances.
- 3.4 The use of the WDC NCS portal with an electronic tracking system has enabled a reminder email to review leases coming up for renewal. Current leases have been entered with reminder dates set. New templates have been created for leases, licenses to occupy and general agreements. Reviewing expired leases will be an ongoing process for some time, but this new system will greatly reduce the chance of WDC being in this situation in the future.

3.5 Lease agreements are required to meet applicable New Zealand legislation such as the Residential Tenancies Act 1986, Property Law Act 2007 and Land Transfer Act 1952.

3.6 Specialist legal advice has been sought to address issues and challenges.

3.7 **RESERVES MANAGEMENT ACT**

3.8 Under section 41(1) of the Reserves Act 1977 ('Reserves Act'), the administering body shall within five (5) years of its appointment or within five (5) years of the commencement of the Reserves Act (whichever is later), must prepare and submit to the Minister for his approval Reserve Management Plans ('Management Plans') for reserves under its control, management and administration.

3.9 The Reserve Management Plan works program is being undertaken in association with the District Plan Review.

3.10 **MAROKOPA HOLIDAY PARK**

3.11 Since reopening (early December 2018) until the end of December 2018, there have been over 1050 transactions recorded at the Park.

3.12 The Marokopa Holiday Park continues to attract visitors with many positive comments on the amenities being made to the Infrastructure Manager – Property and the Holiday Park Cleaners.

3.13 The Kiwi Cash technology is working very well, with no service disruptions since December 2018. Battery backup for the onsite phone and cameras has now been installed and is fully operational.

3.14 The replacement boom arm for the gate has been fitted and will be fully functional after a service to the boom gate mechanism has been undertaken.

3.15 The servicing of the boom gate mechanism has been completed and is fully operational. Since recommissioning the gate, there have been no technical issues or outages. Visitors are again being charged for passing through the gate.

3.16 Relocation of the two cabins onsite will take place early in the new financial year. One will be fitted out with laundry facilities and the other utilised as a kitchen. Both services will be accessed and paid for using the Kiwi Cash technology.

3.17 Pricing for the relocation of the two cabins and removal of the existing old laundry and fisherman's cabin building is underway.

3.18 Quotes have been received from Kiwicash for 2x washing machines, 2x ceramic hotplates, 2x driers all fitted with the Kiwicash technology. Once commissioned the revenue generated from the Marokopa Holiday Park will be increased dramatically.

3.19 Surveying work is being undertaken to inform the subdivision process which will legally separate the Holiday Park from the fenced off School House area. This survey work will be completed by the end of May. A decision about the future ownership and/or use of the School House site can then be made.

3.20 Surveying work has now been completed.



3.21 **TE KUITI (NEW) HOLIDAY PARK**

- 3.22 Positive feedback has been received about the dump station and word is getting out there about the new Holiday Park. Campers are impressed with the facilities and positive feedback has been received by a local tourist business via a camper.
- 3.23 Options to further develop Brook Park into a mix of both passive and active activities will complement the Holiday Park making it a desirable tourist destination for travellers into the area.
- 3.24 The number of Dump Station users has been consistently high, with the number of Holiday Park users steadily increasing. Fortnightly statistic reports from CamperMate identify steady numbers of travellers looking up both the Te Kuiti and Marokopa Holiday Parks.
- 3.25 WDC recently celebrated the Official Opening of the Te Kuiti Holiday Park with a good turnout of guests ranging from members from the New Zealand Motor Caravan Association, Media, Consultants, Contractors, Councillors, WDC Staff, Residents and Suppliers.
- 3.26 *The number of visitors to the holiday park and dump station remains steady with more travellers learning about its existence everyday.*
- 3.27 *The Kiwicash technology is working well with very few issues for WDC staff to contend with.*

3.28 **BROOK PARK**

- 3.29 A Landscape Architect was commissioned to present potential development ideas for Brook Park through a Draft Concept Plan, to be reviewed by Council and used to inform options going forward.
- 3.30 The Draft Concept Plan received from the Landscape Architect was workshopped by the Council, however has decided to concentrate on current boundary and internal fencing maintenance/replacement prior to progressing with any further development.

- 3.31 The maintenance and renewal work associated with the fencing of Brook Park, both boundary and internal, continues and will be a work in progress.
- 3.32 The long term lease between WDC and the leasee for grazing purposes was recently terminated and in the interim an agreement has been reached with a local farmer for him to graze sheep until early in the new year when this will be reviewed.
- 3.33 The lower gate has now been padlocked restricting vehicular access to the top carpark via the access way. This was done due to health and safety concerns around antisocial behaviour and pedestrians and vehicles sharing such a narrow and windy access way. This has caused some local reaction.
- 3.34 **TE KUITI AERODROME**
- 3.35 Individual stakeholder meetings have been convened to ascertain the requirements of each stakeholder.
- 3.36 Quotes are currently being sought for the proposed future development, including new and replacement fencing, an automated gate to airfield, roading, entranceway, resealing sections of the runway, clearing of swales and other maintenance work.
- 3.37 Quotes have now been received and the procurement policy guidelines followed with work to commence on 5 August this year. The work is expected to be completed by the end of August with the exception of the new fences which will be constructed later in the year due to timber supply shortages.
- 3.38 All stakeholders have been informed both verbally and via email giving them in writing a schedule of works.
- 3.39 A moss and mould spray treatment will be applied to the historic building (Aeroclub Clubrooms) in due course.
- 3.40 This has now been done and over the following weeks the moss and mould will be eliminated.
- 3.41 Rental appraisals have been received from Doyle Valuations. Using this appraisal information together with the identified stakeholder requirements, new lease agreements will be drafted.
- 3.42 Research has also been conducted as to how other councils charge Aero Clubs. Using this information an agreement between WDC and the Te Kuiti Aero Club will also be drafted.
- 3.43 Super Air has plans to build a new Hanger within the proposed new development site to the west side of the Entranceway. This development will follow the standard WDC building consent procedure and approval process.
- 3.44 Superair is working through the consent process now and expect to have their new hanger completed later this year. Its existing sheds will be removed from the current location at its own cost.
- 3.45 **TAINUI DOMAIN RECREATION RESERVE**
- 3.46 The committee that was elected in May of 2018 have now formed an incorporated society in order to apply for funding for the future development of the domain in conjunction with WDC.

- 3.47 Camping and grazing continues to provide a good source of income.
- 3.48 The Tainui Domain Recreational Reserve Committee have been exploring ideas for future development of the Domain. These ideas are yet to be presented to WDC as a formal proposal.
- 3.49 WDC is beginning the process of drafting a Reserve Management Plan (which must include future development considerations) for the Tainui Domain Recreational Reserve.
- 3.50 The draft Reserve Management Plan will also address considerations for adjacent development and use of public property i.e. the nine hectares of the Reserve which are managed by WDC.
- 3.51 Further remedial works are underway to eliminate water leaks. This has been scheduled for later this month and will involve the replacement of water lines and upgrading some of the toilet and basinware to make them more water efficient.
- 3.52 **TE KUITI ESPLANADE RESERVE**
- 3.53 Various sections of the walkway along the Mangaokewa Stream have had retaining walls replaced and footpaths re-metaled.
- 3.54 Trees and shrubs are being trimmed back and drainage improved where required. This work will improve access along the walkway especially during wet periods.
- 3.55 Bridge maintenance at the back of Graymont has been completed and the bridge is now open for walking access.
- 3.56 Surveying of the Graymont site is to be undertaken and a detailed area map produced to define the walking track location. This will be followed by track upgrades to be completed by Graymont at their cost.
- 3.57 Agreement has also been reached between Graymont and WDC that once the upgrading work referred to above has been completed, future maintenance of the bridge will be the responsibility of Graymont and maintenance of the walking track will be WDCs.
- 3.58 WDC will also become the controlling authority for the walkway alongside Graymont's land at Te Kuiti when all of the work has been completed.
- 3.59 The Surveyor, Mr Murray Hislop, has yet to carry out the survey work.
- 3.60 Signage for the Waitete Road/SH4 section of the Te Araroa Walking has been ordered. Once all signage has been received installation will be scheduled.
- 3.61 The new SH compliant Te Araroa Walking Track sign has been erected opposite Inframax with further smaller walking track signage still to be put in place.
- 3.62 **JETTIES & PONTOONS**
- 3.63 Maintenance work was required on the Te Waitere Jetty to lubricate two rollers on the bottom of the walkway ramp. This will allow for freer movement of the pontoon during tidal changes.
- 3.64 This maintenance work has now been completed.

- 3.65 Work on the Mokau Jetty is scheduled for May 2019. This will involve filling the ballast drums under the pontoon with expandable foam allowing it to float level. All rotten decking boards will also be replaced.
- 3.66 **This maintenance work has now been completed.**
- 3.67 A recent inspection of the Te Maika Jetty identified maintenance concerns and a quote has been requested for this work. This work will be prioritised around available budget.
- 3.68 **A quote has been received and the cost will be worked into available and future budgets.**



3.69 **TUI PARK, PIOPIO**

- 3.70 Pricing is underway for minor upgrades to the Tui Park Toilet Facilities. This will include installing a single shower in both the Ladies and Men's Rooms, the installation of a small hot water cylinder in the kitchen/dining building, and the repainting of the toilet block both internally and externally.
- 3.71 **A proposal was recently put to the Piopio Trust around upgrading the ablutions block providing for the women's side 1x shower, 1x toilet and 1x basin and the same on the men's side. Both sides would give wheelchair access and comply with building regulations. No building consent would be required due to the minor changes within the block.**
- 3.72 **As well as the changes to the ablutions block, both internally and externally would be fully repainted, power points would be fitted to the existing wiring for campervans and the cleaning of the block would be taken over by WDC.**
- 3.73 **This would all be paid for by fitting the showers with scanners and an electronic honesty box both supplied by Kiwicash. This technology would replace the existing cash based honesty box where the proceeds currently do not come to WDC. This technology is identical to what is currently in place at both the Marokopa and Te Kuiti Holiday Parks. (Refer digital honesty box image below.)**



3.74 The Piopio Trust Committee has agreed to complete maintenance required on the front road side fence and plant additional trees.

3.75 **Some of this work has been completed by the trust already.**

Suggested Resolution

The Progress Report: Parks and Reserves be received.

GREG BOYLE
GENERAL MANAGER - INFRASTRUCTURE SERVICES

2 August 2019

Document No: A439317

Report To: Council



Meeting Date: 27 August 2019

Subject: Progress Report – Public Amenities

Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to brief Council on current work streams within the Public Amenities portfolio.

Background

- 2.1 The Public Amenities Activity provides public amenities in order to support the health and well-being of the community by providing areas for burial, restroom facilities for the comfort and convenience of residents and visitors and improved town street amenities.
- 2.2 A review on all Public Amenities facilities is being undertaken. This includes condition assessments and maintenance inspections to determine the current structural condition of the facilities. This will enable better planning and inform further maintenance works which may need to be done to bring the facilities up to standard.

Commentary

- 3.1 A recycling station and waste bin has also been provided to address waste minimization.
- 3.2 **PIOPIO TOILETS (KARA PARK)**
- 3.3 The flushing system at the facility requires an upgrade to reduce the occurrence of blockages and costly after hours callouts during peak times.
- 3.4 Quotes have been received and the work awarded to a local contractor. This work will be undertaken early December.
- 3.5 Due to the Contractor's heavy workload this work has been delayed until after the holiday period.
- 3.6 Following the upgrade of the flushing system, no further after-hours callouts have been required.
- 3.7 **MOKAU HALL TOILETS**
- 3.8 TIF funding has been applied for to cover 50% of the costs to build new facilities on the adjacent site currently owned by the local school. Negotiations for the site are currently underway.

- 3.9 Negotiations for the school site are ongoing.
- 3.10 Upgrades to the current septic system are being investigated to reduce the odour around the toilets and hall.
- 3.11 An upgrade to the ventilation stacks of the septic system has now been completed, which has addressed the odor issues.
- 3.12 An upgraded float system will be installed in the lower holding tank to eliminate the chance of any potential overflows onto the sidewalk.
- 3.13 The float system upgrade has now been completed and no overflow issues have re-occurred.
- 3.14 Five temporary portaloos are to be placed close to the existing hall toilets to ease congestion during the peak season from the 1 Dec 2018 through to 31 March 2019. This will be funded by MBIE at a cost of \$69,000.
- 3.15 The five portaloos placed onsite in December 2018 have now been removed and the site reinstated.
- 3.16 The next Tourism Infrastructure Fund funding (TIF) round opens for applications on 1 March 2019. Hopefully the Minister's Priority Statement will be released soon to inform project emphasis for the next round, and that public toilet upgrades will remain part of that.
- 3.17 TIF funding has been approved for the additional toilets in Mokau. The amount approved is \$186,000 plus \$20,000 operations and maintenance costs for the first two years. The total project cost estimate \$383,000 plus GST, with WDC co-funding the residual cost as provided in its 2019-28 LTP.
- 3.18 The identification of a site for the upgraded toilets remains a work in progress. The preferred site is the surplus Mokau School property immediately north of the existing toilet block. A direct approach is to be made to the Ministry of Education to start that process. A letter of intent would suffice for TIF application purposes.
- 3.19 An alternative proposed site for the new toilet block has been identified and is under consideration.
- 3.20 A Concept Plan is currently being prepared by a Landscape Architect and is expected to be completed by mid-August following an internal review and feedback.
- 3.21 Funding from TIF is for an additional (not replacement) toilet block, therefore pricing is being sought for upgrade and maintenance works to the existing Mokau toilets outside the Mokau Hall. Upgrade works will include a painting both internally and externally, replacement toilets and basins, floor coverings and a more water efficient cistern for the men's urinal. This work is required as the current facility is old and worn and in need of freshening up.
- 3.22 The upgrade and maintenance works have now been completed with the exception of the toilets and basins as these were deemed an unnecessary expense as the toilets are in good condition. With the basins being stainless steel, they were polished bringing them back to a new look. All lighting was also replaced with more energy efficient LED's.



