



Assets/Infrastructure Committee Meeting

Order Paper

Thursday 9 August 2018, 9:30 am

Council Chamber, Rangitikei District Council
46 High Street, Marton

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Chair
Cr Dean McManaway

Deputy Chair
Cr Ruth Rainey

Membership

Councillors Richard Aslett, Cath Ash, Nigel Belsham, Jane Dunn,
Angus Gordon, Lynne Sheridan and Dave Wilson
Ms Coral Raukawa-Manuel (Te Roopu Ahi Kaa representative)
His Worship the Mayor, Andy Watson (ex officio)

Please Note: Items in this agenda may be subject to amendments or withdrawal at the meeting. It is recommended therefore that items not be reported upon until after adoption by the Council. Reporters who do not attend the meeting are requested to seek confirmation of the agenda material or proceedings of the meeting from the Chief Executive prior to any media reports being filed.



Rangitikei District Council

Assets and Infrastructure Committee Meeting

Agenda – Thursday 9 August 2018 – 9:30 AM

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The quorum for the Assets/Infrastructure Committee is 6.

Council's Standing Orders (adopted 3 November 2016) 10.2 provide: The quorum for Council committees and sub-committees is as for Council, i.e. half the number of members if the number of members (including vacancies) is even or a majority if the number of members is odd.

1 Welcome

2 Council Prayer

3 Apologies/leave of Absence

4 Members' conflict of interest

Members are reminded of their obligation to declare any conflicts of interest they might have in respect of items on this agenda.

5 Confirmation of order of business

That, taking into account the explanation provided why the item is not on the meeting agenda and why the discussion of the item cannot be delayed until a subsequent meeting, be dealt with as a late item at this meeting.

6 Confirmation of minutes

The minutes of the Assets/Infrastructure Committee meeting from 12 July 2018 are attached.

File ref: 3-CT-13-2

Recommendation:

That the [amended] Minutes of the Assets/Infrastructure Committee meeting held on 12 July 2018 be taken as read and verified as an accurate and correct record of the meeting.

7 Chair's Report

A report will be tabled at the meeting.

File ref: 3-CT-13-4

Recommendation:

That the Chair's Report to the Assets/Infrastructure Committee meeting on 9 August 2018 be received.

8 Progress with strategic issues

Regarding key priority issue 1, the implications of the One Road Network Classification formed part of the LTP workshop session on 20 July 2017. A preliminary presentation has been done on a development contributions policy, with a follow-up discussion on 5 October 2017 to better understand the statutory requirements for developing a policy and the likely infrastructure needs to service larger-scale subdivisions. At the Finance/Performance Committee's meeting on 26 October 2017, the use of an alternative statutory mechanism –

development agreements – was considered and a revised proposal considered at Council's meeting on 25 January 2018. There has yet to be a workshop session to progress this.

The adopted transport and parking bylaw contains provisions which allow Council some control over logging vehicles and to secure financial compensation for damage to the roading network. A meeting with heavy vehicle stakeholders was held on 3 August 2017. Written submissions on the proposed Bylaw closed on 8 September 2017, with oral submissions heard on 28 September. Council deliberated on all submissions at its meeting on 26 October 2017 and approved the bylaw with the exception of section 16 on heavy vehicles which was reconsidered and amendments approved at Council's meeting on 30 November 2017.

Regarding key priority issue 3, the licence to occupy for the groups in the former Taihape College (Rauma Road) was signed and returned to the Ministry of Education. An extension for three years was subsequently offered and accepted. A project plan was agreed to for upgraded amenities on Taihape Memorial Park and an intensive study of use of the Park reported to Council's meeting on 14 December 2017 (with the recommendations incorporated into the Consultation Document for the 2018-28 Long Term Plan. A report on options was provided to the July 2018 meeting of the Assets/Infrastructure Committee, with further considerations put to this meeting.

A presentation was provided outlining three scenarios for Council if it were to retain ownership and management of community housing in the District; Council has agreed to a capital renewal programme. At its meeting on 31 May 2018, Council agreed that market rental would be charged, on the basis of tenants becoming eligible for supplementary accommodation benefits and receiving with a Council-paid subsidy on electricity charges from Council's supplier for the first two years.

Toilets primarily funded by the Mid-sized Tourism Infrastructure Fund have been installed at Bruce Park and Papakai Park. The location of the toilet in Mangaweka Village has yet to be determined.

A public meeting was held on 11 December 2017 to discuss future possibilities for the Santoft Domain. This showed strong interest in seeing part of the Domain develop for public use. An on-site meeting was arranged for 7 April 2018, and a Domain Committee appointed for the rest of the triennium. An application was made in early June to the Tourism Infrastructure Fund to assist with the provision of an ablution block there but the outcome is not yet known. A draft management plan is being considered by the Committee at its meeting on 31 July 2018.

9 Legal access to Council's strategic sites - Progress update – July

A memorandum will be tabled at the meeting.

File ref: 6-CF-4

Recommendation:

That the tabled update 'Legal access to Council's strategic sites - Progress update – July' to the 9 August Assets/Infrastructure Committee meeting be received.

10 Marton and Bulls Wastewater Disposal - proposed way forward

A report is attached.

File ref: 6-WW-1-4

Recommendations:

- 1 That the report on 'Marton and Bulls Wastewater Disposal - Proposed Direction' to the Assets/Infrastructure Committee on 9 August 2018 be received.
- 2 That the Assets/Infrastructure Committee, having considered the detailed business case on options to address wastewater disposal from Bulls and Marton, recommends to Council that:
 - Establishing a land-based disposal system for the combined Marton and Bulls wastewater flows is confirmed as Council's preferred option;
 - The process to procure the appropriate land disposal area(s) for Marton and Bulls treated wastewater is commenced;
 - The pipeline design and progress with scoping the other elements of the proposed project continue to be advanced;
 - Further engagement/consultation with Iwi and the Bulls/Marton communities is undertaken prior to the lodging of the resource consent application with Horizons by the end of October 2018;
 - Reports on progress are provided to the Assets/Infrastructure Committee, ahead of any requirement for a final Council decision prior to the lodging of the resource consent application in October 2018.

11 Consenting strategy update for Council's wastewater treatment plant upgrade projects

A memorandum is attached.

File ref: 6-WW-1

Recommendation:

That the memorandum 'Consenting strategy update for Council's wastewater treatment plant upgrade projects' to Assets/Infrastructure Committee on 9 August be received.

12 Biological Control: Taihape oxidation pond and associated considerations.

A memorandum is attached.

File ref: 6-WW-1-8

Recommendations:

- 1 That the memorandum 'Biological Control: Taihape oxidisation pond and associated considerations' to the 9 August Assets/Infrastructure Committee meeting be received.
- 2 That the following activities be approved by the Assets/Infrastructure Committee:

EITHER

That a 26ZM(3) application be made to the Department of Conservation for the Taihape Wastewater Treatment Plant oxidisation pond,

OR

That a joint 26ZM(3) application to the Department of Conservation be made for the Taihape Wastewater Treatment Plant oxidisation pond, [AND/OR] Dudding Lake, [AND/OR] Marton B and C Dam;

AND

That a feasibility exercise for using silver carp at the Taihape Wastewater Treatment Plant oxidisation pond be undertaken.

13 Taihape Memorial Park – proposed ablution / amenities block – further considerations

A public meeting (including members of the Memorial Park User Group) has been arranged for 3 August 2018. A report will be tabled at the meeting.

File ref: 6-RF-1-12

Recommendations:

1. That the report '13 Taihape Memorial Park – proposed ablution / amenities block – further considerations' to the Assets/Infrastructure Committee meeting 9 August 2018 be received.
2. That.....

14 Kakariki Road – safety improvements

During the 5 year period 2013-2018 there were 13 loss of control accidents on Kakariki Hill. 10 were non-injury accidents and 3 resulted in minor injuries. 11 of the accidents occurred when the surface condition was wet.

A high friction seal will be applied to the curves and hill section this construction season. In addition the lane markings will be reconfigured to convert the uphill lane into a slow vehicle lane with a safety run out at the top. The other two lanes will then be for through traffic.

The section will be monitored between 2018-21, during this period the economics and feasibility of geometric improvements will be evaluated with the view of including possible improvements in future Land Transport Programmes.

Attached are the 5 year Crash table, 5 year All Crash Map and the 5 year Injury Map.

15 Community Housing Update

A report is attached. Details on expenditure during the past three years will be tabled at the meeting.

File ref: 6-CF-1-14

Recommendation:

That the 'Community Housing Update' report to Assets/Infrastructure Committee on 9 August be received.

16 LGNZ Three Waters Survey

Local Government New Zealand has asked all councils to give feedback on the Government's review on the management of the three waters – both regulation and service delivery options. This feedback will inform the LGNZ position to be discussed by National Council at its next meeting on 31 August 2018.

The suggested response to LGNZ will be tabled at the meeting (and circulated electronically beforehand).

Recommendations:

- 1 That the suggested response to Local Government New Zealand's survey on the Government's three waters review be received.
- 2 That the Chief Executive convey the suggested response [as amended/without amendment] to Local Government New Zealand's survey on the Government's three waters review.

17 Council contribution to a parking area and bus stop at the St Andrews Church site for Bulls School

Staff have met with the Church committee which Councillor Dunn also attended. Council agreed to construct an entrance way to the church property field at the rear of the church. An e-mail indicating such has been forwarded to the chairperson of the Church committee with Cr Dunn copied into. The current location for the bus stop is safely located. Council is not contributing to the planned parking area inside the field.

18 Process for lowering the speed limit on Hendersons Line near Pukepapa Road (Marton)

Attached is a request and signed petition to extend the 70 km/h zone beyond 172 Hendersons Line that was presented as a late item at the 31 May 2018 Council meeting.

Under the new speed limit setting rules, 70km/h and 90 km/h limits are not to be used. However, extending an existing 70 km/h (or 90 km/h) zone might be permitted if Council provides an adequate explanation to NZTA why Council wants this rather than changing the whole length to 60 km/h or 80 km/h.

It is proposed to make such an application to NZTA on the basis that

- there will be a full review of the Council's Speed Limit Bylaw next year, having regard for the Government's policy directions on improving road safety – this review to specifically include all areas which are currently limited to 70 km/h with the outcome that they become 60 km/h or 80 km/h; and
- extending the 70 km/h limit in the short term until next year's review is complete ensures consistency of approach and increases the likelihood that the lower limit will be observed.

If NZTA agrees, the only consultation required will be to the Police as the petition from residents along Hendersons Line is sufficient in terms of gauging community support.

If NZTA does not agree, a full consultation would be needed; it is preferable to defer this until next year's review.

File ref: 1-DB-1-7

Recommendation:

That Council applies to the New Zealand Transport Agency to allow an extension of the 70 km/h limit on Pukepapa Road to 200m in Hendersons Line and, if not approved, defer consideration of a lower limit until the review of the Speed Limit Bylaw scheduled for 2019.

19 Questions put at previous meeting for Council's advice or action

Responsibility for fence repair around Marton B and C Dams following the tree harvest

It is council's responsibility to repair damaged fencing as a result of forestry harvest. Council are in the process of repairing some areas of Marton B and C Dams currently.

20 Infrastructure Group Report

A report is attached.

File ref: 5-EX-3-2

Recommendation:

That the 'Infrastructure Group Report' to the Assets/Infrastructure Committee meeting 9 August 2018 be received.

21 Community and Leisure Report

A report is attached.

File ref: 5-EX-3-2

Recommendation:

That the 'Community and Leisure report' to the Assets/Infrastructure Committee meeting 9 August 2018 be received.

22 Activity management

The Activity Management Templates for the following asset-based groups of activities are attached:

- Roading and footpaths (including roading contractor performance)
- Water (including rural water supplies)
- Sewage and the treatment and disposal of sewerage
- Stormwater drainage (*a report on stormwater 'hot spots' will be tabled*)
- Rubbish and recycling
- Community and leisure assets (including parks)

In accordance with Council resolution 17/RDC/055 which amended Standing Order 20.3 'Questions to staff', the following arrangement applies:

In the email advising Elected Members that the Committee Order Papers have been uploaded, they will be asked to email questions before the meeting to the relevant Group Manager (and copied to the Governance Administrator). The answers will be copied to all Elected Members, the Chief Executive and the Governance Administrator. The full email exchange will be tabled at the meeting. Outstanding questions will be noted in this document.

Questions may still be asked at the meeting. The minutes will record those which require further clarification or actions by staff and note whether this is to be by email before the next meeting (in which case it will be included as a document in the Order Paper) or through a report or agenda note at the next meeting.

Recommendation:

- 1 That the activity management templates for June 2018 for Roading, Water (including rural water supplies), Sewerage and the treatment and disposal of sewage,

Stormwater drainage, Community and leisure assets, and Rubbish and recycling be received.

- 2 That the memorandum 'Questions of Activity Management Templates' to the Assets and Infrastructure Committee meeting on 9 August 2018 be received.

23 Late Items

24 Future Items for the agenda

25 Next meeting

13 September 2018, 9.30 am

26 Meeting closed

Attachment 1



Rangitikei District Council

Assets and Infrastructure Committee Meeting

Minutes – Thursday 12 July 2018 – 9:30 AM

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Present: Cr Ruth Rainey, Deputy Chair
Cr Cath Ash
Cr Nigel Belsham
Cr Jane Dunn
Cr Angus Gordon
Cr David Wilson
His Worship the Mayor, Andy Watson

Also Present Cr Graeme Platt

In attendance: Mr Ross McNeil, Chief Executive
Mr Michael Hodder, Community & Regulatory Services Group Manager
Mr Hamish Waugh, Infrastructure Group Management
Mr Glenn Young, Utilities Manager
Mr Andrew van Bussel, Operations Manager
Mr Reuben Pokiha, Roding Advisor
Mr Graeme Pointon, Strategic Property Advisor
Ms Gaylene Prince, Community & Leisure Assets Team Leader
Mr Allen Geerkins, Projects Engineer Roding
Mr Robert Rose, Assets and Compliance Team Leader
Ms Nardia Gower, Governance Administrator
Mr Trevor Nicholls, Nicholls Swim Academy

Tabled Documents	Item 7	Chair's Report
	Item 17	Late items

17 Welcome

The meeting started at 9:33am. The Chair welcomed everyone to the meeting.