3.23 **KIRITEHERE**

3.24 A need has been identified for additional toilets at Kiritehere.

3.25 The next Tourism Infrastructure Fund funding round opens for applications on 1 March 2019. Hopefully the Minister's Priority Statement will be released soon to inform project emphasis for the next round, and that public toilet upgrades will remain part of that.

3.26 An application has been made for TIF funding for this toilet upgrade project with a funding decision expected to be announced by the end of June.

3.27 TIF funding for the new toilet has been approved and pricing is underway to determine the best option available for this remote site.

3.28 **WAIKAWAU TOILET**

3.29 A composting style public toilet has been identified as being required due to the frequency this site is visited by freedom campers and holiday makers.

3.30 The next Tourism Infrastructure Fund funding round opens for applications on 1 March 2019. Hopefully the Minister's Priority Statement will be released soon to inform project emphasis for the next round, and that public toilet upgrades will remain part of that.

3.31 An application has been made for TIF funding for this toilet upgrade project with a funding decision expected to be announced by the end of June.

3.32 TIF funding for the new toilet has been approved and pricing is underway to determine the best option available for this remote site.

3.33 Total TIF funding towards the Kiritehere and Waikawau toilets is \$108,500, plus \$52,000 for operating and maintenance costs over the first two years.

3.34 **WDC CEMETERIES**

3.35 To further the improvement of WDC cemetery records and the location of graves at all Waitomo District Council cemeteries a numbering system has been

developed in relation to the NCS plot number and will be rolled out within the next month. Each plot will have a specific number installed on the berm to identify the plot and area of location.

- 3.36 The fixing of the aluminum identification tags to the Headstone and berms at Te Kuiti New Cemetery and Te Kuiti Old Cemetery is now complete, including the installation of new signage for both cemeteries.
- 3.37 Adhering of identification tags has now been completed at Piopio, Mokau and Maipu cemeteries, with Aria and Te Waitere still to be done weather permitting.
- 3.38 The sale and purchase agreement for Lot 3 (area of gifted land) at Te Kuiti Cemetery has now been signed by both parties, and an application for subdivision consent lodged with Council. The subdivision consent is for a boundary relocation, which will see Lot 3 amalgamated with the existing cemetery.
- 3.39 The cattle stop to the entrance of the Te Kuiti New Cemetery is in desperate need of repair. The repair work has now been completed.
- 3.40 The old notice board shelter that was removed from Railway Building 1 has now been repurposed and relocated to the top end of the Te Kuiti New Cemetery. A water tank, fed from the roof, and bench seat must still be completed. This will now provide a sheltered rest area with a hand wash facility.
- 3.41 The sheltered rest area including the bench seat and a water tank has been completed and has been well received by the public.



- 3.42 Pouring of an additional six berms at the back of the Te Kuiti New Cemetery and three berms in the Garden of Memories has been scheduled on February's ISU works program.
- 3.43 The pouring of these berms has now been completed.
- 3.44 Proposed changes to Te Waitere Cemetery have been submitted by the local community in Te Waitere. They include extension of the carpark enabling safer parking off the main road, the construction of an additional shelter/memorial wall

at the north end and mowing strips along and between the graves and berms. A site meeting has been held and discussions continue.

- 3.45 The extension of the carpark and the construction of the shelter/memorial wall have been approved by WDC. WDC has agreed to undertake the carpark extension and the local community are to supply materials and construct the shelter/memorial wall. Health and Safety (SSSP) plans have been requested for the construction process.
- 3.46 The SSSP plans have not been received to date. Construction has not started.
- 3.47 The extension of the carpark has been completed. It is unknown when the new shelter/memorial wall will be constructed.
- 3.48 Three sections of fencing around the Kiritehere Cemetery is to be replaced and the remainder of the fencing tidied up and made good.
- 3.49 **ABLUTION FACILITIES MAINTENANCE**
- 3.50 Condition Assessments for public toilets have been completed. A maintenance program is being developed.

Suggested Resolution

The Progress Report: Public Amenities be received.



GREG BOYLE

GENERAL MANAGER (Acting) - INFRASTRUCTURE SERVICES

5 August 2019

Document No: A439318

Report To: Council



Meeting Date: 27 August 2019

Subject: Progress Report: Recreation and Culture

Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to brief Council on current work streams within the Recreation and Culture Activity.

Background

- 2.1 Waitomo District Council is committed to ensuring that opportunities for recreation and cultural activities are provided within the District.
- 2.2 The Recreation and Culture activity, provides recreation and cultural facilities and opportunities in order to support the health, well-being and social interaction of the community.
- 2.3 The range of recreation and culture facilities provided by Waitomo District Council includes; Waitomo District Aquatics Centre, Community Facilities and the Les Munro Centre.

Commentary

3.1 **LEASE AGREEMENTS**

- 3.2 Lease agreements are required to meet applicable New Zealand legislation such as the Residential Tenancies Act 1986, Property Law Act 2007 and Land Transfer Act 1952.

- 3.3 Reviews on lease agreements are well underway. Leases coming up for renewal are being reviewed and renewed. These are being entered into MagiQ and reminders set. Expired leases are being worked through which will be an ongoing process for some time.

3.4 **COMMUNITY HALLS**

- 3.5 Inspections have been conducted on all council owned halls. Maintenance schedules have been created and prioritized.

- 3.6 Formal agreements are being prepared for hall committees in an effort to create a general understanding of roles, responsibilities and procedures and to operate within a best practice H&S framework.

- 3.7 Draft forms of Agreement for both land leases and Hall Committee Agreements have been developed.
- 3.8 The contact details of WDC owned Hall committees has been updated. WDC will look to engage as appropriate at committee meetings and receive minutes. This has been received well with open lines of communication now developing.
- 3.9 Although regular contact is continuing between WDC and Hall Committees, getting the Agreements signed is proving a challenge.
- 3.10 **MOKAU HALL**
- 3.11 Earlier this month a committee meeting was attended by WDC. The Hall Committee tabled a proposal for the upgrade of the kitchen. The proposal also identified that this section of the hall had outdated electric wiring. This was investigated with an electrician appointed to replace the wiring as a H&S risk mitigation.
- 3.12 The committee is also exploring an option to promote community wellbeing by creating a gym for the local community in the unutilized lower section of the hall.
- 3.13 Fund raising to bridge the short fall of funds is ongoing.
- 3.14 The committee have sourced lining for the Wellness Centre in the basement and plan to have this area lined by the end of the year.
- 3.15 Kitchen renovations will commence early December 2018, with the lowering of the ceiling and rewiring of the kitchen and original hall to address electrical concerns.
- 3.16 The hall has been utilized by the community more frequently over recent months.
- 3.17 The Wellness Centre has progressed to the stage where it can be used by the community.
- 3.18 The committee have had an electrician onsite to discuss the new wiring for the kitchen renovations and the replacement wiring to the small hall adjoining the kitchen. WDC are paying for the upgrading of the wiring to the hall due to the health and safety implications. The kitchen wiring will be paid for by the committee who are currently undertaking fundraising for this project.
- 3.19 This work is scheduled to be completed by the end of this financial year.
- 3.20 The wiring upgrade to the hall has now been completed as has the new wiring to the kitchen area as part of the renovations.
- 3.21 **PIOPIO HALL**
- 3.22 Pricing is being sought to replace the front timber window due to extensive rot and to replace the emergency exit door to Weka Street. Pricing has been received but a review of budgets is still to be undertaken.
- 3.23 The replacement cost of the front timber joinery window has been budgeted for in the 19/20FY.
- 3.24 A revised quote has been accepted for the replacement of the front timber window on the SH side. This window will be replaced with aluminum reducing greatly ongoing maintenance costs and will address health and safety concerns.

- 3.25 Additional pricing is being sought for both the emergency exit doors due to security and health and safety risks.
- 3.26 Both emergency doors have been replaced which will not only make the Hall more secure, but also enable much quicker evacuation in the unlikely event of an emergency during a hall hire that might require an emergency evacuation.
- 3.27 Painting of the timber joinery along the side of the building (Weka Street) has now been completed.
- 3.28 **MAHOENUI HALL**
- 3.29 Damage has been caused internally by a roof leak over the kitchen area. Pricing has been received and the remedial work awarded to a local contractor. This work is due to commence early December 2018.
- 3.30 Work was delayed due to the contractor's work load over the Christmas period and has been rescheduled to early February 2019.
- 3.31 During the roofing works, electrical upgrades will also be undertaken in the kitchen area to address health and safety concerns.
- 3.32 The weathertight issues on the roof have now been addressed.
- 3.33 **Some areas of cladding will be replaced to the inside of the front façade ensuring further the weather tightness and integrity of the building.**
- 3.34 Electrical upgrades to the kitchen area were deemed unnecessary. It is thought the age of some of the appliances may have been causing the electrical circuits to overload.
- 3.35 A quote has been requested for re-wiring of the main hall due to the age of the wiring. This is potential a health and safety risk.
- 3.36 **A quote for the rewiring of the main hall has been accepted and is scheduled to be completed by the end of August.**
- 3.37 Structural concerns have been raised by the committee around the concrete piles of the hall, bathroom and kitchen areas. WDC will engage an engineer's to investigate and report on the structural integrity of the piles.
- 3.38 An Engineer's report has identified several structural issues potentially caused by poor soil conditions and storm water drainage. As remedial action, the runoff from the roof will be diverted to downpipes into the water tank to the rear of the building.
- 3.39 **LES MUNRO CENTRE**
- 3.40 Work is underway to increase water pressure to the three sinks in the kitchen. This involves changing the water cylinder situated on the upper level.
- 3.41 Six new stage boxes have been constructed and are yet to be carpeted. These new boxes are much lighter than the old ones making them easier to move around. This will reduce if not eliminate the damage being done to the hall floor when moving them from the stage. The weight of the old boxes were also a health and safety concern.

- 3.42 This work has now been completed.
- 3.43 The resurfacing of the main hall floor is scheduled to be undertaken mid this month.
- 3.44 The main hall floor has now been sanded and resurfaced.
- 3.45 The Les Munro Centre is listed on the WDC website as an available venue for hire.
- 3.46 Remedial works to the air conditioner platform on the upper roof has now been completed. The cladding and cap flashing has been replaced and painted. Further cladding replacement is still required and pricing has been requested.
- 3.47 A quote has been accepted to reclad a section of the cladding on the upper roof behind the air conditioner unit and is due to be completed early December 2018. The recladding work has been completed.
- 3.48 At the same time an electronic upgrade was completed on the remote access system.
- 3.49 A pull down projector screen has been installed in the supper room and a review of all IT services is being undertaken prior to a hard wired projector being installed.
- 3.50 Pricing is being sought for a hard wired projector/s and additional electronic projector screen/s for the supper room which will provide additional state of the art functionality to the facility.
- 3.51 It has been determined that the significant cost involved in purchasing and installing projectors and additional screens outweighs any benefit. The alternative is to utilize the existing pull down screen and obtain prices for a new protector which can be hired out.
- 3.52 Additional "block out" roller blinds have been installed adjacent the sunscreen blinds in the Supper Room which ensures better viewing of the screen during brighter days.
- 3.53 Pricing is being sought for replacement dining tables. The existing tables are showing signs of wear and tear and are very heavy and difficult to maneuver.
- 3.54 All dining tables, both round and rectangular have been replaced in much lighter and easier to erect tables. The older and heavier tables have been distributed between the Mokau, Piopio and Mahoenui Halls.
- 3.55 Pricing is also being sought for replacement seating in the main foyer as the existing seating is dirty, outdated and very low making it difficult for the elderly to use.
- 3.56 Pricing is still being sought for appropriate replacement seating.
- 3.57 It was decided not to replace the seating in the main foyer, but to recover the seats which has now been completed.
- 3.58 A modem has been installed at the Centre to enable Wifi access to the Internet.
- 3.59 A quote to replace the large roller door, corrugated cladding and pour a small area of concrete below the sheep access door to the rear of the Centre has been

requested. The existing corrugated iron is covered in dents which makes the area look old and unmaintained.

3.60 Once this work has been completed the area will be more robust and less susceptible to damage.

3.61 With the exception of the small area of concrete which is still to be completed, the replacement cladding and both roller doors has be replaced.

3.62 An upgraded audio system has been installed incorporating replacement speakers in the auditorium and new mircophones. This will make it easier for hall users to connect the wireless microphones to the audio system and achieve higher quality sound through the speakers.

3.63 A quote has been accepted for the steel grates running around the exterior perimeter of the building to be sandblasted and galvanized greatly increasing the life of the steel.

3.64 Replacement curtains have been fitted to the stage of the auditorium. These replace the old and faded ones and have had a fire retardant applied to them making them less likely to burn during a fire.

3.65 During a recent service the air conditioner units were identified to have low levels of gas required for both heating and cooling. Due to the age of the units sourcing this gas may prove to be a challenge.