A moment of silence was observed for the passing of George McIrvine, Group Manager, Finance and Business Support.

18 Council Prayer

Cr Dunn read the Council prayer.

19 Apologies/leave of Absence

That the absence of Cr McManaway, Cr Aslett, Cr Sheridan and Ms Coral Raukawa-Manuel be received.

Cr Gordon / His Worship the Mayor. Carried

20 Members' conflict of interest

Members were reminded of their obligation to declare any conflicts of interest they might have in respect of items on this agenda.

There were no declared conflict of interest.

21 Confirmation of order of business

That, taking into account the explanation provided why the item is not on the meeting agenda and why the discussion of the item cannot be delayed until a subsequent meeting,

C1038 Otara Road Bridge Strengthening

be dealt with as a late item at this meeting.

Cr Rainey / His Worship the Mayor. Carried

22 Confirmation of minutes

Resolved minute number

18/AIN/041

File Ref

3-CT-13-2

That the Minutes of the Assets/Infrastructure Committee meeting held on 14 June 2018 be taken as read and verified as an accurate and correct record of the meeting.

Cr Belsham / Cr Dunn. Carried

23 Chair's Report

The Deputy Chair took her tabled report as read

Resolved minute number

18/AIN/042

File Ref

3-CT-13-4

That the Chair's Report to the Assets/Infrastructure Committee meeting on 12 July 2018 be received.

Cr Rainey / Cr Wilson. Carried

24 Progress with strategic issues

The Committee noted the commentary in the agenda.

25 Legal access to Council's strategic sites - Progress update – June

Mr Pointon spoke to the update. The key points were:

- Staff noted that the commissioning of the Rātana Bore will be complete by the end of next week. It will be with a discussion with the Chief Executive as to when to hold the opening day of the Rātana bore with consideration to later in the year as the weather improves.
- Mr Pointon noted that in the update for Bulls (#2.2) the easement rings the external boundary of Walton Street development.
- The roading team has looked at the cost to provide adequate access into the Marton A Dam site with current estimates (without in-ground inspection) of \$185K. This would be only to provide a metal track to carry residential traffic.

Other comments on the Marton A Dam site included:

- The quotable value for the site is \$255K
- There is currently no wastewater capacity.
- The dam is not part of the Tutaenui flood scheme.
- The gorse has been sprayed.

The Committee requested a report on costings prior to making a decision on selling the site as is or making improvements

- The Taihape Rail-land holds Council wastewater and stormwater infrastructure items. Officers are currently investigating the land purchase costs versus easement cost, required to secure access to the assets.

Undertaking	Subject
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That a report be provided to the Assets/Infrastructure Committee on the Marton A Dam site that includes:

- Cost analysis on selling the site as is or potential financial gain by investing in improvements.
- Whether there is a drain through the wall for water

Resolved minute number	18/AIN/043	File Ref	6-CF-4
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That the update 'Legal access to Council's strategic sites - Progress update – June' to the 12 July Assets/Infrastructure Committee meeting be received.

Cr Ash / Cr Gordon. Carried

26 Taihape and Marton Swim Centre operations

Mr Trevor Nicolls gave a verbal presentation to the Committee with the following highlights:

Marton Pool:

- Season went as per normal. Growth was seen in aqua aerobics and the Green Prescription programme.
- The Triathlon, normally run from Rangitikei College, was run out of the facility with 250 participants.
- School programmes running as per normal.
- Visiting clubs training during January dropped off due to lack of accommodation with Arahina closing. Need to address in future.
- Progress with Poolsafe has been accomplished with the chemical storage shed complete.
- Initiatives to encourage the younger generation in include the negotiation of a lease with the Flipper Ball franchise, this will roll out through Taihape and Marton. A demonstration will take place on opening day.
- Swimming instructors and lifeguards are receiving training over winter

Committee discussion included:

- 100 people have utilised the Green prescription, this is only available in Marton.
- Ngati Apa may have potential for accommodating visiting clubs.
- Year-round opening of Marton Pool has been estimated at 25k per month. The EECA audit report noted the current state of the roof means a large amount of energy is

being used to retain the temperature of the water. This would need to be addressed to ascertain the true operational costs of the pool opening all year.

- Splash pad development has had no further development to date.
- The EECA audit reports of water leakage was based on figures taken prior to pool leaks being repaired. Any current leaks will be auxiliary piping, and are minor. Mr Nicolls explained that there is an issue with the volume of the balance pool in Marton with the tank being 75% too small. This results in water overflow, and heating of new water during busy periods.

Taihape Pool:

- The facility was unable to open until November, this resulted in a short season and schools unable to do a swim season at the end of 2017.
- Opening hours have been extended an hour, now closing at 6pm allowing adults finishing work at 5.00 pm the opportunity to swim afterwards.
- Have received great buy-in from schools.
- Offered no charge for pool hireage for school cluster sports days, 2018-2019 plan is to extend the same offer to Marton school clusters.
- Preschool and baby groups proved difficult to engage not knowing the landscape.
- Granted free entry for groups like Greenlight, A&P and Gumboot Day.
- Currently painting, changing rooms new flooring. Marking out lines in pool will be done.

Next season plans include:

- Building the preschool swim lesson numbers
- Building the adult programme
- Introducing Flipperball
- Starting Aqua aerobics classes
- Bringing forward opening day to the first Saturday of last school holidays of the year, holding an Opening Day Grand Gala.

Further discussion was:

- Nicholls Swim Academy subsidises the free pool hireage for cluster school sports days.
- 6-7 local staff are employed for the season and a local prospective manager is in training.
- Mr Nicolls suggested the Council would benefit from both the Marton and Taihape pool management contracts being extended for one more season in order to obtain a clear set of data collection over a full operational season.

Undertaking

Subject

That a cost analysis on installing an adequate balance tank for the Marton teaching pool is provided to the Assets/Infrastructure Committee.

27 Report on Taihape Memorial Park ablution facilities (to include discussion with Taihape Netball)

Ms Prince spoke to the report, noting that cost estimates for trenching and getting 3 waters to each site are:

- Option 1: \$35- 44k
- Option 2: \$58 – 96k

These estimates do not include power.

The following comments were made with regard to each option.

Option 1:

- Boundary issues only apply to street frontage.
- Incurs less costs without the need of resource consents and in getting utilities to the site.

Option 2:

- A resource consent would be sought by an independent planner who would run the process. This would incur a cost.
- The netball club have stated they use part of the site earmarked for option 2 as a warmup site.
- Incurs setback requirements.
- If Field 3 was extended a resource consent would be required to remove redwood trees. The estimate for the consent is in excess of \$20k.
- A Taihape Community Group has offered to financially contribute towards option 2.
- Previous community consultation has indicated a preference for option 2.

The Committee agreed to let the item lie on the table until its August meeting, following key stakeholder meetings and a full understanding of costs for each option, based on option 2 involving Field 3 remaining as is, and instead encroaching on the tennis court site.

Resolved minute number

18/AIN/044

File Ref

6-RF-1-12

That the report 'Proposed ablution block, Memorial Park, Taihape' be received.

Cr Rainey / Cr Dunn. Carried

Motion

That the location of the proposed Taihape Memorial Park Ablution Block be confirmed as:

Between the Grandstand and Utiku Old Boys Rugby Clubrooms

His Worship the Mayor / Cr Belsham. Withdrawn

Resolved minute number **18/AIN/045** **File Ref** **6-RF-1-12**

That the item 'Report on Taihape Memorial Park ablution facilities (to include discussion with Taihape Netball)' lie on the table until the Assets/Infrastructure Committee meeting on 9 August 2018.

Cr Rainey / Cr Belsham. Carried

28 Concept plan for development of Papakai and Taihape Memorial Park

Resolved minute number **18/AIN/046** **File Ref** **6-RF-1-12**

That the 'Concept plan for development of Papakai and Taihape Memorial Park' to the Assets/Infrastructure Committee meeting 12 July 2018 be received.

Cr Rainey / Cr Gordon. Carried

14 3 Water Compliance Update

Mr Waugh introduced new staff member Mr Robert Rose.

Mr Rose stated that with regard to the non-compliance reported in both Mangaweka and Hunterville is a technical non-compliance and not a water quality con-compliance. Staff are currently in discussion with water assessors as to options of excluding such administrative issues that do not affect water supply quality. It was noted that in Government see all non-compliance as the same.

Resolved minute number **18/AIN/047** **File Ref** **5-EX-3-2**

That the report '3 Waters Compliance – June 2018' be received.

Cr Rainey / Cr Dunn. Carried

15 Questions put at previous meeting for Council's advice or action

The Committee noted the commentary in the agenda.

16 Activity management

The Activity Management Templates for the following asset-based groups of activities are attached:

Roading and footpaths (including roading contractor performance)

Mr Pokiha spoke to the report.

- Committee members noted that the Broadway High road and kerbside project is currently going through an underground settling process prior to an additional layer bringing the road level to kerb lip. Staff stated that Broadway retailers have been informed on full process and is communicated on the website.
- Signs have recently been enhanced on Kakariki Rd and staff are investigating the upgrade of the passing lane.

Utilities

Mr Young spoke to the report, highlighting that the project scope of the Taihape Reservoir seismic strengthening will analysis comparative costs of a temporary reservoir verses a replacement. Mr Young further noted that not all of the year's stormwater budget has been spent.

Comments made were:

- There has been no water capacity issues out of Bulls in the past three years.
- Providing a wastewater pipe sits below a water pipe they are permitted to sit in same trench
- Central Government's report is due in November following the 3 water amalgamation review. It was noted that at the last Council meeting it was agreed to a wider regional discussion with regard to the provision of water seeking potential for a regional solution.

Community and leisure assets (including parks)

Ms Prince took report as read. Comments made were:

- Councillors favourably noted the new Marton library sign.
- It is Horizons Regional Council that is required to manage the skid sites following tree harvest with a Sediment Control Plan; it is landowners' responsibility to put that to the regional council.

Undertaking

Subject

Ms Prince to check with Mr Sanson on who pays for fence repair around Marton B and C Dams following the tree harvest.

Resolved minute number **18/AIN/048** **File Ref**

That the activity management templates for June 2018 for Roading, Water (including rural water supplies), Sewerage and the treatment and disposal of sewage, Stormwater drainage, Community and leisure assets, and Rubbish and recycling be received.

Cr Belsham / Cr Ash. Carried

17 Late Items

C1038 Otara Road Bridge Strengthening

Resolved minute number **18/AIN/049** **File Ref**

That the report Otara Bridge Strengthening Physical Works' to the AIN committee meeting on 12 July 2018 be received.

Cr Dunn / Cr Gordon. Carried

Resolved minute number **18/AIN/050** **File Ref**

That the Assets/Infrastructure Committee recommends to Council that Council award Contract C1038 for the Otara Bridge Strengthening physical works (Rangitikei District Council share) to Riverside Construction Ltd for contract value of 50% of the tender price, which will be Two Hundred Seventy-Four Thousand, Six Hundred and Seventy-Nine Dollars, and Forty-Eight Cents \$274,679.48 excl GST.

His Worship the Mayor / Cr Gordon. Carried

Adjourned at 11:38 reconvened at 11:43

13 The Manawatū – Whanganui Regional Sport Facility Plan

A presentation was provided by the Chief Executive.

Elected members discussed the Sport Manawatū-Whanganui regional plan and how that may or may not benefit further development of facilities within the District.

Resolved minute number **18/AIN/051** **File Ref**

That the Assets/Infrastructure Committee recommend to Council that Council endorse the Manawatū -Whanganui regional Sport Facility Plan as a tool to guide the future planning development, management and operation of sports facilities in the Rangitikei and wider Manawatū -Whanganui region.

Cr Wilson / Cr Dunn. Carried

18 Future Items for the agenda

Marton/Bulls wastewater proposals

Dudding Lake lease agreement

Amenities Block on Taihape Memorial Hall

19 Next meeting

9 August 2018, 9.30 am

20 Meeting closed

12:19pm

Confirmed/Chair: _____

Date:

Attachment 2



Report

Subject: **Marton and Bulls Wastewater Disposal - Proposed Direction**

To: Assets and Infrastructure Committee

Date: 9 August 2018

File Ref: 6-WW-1-4

1 Executive Summary

Purpose of the report

To allow the Committee to consider and make a recommendation to Council on the direction for future wastewater disposal from the Marton and Bulls wastewater treatment plants.

1.1 Key issues

Continuation of a treated wastewater discharge from the Marton WWTP into the Tutaenui Stream is considered to be extremely difficult to achieve due to the following factors:

- A strong community desire for the water quality in the Tutaenui Stream to be improved
- A similar strong desire from local iwi and hapū to begin a process to regain some of the mauri of the stream
- Policy 5-11 of the One Plan that requires the discharge of treated wastewater to land
- Section 107 of the Resource Management Act that prohibits discharges of contaminants in certain circumstances. These appear to be applicable in the case of the Tutaenui Stream.

These principles also apply to the Bulls treated wastewater discharge into the Rangitikei River at Bulls.

Council is under regulatory and community expectation to move forward and resolve these issues.