3.66 **RSA MEMORIAL ROCK**

3.67 A proposal was received from the RSA late 2017 for the installation of a memorial rock at the cenotaph area. The RSA were advised by WDC that the size of the rock (4500x2500x2500) was of concern and that it would create a H&S risk. After meeting with members of the Management Board, agreement was reached and a memorial rock chosen and agreed on between the RSA and WDC. A proposed schedule around timing and siting the rock was requested by WDC and a planned unveiling was to co-inside with Armistice Day on the 11th November 2018.

3.68 A Committee meeting was held mid-September to confirm a timeline for the installation of the memorial rock which was likely to be towards the end of October.

3.69 The RSA now proposes to construct a concrete block wall instead of the rock as originally proposed and agreed. This is due to the already manufactured stainless steel wording commissioned by the RSA being too large for the rock. The new "concrete block wall" proposal is yet to be submitted to WDC.

3.70 A three piece pre-cast panel wall has now been proposed by the RSA with further details still to be provided to WDC for approval.

3.71 Regular contact has been made with the RSA to ensure the project maintains momentum, but no documentation has yet been received by WDC from the RSA.

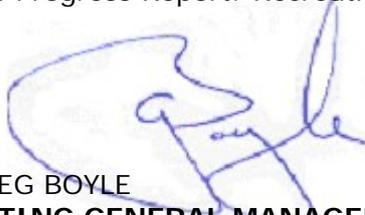
3.72 **WAITOMO DISTRICT AQUATIC CENTRE - 2017/2018 SEASON**

3.73 The Waitomo District Aquatic Centre opened on 1 October for the 2017/2018 season under the management of Contract Leisure Management (CLM). CLM have been managing the operation of the Aquatic Centre since 2015.

- 3.74 The pool was closed down for the winter on 29 April 2018.
- 3.75 Maintenance and upgrade work is scheduled while the facility is closed. This work consists upgrade of the grandstand and replacing the roof sheeting and perimeter wall cladding.
- 3.76 The pool structure was also emptied, inspected and recoated. All operating equipment will also be inspected and serviced during this renewal.
- 3.77 All maintenance work has now been completed including the repainting of both the main and toddlers pools.
- 3.78 The complex reopened 22 October 2018 for the 2018-19 summer season.
- 3.79 The complex is now closed for the winter period, a number of low cost maintenance jobs will be undertaken during this period.
- 3.80 Feedback received in relation to the maintenance work carried out last year has been very positive.
- 3.81 New pool covers have been ordered for both the main and toddler pools. This will replace the old faded and ripped covers and will provide a thicker thermal barrier between the heated water and cooler air temperature reducing heating costs.
- 3.82 Quotes are being sort for additional shade sails to shelter families from the harsh sun while visiting the Aquatic Centre.
- 3.83 Both the pools are currently undergoing paint touchups and line marking down the edge of the pool entry stairs addressing health and safety concerns.

Suggested Resolution

The Progress Report: Recreation and Culture be received.



GREG BOYLE

ACTING GENERAL MANAGER - INFRASTRUCTURE SERVICES

2 August 2019

Document No: A439846	
Report To:	Council
	Meeting Date: 27 August 2019
	Subject: Progress Report: Solid Waste Services
	Type: For Information

Purpose of Report

- 1.1 The purpose of this business paper is to brief Council on the current work streams within the solid waste management portfolio, including contracted services.

Statutory Considerations

- 2.1 Waitomo District Council has a statutory responsibility under the Waste Minimisation Act 2008 to promote effective and efficient waste management and minimisation within Waitomo district, and to review its Solid Waste Management and Minimisation Plan (SWaMMP) no later than every six years. The SWaMMP 2018-2028 is currently in use and is available on WDC's website.
- 2.2 The Waste Minimisation Act 2008 encourages a reduction in the quantity of waste generated and disposed of in landfills, with the aim of reducing the environmental harm of waste while providing economic, social and cultural benefits
- 2.3 A key element of the Act is a waste levy applied to all wastes disposed to landfill. The levy is \$10 plus GST per tonne. The purpose of the levy is to increase the price of waste disposal to better reflect the cost of waste on the environment, society, and the economy and to generate money for waste minimisation initiatives.

Background

- 4.1 The SWaMMP is WDC's "tactical" plan in support of the Council's LTP, with linkages to Council bylaws pertaining to waste management related matters. It represents a combination of the statutory requirement for a waste minimisation plan, and WDC's solid waste asset management plan.
- 4.2 The Waste Minimisation Act 2008 (WMA) requires a waste assessment to be undertaken and used to inform the review of the SWaMMP. The assessment provides the necessary data on waste and diverted material streams to determine priorities. The most recent assessment was completed in 2017 and was made available to the Medical Officer of Health (in satisfaction of the WMA) for review and sign off. The Waste Assessment is also required to be included with Council's draft SWaMMP.
- 4.3 Waitomo District Solid Waste Bylaw 2009 aims to ensure that household waste is reduced, collected and disposed of in the interests of public health and in an efficient and cost effective manner. It provides for the efficient collection and recovery of recyclable waste and management of waste management facilities for the optimum disposal or recycling of waste.

- 4.4 The current funding of Council's solid waste management services is through a combination of general and targeted rates, which cover mainly the original establishment cost and disposal of recyclables, while user charges are used to fund operational costs relating to collection and disposal, structured so that they incentivise waste minimisation practices.

Solid Waste Management

- 5.1 Solid Waste Management is the combination of asset management, financial, engineering and technical practices to reduce and dispose of general refuse and the promotion of waste minimisation.
- 5.2 The Solid Waste Activity provides for education on waste minimisation, collection and separation of recyclables, and the disposal of residual waste to landfill.
- 5.3 WDC is meeting its waste management obligations under the WMA and SWaMMP by providing:
- weekly kerbside refuse and recyclables collection services
 - rural transfer stations, including free recycling services
 - street side recycling units
 - a fully engineered landfill for the safe disposal of residual solid wastes.
- 5.4 The service levels, strategies and information requirements contained in the SWaMMP become the basis for performance orientated contracts let for service delivery. Risks associated with delivery of the collection, waste transfer stations and landfill are mitigated by effective contract management including monitoring of contractor performance and ensuring regular reporting of core service and activity data.
- 5.5 Bi-annual waste audits of the kerbside collection bags have been conducted since 2008 as required by the SWaMMP. The purpose of the kerbside audits is to collect data to monitor the effectiveness of waste minimisation services and to assess waste disposal trends in consumer behaviour. Over recent years, it has been identified that the waste audit methodology needed to be reviewed to ensure the data collected provided the necessary information to measure the success of initiatives to increase diversion and reduce waste to landfill.
- 5.6 **The next waste audit is scheduled for July 2020.**
- 5.7 From recent audits, the amount of organic product going to landfill has been identified as a concern, with increased focus required to improve diversion potential at source, change consumer behaviour and reverse this trend in order to meet KPIs going forward.
- 5.8 **Big Belly Bin Trial**
- 5.9 Big Belly Bins have been trialed over the previous eight months and have provided enough data to prove their cost effectiveness.
- 5.10 The bins are rented from Manco at a cost of \$50.00 per week each and are funded using the MfE waste levy refunds WDC receives.

Description	Litres Deposited Sept 2018	Litres Deposited Oct 2018	Litres Deposited Nov 2018	Litres Deposited Dec 2018	Litres Deposited Jan 2019	Litres Deposited Feb 2019
Running total - litres to date	1,022.00	4,202	6,246	10,561	14,082	15,030
Benneydale	480 (7.9 days)	1,499 (28 days)	454 (20 days)	2,607 (44 days)	1,987 (11 days)	498
Haggas Point Lookout	542 (10 Days)	1,681 (29 days)	1,590 (30 days)	1,708 (35 days)	1,534 (19 days)	450
Total for month	1,022	1,149	2,044	4,315	3,521	948
Description	Litres Deposited Mar 2019	Litres Deposited Apr 2019	Litres Deposited May 2019	Litres Deposited June 2019	Litres Deposited July 2019	Litres Deposited Aug 2019
Running total - litres to date	15,978	17,127	19,511	21,327	23,937	
Benneydale	618	558	1,476	1,362	1,816	
Haggas Point Lookout	633	591	908	454	794	
Total for month	1,251	1,149	2,384	1,816	2,610	

- 5.11 Updated signage has been installed at the unconsented greenwaste disposal site in Mokau. The signage states that Illegal Dumping of Rubbish and Greenwaste is prohibited under the Litter Act 1979.
- 5.12 Hidden surveillance cameras have been trialled at three different sites with evidence showing after-hours activity at the transfer stations. Cameras will now be used randomly across the five transfer Station sites. The intention will be to prosecute offenders whenever possible in an attempt to deter this inappropriate behaviour. Te Kuiti Landfill will also have three cameras installed in the New Year.
- 5.13 **Landfill**
- 5.14 The Waitomo District Landfill has a consented volume of 232,000 tonnes.
- 5.15 A new consent application has been lodged with the regional council that, if granted, will enable the optimised fill capacity to be increased to approximately 420,000 tonnes. The resource consent application was lodged with WRC on 3 May 2019.
- 5.16 Investigations in 2017 confirmed actual landfill fill volume was approximately 173,000m³ (equivalent to 155,000 tonnes) compared to the consent limit of 232,000 tonnes. It was estimated that consented capacity will be reached by 2023. The landfill consent term expires in 2033.
- 5.17 The physical capacity of the landfill will be increased over the next two financial years by raising the design finish level of the current footprint. That will require lining of the corresponding height of the high-wall. The life of the landfill, at current annual fill rates, will be extended to approximately 2044 i.e. beyond the term of the current consent (2033).
- 5.18 The chosen consent renewal option (as per Council resolution) involves renewing the consent to realise the full potential of the investment required (approximately

\$1.5M) to extend fill capacity though to 2044. It avoids the s.128 review process, is no more onerous than a consent variation, provides a longer term without the need to construct a new cell at significant additional capital cost, and best aligns consent life with landfill capacity.

- 5.19 A detailed topographical survey was repeated in July 2019 to determine the actual landfill fill volume to reconcile with weighbridge tonnages. The survey showed that the actual volume of the landfill is 202,000m³, equivalent to 181,000 tonnes. Annual tonnage was 11,100 tonnes, slightly higher than the 9,800 tonnes surveyed in 2017. Annual weighbridge tonnage over the same period was also 11,100 tonnes.

Description	Tonnes Deposited July 2018	Tonnes Deposited Aug 2018	Tonnes Deposited Sept 2018	Tonnes Deposited Oct 2018	Tonnes Deposited Nov 2018	Tonnes Deposited Dec 2018	Tonnes Deposited Jan 2019
Deposited to Date	158,512.50	159,513.28	160,469.26	161,327.45	162,415.67	163,278.92	160,469.87
WDC Bags Collected	1.26	1.20	1.32	1.20	1.18	1.72	1.42
Total over Weighbridge	1059	1085.05	1018.81	929.71	1575.64	933.12	1009.10
Less Diverted Recycle	28.61	41.12	34.32	39.93	468.61	45.13	33.51
Less Stock out Gate	27.75	44.35	29.86	32.79	20.00	26.46	20.42
Total To Landfill	1003.90	1000.78	955.98	858.19	1088.22	863.25	956.59
Tonnage Available Space	73,487.50	72,486.72	71,530.74	70,672.55	69,584.33	68,721.08	67,764.49
Description	Tonnes Deposited Feb 2019	Tonnes Deposited March 2019	Tonnes Deposited April 2019	Tonnes Deposited May 2019	Tonnes Deposited June 2019	Tonnes Deposited July 2019	
Deposited to Date	165,238.95	166,211.28	167,358.19	168,455.27	169,424.68	170,523.78	
WDC Bags Collected	0.79	1.14	0.82	1.14	0.74	0.65	
Total over Weighbridge	1,060.58	1,049.72	1,225.09	1,168.79	1,021.20	1,165.93	
Less Diverted Recycle	34.39	40.50	42.78	42.20	28.05	39.38	
Less Stock out Gate	23.54	36.89	35.4	30.65	26.50	28.10	
Total To Landfill	1,003.44	972.33	1,146.91	1,097.08	967.39	1,099.10	
Tonnage Available Space	66,761.05	65,788.72	64,641.59	63,544.51	62,575.1	61,476	

5.20 Diverted Material

- 5.21 To date a total of **181.55 tons** of recyclables has been diverted from the landfill for this financial year.
- 5.22 Note there was a significant increase in diverted materials during November 2018. This was concrete rubble coming in from the new Te Kuiti Holiday Park site. Large concrete pads were broken up to make way for the developments. Concrete rubble is diverted from the landfill to be reused for internal track/roading hard surfaces.

5.23 Emissions Trading Scheme

5.24 The Government has started on a review of New Zealand's carbon footprint and this may have a more significant impact on the cost of disposing rubbish in the future.

5.25 The impact of this review will be taken into account during the assessment of landfill disposal costs in preparation for the next LTP. Increased waste diversion would help reduce the cost to WDC for carbon credits.

5.26 Health and Safety at Work (Asbestos) Regulations 2016

5.27 The Health and Safety at Work (Asbestos) Regulations 2016 came into effect in April 2016. Under Clause 40 it is a duty of an asbestos removal expert to ensure that asbestos waste is disposed of by depositing it in a place approved for the purpose by a territorial authority under section 73 of the Resource Management Act 1991. Under Resource Consent 101753 Waitomo District Landfill (WDL) is able to accept asbestos waste if it is done in accordance with regulation requirements.