The continuing direct discharges of treated wastewater to the Tutaenui Stream and the Rangitikei River are extremely offensive to affected iwi and hapū.

1.2 Major recommendations

That the Assets/Infrastructure Committee, having considered the detailed business case on options to address wastewater disposal from Bulls and Marton, recommends to Council that:

- Establishing a land-based disposal system for the combined Marton and Bulls wastewater flows is confirmed as Council's preferred option;
- The process to procure the appropriate land disposal area(s) for Marton and Bulls treated wastewater commence;
- The pipeline design and progress with scoping the other elements of the proposed project continue to be advanced;
- Further engagement/consultation with Iwi and the Bulls/Marton communities is undertaken prior to the lodging of the resource consent application with Horizons by the end of October 2018;
- Reports on progress are provided to the Assets/Infrastructure Committee, ahead of any requirement for a final Council decision prior to the lodging of the resource consent application in October 2018.

2 Context

2.1 Background

Historically, there have been significant difficulties in ensuring the effluent discharged from the Marton WWTP is consistently compliant with the Resource Consent conditions. There have been many occasions where non-compliance has occurred, particular with the nitrogen levels.

Council has been under on-going pressure from Horizons Regional Council to demonstrate how we would move to compliance over time.

The above work was undertaken on the assumption that the discharge of treated effluent into the Tutaenui Stream would be able to be re-consented. This now appears extremely unlikely as there is little or no dilution for the discharge into the Tutaenui Stream for the summer months when stream flows are typically low or non-existent.

Alternatives to meet future consent requirements in accordance with the Regional Council requirements, as stated in the 'One Plan', have been identified and worked through as part of a comprehensive Business Case process. The preferred options all have a degree of land discharge, which in turn, are dependent on the amount and type of land that can be procured for land discharge.

The relevance of a future land discharge option is that for this disposal method the level of nutrients can be much greater than for a water discharge, making the disposal of these high nutrient wastes with high nutrient levels more acceptable/achievable.

The environmental impact of the Bulls treated wastewater discharge on the Rangitikei River is much less, but the cultural and regulatory requirements for a discharge to land are the same, if not greater. A resource consent application, lodged in 2015, for the Bulls WWTP consists of a wetland and a rapid infiltration

discharge. By agreement with Horizons, the application has been on hold pending the outcome of the business case process.

A better business case prepared by staff clearly indicated that a land discharge for the combined Bulls and Marton wastewater flows was the preferred option.

A meeting with the Advisory Group to discuss the draft version of this report was held on the evening of 31 July 2018.

The timeline is summarised below:

- Ongoing issues with Marton discharge evident in 2015
- Bulls application for renewal of existing consent 2015
- Joint land disposal option for Bulls identified late 2016
- Horizons indicated strong preference for land based disposal 2017
- Business Case developed by Infrastructure Staff June 2017
- Presented to Council workshops August/September 2017
- Council expands membership of Advisory Group late 2017 to include Bulls representation
- Strong support from Marton-Bulls Wastewater Advisory Group early 2018 for the removal of the wastewater discharge from Tutaenui Stream as a first priority.
- Advisory Group meeting 31 July 2018 to consider draft business case.

2.2 The Better Business Case Approach

Better Business Cases (BBC) is a process adopted by The Treasury to ensure that proper planning has been undertaken for major public sector projects. The most obvious examples for Council are the requirement for BBC process for projects that will attract a subsidy from NZTA.

Although not a requirement for any water utilities expenditure, a BBC was developed for the disposal of Marton and Bulls Wastewater separately and together with a variety of disposal options. The BBC process was completed in 2017 as a precursor to the Asset Management Plan and Long Term Plan (LTP) processes.

This resulted in a long list of 50 options, but only 2 options met all the required criteria.

These options were similar – divert raw effluent from Marton to Bulls, undertake the minimum treatment required for land discharge at Bulls, and to disposed of treated effluent to land at Bulls. The preferred option of these allowed for a connection to, and an income from ANZCO Foods, which reduced the whole of life cost due to the trade waste income received.

The 2018-28 Long Term Plan (LTP) has allocated funding for this project over the 10 year horizon of the LTP. The outcomes of the business case have been discussed with the Advisory Group previously. This was one of the drivers behind expanding the Marton-based Advisory Group to incorporate representation from Bulls.

The full business case is appended to this report, as well as a copy of the PowerPoint presentations developed and presented previously.

2.3 Marton disposal alternatives

Council had expressed a preference for a more detailed analysis of treatment and land disposal options for Marton as a stand-alone project.

The following assumptions have been made:

- Average daily discharge 2400 m³/day
- Existing ponds can provide adequate storage for rainfall derived inflows
- No Tutaenui Stream discharge
- The nearest Rangitikei River discharge is 6.4 km away
- Consenting costs for all options estimated to be the same.

To this end, three scenarios were developed and analysed:

- i) Combined land and water discharge similar to the Feilding system with the overflow being treated and discharged to the Rangitikei River at the nearest point to the Marton WWTP.
- ii) A treatment upgrade based on the effluent being discharged to the Rangitikei River at the nearest point to the Marton WWTP.
- iii) A stand-alone land discharge to an area located between Bulls and the sea. This option includes allowance for a pipeline distance to up to 16 km.

The capital cost estimates are as follows:

- i). Combined land and water discharge at Marton \$13,181,184.
- ii). Enhanced treatment at Marton \$16,042,752.
- iii). Full land discharge south of Bulls (combined Bulls and Marton) \$11,733,811.

Details of the estimates are attached, as well as a copy of the quotation received by Council for a package treatment plant to treat Marton's wastewater.

2.4 Long Term Plan

The proposal is in line with Council's Long Term Plan, which signals the most likely scenario to be a combined Bulls/Marton land-based disposal option. This report seeks the Committee's recommendation to Council to confirm that option.

2.5 Significance

The proposal is significant in terms of the Council's significance and engagement policy. There is considerable community interest given the nature and scale of the issue, and the significant cost required to achieve the desired outcome. For this reason community engagement, targeting the Bulls and Marton communities, will be undertaken over the next two months. Once the specific areas for land disposal are known, discussions with neighbouring owners will be undertaken. The intention is to secure land that is more remote in terms of proximity to neighbours.

2.6 Māori consultation

The importance of wastewater disposal issues to Iwi within the District is acknowledged. While Iwi have previously signalled a desire for all wastewater disposal to move to a land-based system, specific consultation with Iwi, particularly Ngati Apa and Ngati Parewahawaha, will be undertaken on this project over the next 2-3 months (i.e. ahead of the finalising the resource consent application for lodging in October 2018). Further engagement with Iwi is anticipated as part of the consenting processing going forward.

2.7 Legal issues

Securing the necessary resource consents, and subsequent compliance, form the basis of the legal requirements for this project. However, while the recommendation is for Council to acquire and own the land used for effluent disposal, the option of long-term lease agreements cannot be completely ruled out at this stage. In addition, this project will involve the establishment of new infrastructure (e.g. pipelines) and tenure of/access to those assets will need to be secured. It is anticipated that this infrastructure will, as far as possible, be located on public land (e.g. road corridor).

2.8 Approach

Community views on wastewater disposal will be facilitated in conjunction with the Advisory Group, which will continue meet as this project progresses.

Feedback from Advisory Group has informed this report.

There has been broad consensus on the scope and direction of this project from the Advisory Group, which can be summarised as follows:

- 1) Agreement with the land disposal of wastewater
- 2) Dealing with Bulls and Marton wastewater as a combined approach

- 3) Proceeding with land acquisition for the disposal of Marton and Bulls wastewater as a first phase
- 4) Continue with the project as indicated below:
 - a) Phase 1: procure land and obtain consents for land disposal of treated wastewater
 - b) Phase 2: design and construct a pipeline from Marton to Bulls
 - c) Phase 3: dispose of treated Marton wastewater to land
 - d) Phase 4: dispose of treated Bulls wastewater to land
 - e) Optimise and consolidate treatment systems

3 Analysis

3.1 Views

Community views have been explored in this report through the Advisory Group.

As outlined above, the Advisory Group provided a clear direction. This will form the basis of a wider community engagement process.

Other considerations that were raised by the Group were:

- To consider allowing for growth or to connect existing industry to the proposed disposal system. In this regard, discussions with stakeholders will continue, however, a final decision as to the capacity of the upgrade will need to be made in the near future.
- Agreement with the large area/low application rate/redundancy design principles.
- The need to maintain a high level of communication around the project.

3.2 Consideration of Options

The business case document sets out the assessment criteria and options in order to determine the most appropriate and effective solution for the disposal of treated wastewater from Marton and Bulls. The recommended option offers the follow benefits;

1. Removal of treated wastewater from the Tutaenui Stream and Rangitīkei River
2. Avoiding of the need for expensive treatment systems (e.g. package plants)
3. The potential to limit the need for further treatment given land-based disposal is likely to accommodate significantly higher nutrient levels in the wastewater effluent

4. The opportunity to factor in growth and/or additional commercial connections in a cost-effective manner.
5. A single consent process, which maximises efficiencies and limits costs associated with the process
6. The opportunity to consider decommissioning parts of the existing Marton and Bulls WWTPs that are not needed to support the discharge of wastewater onto land.

3.3 Costs

There are no cost implications from this report. Funding has been allocated in the Long Term Plan to dispose of the wastewater from Marton and Bulls, and this covers the associated work involved with community/lwi engagement, preparing and submitting the resource consent application and the acquisition of the land required to support the preferred option.

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2026/27	2027/28	TOTAL
Marton and Bulls combined scheme										
Stage 1 Marton to Bulls - pipe to Bulls	2,600,000									
Stage 2 Marton to Bulls - buy land and consent	1,087,000									
Stage 3 Develop irrigation - initially for Marton flows		1,192,000	600,000	688,981	650,000	500,000				
Stage 4 Install pipeline and divert Marton flows initially		1,200,000	639,000	500,000		1,000,000				
Stage 5 Treatment improvements at Bulls					1,570,828	1,803,000	555,000	775,000		
Stage 6 Decommission and dispose of surplus assets								700,000	540,000	
	3,687,000	2,392,000	1,239,000	1,188,981	2,220,828	3,303,000	555,000	1,475,000	540,000	16,600,809

The adopted LTP assumes no external (Government) funding. However, staff will continue to seek opportunities for external funding. Any external funding received will proportionately reduce the cost to Council and ratepayers.

4 Conclusions

The relative cost benefits, lwi and community acceptability, Advisory Group feedback, and alignment with Horizons' One Plan, indicate that the disposal of Marton and Bulls treated wastewater onto land in an area south of Bulls is the most effective option.

This option is recommended to Council as the basis for advancing the Marton and Bulls wastewater project.

5 Recommendation

5.1 That the report on 'Marton and Bulls Wastewater Disposal - Proposed Direction' to the Assets/Infrastructure Committee on 9 August 2018 be received.

5.2 That the Assets/Infrastructure Committee, having considered the detailed business case on options to address wastewater disposal from Bulls and Marton, recommends to Council that:

5.3

- Establishing a land-based disposal system for the combined Marton and Bulls wastewater flows is confirmed as Council's preferred option;
- The process to procure the appropriate land disposal area(s) for Marton and Bulls treated wastewater is commenced;
- The pipeline design and progress with scoping the other elements of the proposed project continue to be advanced;
- Further engagement/consultation with Iwi and the Bulls/Marton communities is undertaken prior to the lodging of the resource consent application with Horizons by the end of October 2018;
- Reports on progress are provided to the Assets/Infrastructure Committee, ahead of any requirement for a final Council decision prior to the lodging of the resource consent application in October 2018.

Hamish Waugh
General Manager – Infrastructure

Rough Order of Cost Estimate – Marton WWTP land disposal						
Option 1 - Combined land and water discharge similar to Feilding						
Item	Description	Unit	Quantity	Rate	Amount	Comment
1	Preliminary & General	%	9535000	8%	762,800	
2	Land	ha	70	20000	1,400,000	
3	Pipeline	m	6400	150	960,000	6.4 km pipeline to Rangitikei River
4	Irrigation and planting	ha	70	8000	560,000	Centre pivots plus buffer planting
5	Landowner agreements	LS	1	100000	100,000	Between SH3 and the Rangitikei River
6	Treatment upgrade for river discharge	ea	1	4030000	4,030,000	2x2 600m³/day package treatment plants
7	Civil and site works	LS	1	1485000	1,485,000	See quote for package plant
8	Consent	LS	1	1000000	1,000,000	New river discharge consent
				Items 2-7 Sub-total	9,535,000	
				Sub-Total 1-7	10,297,800	
8	Engineering fees	%	10297800	8%	823,824	
9	Contingency	%	10297800	20%	2,059,560	
	TOTAL				\$13,181,184.00	
Option 2 - Marton treatment option						
Item	Description	Unit	Quantity	Rate	Amount	Comment
1	Preliminary & General	%	11605000	8%	928,400	
2	Package treatment plant	ea	2	4030000	8,060,000	2x2 600m³/day package treatment plants
3	Civil and site works	LS	1	1485000	1,485,000	See quote for package plant
4	Pipeline	m	6400	150	960,000	6.4 km pipeline to Rangitikei River
5	Landowner agreements	LS	1	100000	100,000	Between SH3 and the Rangitikei River
6	Consent	LS	1	1000000	1,000,000	New river discharge consent
				Items 2-5 Sub-total	11,605,000	
				Sub-Total 1-5	12,533,400	
6	Engineering fees	%	12533400	8%	1,002,672	
7	Contingency	%	12533400	20%	2,506,680	
	TOTAL				\$16,042,752.00	
Rough Order of Cost Estimate – Marton to Bulls to land disposal						
Item	Description	Unit	Quantity	Rate	Amount	Comment
1	Preliminary & General	%	8488000	8%	679,040	
2	Discharge main from Marton to Bulls					
	200 mm PVC up to 2m depth	lin.m	12500	180	2,250,000	
3	Land disposal at Bulls					
	Land purchase (forestry)	ha	300	3500	1,050,000	Forestry land
	Resource consent	LS	1	1000000	1,000,000	Assume same cost as for a river discharge
	Pipeline to disposal area from Bulls	lin.m	16600	180	2,988,000	200mm diameter
	Irrigation development	ha	240	5000	1,200,000	2mm/ha/day, 100% redundancy
				Sub-total 2-3	8,488,000	
				Items 1-3 Sub-total	9,167,040	
4	Engineering fees	%	9167040	8%	733,363	
5	Contingency	%	9167040	20%	1,833,408	
	TOTAL				\$11,733,811.20	



STEWART & CAVALIER LTD

ENGINEERS

Te Awamutu



Ref. RB6161-18

2nd February 2018

Rangitikei District Council
46 High Street
MARTON 4741

Attention: Blair Jamieson

Dear Blair

RE: *MBR Waste Water Treatment Plant - Marton*

We have much pleasure in submitting budget pricing for the above project.

Packaged MBR sewage treatment plant for treatment of municipal wastewater consisting of the following main components:

- 2 x MW-MR600-U, Capacity max. up to 600 m³/day (each)
- Incorporated Primary Automatic Intake Screen
- Odour Control System
- UPS for PLC standby power (during Standby Generator Starting if applicable)
- All necessary Process Pumps, Mixers, and Aerators.
- Sludge Dewatering System

PRICE

\$ 4,030,000.00

Packaged MBR sewage treatment plant for treatment of municipal wastewater consisting of the following main components:

- 1 x MW-MR1000-U, Capacity max. up to 1000 m³/day
- Incorporated Primary Automatic Intake Screen
- Odour Control System
- UPS for PLC standby power (during Standby Generator Starting if applicable)
- All necessary Process Pumps, Mixers, and Aerators.
- Sludge Dewatering System

PRICE

\$ 3,600,000.00

1317 Alexandra Street, PO Box 22, Te Awamutu

PH: (07) 871 7062 - FAX: (07) 871 7574

**** Prices following as budget estimations in lieu of further information required, these are additional to the MBR Package Plant Prices**

Civil Works (Including underground process tanks)	\$ 1,400,000.00
Site Building (Office & Storage)	\$ 75,000.00
Treated Water Transfer Pumps (and control)	\$ 10,000.00

NOTES AND CLARIFICATIONS

Wastewater treatment system:

1- MBR plant

Mechanical equipment including pipes and fittings within the MBR plant container will be supplied.
Primary screen discharge chute will be supplied.
Plant PLC control System, c/w HMI.
Lifting station incorporating duty/standby lifting pumps

2- Additional Items & Services Included

Civil Design.
Project Management.
Electrical Metering & Distribution Board supply and install.
All electrical interconnecting cables, supply and install.
Mechanical Installation.
Craneage to place the process container(s) on a suitably prepared foundation.
Chemical Tanks and chemical dosing systems.
Access stairs and platforms, supply and install.
Exterior lighting, supply and install.
Safety handrails for safe access to plant on top of the container.
Total plant Testing & Commissioning

3- Additional Items & Services Excluded

Geotechnical investigation/reports to determine extent of civil works required.
Treated Water Pumps (where necessary).
Landscaping, site security fencing, access roads, and personnel access control.
Standby Power Supply (Genset).
Costs associated with planning, building, and resource consents.
Power supply to construction site.
Optional Sludge Pond (if required).

Payment:

Standard milestone payments are as follows with Irrevocable Letter of Credit for total amount of the offer. These payment terms are related to the importation of the Mena Water Package Plant.

80% on Completion of Manufacture and Confirmed Bill of Lading (Item has been loaded for shipping)

20% on Completion of Commissioning or 150 days after Confirmed Bill of Lading (whichever comes first).

Delivery:

From receipt of order and Letter of Credit Documentation provided within 3 weeks of the order date.

3 – 4 Weeks	Detailed Design
1 week	Client Document approval (This time period is client driven, and delays in this step will impact final delivery dates.
16 Weeks	Mechanical Construction
6 – 8 Weeks	Shipping

Guarantee:

24 months for mechanical equipment, 12 months for electrical equipment.

(Effective from customs clearance in NZ).

Exchange Rate:

Off shore purchases have been converted to NZ dollars at a rate of NZD 1.00 = Euro 0.6000, variations to this rate at the time of overseas payment will be to your account.

GST:

Goods and Services Tax is NOT included in the indicated prices.

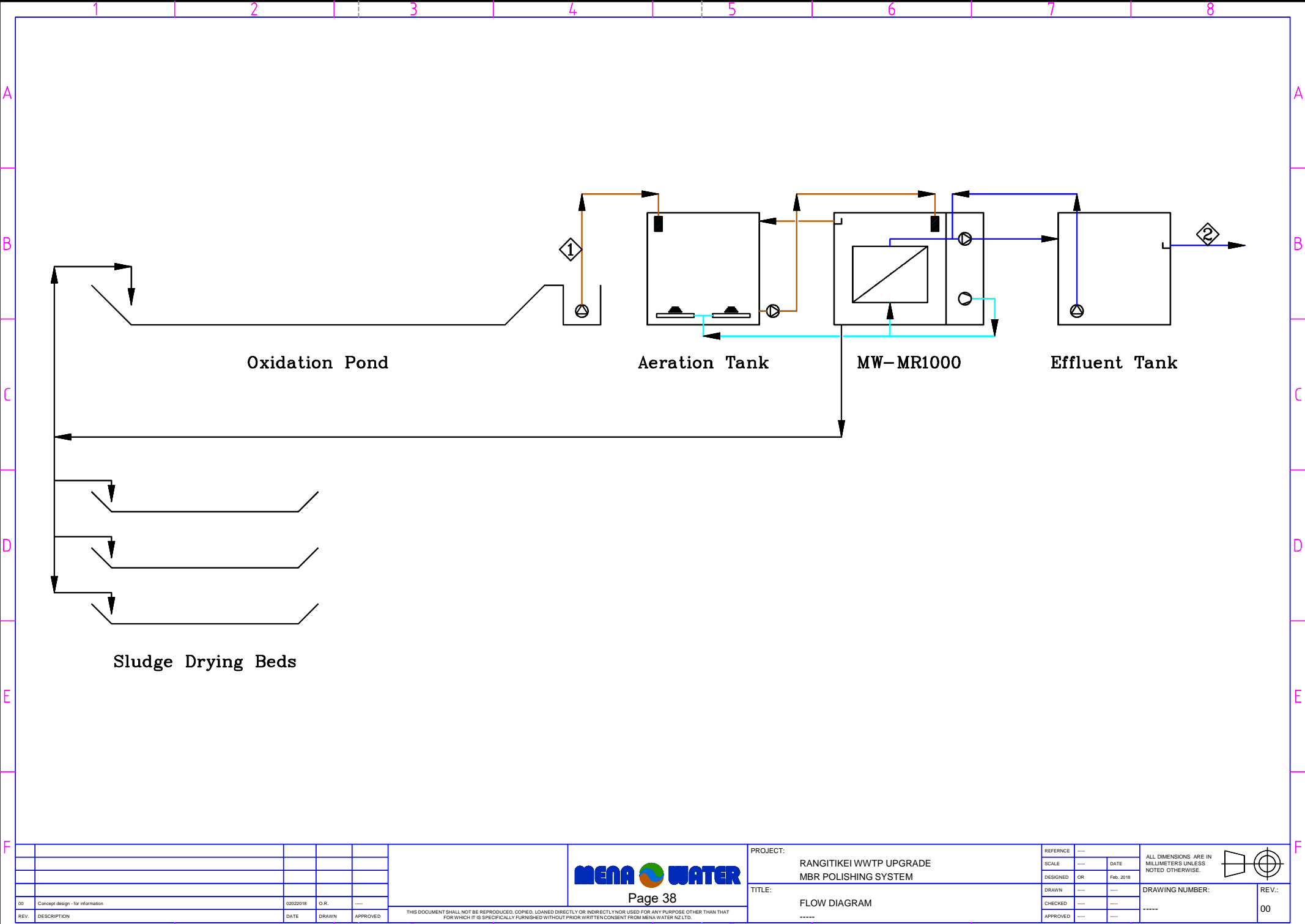
Yours faithfully

STEWART & CAVALIER LIMITED



Ross Burrell
Sales Engineer





REV.	DESCRIPTION	DATE	DRAWN	APPROVED
00	Concept design - for information	02/02/2018	O.R.

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PROJECT:	RANGITIKEI WWTP UPGRADE MBR POLISHING SYSTEM
TITLE:	FLOW DIAGRAM

REFERENCE	----	DATE	----		ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
SCALE	----	DATE	----		
DESIGNED	OR	Feb. 2018	----		
DRAWN	----	----	----		
CHECKED	----	----	----	DRAWING NUMBER:	----
APPROVED	----	----	----	REV.:	00

Appendix 1

BETTER BUSINESS CASE

MARTON AND BULLS WASTEWATER TREATMENT PLANTS – LONG TERM SOLUTIONS

Prepared by:	Véronique Lim/Chris Pepper
Date:	June 2017
Approval to develop preferred option:	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Minimum treatment at Bulls for land irrigation.

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Executive Summary

Strategic Case

Need to Invest

- Resource consent renewal
- Treatment improvements
- Cultural value and significance of the River to Iwi.
- Consideration of land disposal options for discharges of contaminants.
- High operation and maintenance and consenting costs

Strategic Context

- To improve, promote, and protect public health within its district (Health Act 1956).
- To cause all proper steps to be taken to secure the abatement of any nuisance, or any condition likely to be injurious to health (Health Act 1956).
- To make broad assessments of the needs of their communities for water, wastewater, and other sanitary services (Local Government Act 2002).
- The One Plan requires consideration of a land-based discharge.
- Long Term Plan 2015-2025

Investment Objectives

1	To continue to collect, treat and dispose of wastewater from Marton and Bulls after the current resource consents expire.
2	That Marton and Bulls' wastewater treatment and disposal match Policy 5-11 of the One Plan after the resource consents expire by avoiding direct river discharges.
3	To have sufficient land to avoid river discharges after the resource consents expire.
4	To improve the Council's plants operation and management after the resource consents expire.
5	To improve the quality of the Rangitikei River.

Benefits

1	Marton and Bulls' residents and businesses will continue to have their wastewater collected, treated and disposed.
2	Good reputation of the Council who is providing high level services to its community and who is improving its environment quality.
3	Visitors of the Rangitikei Region will benefit of a cleaner river and environment.
4	In line with the Policy 5-11 of the One Plan.
5	Enhance relationship with local Iwi.
6	Reducing the number of schemes frees up time and resource. This relates to management, planning and operational resources. Only one plant to manage, operate, maintain, upgrade and renew. This means less costs associated and better management of a single treatment plant.
7	Avoid the need for a costly treatment plant or land disposal at Marton compared to recent examples at Hunterville and Shannon.

Risks

1	Uncertainties around resource consents conditions
2	Increased operation and maintenance costs
3	Land area required might not be available. This might affect the possibility to discharge to land or to build a treatment plant in the immediate vicinity of the WWTPs.
4	Discharges to river at Marton and Bulls still required in emergency conditions.
5	Unplanned growth of Marton and Bulls' population.
6	Preliminary costs estimates are based on the Council's experiences and previous projects. It is assumed that those costs remained similar.
7	Land disposal via a wetland is a rapid infiltration system where treated wastewater disposed of can end up in the river, without nutrients being removed. This system usually requires a higher level of treatment.

Constraints and Dependencies

1	Level of treatment achieved at Bonny Glen before any mixing with wastewater at Marton WWTP.
2	Costs outlined in the Asset Management Plan are insufficient to renew the resources consents and subsequently not funded in the Long Term Plan (LTP).
3	Transfer wastewater from Marton to Bulls is not a cultural issue. This needs to be assessed with local Iwi in Bulls.

Economic Case

Option	A2	B3	B5	B13	B14
Description	River discharge at Marton and Bulls	Pipeline and irrigation to land at Bulls	B3 + ANZCO Foods	Wetland at Bulls	Wetland at Bulls + ANZCO Foods
Whole of life capital cost (\$m)	10.1	12.4	14.5	7.2	9.6
Whole of life operating costs (100 year costs) (\$m)	55.8	49.5	25.1	35.8	15.6
Cost-Benefit Analysis					
Net Present Benefits (\$m)	0	0	6.0	0	6.0
Net Present Costs (\$m)	17.8	18.2	20.7	12.0	15.5
-Net Present Value (5%) (\$m)	17.8	18.2	14.7	12.0	9.5
Multi-criteria Analysis					
Objective 1	Yes	Yes	Yes	Yes	Yes
Objective 2	No	Yes	Yes	Yes	Yes
Objective 3	No	Yes	Yes	No	No
Objective 4	Partial	Yes	Yes	Yes	Yes
Objective 5	Partial	Yes	Yes	Partial	Partial
Preferred Options		Acceptable	Preferred	If wetland acceptable	

Financial Case

\$m – Option B5	Year 1	Total 10 years
Capital	14.5	14.5
Operating	0.3	3.1
Total	14.8	17.6
Existing Revenue	0	0
Existing Capital (LTP)	6.3	7.5
Extra Revenue	0	2.4
Extra Capital Required	8.5	7.7
Total	8.5	7.7

Commercial Case

Based on the preferred way forward – *Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only* – and subject to approval, the procurement strategy is to engage an expert to locate the most suitable land in the vicinity (10-15 km) of the Bulls wastewater treatment plant, engage surveyors to undertake detailed ground level investigations, engage technical expert to peer review the in-house design and provide a detailed design of the pipeline and the pumps associated. Then, the organisation proposes to approach the market with an Expression of Interest for the supply and installation of the pipeline and the pumps required.