5.28 The current Landfill Management Plan, under which the landfill is operated, includes provisions for ensuring acceptance procedures for all waste types meet resource consent/ regulatory requirements.

5.29 WDC is one of four landfills in the greater Waikato/Coromandel area with approval via resource consent conditions to accept this type of waste.

5.30 WDC is currently not accepting any asbestos waste pending the new consent and associated need for a revised management plan

5.31 Capital Projects

Description	Actual August 2018	Actual September 2018	Actual October 2018	Actual November 2018	Actual December 2018	Actual January 2019
Safety improvements	H&S provided equipment	Awakino safety barrier \$2611.96		\$12,350		
High Wall Safety Work						
Main entrance upgrade Transfer station improvements	\$862.20	\$357.80	Te Kuiti Landfill reseal \$35,993.34		Nil	Nil

Description	Actual February 2019	Actual March 2019	Actual April 2019	Actual May 2019	Actual June 2019	Actual July 2019
Safety improvements						
High Wall Safety Work						
Main entrance upgrade Transfer station improvements	\$8962.53 CCTV camera	Nil	Nil	Nil	Nil	Nil

- 5.32 Safety improvements include all the H&S issues which were identified during the previous 2018/19 period for the Solid Waste assets.
- 5.33 High wall shaping involves the removal and shaping of earth above the Te Kuiti landfill space and is carried out for safety purposes to prevent the potential for landslides and also to manage water ingress into the landfill area. Whilst this work has been completed and the desired outcomes have been achieved for now, the area will require future works to ensure that potential risks are addressed.
- 5.34 Access control at the Te Kuiti landfill has been completed to restrict public entry to the landfill section and better manage H & S risks.
- 5.35 **Contractual Reporting – 0500/16/041**
- 5.36 The following is a snapshot from the EnviroWaste Landfill management contract report KPI score / reasoning PACE evaluation score for year beginning July 2018, is provided in the following table.

Month	Score	%
Jul-18	320	80%
Aug-18	360	90%
Sep-18	380	95%
Oct 18	380	95%
Nov 18	390	98%
Dec 18	400	100%
Jan 19	400	100%
Feb 19	400	100%
Mar 19	400	100%
Apr 19	400	100%
May 19	400	100%
June 19	400	100%
July 19	400	100%

5.37 **Monthly Performance Rating Evaluation Definitions**

Grade	Definition
1	Very Poor – Meeting very few of the requirements of each objective. Not making progress to a more satisfactory level. Unable to provide required outcomes without significant Client or Consultant intervention. >50%
2	Poor – Meeting the requirements of some of the objectives to the minimum specified standard. Making progress towards an acceptable rating. 50 - 69%
3	Marginal / Unacceptable – Barely Meeting objectives to the minimum specified standard. 70 - 75%
4	Good – Meeting all objectives. Delivering better than the minimum specified standard. Consistent best practise methodology being applied. 76 - 89%
5	Excellent – Meeting all objectives. Consistently providing well above the required standard. Proactive in providing value added features, such as pro-activeness, flexibility, identifying and pursuing innovation without Client or Consultant intervention. 90%<

- 5.38 **Contractual Reporting – 500/16/038 – Kerbside And Recycling Collection Contract**
- 5.39 PACE evaluation score for year beginning July 2018 is provided in the following table.
- 5.40 There are no results for May and June 2019 due to staff vacancies.

Month	Score	%
Jul-18	382	76%
Aug-18	340	68%
Sep-18	460	92%
Oct-18	420	84%
Nov-18	460	92%
Dec-18	300	60%
Jan – 19	275	55%
Feb – 19	500	100%
Mar – 19	430	86%
Apr -19	460	92%
July - 19	500	100%

5.41 Monthly Performance Rating Evaluation Definitions

Grade	Definition
1	Very Poor – Meeting very few of the requirements of each objective. Not making progress to a more satisfactory level. Unable to provide required outcomes without significant Client or Consultant intervention. >50%
2	Poor – Meeting the requirements of some of the objectives to the minimum specified standard. Making progress towards an acceptable rating. 50 - 69%
3	Marginal / Unacceptable – Barely Meeting objectives to the minimum specified standard. 70 - 75%
4	Good – Meeting all objectives. Delivering better than the minimum specified standard. Consistent best practise methodology being applied. 76 - 89%
5	Excellent – Meeting all objectives. Consistently providing well above the required standard. Proactive in providing value added features, such as pro-activeness, flexibility, identifying and pursuing innovation without Client or Consultant intervention. 90%<

Service Requests / Complaints

- 7.1 Service requests are initiated by ratepayers or businesses across the District. The Service Requests are then followed up by WDC staff.
- 7.2 It must be noted that almost all Service Request complaints received for kerbside refuse or recyclables not being collected are due to the person placing the bag or recycle bin out too late. Service Requests or complaints relating to Solid Waste operations and/or Solid Waste Assets for 2018/2019 include:

Description	July 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018
Kerbside Refuse not collected	1	3	0	3	1
Landfill Complaint	0	0	0	0	0
Transfer Station Complaint	0	0	0	0	0
Litter Bins not being emptied	0	0	0	0	0
Request for additional service	0	0	0	0	0

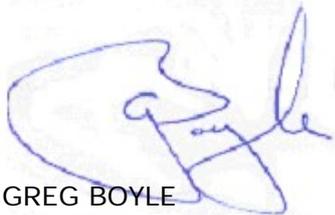
Description	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019
Kerbside Refuse not collected	2	1	7	0	0
Landfill Complaint	0	0	0	0	0
Transfer Station Complaint	0	0	0	0	0
Litter Bins not being emptied	0	0	0	0	0
Request for additional service	0	0	0	0	0

Description	May 2019	June 2019	July 2019
Kerbside Refuse not collected	5	2	1
Landfill Complaint	0	0	0
Transfer Station Complaint	1	0	0
Litter Bins not being emptied	0	0	0
Request for additional service	3	1	1

- 7.3 Non collection is still the main cause of complaint, however this is usually due to people putting rubbish out after the collection has passed or putting commercial quantities of rubbish out.

Suggested Resolution

The Progress Report: Solid Waste Services be received.



GREG BOYLE
ACTING GENERAL MANAGER – INFRASTRUCTURE SERVICES

Document No: A440312	
Report To:	Council
	Meeting Date: 27 August 2019
	Subject: Progress Report: Water Supply, Sewerage and Stormwater
	Type: Information Only

Purpose of Report

- 1.1 The purpose of this business paper is to provide an updated progress report on the Three Waters Activities as set out in Council's Long Term Plan, including contracted services.

Background

- 2.1 The Waters activities are:
1. **Water Treatment and Supply:** Providing for the environmentally safe extraction, treatment and distribution of a potable water for Te Kuiti, Piopio, Mokau and Benneydale.
 2. **Sewerage System, Treatment and Disposal of Sewage:** The collection, treatment and disposal of sewage for Te Kuiti, Piopio, Benneydale and Te Waitere.
 3. **Stormwater:** The collection and disposal of urban storm water.
 4. **Trade Waste:** Management of trade waste discharges from commercial/ industrial premises to ensure the quality and quantity of the discharges do not cause any operational or compliance issues for our network systems and wastewater treatment plants.
- 2.2 WDC's only reticulated stormwater disposal network serves Te Kuiti. Any changes to that will be reported on for other areas as these arise.

Considerations for the Activity

- 3.1 The key drivers of service for each of Council's three waters activities schemes (Te Kuiti, Benneydale, Piopio, Mokau and Te Waitere) relate to health and environmental compliance, sustainability of supply, risks and resilience, storage, flow volumes and pressure.
- 3.2 Customer levels of service (LoS) for Water services focus on "aesthetic" characteristics of water quality - odour, taste, clarity and most important public health by complying with DWSNZ 2005(2008).

- 3.3 LoS for Waste Water schemes relate to reliability of service, public health and environmental protection measured as overflows due to blockages.
- 3.4 Public LoS relating to Storm water include reducing the threat of flooding of property, not posing a risk to the most vulnerable persons in the community, responsiveness to customer services during flood events and managing the adverse effects of SW on the quality of the receiving water.
- 3.5 Environmental LoS for all three activities are mostly of a technical nature, defined through resource consent conditions specific to each scheme.
- 3.6 Each of WDC's Three Waters activities has its own specific characteristics requiring consideration and attention that need to be managed and maintained by Council in order to ensure that LoS are met within all health and environmental guidelines.
- 3.7 The Three Waters activity is by far the most complex and regulated of any of the WDC asset systems to operate and maintain, it has the greatest risk of causing harm to a community from a health and safety perspective if not carried out effectively.
- 3.8 There are four works categories under each of the three Waters activities to maintain all the LoS:
- 1 **Routine Duties:** Routine Operations and maintenance duties and tasks are carried out by trained and competent Water and Wastewater technicians. These duties and tasks are to ensure all treatment plants are operating as per the operations and maintenance specifications.
 - 2 **Planned Maintenance:** Operations and maintenance is the planned servicing of the three waters infrastructure – reticulation, pump stations, cleaning reservoirs, replacing old water meters, hydrants and valves.
 - 3 **Emergency Repairs:** Emergency Repairs are dealt with as they occur. They are usually dealt with immediately, and at times this impacts on the delivery of Planned Maintenance and Service Requests, which is postponed to a later time.
 - 4 **Service Requests:** Service Requests are initiated by Ratepayers or Businesses across the District and are phoned in, emailed or they could be provided to the Customer Services by means of walk-in. Service Requests are logged and forwarded to the Water Services Unit to resolve with the Contractor as a resource as needed.

Service Delivery

4.1 IN-HOUSE

- 4.2 The Infrastructure Services Group provides technical, strategic planning, and operational support to the staff and customers of WDC. The Water Services Business Unit (WSBU) is responsible for two work streams within the water, wastewater and storm water area. This operations and management of all treatment plants and the operations and management of district wide reticulation networks.
- 4.3 The WSBU's core responsibility is to operate and maintain treatment plants in order to provide sustainable water and waste water facilities that operate within national standards as set out within specific consents.

- 4.4 Other responsibilities include but not limited to field sampling, field analysis and laboratory analysis; assist with monitoring and sample preparation to meet the monitoring requirements. To undertake equipment maintenance and calibration and help ensure the continued efficient use of the Laboratory.
- 4.5 The WSBU also contribute to identify projects to maximise the efficiency of the division and continually improve on existing processes.
- 4.6 The three waters reticulation network service delivery is procured externally and managed internally by the Water Operations Manager assisted by an administrator to optimise efficiency and to ensure that LoS requirements are met by cost effective and efficient project management.
- 4.7 An in-house agreement between the Water Services Business Unit (WSBU) and the Manager - Water Services (Asset owner) is in place to provide this service.
- 4.8 Services to be carried out under the agreement include, but are not limited to, the following:

Operational Activities - Water Services	
Water Services Asset Management Team	Water Services Business Unit
Planning, investigation, design, performance and quality monitoring of physical works projects (maintenance and construction), including the administration of professional services.	Reporting to the Manager Water Services on: <ul style="list-style-type: none"> - physical and financial performance of physical works activities; - physical condition of 3-waters assets, including recommendations for maintaining, renewing, enhancing, or disposing of assets.
Preparation of: <ul style="list-style-type: none"> - Project feasibility reports; - Asset management plans; - Work programmes; - Risk management plans. Interpreting condition rating data and applying to programme development.	Gathering and managing information: <ul style="list-style-type: none"> - Carrying out asset condition inspections and ratings, and ensuring all asset data on completed work is kept up to date; - Monitoring, recording and reporting water and wastewater treatment plant performance data ; - Monitoring levels of service and reporting on achievement of key performance measures; - Monitoring, recording and reporting on trade waste discharges. Delivering operations, maintenance and renewals programmes.
Developing, procuring and managing capital physical works activities. Supervising external capital works activities.	Providing support to the WSAMT on physical works activities.
Processing, monitoring and enforcing trade waste discharge consents and calculating monthly trade waste charges for invoicing.	Monitoring and reporting trade waste discharges.

Operational Activities - Water Services	
Water Services Asset Management Team	Water Services Business Unit
Undertaking: <ul style="list-style-type: none"> - Flow modelling studies; - Catchment surveys and catchment management plans; - Water supply safety plans; - Health and safety audits; - Risk management plans. 	Implement, monitor and report compliance with safety and risk management plans.
Preparing and evaluating tenders and monitoring physical works and external professional services activities.	
Interpreting, prioritising and programming recommendations from professional services reports and investigations, including review of asset condition assessment reports.	Monitoring and reporting on asset condition of water and wastewater treatment plants and 3- waters networks
Obtaining building and resource consents.	
Reporting to Waikato Regional Council on consent compliance and related matters.	Monitoring, recording and reporting water and wastewater treatment plant resource consent compliance data.
	Any other activities subsequently requested during the agreement period.

4.9 This Agreement also includes administration support functions. The following table identifies the administration activities:

Administration Activities – Water Services	
Water Services Asset Management Team	Water Services Business Unit
Setting and administering policy and standards, risk, and levels of service.	Preparing rolling maintenance programmes.
Approving, administering and monitoring asset management plans.	Implementing data collection and reporting systems consistent with AMS.
Owning maintenance management systems.	Collecting and reporting maintenance history in agreed format.
Owning infrastructure databases.	Providing data and information to WDC.
Managing WDC's water services budgets.	Reporting expenditure against approved programmes.
Preparing financial assistance claims – Ministry of Health.	Providing monitoring data for WDC annual plan performance measures.
Budget management.	Operating job costing system and report on budget spend
Reviewing and confirming scope of work programmes.	Reporting progress against approved programme scope.
Administering database of tenderers	
Administering and maintaining telemetry / SCADA system	Operating telemetry/SCADA stations
Servicing democracy, including providing customer/ratepayer interface and responding to enquiries.	After hours service arrangements.