Management Case

Key milestones	Year 1				Year 2			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Obtain formal agreement from local Iwi in Bulls								
2. Obtain temporary resource consent from Horizons Regional Council								
3. Find suitable soil								
4. Obtain detailed ground level investigations (external surveyor)								
5. Discuss with ANZCO Foods								
6. Develop concept design for the preferred solution (in-house)								
7. Develop detailed design: pipeline, valve, connections, pumps, controls (external)								
8. Purchase land								
9. Negotiate sale								
10. Construction								
11. Commissioning								

Plan for successful delivery:

- PMI PMBOK project management methodology
- Project progress will be reported using the Key Project Status Report.

1. Background

1.1. Marton WWTP

❖ Population

Marton has a population of some 4,600 served by residential and commercial sewer connections. There are a handful of food processing industries. Two major inputs to the Marton WWTP are Speirs Foods and Malteurop.

❖ Consents

Consent	Consent Number	Expiry Date	Consent Limit	Comments
Discharge to Water	7312	31 Mar 2019	See comments	Shall not give rise to negative effects on receiving environment as detailed in consent
Discharge to Air	7313	31 Mar 2019	DO > 1.0 g/m ³	

❖ Current treatment elements

Asset Type	Physical Parameters
Treatment Plant	Capable of treating 3,600m ³ /day Continuous moving bed filtration system UV disinfection Sludge disposal system SCADA system Grit Trap Mechanical Screen Anaerobic pond Aeration Lagoon (0.254 Ha) Facultative Pond (5.421 Ha) Secondary settling pond (2.670 Ha)

❖ Discharge to river

The treated effluent is currently discharged to the Tutaenui Stream, before making its way to the Rangitikei River.

1.2. Bulls WWTP

❖ Population

The Bulls sewer network serves a population of 1,600. The entire community is serviced including a small industrial area including food processing. The town's abattoir runs and maintains its own oxidation pond system. Negotiations are under way to integrate this system with the public system in the near future.

❖ Consents

Consent	Consent Number	Expiry Date	Consent Limit	Comments
Discharge	6406	1 Nov 2006	515 m ³ /day NH ₄ N < 30 g/m ³ CBOD ₅ < 12 g/m ³ TSS < 120 g/m ³ <i>Enterococci</i> < 2000/100 mL DRP < 10 g/m ³	Discharge from Bulls oxidation pond to Rangitikei River; shall not give rise to negative effects on receiving environment as detailed in consent

Revised application lodged – awaiting decision on notification.

Currently the Bulls wastewater treatment plant discharges under existing use rights.

❖ Current treatment elements

Asset Type	Asset Parameters
Treatment Plant	Mechanical screen Facultative pond (1.978 Ha) Secondary settling pond (1.648 Ha) Capable of treating 515m ³ /day (Resource Consent)

❖ Discharge to river

The two-pond system has an overflow weir to a grass-covered drain running through a paddock towards the Rangitikei River.

2. The Strategic Case – Making the Case for Change

2.1. Strategic Context

❖ Rangitikei District Council, Long Term Plan 2015-25:

- *Contributing to personal and public health and safety* → Community Outcomes: A safe and caring community

- *Supporting the sustainability of the natural environment* → Community Outcomes: A treasured natural environment - The District's major natural and cultural resource is its rivers and waterways, particularly the magnificent Rangitikei River.

❖ **Resource consents:**

For the discharge of treated water to either land or water from the District's Wastewater Treatment Plants and statutory obligations under the **Local Government Act 2002**, **Health Act 1956** and **Resource Management Act 1991**:

- *To improve, promote, and protect public health within its district* (Health Act 1956).
- *To cause all proper steps to be taken to secure the abatement of any nuisance, or any condition likely to be injurious to health* (Health Act 1956).
- *To make broad assessments of the needs of their communities for water, wastewater, and other sanitary services* (Local Government Act 2002).

❖ **Current issues:**

- Inability to cope with large shock loadings primarily received from Bonny Glen Landfill (this will stop starting from December 2017).
- Nutrient removal rates do not meet discharge consent requirements.
- No certainty that consent conditions will be met consistently.
- No certainty about future capital and operational cost requirements.
- No certainty about future financial and depreciation costs.
- The flows in the Tutaenui stream cannot provide any significant dilution factor to the discharge. The most recent consent conditions received (for the Feilding WWTP discharge) require a 1:50 dilution factor. This cannot be achieved with Marton, particularly in the summer months where flows in the stream are often extremely low.

❖ **Anticipated operating environments:**

- Ongoing resource consent breaches for the Marton Waste Water Treatment Plant (Monitoring results with Consent 7312 indicate that the Marton WWTP does not comply consistently with the downstream ammoniacal nitrogen limit).
- Lesson learned from Feilding WWTP experience shows the importance of the Policy 5-11 of the One Plan to the Environmental Court and local Iwi: land-based discharged must be considered. The Feilding WWTP consent process has highlighted significant community and iwi concerns about direct wastewater discharges to watercourses, even when it can be demonstrated that the effects of the treated effluent are minor. Even where there are 'less than minor' physical effects on receiving waters, treatment improvements are still required.
- It is easier to obtain long term consents for a discharge to land than for a discharge to water.
- Extended consenting processes are extremely expensive.
- On-going operating and consenting costs are likely to be significant

- Addressing these factors poses a significant affordability issue for the Council and its community.

❖ **Horizons Regional Council – One Plan:**

- Requires consideration of a land-based discharge. Policy 5-11 regarding Human Sewage Discharge specifies that ‘before entering a surface water body all new discharges of treated human sewage must be applied onto or into land, or flow overland, or pass through an alternative system that mitigates the adverse effects on the mauri of the receiving water body’.

❖ **The Need for Investment:**

- The existing resource consent for the Marton Waste Water Treatment Plant (WWTP) is due to expire in March 2019.
- Lack of infrastructure at Marton to achieve sufficient treatment. Treatment improvements are required.
- Discharges to river should be avoid wherever possible. The Council acknowledges the cultural value and significance of the Rangitikei River.
- Policy 5-11 of the One Plan requires consideration of land disposal options for discharges of contaminants.
- Discharges to land at Marton require to purchase land and design and build an irrigation system.
- Wastewater services must be managed in a manner that reduces cost and management risks.

2.2. The Case for Change

❖ **Investment Objectives**

- 1. To continue to collect, treat and dispose of wastewater from Marton and Bulls after the current resource consents expire.
- 2. That Marton and Bulls’ wastewater treatment and disposal match Policy 5-11 of the One Plan after the resource consents expire by avoiding direct river discharges.
- 3. To have sufficient land to avoid river discharges after the resource consents expire.
- 4. To improve the Council’s plants operation and management after the resource consents expire.
- 5. To improve the quality of the Rangitikei River.

❖ Benefits

- Marton and Bulls' residents and businesses will continue to have their wastewater collected, treated and disposed.
- Good reputation of the Council who is providing high level services to its community and who is improving its environment quality.
- Visitors of the Rangitikei Region will benefit of a cleaner river and environment.
- In line with the Policy 5-11 of the One Plan.
- Enhance relationship with local Iwi.
- Reducing the number of schemes frees up time and resource. This relates to management, planning and operational resources. Only one plant to manage, operate, maintain, upgrade and renew. This means less costs associated and better management of a single treatment plant.
- Avoid the need for a costly treatment plant or land disposal at Marton compared to recent examples at Hunterville and Shannon.

❖ Risks

- Not reaching the requirements from the resource consents.
- Uncertainties around resource consents conditions. Horizons Regional Council may impose stringent river discharge standards at Marton and Bulls.
- Increased operation and maintenance costs of a discharge to river at Marton and Bulls.
- Land area required might not be available. This might affect the possibility to discharge to land or to build a treatment plant in the immediate vicinity of the WWTPs.
- Consent process is contested leading to the budget being exceeded, onerous consent conditions and a short time to renewal.
- Discharges to river at Marton and Bulls still required in emergency conditions.
- Conflict with local Iwi if treated wastewater is to be discharged to river.
- Insufficient land for treated wastewater disposal in Marton or Bulls.
- Costs to acquire land, and for effluent storage and distribution of treated effluent at Marton and Bulls have not been budgeted for and more funding is required.
- Unplanned growth of Marton and Bulls' population.
- Preliminary costs estimates are based on the Council's experiences and previous projects. It is assumed that those costs remained similar.

- Land disposal via a wetland is a rapid infiltration system where treated wastewater disposed of can end up in the river, without nutrients being removed. This system usually requires a higher level of treatment.

❖ **Constraints and Dependencies**

- Level of treatment required by the resource consents.
- Level of treatment achieved at Bonny Glen before any mixing with wastewater at Marton WWTP.
- Timeframe for resource consents for Marton and Bulls.
- Costs outlined in the Asset Management Plan are insufficient to renew the resources consents and subsequently not funded in the Long Term Plan (LTP).
- Transfer wastewater from Marton to Bulls is not a cultural issue. This needs to be assessed with local Iwi in Bulls.
- Horizons Regional Council approves a temporary resource consent the time to build the pipeline.
- Awaiting decision on notification for Bulls WWTP.

3. The Economic Case

3.1. Long-List Options

In **Red**: Options that are discarded

In **Orange**: Options that are possible but have limitations

In **Green**: Acceptable options

A] Separate treatment and disposal options for Marton and Bulls

1) Status Quo at Marton + Status Quo at Bulls

This assumes that the Council will be able to re-consent the existing discharges to river.

At Marton, the flows in the Tutaenui stream cannot provide any significant dilution factor to the discharge. The most recent consent conditions received (for the Feilding WWTP discharge) require a 1:50 dilution factor. This cannot be achieved with Marton, particularly in the summer months where flows in the stream are often extremely low.

Daily discharge volume are exceeding consent condition. A revised application for Bulls WWTP has been lodged. Council is awaiting decision on notification and decision from Horizons Regional Council on the quality of discharge the plant will be expected to deliver.

2) Improve discharge to river at Marton + Status Quo at Bulls

Not in line with Policy 5-11 of the One Plan.

Status Quo at Bulls unlikely.

3) Discharge to land and to river in emergency (minimum treatment for land irrigation) at Marton + Status Quo at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

4) Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) + Status Quo at Bulls

Not in line with Policy 5-11 of the One Plan for Bulls.

5) Discharge to land only at Marton + Status Quo at Bulls

Not in line with Policy 5-11 of the One Plan for Bulls.

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

6) Status Quo at Marton + Improve discharge to river at Bulls

Status Quo at Marton seems not possible as the flows in the Tutaenui stream cannot provide any significant dilution factor to the discharge.

7) Status Quo at Marton + Discharge to land and to river in emergency (minimum treatment for land irrigation) at Bulls

Status Quo at Marton seems not possible as the flows in the Tutaenui stream cannot provide any significant dilution factor to the discharge.

8) Status Quo at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to)

Status Quo at Marton seems not possible as the flows in the Tutaenui stream cannot provide any significant dilution factor to the discharge.

9) Status Quo at Marton + Discharge to land only at Bulls

Status Quo at Marton seems not possible as the flows in the Tutaenui stream cannot provide any significant dilution factor to the discharge.

10) Improve discharge to river at Marton + Improve discharge to river at Bulls

Not in line with Policy 5-11 of the One Plan.

11) Improve discharge to river at Marton + Discharge to land and to river in emergency (minimum treatment for land irrigation) at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

12) Improve discharge to river at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Bulls

Not in line with Policy 5-11 of the One Plan for Marton.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

13) Improve discharge to river at Marton + Discharge to land only at Bulls

Not in line with Policy 5-11 of the One Plan for Marton.

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

14) Discharge to land and to river in emergency (minimum treatment for land irrigation) at Marton + Improve discharge to river at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

15) Discharge to land and to river in emergency (minimum treatment for land irrigation) at Marton + Discharge to land and to river in emergency (minimum treatment for land irrigation) at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

16) Discharge to land and to river in emergency (minimum treatment for land irrigation) at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

17) Discharge to land and to river in emergency (minimum treatment for land irrigation) at Marton + Discharge to land only at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

18) Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Marton + Improve discharge to river at Bulls

Not in line with Policy 5-11 of the One Plan for Bulls.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

19) Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Marton + Discharge to land and to river in emergency (minimum treatment for land irrigation) at Bulls

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

20) Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Bulls

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

In line with Policy 5-11 of the One Plan.

21) Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Marton + Discharge to land only at Bulls

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

22) Discharge to land only at Marton + Improve discharge to river at Bulls

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

Not in line with Policy 5-11 of the One Plan for Bulls.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

23) Discharge to land only at Marton + Discharge to land and to river in emergency (minimum treatment for land irrigation) at Bulls

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

24) Discharge to land only at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Bulls

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

25) Discharge to land only at Marton + Discharge to land only at Bulls

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

This means two treatment plants to upgrade and maintain and resource consents for two sites: expensive exercise.

B] Common disposal options for Marton and Bulls

26) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Keep existing treatment at Bulls. Discharge to river at Bulls as currently.

Not in line with Policy 5-11 of the One Plan for Bulls.

Daily discharge volume are exceeding consent condition. A revised application for Bulls WWTP has been lodged. Council is awaiting decision on notification and decision from Horizons Regional Council on the quality of discharge the plant will be expected to deliver.

27) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Improve treatment at Bulls. Discharge to river at Bulls.

Not in line with Policy 5-11 of the One Plan for Bulls.

28) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Minimum treatment for land discharge at Bulls. Discharge to land and to river at Bulls in emergency.

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

29) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

30) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

31) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

32) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

33) Pipeline from Marton to Bulls. Transport pre-treated effluent from Marton to Bulls. Keep existing treatment at Bulls. Discharge to river at Bulls as currently.

Not in line with Policy 5-11 of the One Plan for Bulls.

Daily discharge volume are exceeding consent condition. A revised application for Bulls WWTP has been lodged. Council is awaiting decision on notification and decision from Horizons Regional Council on the quality of discharge the plant will be expected to deliver.

Pre-treatment seems insufficient to meet consent condition.

34) Pipeline from Marton to Bulls. Transport pre-treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to river at Bulls.

Not in line with Policy 5-11 of the One Plan for Bulls.

Pre-treating at Marton if equipment can be reused but there are still two sites to maintain and operate.

35) Pipeline from Marton to Bulls. Transport pre-treated effluent from Marton to Bulls. Minimum treatment for land discharge at Bulls. Discharge to land and to river at Bulls in emergency.

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

36) Pipeline from Marton to Bulls. Transport pre-treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

Pre-treating at Marton if equipment can be reused but there are still two sites to maintain and operate.

37) Pipeline from Marton to Bulls. Transport pre-treated effluent from Marton to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

38) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Keep existing treatment at Bulls. Discharge to river at Bulls as currently.

Not in line with Policy 5-11 of the One Plan for Bulls.

Daily discharge volume are exceeding consent condition. A revised application for Bulls WWTP has been lodged. Council is awaiting decision on notification and decision from Horizons Regional Council on the quality of discharge the plant will be expected to deliver.

39) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to river at Bulls.

Not in line with Policy 5-11 of the One Plan for Bulls.

40) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Minimum treatment for land discharge at Bulls. Discharge to land and to river at Bulls in emergency.

If there are discharges to river, a minimum level of treatment is required (more stringent conditions than discharges to land).

41) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

There is no advantage in treating at Marton and improving treatment at Bulls: there are still two sites to maintain and operate.

42) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

There is no advantage in treating at Marton and improving treatment at Bulls: there are still two sites to maintain and operate.

The land area required would be very high and important storage would be required (when soil capacity cannot take more water). A minimum of 90 days of storage is usually recommended.

43) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport raw effluent from Bulls to Feilding. Treat and discharge at Feilding.

Additional 900 m³/day from Marton and Bulls to the Feilding WWTP. The treatment plant cannot cope with this additional flow without further investment (especially if the project to transport wastewater from the other villages in Manawatu goes ahead).

One river crossing.

44) Pipeline from Marton to Bulls. Transport pre-treated effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport pre-treated effluent from Bulls to Feilding. Treat and discharge at Feilding.

Pre-treating using existing equipment.

Additional 900 m³/day from Marton and Bulls to the Feilding WWTP. The treatment plant cannot cope with this additional flow without further investment (especially if the project to transport wastewater from the other villages in Manawatu goes ahead).

One river crossing.

45) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.

Improve treatment to be able to discharge to land.

Additional 900 m³/day from Marton and Bulls to the Feilding WWTP irrigation system. Need to improve irrigation system.

One river crossing.

Still many plants to improve, maintain and operate.

46) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Treatment at Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.

47) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.

Improve treatment to be able to discharge to land.

Additional 900 m³/day from Marton and Bulls, plus volumes from ANZCO sites, to the Feilding WWTP irrigation system. Need to improve irrigation system.

One river crossing.

Still many plants to improve, maintain and operate.

48) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Pipeline from Bulls to Feilding. Transport raw effluent from Bulls to Feilding. Treat and discharge at Feilding.

Additional 900 m³/day from Marton and Bulls, plus volumes from ANZCO sites, to the Feilding WWTP. The treatment plant cannot cope with this additional flow without further investment (especially if the project to transport wastewater from the other villages in Manawatu goes ahead).

One river crossing.

49) Keep existing treatment at Marton and Bulls. Pipeline from Marton to Bulls. Wetland at Bulls

Land disposal via wetland/rapid infiltration involves high quality wastewater (generally of higher quality than the low rate infiltration via irrigation option) being discharged at high rates (200 to 675 mm/d) into specially-designed rapid infiltration. This option is purely a mechanism for diffuse disposal, and only slight improvements in the overall quality of the effluent discharged to land, and eventually the river, are expected. This will however be in line with Policy 5-11 of the One Plan where 'before entering a surface water body all new discharges of treated human sewage must be applied onto or into land, or flow overland, or pass through an alternative system that mitigates the adverse effects on the mauri of the receiving water body'.

50) Keep existing treatment at Marton and Bulls. Pipeline from Marton to Bulls + ANZCO. Wetland at Bulls

Same as option 49 plus volume from ANZCO.

	Options	Status Quo		Existing treatment		Pipelines			Improved treatment			Disposal			Income
		@ Marton	@ Bulls	@ Marton	@ Bulls	Marton to Bulls	ANZCO to Bulls	Bulls to Feilding	@ Marton	@ Bulls	@ Feilding	@ Marton	@ Bulls	@ Feilding	
Separate schemes	1 A1	x	x	x	x							R	R		
	2		x						x			R	R		
	3		x						Min			R + L	R		
	4		x						x			R + L	R		
	5		x						x			L	R		
	6	x								x		R	R		
	7	x								Min		R	R + L		
	8	x								x		R	R + L		
	9	x								x		R	L		
	10 A2								x	x		R	R		
	11								x	Min		R	R + L		
	12								x	x		R	R + L		
	13								x	Min		R	L		
	14								Min	x		R + L	L		
	15								Min	Min		R + L	R + L		
	16								Min	x		R + L	R + L		
	17								Min	Min		R + L	L		
	18								x	x		R + L	R		
	19								x	Min		R + L	R + L		
	20 A3								x	x		R + L	R + L		
	21								x	Min		R + L	L		
	22								Min	x		L	R		
	23								Min	Min		L	R + L		
	24								Min	x		L	R + L		
	25 A4								Min	Min		L	L		
Common disposal options	26				x	Raw							R		
	27 B1					Raw				x			R		
	28					Raw				Min			R + L		
	29 B2					Raw				x			R + L		
	30 B3					Raw				Min			L		
	31 B4					Raw	Raw			x			R + L		x
	32 B5					Raw	Raw						L		x
	33			x	x	Pre-treated							R		
	34 B6			x		Pre-treated				x			R		
	35			x		Pre-treated				Min			R + L		
	36 B7			x		Pre-treated				x			R + L		
	37			x		Pre-treated				Min			L		
	38				x	Treated							R		
	39			x		Treated				x			R		
	40			x		Treated				Min			R + L		
	41			x		Treated				x			R + L		
	42			x		Treated				Min			L		
	43 B8					Raw		Raw			x			R + L	
	44			x		Pre-treated		Pre-treated			x			R + L	
	45 B9					Treated			x	x				R + L	
	46 B10					Raw		Treated		x				R + L	
	47 B11					Raw	Raw	Treated		x				R + L	x
	48 B12					Raw	Raw				x			R + L	x
	49 B13			x	x	Treated							W		
	50 B14			x	x	Treated	Raw						W		x

R	River
L	Land
W	Wetland
Min	Minimum standard for land irrigation

3.2. Short-List Options

On the basis of the initial assessment of the long-list options, the following short-listed options were selected for further economic analysis:

A) Separate treatment and disposal options for Marton and Bulls

A1) Status Quo at Marton + Status Quo at Bulls

A2) Improve discharge to river at Marton + Improve discharge to river at Bulls

A3) Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Bulls

A4) Discharge to land only at Marton + Discharge to land only at Bulls

B] Common disposal options for Marton and Bulls

B1) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Improve treatment at Bulls. Discharge to river at Bulls.

B2) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

B3) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

B4) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Transport raw effluent from ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

B5) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

B6) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to river at Bulls.

B7) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.

B8) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport raw effluent from Bulls to Feilding. Treat and discharge at Feilding.

B9) Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.

B10) Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Treatment at Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.

B11) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.

B12) Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Pipeline from Bulls to Feilding. Transport raw effluent from Bulls to Feilding. Treat and discharge at Feilding.

B13) Keep existing treatment at Marton and Bulls. Pipeline from Marton to Bulls. Wetland at Bulls.

B14) Keep existing treatment at Marton and Bulls. Pipeline from Marton to Bulls + ANZCO. Wetland at Bulls

Dimension	Description	Main Options within each Dimension
Scope (the what)	Collect, treat and dispose of wastewater from Marton and Bulls. What level of treatment? What disposal solution(s) chosen?	<p><u>Collection system</u>: remains the same in all options.</p> <p><u>Treatment and disposal</u>:</p> <ul style="list-style-type: none"> • Status Quo – Do nothing (A1) • Treat and dispose to river: <ul style="list-style-type: none"> - in Marton and Bulls separately (A2) - treatment separate – disposal together (B6) - treatment and disposal together (B1) • Treat and dispose to land (irrigation): <ul style="list-style-type: none"> - in Marton and Bulls separately (A4) - treatment separate – disposal together (not further dev.) - treatment and disposal together (B5) • Treat and dispose to land and river: <ul style="list-style-type: none"> - in Marton and Bulls separately (A3) - treatment separate – disposal together in Bulls (B7) - treatment and disposal together in Bulls (B2) - treatment and disposal together in Bulls + ANZCO sites (B4) - treatment separate – disposal together in Feilding (B9) - treatment together in Bulls – disposal together in Feilding (B10) - treatment together in Bulls + ANZCO sites + disposal together in Feilding (B11) - treatment and disposal together in Feilding (B8) - treatment and disposal together in Feilding + ANZCO sites (B12) • Treat and dispose to land (wetland): <ul style="list-style-type: none"> - Treatment as existing. Disposal via a wetland in Bulls (B13) - Treatment as existing + ANZCO. Disposal via a wetland in Bulls (B13)
Solution (the how)	How can the services be provided? How can we treat wastewater from Marton and Bulls? How can we dispose of wastewater from Marton and Bulls?	<ul style="list-style-type: none"> • Status Quo – Keep the existing treatment plants and disposal systems • Design and build new treatment plants • Design and build new irrigation systems • Design and build pipelines to transfer sludge from one treatment plant to another to reduce treatment, disposal and consent cost
Service delivery (the who)	<p>Who can help us to deliver the services?</p> <p>Service delivery for:</p> <p><u>A. Design</u></p> <p><u>B. Equipment</u></p> <p><u>C. Installation</u></p> <p><u>D. Maintenance and operation</u></p>	<p><u>A. Design</u></p> <ul style="list-style-type: none"> - In-house (Utilities team) - Out-sourced (Consultants) - Alliances/partnership <p><u>B. Equipment</u></p> <ul style="list-style-type: none"> - Several supplier <p><u>C. Installation</u></p>

		- Contractors <u>D. Maintenance and operation</u> - Operation team - Contractors
Implementation (the when)	When can services be delivered?	<ul style="list-style-type: none"> • Now • Phased • Just in time
Funding	How can it be funded?	<ul style="list-style-type: none"> • Existing budget (capital and operating) • Loans • Targeted rates • Additional budget • Income from ANZCO Foods Rangitikei and ANZCO Foods Manawatu

3.3. Economic Analysis

For the purposes of the analysis, the following assumptions have been made:

- An upgraded discharge to River will require a higher standard of wastewater treatment. A wastewater treatment plant was built in Hunterville and we will assume the same type of equipment is required.
- The existing ponds need to be lined.
- Consenting costs are based on the previous experiences at Cheltenham, Hunterville and Bulls.
- Length of consent are based on the Council's previous experiences: 10 years for a discharge to river resource consent and 35 years for a discharge to land resource consent.
- For irrigation: an hydraulic application rate of 4 mm per day all year round in Bulls and with 90 days of storage in Marton is required to eliminate the need for a discharge to river resource consent.
- The existing oxidation pond can be reused as storage if they are lined.
- When irrigating, a buffer zone of 20 metres will be required around the whole site.
- Minimum treatment is required to maintain the irrigation system.
- Revenue from ANZCO: +\$120,000/year per site
- Total discharge volumes:

❖ MARTON:

Population	Dry weather flow	Wet weather flow	Average daily flow to treatment plant (dry weather)	Average daily flow to treatment plant (wet weather)	Peak daily flow (dry weather)	Peak daily flow (wet weather)
4,600 residents	250 L/person/day	500 L/person/day	1150 m ³ /day	2300 m ³ /day	33 L/s	67 L/s
Speirs Foods			200 m ³ /day	300 m ³ /day		
Malteurop			200 m ³ /day	300 m ³ /day		

TOTAL	1550 m ³ /day	2900 m ³ /day	45 L/s	84 L/s
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❖ **BULLS:**

Population	Dry weather flow	Wet weather flow	Average daily flow to treatment plant (dry weather)	Average daily flow to treatment plant (wet weather)	Peak daily flow (dry weather)	Peak daily flow (wet weather)
1,600 residents	250 L/person/day	500 L/person/day	400 m ³ /day	800 m ³ /day	12 L/s	23 L/s

❖ **ANZCO Foods:**

+500 m³/day for ANZCO Foods Rangitikei

+500 m³/day for ANZCO Foods Manawatu

- No allowance has been made for population growth. We assume population and usage remain the same over the investment period. Note that the pipe sizes identified as practical for this application all have a considerable amount of spare capacity.
- The distance between Marton and Bulls is approximately 10.2km.
- The distance between Bulls and Feilding is approximately 19km.

The following table compares the indicative costs and benefits of each short-listed option. Note that the status quo option has been discarded from the comparison, as it is unlikely that a discharge to river without further treatment is permitted.