Administration Activities – Water Services	
Water Services Asset Management Team	Water Services Business Unit
<p>Undertaking community consultation on work projects</p> <p>Reporting to WDC, WRC etc.</p> <p>General administration duties (e.g., correspondence, record management)</p> <p>Reporting on WDC annual plan performance measures</p> <p>Developing and operating communication plans and strategies.</p> <p>Preparing and administering service agreements or activities with professional services providers (internal and external)</p> <p>Accepting physical works tenders.</p> <p>Ensuring the necessary documentation (e.g. safety plan, programme, etc.) in support of activities or service agreements is in place.</p> <p>Administering TW Bylaw 2006 (amended 2016) and trade waste agreements.</p> <p>Reporting resource consent compliance.</p> <p>Auditing health and safety systems.</p>	<p>General administration duties (e.g., correspondence, record management)</p> <p>General administration duties (e.g., correspondence, record management)</p> <p>Collecting performance data and reporting.</p> <p>Public relations/communications procedures.</p> <p>General administration duties (e.g., correspondence, record management)</p> <p>Administration of TW sampling and testing programmes.</p> <p>Monitoring and documenting treatment plants performance and resource consent compliance.</p> <p>Preparing and administering health and safety systems.</p>

4.10 The WSBU also oversee the external service delivery procured from a Supplier Panel on the basis of set price proposals for a 12 months period. This for the supply of all labour, plant, tools, equipment and materials necessary to repair and maintain the water, sewer and stormwater reticulation network systems to a standard appropriate to their use and in compliance with the appropriate water permits, discharge permits and land use consents.

4.11 The following contracts are currently in place:

- Contract 500/16/045 - WSBU Agreement
- Contract 500/16/036 - Water, Wastewater and Stormwater Reticulation Management Services
- Contract 500/16/042 – Trade waste cleaning

4.12 CAPITAL WORKS

4.13 Capital Works focus is on Renewals and Upgrades on aging or failed infrastructure and is managed and procured by the Water Services team (see item 11.0).

4.14 COMPLIANCE MONITORING

4.15 Compliance monitoring is reported separately.

4.16 PLANNED MAINTENANCE

4.17 The 'Asset Owner' is responsible for managing the effective and efficient day to day maintenance operation of all major equipment forming part of WDC's Water and Waste Water Treatment Plants and Pump Stations through the delivery of the full range of maintenance and repair duties and installation activities.

4.18 REACTIVE MAINTENANCE

4.19 The WSBU is responsible for ensuring any urgent and reactive maintenance work requirements are rectified as soon as possible at a reasonable cost.

4.20 The Asset Owner is notified when and if the repair of the asset could or may require replacement or renewal.

Water – DWSNZ 2005(2008)

5.1 The supply of treated drinking water is a process that takes place from abstraction at the source through to the customer service connection "the toby". To mitigate the risk for public health a number of barriers against risk of potential contaminant are introduced to eliminate, or at least minimise, the risk to acceptable levels.

5.2 For reference to WDC compliance to the Drinking water Standards 2005 amended 2008 please refer to the Addendum – [Section 1](#).

Wastewater

6.1 WDC provides and manages four separate public Waste Water Treatment (WWT) schemes; at Te Kuiti, Benneydale, Piopio and Te Waitere. The largest of these is at Te Kuiti.

6.2 The WWT scheme servicing Waitomo Village is privately owned and operated.

6.3 With the exception of Te Waitere, the remaining three WWT schemes have been upgraded over the past six years, representing a significant contribution towards the social and environmental wellbeing of the associated communities, and the community outcomes for sustainable infrastructure.

6.4 For reference to WDC WWT schemes please refer to the Addendum – [Section 2](#).

Stormwater

7.1 The primary purpose of WDC's Stormwater (SW) infrastructure is to provide protection to residential and commercial property from surface flooding.

7.2 For reference to WDC WW schemes please refer to the Addendum – [Section 3](#).

Trade Waste

- 8.1 The main trade waste dischargers to the Te Kuiti Wastewater system (TKWWTP) are the two meat processing plants - Te Kuiti Meats (TKM) and United Beef Packers (UBP).
- 8.2 Trade waste discharge consents (TWDC's) were agreed with both organisations.
- 8.3 This follows from the first TW Agreement where it was agreed that a review would be held from data obtained through normal operation of the Agreement.
- 8.4 Both Agreements were reviewed and adjustments made and agreed between the parties.
- 8.5 Te Kuiti Meats, in working towards discharging effluent compliant with the agreed discharge quality, has invested approximately \$500,000 towards improvements to their pre-treatment facility and provided regular updates of progress. Currently they are tracking well within their agreed discharge limits.
- 8.6 Agreements has been renewed for both UBP and Te Kuiti Meats.
- 8.7 We are working with HACH Instruments Ltd and Te Kuiti Meats (TKM) to improve the method of collecting trade-waste effluent discharge so both parties are comfortable with the testing results. The results contributes to the calculation of monthly charge fees to TKM. The new improve auto-sampling method and location should be completed by early October 2018.
- 8.8 Installed, commissioned and been operating since November 2018.
- 8.9 TKM are satisfied with the outcome of the new installation. It provides them with useful monitoring information and timely results.

Level of Service (LoS) Drivers

- 9.1 The following LoS drivers define the scope and scale of services that is provided by the activity.
- 9.2 **CUSTOMER EXPECTATIONS**
- 9.3 Customers require that services within the three services activities are provided at agreed levels of service supported through adequate infrastructure maintenance, management and construction services delivered reliably, efficiently and economically.
- 9.4 **ENVIRONMENTAL RESPONSIBILITY**
- 9.5 WDC is required under the provisions of the Resource Management Act to provide all services in an environmentally responsible manner.
- 9.6 **HEALTH AND SAFETY**
- 9.7 The Three Waters activity is by far the most complex and regulated of any of the WDC asset systems to operate and maintain, it has the greatest risk of causing

harm to a community from a health and safety perspective if not carried out effectively.

9.8 Asset management planning addresses WDC's safety obligations through:

- Employing trained and well established operators for all WDC treatment plants
- Adoption of appropriate safety standards for the creation of new assets and implementation of appropriate safety standards for existing assets.
- Specification of works to maintain assets in a safe condition.
- Enforcement of safe operating and work practices.
- Compliance with industry standards and codes of practice.

9.9 EFFICIENCY AND EFFECTIVENESS

9.10 WDC manages the Three Waters infrastructure on behalf of the affected ratepayers. Delivery of agreed LoS needs to be carried out in a manner that can be shown to be both effective and efficient.

9.11 The techniques of asset management support efficiency and effectiveness by:

- 1 Using best practice principles for the employment of a well-trained and managed operations team
- 2 Providing a basis for monitoring asset capacity, performance and utilisation
- 3 Enabling asset managers to anticipate, plan and prioritise asset maintenance and renewal works
- 4 identifying under funding of asset maintenance and replacement
- 5 Quantifying risk, allowing the minimisation of high impact (financial and service level) failures and environmental effects and resulting in savings where asset renovation is less than for replacement
- 6 Extending the life of an asset by optimising maintenance and refurbishment treatment selection.

9.12 CORPORATE PROFILE

9.13 WDC aims to be a customer focused organisation and a good corporate citizen. Effective asset management planning reflects this corporate aim.

9.14 The first step is to identify the key service criteria for each service area from the customer's perspective (the objectives of the services provided) and identify defined levels of performance for key service criteria.

9.15 Asset Managers then plan, implement and control both the technical or outcome related dimensions and the functional or process related dimensions of service levels. These technical and functional dimensions are not always independent of each other. In some cases high technical quality may contribute to high functional quality or vice versa.

9.16 Recognition of the differences and relationships between the technical and functional levels of service is an important part of understanding levels of service.

Typical Technical Levels of Service	Typical Customer Levels of Service
Outcome related - measures define what the customer receives in an interaction with an organisation	Process related - measures define how the customer experience the service
Quality	Intangibles
Quantity	Responsiveness
Availability	Courtesy
Legislative requirements	Assurance (knowledge, trust, confidence)
Maintainability	Empathy (understanding, individual attention)
Capacity	
Reliability and performance	
Environmental impacts	
Cost / affordability	
Comfort	
Safety	
Reliability and performance	

Service Delivery – Considerations

10.1 TE KUITI WATER TREATMENT PLANT

- 10.2 The water treatment process standard requires a 4-Log protection level. The existing noncompliance is due to a technicality (each water filter within the TKWTP (4) must be fitted with its own turbidity meter to measure the operation of each of the four filters) resulting in technical non-compliance for Protozoa treatment, although the physical barrier for actual protozoa removal is in place.
- 10.3 The four turbidity meters have been installed, commissioned and calibrated with the completion of Phase 1 of the TKWTP upgrade. Verification for accreditation purposes by the Water Assessor and finalization of the Water Safety Plan is in progress.
- 10.4 Progress has been made to provide better and improved monitoring and recording all required parameters on the SCADA system to show compliance with bacteriological and protozoan criteria. These includes: -
- Chlorine residuals on final water leaving treatment plant
 - Turbidity on inlet/outlet for all four filters
 - Turbidity on final water leaving the treatment plant
 - pH on settled and final water leaving the treatment plant
 - UV system monitoring parameters, such as UV Intensity, UV Transmittance, UV dosage, Flow rate through each unit, Lamp outage, and Operating hours of each lamp.
- 10.5 The above will provide the log credit removal required to comply with the Health (Drinking water) amendment Act 2007 and its Drinking Water Standard.
- 10.6 In addition, the compliance certificate has been issued for the 2 Ultraviolet disinfection reactors.

- 10.7 As reported to Council prior work on Phase 2 of the upgrade, namely the Raw Water Intake Contract, has been hampered by high river levels. On 6 July 2018 the contractor managed to de-sludge the construction area and was ready to do the piling. Unfortunately heavy rains on the 7 and 8 July lead to a rise in river levels again and the area flooded. This has now been cleaned out again and the contractor is ready to do the piling and base.
- 10.8 The Raw water Intake (phase 2) was completed at the end of October 2018. (Detail updated, see Item11.0)
- 10.9 The Electrical and Mechanical consultants are currently reviewing the functional description and will implement all plant operational and compliance set point for all monitoring devices in the next couple of next months.
- 10.10 The functional description of the WTP is now with WDC staff to review and will implement when the cost is provided by the SCADA contractor. WDC has worked through the functional description of the plant with Alf Downs, the SCADA service provider. The WDC operators are now working through the new changes to ensure they achieve the necessary outcomes.
- 10.11 Work on the UV disinfection system to ensure compliance with current New Zealand Drinking Water Standard is almost completed. This will ensure the UV system is monitored, trended, alarmed and recorded for operational and protozoa compliance purposes.
- 10.12 All the required parameters for Monitoring, reporting and compliance with NZDWS has been complete in Mid December 2018. We are now monitoring to ensure the devices install are providing the required information.
- 10.13 I have informed the Ministry of Health, through Drinking Water Assessor in Hamilton of the completed project.
- 10.14 From December 2018 till Early February 2019, we experience Water quality problem in Te Kuiti due to taste and Odour in our drinking Water. We have mitigated the cause of the problem but are investigating to avoid similar occurrence in the future. A report is been developed.
- 10.15 WDC Councillors visited the site in March 2019.
- 10.16 The majority of the upgrade capital work has been completed. Minor alterations and improvements are currently being worked through. The minor works will be completed before the end of 2018/19 financial year.
- 10.17 The draft Water Safety plan prepared by Opus International Consultants on WDC's behalf is being reviewed before will be submitted to the MoH Drinking Water Assessor for assessment and approval.
- 10.18 The plant has operated satisfactorily over the previous three months.
- 10.19 The treatment plant was commissioned on 10 July 2019 by Alf Downs and Waters Business Unit Staff
- 10.20 The commissioning was based on the new upgrade, its new functional description and the method of operations of the plant Practical Completion certificate was issued to Alf Downs on the 11 July following the commissioning work.
- 10.21 Opus International Consultants have now been tasked to review and upgrade the new Water Safety Plan because of the new treatment processes and functions.
- 10.22 Work is still continuing to improve water quality monitoring, recording and reporting. This will be achieved by improving our instruments ability to monitor, measure accurately and record all parameters as per drinking water standards

requirements. This will also involve setting up all CCP (Critical Control points) ensuring the CCP are not breached and alarms are sent to duty operator to remedy.