Option	A2	A3	A4	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14
Description	Improve discharge to river at Marton + Improve discharge to river at Bulls	Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Marton + Discharge to land and to river in emergency (improved treatment for discharge to river if needs to) at Bulls	Discharge to land only at Marton + Discharge to land only at Bulls	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Improve treatment at Bulls. Discharge to river at Bulls.	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.	Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.	Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to river at Bulls.	Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Improved treatment at Bulls. Discharge to land and to river at Bulls in emergency.	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport raw effluent from Bulls to Feilding. Treat and discharge at Feilding.	Pipeline from Marton to Bulls. Transport treated effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.	Pipeline from Marton to Bulls. Transport raw effluent from Marton to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.	Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Pipeline from Bulls to Feilding. Transport treated effluent from Bulls to Feilding. Discharge at Feilding.	Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Pipeline from Bulls to Feilding. Transport raw effluent from Bulls to Feilding. Treat and discharge at Feilding.	Keep existing treatment. Marton to Bulls sewer pipeline. Wetland at Bulls	Keep existing treatment. Marton to Bulls sewer pipeline. Wetland at Bulls + ANZCO
Whole of life capital cost (\$m)	10.1	18.6	18.0	9.8	15.8	12.4	17.1	14.5	11.1	16.6	25.0	23.7	22.9	27.4	30.2	7.2	9.6
Whole of life incl. operating costs (100 year costs) (\$m)	55.8	75.5	57.9	60.1	67.4	49.5	41.7	25.1	67.6	71.4	87.7	92.4	71.2	55.4	66.3	35.8	15.6
Cost-Benefit Analysis																	
Net Present Benefits (\$m)	0	0	0	0	0	0	6.0	6.0	0	0	0	0	0	6.0	6.0	0.0	6.0
Net Present Costs (\$m)	17.8	27.5	23.6	18.5	24.0	18.2	25.7	20.7	20.9	25.3	34.2	34.3	29.5	35.4	39.4	12.0	15.5
-Net Present Value (5%) (\$m)	17.8	27.5	23.6	18.5	24.0	18.2	19.8	14.7	20.9	25.3	34.2	34.3	29.5	29.4	33.5	12.0	9.5
Multi-criteria Analysis																	
Objective 1 - Collect, treat and dispose	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Objective 2 - Avoid river discharges	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Objective 3 - Sufficient land to avoid river discharge	No	No	Yes	No	No	Yes	No	Yes	No	No	No	No	No	No	No	No (rapid infiltration)	No (rapid infiltration)
Objective 4 - Improve plants management and operation	Partial	Partial	Partial	Yes	Yes	Yes	Yes	Yes	Partial	Partial	Yes	Partial	Yes	Yes	Yes	Yes	Yes
Objective 5 - Improve river quality	Partial	Partial	Yes	Partial	Partial	Yes	Partial	Yes	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial
Preferred Options						To be considered		Preferred								if wetland acceptable	if wetland acceptable

The preferred options are B3 and B5 because it delivers on all objectives. These options include the transport of raw wastewater from Marton to Bulls for discharge to land at Bulls. Option B5 includes collecting wastewater from ANZCO Foods two sites and thus, includes potential income. Value for money is confirmed as it has the lowest -Net Present Value.

Options B13 and B14 have the lowest capital cost investments and the lowest operating costs. However, land disposal via wetland/rapid infiltration is purely a mechanism for diffuse disposal, and only slight improvements in the overall quality of the effluent discharged to land, and eventually the river, are expected. If a wetland is acceptable, option B14 would be the preferred one.

Detailed costs estimated are available in Appendix A.

3.4. The Preferred Option

The preferred option is option B5 - Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.

4. The Commercial Case

Based on the preferred way forward – *Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only* – and subject to approval, the procurement strategy is to engage an expert to locate the most suitable land in the vicinity (10-15 km) of the Bulls wastewater treatment plant, engage surveyors to undertake detailed ground level investigations, engage technical expert to peer review the in-house design and provide a detailed design of the pipeline and the pumps associated. Then, the organisation proposes to approach the market with an Expression of Interest for the supply and installation of the pipeline and the pumps required.

The required goods and/or services in relation to the preferred way forward are:

1. Obtain formal agreement from local Iwi in Bulls
2. Obtain temporary resource consent from Horizons Regional Council
3. Engage expert to find best suitable soil in the vicinity of the Bulls WWTP
4. Obtain detailed ground level investigations (external surveyor)
5. Discuss with ANZCO Foods Rangitikei and Manawatu about a potential connection of their sewage system
6. Develop concept design for the preferred solution (in-house)
7. Develop detailed design: pipeline, valve, connections, pumps, controls (external)
8. Purchase land
9. Negotiate sale and purchase equipment required
10. Engage contractors for the construction phase
11. Oversee the construction phase
12. Maintain and operate the system

Note that rates can be negotiated especially if an important length of pipe is required. Subject to approval, pipeline length required could be:

- Around 11 km from Cheltenham to Feilding
- An additional 35 to 40km to link Halcombe, Sanson, Rongotea and Kimbolton to Feilding.

There are significant risks around delivering the preferred solution and further work should be completed to assess how best these risks could be apportioned between the parties involved.

5. The Financial Case

A review of the budget indicates that the costs outlined are sufficient to renew the consents and operate the existing or upgraded treatment systems for the 30-year timeframe.

However, there is considerable risk and uncertainty about these assumptions. This leads to the conclusion that the full capital and resultant operating costs that are required have not been included in the budget and subsequently have not been funded in the Long Term Plan.

The proposed whole of life cost of the project is \$25m over the 100 years of the expected lifetime of the pipeline, including savings made from income from ANZCO Foods.

On the 30-year programme, the budget allocated to Marton and Bulls WWTPs is of \$12.1m.

An additional funding of \$8.5m is required in year 1 (see table below).

The proposed funding arrangement is **loans/targeted rate** to have residents contributing to the new scheme. Annual rates would also be payable to cover the operating, interest, depreciation and overhead costs.

Option B5 – Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.															
\$k															
Year	1	2	3	4	5	6	7	8	9	10	Total Year 10	Total Year 20	Total Year 30	Total Year 40	Total Year 50
Preferred Way Forward:															
Capital	14,515	0	0	0	0	0	0	0	0	0	14,515	14,515	14,515	14,515	14,515
Operating	311	311	311	311	311	311	311	311	311	311	3,110	6,220	9,330	12,441	15,551
Total	14,826	311	311	311	311	311	311	311	311	311	17,625	20,735	23,845	26,955	30,065
Funded by:															
Existing Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Capital	6,300	131	145	304	148	75	217	87	119	4	7,529	10,122	12,094	14,066	16,038
Extra Revenue	0	240	240	240	240	240	240	240	240	240	2400	4800	7200	9600	12000
Extra Capital Required	8,526	-60	-74	-233	-77	-4	-146	-16	-48	67	7,695	5,813	4,551	3,289	2,028
Total - cumulated	8,526	8,466	8,392	8,160	8,083	8,079	7,932	7,917	7,869	7,935	7,695	5,813	4,551	3,289	2,028

Notes:

- The existing capital for years 30, 40 and 50 have been assumed to be similar to the amount between year 10 and year 20.
- We have assumed that some amounts have been carried over from year 2014-15, 2015-16 and 2016-17 to year 2017-18. Those amounts are in red in the table below.

Location	ProjectName	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Marton	Marton - WWTP Anaerobic Pond Desludging		300,000											
Marton	Marton - WWTP Desludging													
Marton	Marton - WWTP New Anaerobic Pond and Inlet Works	1,250,000												
Marton	Marton - WWTP Leachate Disposal Investigation	30,000												
Marton	Marton - WWTP New Works	157,500												
Marton	Marton - WWTP Renewals	95,076	158,599	10,082		130,311	144,727	265,870	66,839		210,567	52,554	87,084	
Marton	Marton - WWTP Upgrade			750,000	750,000									
Bulls	Bulls - WWPS Renewals		16,974	5,304	8,487				25,718				23,713	4,243
Bulls	Bulls - WWTP Consent Renewal	300,000												
Bulls	Bulls - WWTP New Works	503,404												
Bulls	Bulls - WWTP Renewals	64,549		126,696		624		37,800	55,452	74,991	6,806	34,054	8,192	
Bulls	Bulls - WWTP Upgrade	1,200,000												
Bulls	Bulls - WWTP Desludging	1,000,000												

6. The Management Case

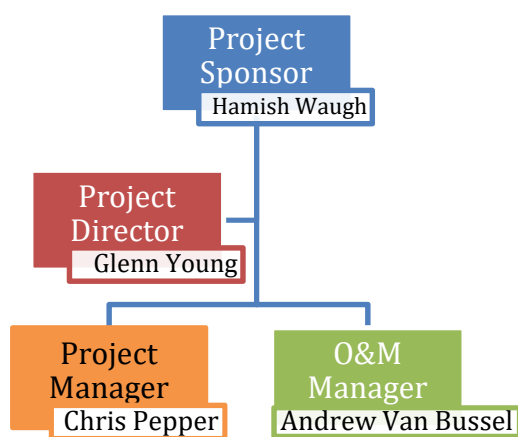
In the event that this investment proposal receives formal approval, a project will be established to deliver the required goods and services and will be managed using the PMI **PMBOK project management methodology**.

Project progress will be reported using the **Key Project Status Report**.

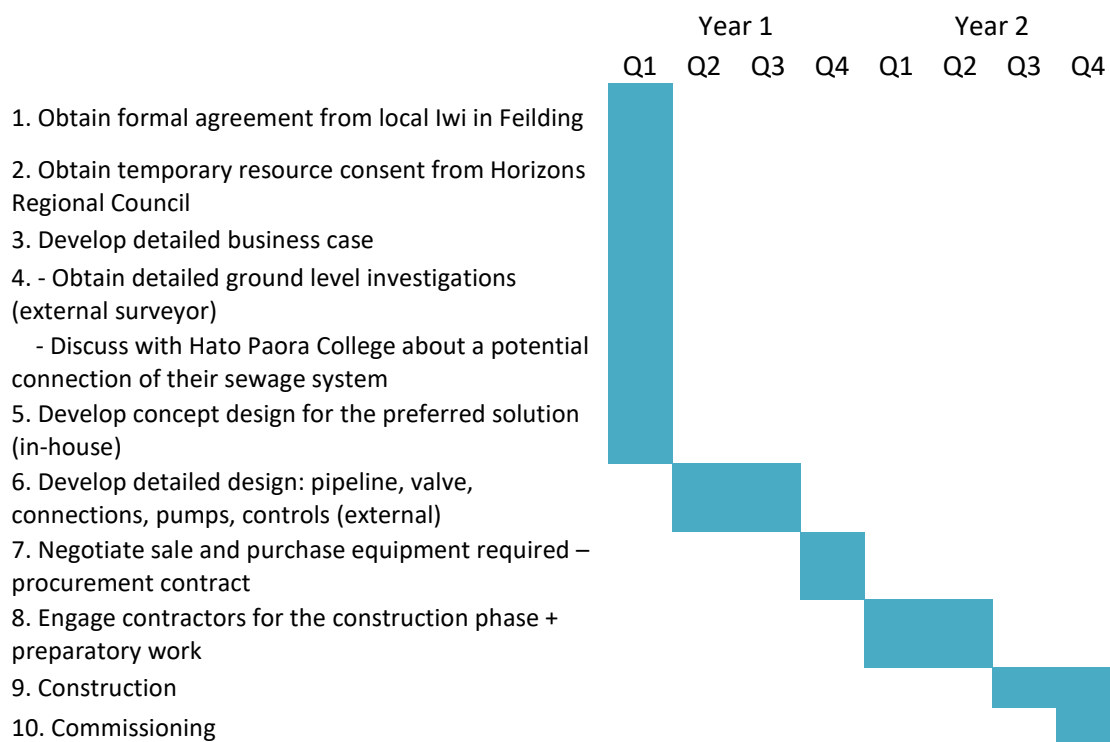
The relevant project management and governance arrangements need to be further defined.

Risks will be managed according to a risks management plan (need to be further developed).

Long Term Plan, Annual Plan and Asset Management Plan will be updated according to the option selected.