- 10.23 WDC is also exploring other alternative service providers for our SCADA and Telemetry systems.
- 10.24 Filter No#1 is currently off line due to damaged filter nozzles resulting in sand been pushed down into the filtered clear water compartment. Work is progressing to have the sand cleared from the compartment and nozzles fixed and sand refill back into the filter. Work is likely to be completed by the end of August 2019.
- 10.25 No major issues with the reticulation network system were experienced during July 2019

10.26 BENNEYDALE WATER TREATMENT PLANT

- 10.27 The water treatment process does not meet the NZDWS which requires 3-Log level of protection.
- 10.28 The WTP UV treatment component needs to be certified to meet the required level of DWS log credits. We are finalising a Bursen UV system approved contractor to certify the system. – Not yet approved
- 10.29 We are incorporating in the SCADA system UV system monitoring parameters, such as UV Intensity, UV Transmittance, UV dosage, flow rate through each unit, lamp outage, and operating hours of each lamp. These will provide the log credit removal requirements
- 10.30 All the required parameters for monitoring, reporting and compliance with NZDWS has been complete in Mid December 2018. We are now monitoring to ensure the devices install are providing the required information.
- 10.31 The Ministry of Health, through the Drinking Water Assessor in Hamilton, has been advised of the completed project.
- 10.32 Verification for log accreditation by the DWA and finalization of the Water Safety Plan is in progress.
- 10.33 Application to classify this supply as a Section 10 Small Water Supply in terms of the DWSNZ is planned and the DWA has been informed of the intent.
- 10.34 The WSP has to be scrutinised by the DWA. For the Waikato Region there is only one qualified DWA and a trainee DWA and in satisfying the work load the Waikato DHB engaged and ex-DWA as consultant to assist with the WSP submissions from the various Councils.
- 10.35 The Draft Benneydale Water Safety Plan (WSP) has been completed after adding additional information that was required by the Drinking Water Assessor (DWA) consultant.
- 10.36 On the 6 July WDC were informed by the Health Protection Officer of Population Health - Waikato District Health Board that the submitted WSP has been approved with minor recommendations.
- 10.37 Work on the UV disinfection system to ensure compliance with current New Zealand Drinking Water Standard is almost completed. This will ensure the UV system is monitored, trended, alarmed and recorded for operational and protozoa compliance purposes. (see item 10.18 & 10.19)

- 10.38 The filter media has been replaced and changed to include new pumice and granulated activate carbon media for adsorption process. These media changes will allow more effective removal of in-organic particles in the water supply. Other work includes emptying and cleaning out the settled sludge, grit, and sand out of the two settling tank including repairing damaged uPVC pipes inside both tanks.
- 10.39 The plant has operated satisfactorily over the previous three months.
- 10.40 Treatment plant continues to operate well.
- 10.41 The media inside the filter was replaced in June 2019.
- 10.42 Improvements to water quality instrumentation and monitoring of operational and compliance parameters needs to be installed and linked to our telemetry and SCADA system. This is planned for 2019/20 financial year.
- 10.43 The above will also include setting CCP (Critical Control points) and monitoring to ensure the CCP are not breached.
- 10.44 There have been no major issues with the reticulation network system during July 2019.

10.45 PIOPIO WATER TREATMENT PLANT

- 10.46 The new plant meets the Drinking Water Act requirements.
- 10.47 However, it regularly fails compliance for technical reasons as the system controlling analysers are also used as the compliance monitoring analysers and this causes non-compliance through normal operational monitoring and process control.
- 10.48 It is for this reason that the WTP will be monitored manually and reported as such to the DWA.
- 10.49 An updated Water Safety Plan is being drafted to confirm the robustness of the safe drinking water supply to the residents.
- 10.50 Application to classify this supply as a Section 10 Small Water Supply in terms of the DWSNZ is planned and the DWA has been informed of the intent.
- 10.51 The Draft Piopio Water Safety Plan (WSP) has been completed after adding additional information that was required by the Drinking Water Assessor (DWA) consultant.
- 10.52 On the 6 July WDC were informed by the Health Protection Officer of Population Health - Waikato District Health Board that the submitted WSP has been approved with minor recommendations.
- 10.53 Old and blocked membrane modules (18 of) was replaced with new ones installed end of August 2018 and now operating effectively. We have also created extra monitoring parameters on SCADA allowing the water techs to monitor and show compliance with effective operations of the membrane. This will ensure log 3 credit removal is taking place.
- 10.54 We are also in progress to ensure pre-treatment, chemical coagulation/flocculation and sedimentation is effectively operating.
- 10.55 Monitoring of these required parameters on SCADA will show compliance. This will also give us additional log 3 credit removal.

- 10.56 The Waikato District Health Board, Drinking Water Assessor (DWA) will be visiting all the Water Treatment plants on the 13 September 2018 to confirm what we are implementing to show bacteriological and protozoan compliances.
- 10.57 The DWA visited the plant to assess the competency of WDC staff on instrument verification and calibration for the plant. DWA assessment of the plant was very good and found no issues.
- 10.58 The Piopio WTP plant is operating well and has been meeting the protozoa 4 Log credit removal over the previous three months.
- 10.59 Cleaned out backwash settling pond.
- 10.60 Started installing 1 x turbidimeter to monitor and measure final water leaving the plant to comply with NZDWS (NZ Drinking water standard)
- 10.61 The membrane plant is operating effectively.
- 10.62 Improvements to water quality instrumentation and monitoring of operational and compliance parameters needs to be installed and linked to our Telemetry and SCADA system as has been planned for this financial year.
- 10.63 The above will also include setting CCP (Critical Control points) and monitoring to ensure the CCP are not breached.
- 10.64 The new reservoir was completed last financial year and is working effectively. A security gate has been installed to prevent unauthorised access onto the reservoir. Safety and NO Unauthorised Entry signs have arranged and will be installed.
- 10.65 There were no major issues with the reticulation network system
- 10.66 MOKAU WATER TREATMENT PLANT**
- 10.67 The WTP does not currently achieve the Log 4 protection requirement. The plant incorporates both chlorine and Ultra-Violet disinfection treatment processes to disinfect the treated water that allows safe drinking water to the community. The source water has a high concentration of iron and the treated water is aesthetically affected by colour, taste and odour.
- 10.68 The existing WTP process requires further optimisation to meet Drinking Water Act requirements. This is in progress with the certification of the UV component and the implementation of the treatment process changes.
- 10.69 Application to classify this supply as a Section 10 Small Water Supply in terms of the DWSNZ is planned and the DWA has been informed of the intent.
- 10.70 All of the WTPs, but especially the Te Kuiti WTP, are very complex to operate. The monitoring of operation and quality, recording, collation and reporting of the WDL delivery will be as complex, if not more so, than the actual operation.
- 10.71 A new Water Safety Plan will be developed after completion of the optimisation of the plant will form part of the submission to the DWA for verification of the log credits.
- 10.72 The new upflow clarifier has been installed and is undergoing performance testing.
- 10.73 The clarifier is now operating but still require Water Techs inputs, as it not performing well just yet.
- 10.74 A minor WTP modification is required to bring the turbidity analyser in line with requirements.

- 10.75 In order to comply with Log 4 credit removal, we are making good progress to ensure all compliance monitoring parameters are monitored and recorded. These include:
- Chlorine residuals on final water leaving treatment plant
 - Turbidity on inlet/outlet for filter
 - Turbidity on final water leaving the treatment plant
 - pH on settled and final water leaving the treatment plant
 - UV system monitoring parameters, such as UV Intensity, UV Transmittance, UV dosage, Flow rate through each unit, Lamp outage, and Operating hours of each lamp.
- 10.76 The above will provide the log credit removal required to comply with the Health (Drinking water) amendment Act 2007 and its Drinking Water Standard.
- 10.77 Work on the UV disinfection system to ensure compliance with current New Zealand Drinking Water Standard is almost completed. This will ensure the UV system is monitored, trended, alarmed and recorded for operational and protozoa compliance purposes.
- 10.78 All the required parameters for Monitoring, reporting and compliance with NZDWS has been complete in Mid December 2018. We are now monitoring to ensure the devices install are providing the required information.
- 10.79 I have informed the Ministry of Health, through Drinking Water Assessor in Hamilton of the completed project.
- 10.80 The Water Storage Dam liner membrane was damaged late in October 2018.
- 10.81 Water use restriction notice was implemented to conserve water whilst the repair work on the dam is been undertaken.
- 10.82 The Consultants (that was responsible for the original design of the structure) was appointed to investigate and provide a design and methodology of repairing the dam embankment.
- 10.83 Repair work commenced on 12 November 2018 after the health and safety plan (SSSP) was reviewed and approved. This also included correct methodology of work carried out in accordance with the consultant's report (Tonkin & Taylor).



Work underway



Tomo showing after pond emptied



Bottom storage dam (drained out)



Top raw water dams

- 10.84 Repair work was completed second week of December 2018.
- 10.85 The Dam was topped up and was in use when the capacity was at 80%.
- 10.86 There seems to be a very small leak as it is evident from the seepage pipework. However, due to the importance of supplying the township of Mokau, it was decided to leave the investigation until the high demand is over around winter months.
- 10.87 Lower Dam monitoring of small leakage is on-going
- 10.88 All three dams have sufficient stored water.
- 10.89 A proposal to upgrade the treatment plant has been completed and is with Greg Boyle, Special Projects Coordinator, for peer review before finalisation of the design.
- 10.90 New computer was installed at the plant to provide more effective an efficient monitoring of the plant performance.
- 10.91 Two top dams are at full capacity.
- 10.92 The bottom dam still has some seepage coming out from under the dam. The dam was recently emptied again and CCTV was used to try and identify where the leak was coming from but could not be located. So the decision has been made to have the dam filled again to cater for coming summer.
- 10.93 Improvement to water quality instrumentation and monitoring of operational and compliance parameters needs to be installed and linked to our Telemetry and SCADA system has been planned for this financial year.
- 10.94 The above will also include setting CCP (Critical Control points) and monitoring to ensure the CCP are not breached.

10.95 A new proposed design has been drawn up to be peer reviewed before implementation.

10.96 There have been no major issues with the reticulation network system

10.97 TE KUITI WASTEWATER TREATMENT PLANT

10.98 The management of the sludge management responsibility has been inconsistent. To address this a new arrangement where the Asset Owner is now responsible for the operation of the sludge press equipment. The dredge and sludge press had to undergo significant maintenance work to bring the equipment back into a state of reliable operation. The sludge handling capacity will also be expanded to include bacterial sludge management for areas that the dredge equipment cannot reach. The loading on the sludge pond has been lessened as the sludge waste has been redirected to another pond until the level of sludge in the sludge pond has been brought under manageable levels.

10.99 Planned maintenance of the major plant is under way.

10.100 Service on two of the submersible aerators have been completed.

10.101 The ultraviolet disinfection reactors are scheduled for their annual service. This will involve stripping and cleaning all the parts, checking for any damage and recalibrating the lamps and sensors.

10.102 All operational and resource consent conditions are being complied with.

10.103 SLUDGE TREATMENT

10.104 Sludge treatment is progressing well. In October a total of 500 tonnes of dried sludge was removed from the settling ponds, pressed and transferred to the landfill.

10.105 A minor improvement to the existing sludge press pipework was carried out to prevent blockages which can stop sludge production. (See photo)

10.106 The improvement was made as the previously installed outlet pipe system was blocking up due to sludge build up around the outlet.

10.107 Sludge Treatment been operating well this period, removing approx., 173 tonnes of dried sludge to the landfill in January 2019

10.108 The dredge electrical cable was damaged again but was quickly repaired. Investigations are on-going to prevent recurring

10.109 There are ongoing operational matters leading to ineffective sludge management.

10.110 The sludge recovery operations have been interrupted due to a mechanical problem with the sludge press.

10.111 The press has been dismantled due to the micro-screen being damaged by high abrasion wear and tear.

10.112 A new micro-screen has arrived and we are now planning to have the press reassembled.

10.113 We plan to have an expert arriving week beginning 19 Aug 2019 to help WDC staff reassemble the press

10.114 PIOPIO WASTEWATER SYSTEM

- 10.115 The Piopio Waste Water System was completely upgraded from the previous on-site privately owned domestic septic tank non reticulated disposal system.
- 10.116 Design work and construction for the reticulation and treatment plant was implemented over several years prior to this.
- 10.117 After completion the Supplier and main Contractor, Innoflow, operated the system until 2014 when WDC took over from Innoflow when the operations and maintenance contract ended and WDC decided not to renew it.
- 10.118 At that time WDC incrementally assumed responsibility of other treatment plants from the previous contractor, notably the newly upgraded Te Kuiti Waste Treatment Plant. The plan was that spare capacity was potentially available and the additional time could be used to maintain and operate the Piopio Waste Water System.
- 10.119 After carrying out preventative maintenance to most of the on-site (residential) systems, WDC are producing excellent quality discharge and complying with the plant discharge consent conditions.
- 10.120 This plant is operating satisfactorily and meeting its consent conditions.
- 10.121 Improvement to monitoring of several operational and compliance parameters needs to be installed and linked to our Telemetry and SCADA system, as has been planned for this financial year.

10.122 TE WAITERE WASTEWATER

- 10.123 The Te Waitere Waste Water Discharge Consent has been successfully renewed for a further 25 years.
- 10.124 In addition the consent makes provision for expansion of the scheme.
- 10.125 The soakage field shows signs of failing and there is no spare capacity in the scheme.
- 10.126 Should Te Waitere show an increase in development a larger, new or refurbished soakage field will be required as a minimum requirement of the next consent.
- 10.127 The existing soakage field size is based on the existing dwellings, boat amenities and public toilets plus an increase of eight dwellings for future growth.
- 10.128 The Te Waitere sewer pump has been replaced.
- 10.129 No issues have been experienced with this system during the July/August 2019.
- 10.130 There have been two properties connected to the wastewater network system during the July/August period.

10.131 TE KUITI WASTE WATER NETWORK

- 10.132 The part of the sewer trunk main located in Taupiri Street is in poor condition.
- 10.133 This sewer trunk main transports sewage from Te Kuiti to the main sewer pump station. It also transports the sewer from both meat works and the industrial area.
- 10.134 This pipe is also in excess of 2 meters deep and runs along the centreline of Taupiri Street.

- 10.135 To enable the replacement of this pipe, a bypass pipe is required to carry the sewer while the old one is replaced.
- 10.136 As the traditional open trench method is very destructive to existing infrastructure, like roads and other utilities, the method to replace the old pipe will be to insert a smaller diameter continuously welded PE pipe into the old trunk main.
- 10.137 The sewer trunk main must remain in operation and therefore a temporary bypass line equal in capacity to at least the average daily dry weather flow will be required.
- 10.138 As the bypass pipe will have sufficient capacity to function as a standalone trunk main during normal operation, the main trunk main will not be required to be the same diameter as it originally was designed to be the only trunk main, as the sewer flows will be split between the 2 trunk mains.
- 10.139 This will provide future flexibility and robustness for increased capacity, as well as better maintenance when the trunk mains require flushing out, etc.
- 10.140 The first section of the bypass pipe that will be proposed is from the main sewer pump station along Hinerangi Street to Alexandria Street and then tie back into the Taupiri Street trunk main.
- 10.141 A survey and design has been initiated to confirm the feasibility of this project along that alignment.
- 10.142 The Taupiri Street Wastewater pipe network upgrade project has been successfully procured, awarded and is underway.
- 10.143 All pump stations are regularly inspected and maintenance work undertaken.
- 10.144 All sewer pump station have been operating well
- 10.145 There have been several sewer overflows due to recent heavy rainfall events, but always attended to within WDC's target response times to minimise impact on environmental and public health issues.
- 10.146 Remedial work was carried out on a sewer main within SH3 (Carrol street).
- 10.147 TE KUITI STORM WATER**
- 10.148 No matters to report on.

Capital Projects

11.1 WATER

11.2 TE KUITI

- 11.3 The majority of capital upgrade projects originate from work identified in the Te Kuiti urban area.

Water Treatment Plant Upgrade				
Phase 1				
Te Kuiti WTP Upgrade	Rebuild Water Treatment Plant	Completed		

Phase 2		
New Intake Structure	Construct a new raw water intake structure	<p>Delayed due to the river level being too high to construct the coffer dam. There is a high risk of flooding the work. Although this work did commence, the river level is still a cause for major health and safety concern. A coffer dam is being built at additional cost to be able to work in relative safety. The contractor is investing in additional equipment to complete the work at his own cost.</p> <p>Progressing</p> <p>Work is now progressing very well. The intake pump and valve chambers is been installed.</p> <p>The electrical and control conduits and cables are been installed.</p> <p>The intake screen been installed, the air compressor has been installed. All the associated valves and pipe work, including electrical work has been completed.</p> <p>The intake system was commissioned recently end of October 2018 with success and currently operating.</p> <p>Finalizing and documentation been completed for total completion of project.</p> <p>Completed</p>
Phase 3		
Old Building Demolition	Remove old building to make way for new driveway entrance and chemical tanker fill area	Completed
Entranceway	Reinforced concrete driveway and chemical bunded fill hard stand for trucks	<p>Contract now completed.</p> <p>Entrance and exit gates has been procured to finalise site security and access control.</p> <p>Work has just begun, with the two main entrance. The cables and electronic gates should be completed by end of next week (14 Sept 2018)</p> <p>The installation of the entry gate to be complete by end of November. The treatment plant perimeter fencing to be completed end of November 2018.</p> <p>Completed</p>
Refurbishment of Clarifiers	Cleaning, condition assessment and epoxy coating of clarifiers	This contract has successfully been completed.
Phase 4		
Te Kuiti WTP	Refurbishments of Filters 3 & 4	Completed

11.4 All completed and commissioned.

Te Kuiti Water Treatment Upgrade		
Total Approved Tender cost \$	Project Actual Cost \$	Variance \$ (+/-)
\$7, 466, 584.00	\$8, 009, 046.29	-\$542, 462.29

Water Reticulation Renewals		
Hetet Street Main Replacement	Replace 100 mm FC main in Hetet Street	Contract now completed
Henderson and Earl Street	Complete ring main feed from Earl Street to Henderson Street	Contract now completed
Edward Street Main Replacement	Replace 100 mm FC water main in Edward Street	Tender documents being drafted and the project will start in the next financial year. Funding will have to be carried over for this project into the next financial year.

Reservoir Seismic Strengthening		
Seismic Strengthening: Mangarino Reservoir	Clean out cracks and seal, condition assessment, replace valves	To be programmed

11.5 BENNEYDALE

- 11.6 Provision has been made for unforeseen renewals and capital works that may arise. Overall the Benneydale WTP and reticulation is in very good condition with the reticulation and the WTP renewed less than 10 years ago.

Benneydale Water Renewals
Nothing planned for this Financial Year

11.7 PIOPIO

- 11.8 The Piopio reticulation is scheduled to be renewed as per the LTP. To do this renewal without major shutdowns affecting the whole town some preparation work is required to allow supply from other mains to reduce the affected properties.

Water Reticulation Renewal		
Tui Street Ring Main Feed	Complete the Tui Street to Moa Street ring main and build a new pipe bridge across the Kuratahi Stream	Tender documents are being drafted. This work will only be able to be started in the next financial year and the current funding will have to be carried over into the next year. This capital works project to be implemented this FY 2018-19. The tender document has been finalized and uploaded on Tender link. This project will not be implemented this FY due to unavailability of funds.
Water Reservoir Replacement	Supply, installation and commissioning of a 500 000l reservoir	The tender for the Piopio reservoir replacement has been awarded.

Water Reticulation Renewal		
		<p>Work will commence after all contract documentation and insurance is received by Council and approved. This includes all health and safety documentation. Design is underway at this stage, Plan for the contractor to be onsite in end of February 2019 to start.</p> <ul style="list-style-type: none"> • The project is almost completed. • Reservoir is completed • All Pipework is completed • Valves and Magflow meter is completed • Disinfection and de-chlorination is completed • Water samples were collected this week and waiting for results, before final inspection and connection to town supply system.

11.9 All completed and commissioned

Name of Capital Project	Total Approved Tender cost \$	Project Actual cost \$	Variance \$ (+/-)
Piopia Water Reservoir Upgrade	\$324, 776.88	\$342, 230.01	-\$17, 453.13



11.10 MOKAU

11.11 The Mokau Water Reticulation has been identified as being in poor condition with several major bursts occurring during September 2016. This prompted a condensing of the Renewal programme that saw the main along North Street being replaced from Oha Street to Rerenga Street, a distance of approximately 550 meters.

Water Reticulation Renewal		
Tainui Street	Replace 100 mm FC main in Tainui Street. This is the second phase in the water main renewal programme	<p>Tender documents in progress. This project will be done in conjunction with the Aria Terrace project scheduled for next year to combine the work. This is to allow savings in the establishment and disestablishment of the contractor's costs. Current year funds will have to be carried over for the next financial year.</p> <p>This tender for the capital works project has been delayed due to need for further investigation into asset condition.</p>

11.12 WASTEWATER

11.13 TE KUITI

- 11.14 The upgrade of Te Kuiti WWTP was completed about 4 years ago. Most of the optimisation has been completed and the plant is treating waste water to the consented standards

Waste Water Treatment Plant		
Oxidation Pond Aeration	Improve the aeration in the oxidation pond. The first aerator was installed with a further 5 to be added. This will allow algae growth control as well as improve pre-treatment of the returned liquid.	Programmed for 2018. This work has not progressed and has been put on hold for the time being.
Chemical tank bunded fill area	Chemical bunded fill hard stand for trucks. This is a Health and Safety requirement	The tank installation and dosing pump connecting up is complete.
Storage Shed	Storage area of equipment	This work is completed.
Waste Water Reticulation Renewal		
Carroll Street Sewer Replacement under Railway	Insert a new continuous PE pipe into the old concrete sewer main	This work is completed.
Sewer Replacement under the River	Drill and pull a new 180 mm under the river to replace the leaking old 150 mm FC inverted syphon.	Completed.
Taupiri Street Augmentation	Install a new 350 mm sewer main along Hinerangi Street from Taupiri Street to the main pump station	<p>Contract awarded.</p> <p>Work was stopped due to health and Safety concerns that were raised.</p> <p>Work has re-commenced after all identified H&S issues were addressed and mitigation put in place.</p> <p>Progressing but almost completed.</p> <p>Project completed</p>

Name of Capital Project	Total Approved Tender cost \$	Project Actual cost \$	Variance \$ (+/-)
Te Kuiti Taupiri St. Reticulation Upgrade	\$399, 078.75	\$373, 155.35	+ \$25, 923.40

11.15 BENNEYDALE

11.16 Provision has been made for unforeseen issues that require attention.

11.17 PIOPIO

11.18 The UV disinfection unit was completely rebuilt to get the E.Coli control back to Discharge Consent limits.

11.19 TE WAITERE

11.20 A new pump is being installed at the main pump station.

11.21 STORMWATER

11.22 TE KUITI

11.23 The Te Kuiti Storm Water Network has been designed for a 1:2 year rainfall event. Overall the system copes very well and improvements have seen a reduction in flooding areas. A Flooding Model was developed and the only major flooding area was identified as a section of flat ground along Waitete Road near Farmland and Hynds. The design calls for a 1,200 mm diameter storm water pipe from the farm beyond the rail line to the Mangaokewa River. The existing pipe changes from a 1,200 mm diameter to a 600 mm pipe under Waitete Road and this will be upgraded.

Storm Water Reticulation		
Waitete Road Augmentation	Install an additional 600 mm storm water pipe alongside the existing to improve drainage	Tender documents are being drafted This capital works project to be implemented this FY 2018-19. The tender document has been finalized and uploaded on Tender link Tenders have been received and reviewed by tender evaluation team (TET). Work deferred to the next financial year.
View Road Augmentation	Install a wingwall, complete pipe work and install connecting pipes to design size	This project has been completed and is working well.
Hospital Road Extension	Install a 600 mm stormwater pipe to eliminate health and safety issues at an open drain.	Tender documents are being drafted This capital works project to be implemented this FY 2018-19. The tender document has been finalized and uploaded on Tender link. Tenders have been received and reviewed by tender evaluation team (TET). This project has been canceled

General

12.1 TE KUITI WASTEWATER

12.2 A proposed variation to the Te Kuiti Waste Water Treatment Plant Effluent Discharge Consent Conditions has been made. This has come about due to the cost and practical implications for certain consent conditions. In particular one of the conditions is to do a fish migration study from the discharge point at the Te Kuiti Aerodrome all the way up the Mangaokewa from its origin and including all the tributaries.

1. It was agreed that an in-house assessment with the aid of a methodology (currently under review by NIWA) can be used.
2. In addition the Te Kuiti Waste Water Treatment Plant bore assessment can be conducted by consultants other than NIWA. This was completed by Tonkin + Taylor at a reduced cost.

12.3 TE KUITI WATER

12.4 An alternative source water supply investigation is underway. The initial project scope was to investigate the feasibility, and subsequent siting, of a suitable off-stream storage dam upstream of the Te Kuiti Water Treatment Plant.

1. A trial, reported on separately, is under way to treat the river abstracted water for iron and manganese removal and this appears to be successful.
2. A change in scope has been done to locate a suitable underground source and this was completed recently. The report from Tonkin + Taylor is submitted as an Annexure to this report.
3. The findings of this desktop study are encouraging with a plentiful supply potentially available in relative proximity to the Te Kuiti WTP.
4. In 2004 a trial bore was sunk near the Mangarino Reservoir that is being investigated for a change in condition and flow, as well as water quality.
5. This bore had a high Iron and Manganese content.
6. The existing bore trial tests were unsuccessful, with the bore casing found to be leaking and much shallower than the recorded depth, potentially reflecting bore collapse.
7. A new investigation bore was sunk at Te Kuiti domain to ascertain the depth and yield of a limestone layer that was expected to be water bearing. Ultimately, the drilling was terminated at a depth of 69m due to being unable to locate the target aquifer and with no evidence found of the recorded geology. This investigation bore will now become a monitoring bore for the purpose of the next stage of investigations.

12.5 WATER METER READING

1. Water meter readings commenced this week and will be completed in the next 3 weeks.
2. The water meter reading system will automatically produce a report on-site if the reading is abnormal, (10% over previous reading). This will then flag

that particular meter for follow up for a possible leak. This system provides the opportunity for the operator to check the reading onsite and should reduce reading errors.

12.6 NZDWS COMPLIANCE

1. Drinking Water Assessor visited the water treatment plants to familiarised with the processes and understand what we are doing to improve our reporting. He also assessed all our four WDC staff on the competency of instrument verification and calibration.
2. Ministry of Health through the Drinking Water Assessor (DWA) has now approved all the water operators as competent to Verify, calibrate and carry out water sampling and analysis.
3. The DWA will be visiting the Treatment Plants to carry out audits for Piopio and Benneydale Water Safety plans before the end of May 2019.

12.7 QUALITY MANAGEMENT SYSTEM (QMS)

1. A QMS system is under development to document how we do things for the Water and Wastewater Treatment and pipe network. This includes: -
 - a) Standard Operating Procedures
 - b) Plant functional descriptions
 - c) Plant layout or schematics
 - d) All plant Critical Control Point (CCP) and how to manage each CCP.
2. WDC is developing SoP's for all critical control points. The finalised SoPs are being implemented by the Operators.

12.8 TRAINING

1. Upskilling staff on troubleshooting, process related issues, legislative and issues related in specific treatment issues are being undertaken. This onsite training has improved technician participation and encouraged staff to strive for higher achievements.

Suggested Resolution

The Progress Report: Water Supply, Sewerage and Stormwater, dated 27 August 2019, be received.

GREG BOYLE

ACTING GENERAL MANAGER – INFRASTRUCTURE SERVICE

27 August 2019

Addendum - Complying to DWSNZ 2005 (2008)
--

Complying to DWSNZ 2005(2008) – Water Treatment plant Compliance

1.1 Drinking Water Standards 2005 (Amended 2008)

1.2 The Health (Drinking Water) Amendment Act 2007 amended the Health Act 1956. This imposed a duty on all water suppliers to ensure their water is safe to drink.

1.3 Drinking water supplies must meet the standards as set out by the Drinking Water Standards 2005 (Amended 2008).

1.4 These Standards are to ensure a minimum safe standard for drinking water, appropriate for the level of population and compliance with statutory monitoring requirements.

1.5 Treatment Process and Log Reduction

1.6 The supply of treated drinking water is a process that takes place from the abstraction at the source through to the customer service connection “the toby”. To mitigate the risk for public health a number of barriers against risk of potential contaminant are introduced to eliminate, or at least minimise, the risk to acceptable levels.

1.7 There are 3 dominant levels of potential contaminants that may cause harm to public health, namely:

1.7.1 Protozoa with the standard organism determining the level of treatment being *Cryptosporidium*.

1.7.2 Bacteria with the standard organism determining the level of treatment being *Escherichia Coli* (*E.Coli*).

1.7.3 Pollutants that occur with specific treatment for the type of environmental, chemical or other pollutants.

*To take account of the additive effect of a series of cumulative treatment processes on the removal of protozoa, ‘Log Credits’ are used, *Cryptosporidium* being used as the reference organism. The level of treatment and the resultant “Log Credits” are detailed in the DWS NZ 2005 (2008). The log credit for a treatment process is related to the percentage of the protozoa the process can remove, by the expression:*

$$\text{log credit} = \log_{10}[1/\{1-(\text{percentage removal}/100)\}]$$

1.8 The Drinking Water Assessor appointed by the District Health Board assigns the Log Credits after an assessment is made of the raw water source and abstraction location.

1.9 The level of treatment is determined by the Log Reduction required with resulting Credits obtained to assign a score to the treatment barriers provided.

1.10 Treatment processes range from:

- Bores – secure, interim and non-secure.
- Surface water – rivers, streams, dams and lakes.
- Coagulation / flocculation – chemical application to collect and attract particles together to become heavier for easier removal through Sedimentation process.
- Sedimentation – settling of heavier and flocculated particles.
- Filtration - this can be through various types of filters with sand being the most common type.
- Disinfection – can either be chemical (chlorine, ozone, etc.) or by means of irradiation (ultra-violet light).
- A combination of the above.

1.11 Each treatment process, or barrier, reduces the risk of harm to public health. To test for the effectiveness of the treatment, the water quality is tested and monitored for compliance both with operational and regulatory requirements. The regulatory compliance results are reported to the District Health Board.

1.12 The appropriate level of monitoring is determined by the population size of the drinking water scheme. The smaller the population the lower the risk of a major outbreak of disease with a resultant smaller impact. The drinking water schemes in the Waitomo District under Council's control fall in a small scale range:

- Te Kuiti – Minor (permanent population less than 5,000)
- Benneydale – Small (permanent population less than 500)
- Piopio – Small (permanent population less than 500)
- Mokau – Small (permanent population less than 500)

1.13 The DWS NZ prescribes the number, frequency and maximum period of days between sampling for various compliance criteria. The test has to be performed to strict standards at an accredited laboratory. WDC currently send all compliance samples to Watercare Laboratories in Auckland. Operational sampling is done by means of portable analysers and on-line instrumentation.

1.14 During the latest Drinking Water Supply Audit, performed by the Drinking Water Assessment Team (Waikato District Health Board), WDC was praised highly for its efforts to take all practical steps in complying with the Drinking Water Standards and to provide safe, wholesome water to its residents despite technically not being compliant with the protozoa log reductions.

1.15 **Te Kuiti Water Supply**

1.16 In accordance with the DWS NZ, the Te Kuiti water supply is classified as a Minor Water Supply due to Te Kuiti's permanent population being less than 5,000 residents.

1.17 At this time, the water treatment process technically does not meet the standard which requires Log 4 and application for verification will be made soon to meet compliance.

- 1.18 All four filters have now been fitted with the required turbidity meters and the UV reactors are functioning as required. Meeting log credits should be attainable and application for compliance will be made soon.
- 1.19 The Te Kuiti water supply has been confirmed safe to drink and the supply is continuously monitored for compliance utilising on-line analysers for direct compliance reporting.
- 1.20 The WDC sampling and testing regime is more than the minimum required by the DWS NZ to manage any potential risk as a result of potential failure of one of the treatment processes.
- 1.21 Although technically not compliant in accordance with the New Zealand Drinking Water Standards, the treated drinking water is safe to drink, as it undergoes the following treatment barriers:
- Coagulation, sedimentation and filtration
 - Ultraviolet disinfection through multi-wave UV reactors (now certified)
 - Chlorination
- 1.22 Since the first phase of the upgrade project has been completed the WTP has been treating water to meet the DWSNZ.
- 1.23 Work is still continuing on the Intake site of the Water Treatment plant. These work includes: -
- 1.23.1 Supply and Installation of Intake pump chamber and pumps- COMPLETED
 - 1.23.2 Supply and Installation of valve chamber and valves - COMPLETED
 - 1.23.3 Supply and Installation of all electrical works- WIP
 - 1.23.4 Supply and Installation of raw water intake screens - COMPLETED
 - 1.23.5 Supply and Installation of Air compressor - WIP
 - 1.23.6 Supply and Installation of water and electrical monitoring devices and instruments.- WIP
 - 1.23.7 Supply and Installation of building to house all the controls, devices and instrumentations - COMPLETED
- 1.24 Work still continuing around both gates and the filters areas.- WIP
- 1.25 Piopio Water Supply**
- 1.26 The water source was assessed to require treatment to Log 4 (due to the raw water source being a river/stream with a certain level of contaminants and potential disease causing organisms). There have been no issues with the Piopio water supply and the water is safe to drink.
- 1.27 The Piopio Water Supply is classed as a Small Water Supply due to having a population less than 500 inhabitants.
- 1.28 Piopio's treated reticulation water supply complies with the Log 4 treatment requirements.
- 1.29 The Piopio treated reticulation water supply is compliant with the bacteriological requirements and is safe to drink.
- 1.30 The drinking water quality is within Drinking Water Standards.

1.31 The membrane unit has gone through replacement of all 18 modules at the end of August 2018. The plant is now complying with level 4 log credit removal. Additional monitoring operating criteria has been added into the SCADA system to effectively manage the membrane treatment process.

1.32 Benneydale Water Supply

1.33 The source water was assessed to require treatment to Log 3 (due to the raw water source being a river/stream with a certain level of contaminants and potential disease causing organisms).

1.34 The current configuration of the treatment process does not deliver the required Log reduction due to the UV's not being certified. WDC is in discussion with the Waikato District Health Board to address compliance with the required barrier arrangements. These restrictions are technical in nature that prevents log credits being obtained for treatment barriers in place.

1.35 The Benneydale reticulated treated water supply is compliant for bacteriological requirements and is tested safe to drink.

1.36 Work was done to the intake screen to unblock the screen.

1.37 Mokau Water Supply

1.38 The water source was assessed to require treatment to Log 4 (due to the raw water source being a river/stream with a certain level of contaminants and potential disease causing organisms)

1.39 The WTP does not currently achieve the Log 4 requirement. The plant incorporates both chlorine and Ultra-Violet disinfection (not certified) treatment processes to disinfect the treated water that allows safe drinking water to the community. The source water has a high concentration of iron and the treated water is aesthetically affected by colour, taste and odour.

1.40 Investigation on source water to provide evidence to reduce log 4 to log 3 credit removal conducted by Opus International Consultants on the 28 August 2018.

1.41 Cyanobacteria Management Protocol was received from Opus and forwarded to Waikato District Health Board for approval in October 2018.

Addendum 2 - Wastewater

2.1 Piopio Scheme

- 2.2 The Piopio scheme differs from conventional gravity schemes in that it collects only grey water effluent from individual septic tanks, pumping the effluent to a modular treatment plant via small diameter, MDPE rising mains. The reticulation and treatment plant are in virtually new condition and are performing well. Discharge from the treatment plant is to the Mokau River and is consented until 30 June 2028.
- 2.3 The operation and management of the plant is done in-house.
- 2.4 The reticulation scheme services the residential and business areas of Piopio as well as the College and the Primary School. The scheme has modest spare capacity for an additional 25 residential houses. Beyond that, treatment plant and pump station capacity and consent discharge volumes would need to be reviewed.
- 2.5 The Piopio system came about because of the history of poor soakage in the locality due to the soil type and high groundwater table. The associated public health related concerns, were key factors leading to the demand for installation a public wastewater scheme at Piopio.
- 2.6 Operation of the reticulation scheme has been brought in-house, providing direct and integrated control over management and service delivery, but with an increased demand on the capacity of existing human resources this service is becoming quite difficult to maintain cost effectively.

2.7 Benneydale Scheme

- 2.8 The Benneydale WW treatment plant has been refurbished, upgraded and re-consented in recent years. The scheme is now in good condition and operating within the required consent parameters. The current consent expires 1 May 2025.
- 2.9 As with the other WW schemes, operation of the plant has been brought in-house, providing direct and integrated control over management and service delivery.
- 2.10 Flushed all land application lines in last month

2.11 Te Waitere Scheme

- 2.12 The current scheme involves collection and pumping of septic tank effluent to a community soakage field. No additional treatment is provided.
- 2.13 Operation of the scheme is provided in-house, providing direct and integrated control over management and service delivery.

2.14 Te Kuiti Scheme

- 2.15 Work on upgrading the Te Kuiti Wastewater Treatment Plant (WWTP) has been completed following a major process of design. The end result is a renewed WWTP achieving stringent effluent quality standards under challenging operating conditions.
- 2.16 As with the other WW schemes, operation of the plant has been brought in-house, providing direct and integrated control over management and service delivery.

- 2.17 The plant is much more complex with many additional operator controlled inputs and maintenance requirements including sampling to ensure environmental compliance.

Stormwater

- 3.1 The primary purpose of WDC's Stormwater (SW) infrastructure is to provide protection to residential and commercial property from surface flooding.
- 3.2 The SW system comprises two components. The primary component relates to the SW networks consisting of open drains, approximately 31km of SW pipes, manholes and discharge structures in urban areas. The secondary component consists of overland flow paths, including the roading network.
- 3.3 WDC has an inventory of information on pipe lengths, diameters, material types and manhole locations for Te Kuiti. The information is mainly anecdotal and the spatial presentation needs a lot of work to reflect reality. The same information is not available at the other urban townships.
- 3.4 In all cases, there is only anecdotal data available on asset condition and performance of sections of the network or the network as a whole. A programme to progressively collect this information is a high priority in the Asset management space and is done in association with the design size plan provided through the network model.
- 3.5 SW assets (and other key infrastructure) at Waitomo Village is privately owned and do not form part of the WDC services.

Key Issues/Considerations for the Activity

4.1 Renewals Programme

- 4.2 The SW reticulation is ageing and parts of it are in poor condition. WDC has a structured Renewals Programme based on existing information. This work will be targeted by procurement of services as governed by the program and/or budget availability.
- 4.3 The renewal programme over the life cycle of the existing assets be managed in-house and procured as needed.

4.4 Climate Change

- 4.5 Climate change is expected to impact on LoS e.g. SW drainage capacity, effectively reducing the design standard of a 2 year event to something less than that.
- 4.6 Increased frequency and intensity of rainfall is expected along the west coast of New Zealand. This could impact on beach communities mainly through beach erosion.

4.7 Inflows – Impact on Wastewater Network

- 4.8 There is an overlap between SW and wastewater services. It is not unusual for roofwater downpipes to be connected to sewerage laterals, or gully traps to be used as sumps on residential properties, especially where ponding is a problem.

4.9 In Te Kuiti, high inflow has been documented as one of the key factors needing to be addressed to protect the sewerage capacity and performance.

4.10 To mitigate this problem an effective SW system in urban areas is required.

4.11 Safety

4.12 There are a number of strong recommendations for SW systems resulting from a Coroner Report following the death of a child who fell into a SW manhole in 2009.

4.13 The most significant of these recommendations is:

- (i) That Territorial Local Authorities take immediate steps to secure manhole covers or fit safety grilles to manholes which:
 - (a) have been identified with a potential for surcharging through network modelling studies; and
 - (b) to existing manhole covers with a known problem with surcharging as reported through existing stormwater operation and maintenance contracts and programmes

4.14 This has been address by a H&S assessment of the existing network in Te Kuiti. This information will be used for the implementation plan to remove or mitigate all risks.

Levels of Service (LoS)

- 5.1 The SW reticulation has been designed to cope with 1 in 2 year storm events. Beyond that, the SW system relies on secondary, overland flow paths to drain excess surface water.
- 5.2 Current LoS include reducing the threat of flooding of property, responsiveness to customer services during flood events and managing the adverse effects of SW on the quality of the receiving water.
- 5.3 The public expectation is that the SW system not pose a risk to the most vulnerable persons in the community.
- 5.4 This service is currently managed by the WSBU and carried out under the network services contract.