The following **timeline** with key milestones is proposed to progress this project forward:



7. Next Steps

This business case seeks formal approval from Council to progress the implementation of the preferred option through:

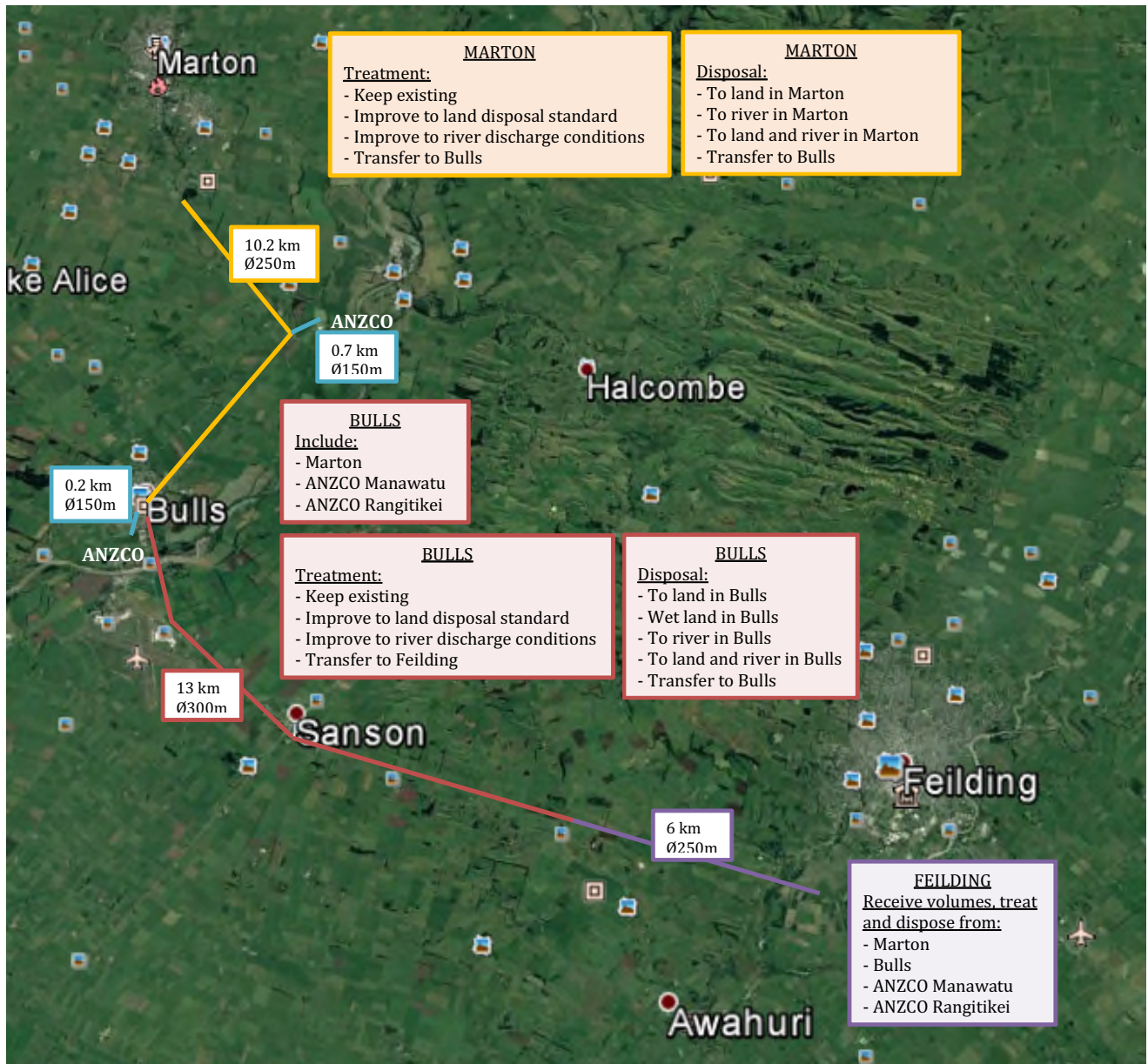
1. Continue to develop detailed Business Case and detailed design.
2. Start discussion with local Iwi and ANZCO Foods.
3. Get formal agreement from Horizons Regional Council and obtain a temporary resource consent for Marton and Bulls.
4. Update Long Term Plan, Annual Plan and Asset Management Plan.
5. Get approval to start further ground level investigations and engage an expert to locate best suitable soil.
6. Begin negotiations with supplier to agree on rates and delivery options.

Appendix A – Detailed Costs Estimates



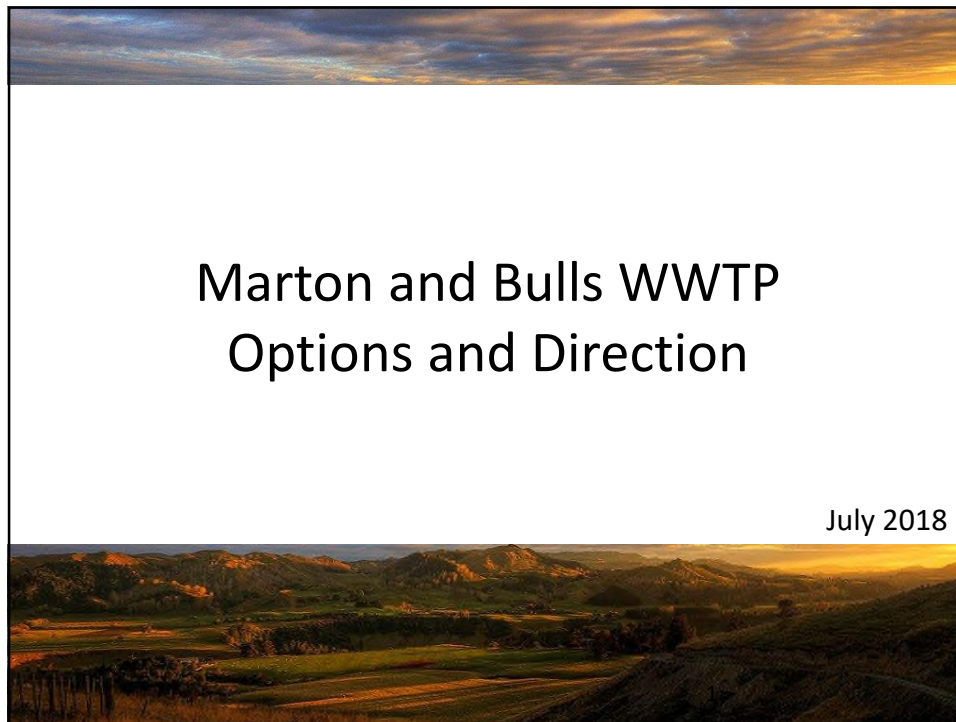






Option	A2	A3	A4	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14
Description	River discharge at Marton and Bulls	Discharges to land and river at Marton and Bulls	Land discharge at Marton and Bulls	Pipeline raw and discharge to river at Bulls	Pipeline raw and discharge to river and land at Bulls	Pipeline raw and discharge to land at Bulls	B2 + ANZCO	B3 + ANZCO	Pipeline treated effluent and discharge to river at Bulls	Pipeline treated effluent and discharge to land and to river at Bulls	Pipeline raw. Treat and discharge at Feilding.	Pipeline raw. Treatment at Bulls. Discharge at Feilding.	Pipeline raw. Treatment at Marton and Bulls. Discharge at Feilding.	B9 + ANZCO	B8 + ANZCO	Pipeline raw. Wetland at Bulls	B13 + ANZCO
Whole of life capital cost (\$m)																	
Whole of life incl. operating costs (100 year costs) (\$m)																	
Cost-Benefit Analysis																	
Net Present Benefits (\$m)																	
Net Present Costs (\$m)																	
-Net Present Value (5%) (\$m)																	
Multi-criteria Analysis																	
Objective 1 - Collect, treat and dispose	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Objective 2 - Avoid river discharges	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Objective 3 - Sufficient land to avoid river discharge	No	No	Yes	No	No	Yes	No	Yes	No	No	No	No	No	No	No	No (rapid infiltration)	No (rapid infiltration)
Objective 4 - Improve plants management and operation	Partial	Partial	Partial	Yes	Yes	Yes	Yes	Yes	Partial	Partial	Yes	Partial	Yes	Yes	Yes	Yes	Yes
Objective 5 - Improve river quality	Partial	Partial	Yes	Partial	Partial	Yes	Partial	Yes	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial	Partial
Preferred Options						To be considered		Preferred								if wetland acceptable	if wetland acceptable

Appendix 2



Contents

- Background
- Business Case and wastewater characterisation
- The draft report
- Thought/Direction from the Advisory Group



Background

- Ongoing issues with Marton discharge evident in 2015
- Bulls application for renewal of existing consent 2015
- Joint land disposal option for Bulls identified late 2016
- Horizons indicated strong preference for land based disposal 2017
- Better Business Case developed by Infrastructure Staff June 2017
- Presented to Council August/September 2017
- Council expands membership of Steering Group late 2017 to include Bulls
- Strong support from Steering Group early 2018 – Marton first to remove discharge from Tutaenui Stream asap.



Purpose of this meeting

- Council requested report to signal direction with input of Advisory Group
- Draft report produced for Advisory Group to have some input on
- Report also to respond to Council request to review Marton alone options
- Also need to look at future options and timing



Better Business Case Recap

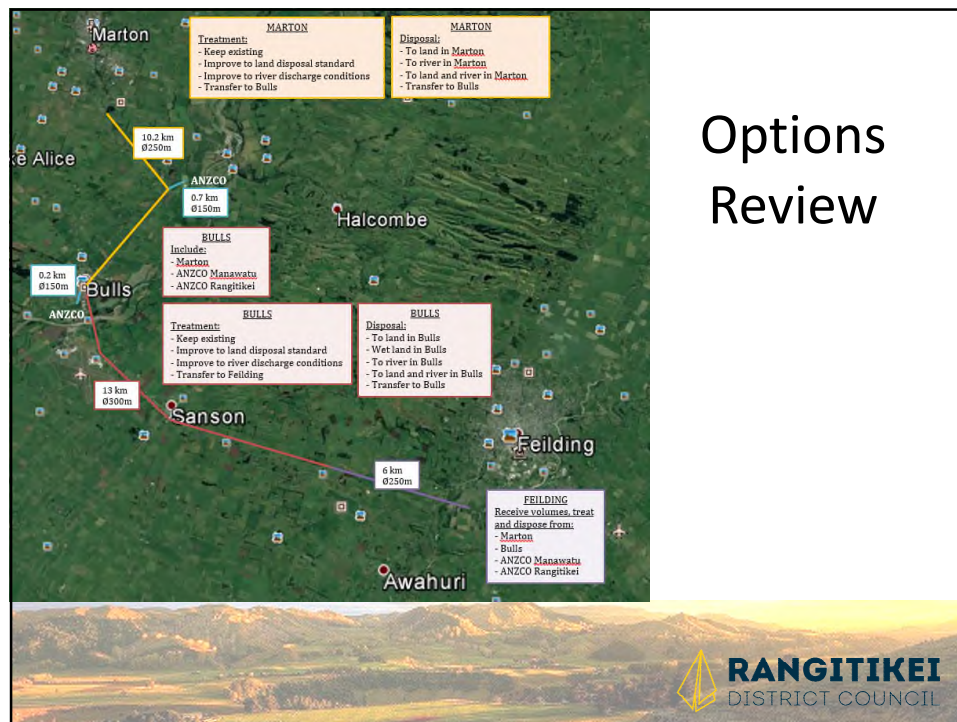
- Long-List Options: 50 in total
- 25 options with separate treatment and disposal schemes for Marton and Bulls
- 25 options with common disposal for Marton and Bulls

Min: Minimum
treatment for
land irrigation

R: River
L: Land
W: Wetland



	Options	Status Quo		Existing treatment		Pipelines			Improved treatment			Disposal		Income
		@ Marton	@ Bulls	@ Marton	@ Bulls	Marton to Bulls	ANZCO to Bulls	Bulls to Feilding	@ Marton	@ Bulls	@ Feilding	@ Marton	@ Bulls	
Separate schemes	1 A1	x	x	x	x							R	R	
	2		x						x			R	R	
	3		x						Min			R + L	R	
	4		x						x			R + L	R	
	5		x						x			L	R	
	6	x								x		R	R	
	7	x								Min		R	R + L	
	8	x								x		R	R + L	
	9	x								x		R	L	
	10 A2								x	x		R	R	
	11								x	Min		R	R + L	
	12								x	x		R	R + L	
	13								x	Min		R	L	
	14								Min	x		R + L	L	
	15								Min	Min		R + L	R + L	
	16								Min	x		R + L	R + L	
	17								Min	Min		R + L	L	
	18								x	x		R + L	R	
	19								x	Min		R + L	R + L	
	20 A3								x	x		R + L	R + L	
	21								x	Min		R + L	L	
	22								Min	x		L	R	
	23									Min		L	R + L	
	24								Min	x		L	R + L	
	25 A4								Min	Min		L	L	
Common disposal options	26				x	Raw							R	
	27 B1					Raw				x			R	
	28					Raw				Min			R + L	
	29 B2					Raw				x			R + L	
	30 B3					Raw				Min			L	
	31 B4					Raw	Raw			x			R + L	x
	32 B5					Raw	Raw						L	x
	33			x	x	Pre-treated							R	
	34 B6			x		Pre-treated				x			R	
	35			x		Pre-treated				Min			R + L	
	36 B7			x		Pre-treated				x			R + L	
	37			x		Pre-treated				Min			R	
	38				x	Treated							R	
	39			x	x	Treated				x			R	
	40			x		Treated				Min			R + L	
	41			x		Treated				x			R + L	
	42			x		Treated				Min			L	
	43 B8					Raw		Raw			x		R + L	
	44					Pre-treated		Pre-treated			x		R + L	
	45 B9			x		Treated				x			R + L	
	46 B10					Raw		Treated		x			R + L	
	47 B11					Raw	Raw	Treated			x		R + L	x
	48 B12					Raw	Raw				x		R + L	x
	49 B13			x	x	Treated						W		
	50 B14			x	x	Treated	Raw					W		x



The Strategic Case

- **Long Term Plan (LTP):** *Contributing to personal and public health and safety. Supporting the sustainability of the natural environment.*
- **Current issues:**
 - Nutrient removal rates do not meet discharge consent requirements.
 - Lack of infrastructure at Marton to achieve sufficient treatment. No certainty that consent conditions will be met consistently.
 - No certainty about future capital and operational cost requirements.
 - No certainty about future financial and depreciation costs.
 - Flows to the Tutaenui stream cannot provide significant dilution factor (Feilding WWTP – 1:50 dilution factor).



The Strategic Case

- **Lessons learned from Feilding WWTP consenting process:**
 - Policy 5-11 of the One Plan - Environmental Court and local Iwi → land-based discharge
 - Length of consent
 - Expensive
 - Operating and consenting costs are likely to be significant
- **Investment Objectives:**
 - 1. To continue to **collect, treat and dispose** of wastewater from Marton and Bulls after the current **resource consents** expire.
 - 2. To match **Policy 5-11** of the **One Plan** by **avoiding direct river discharges**.
 - 3. To have **sufficient land** to avoid river discharges.
 - 4. To improve the Council's plants **operation and management**.
 - 5. To improve the **quality of the Rangitikei River**



Preferred Option

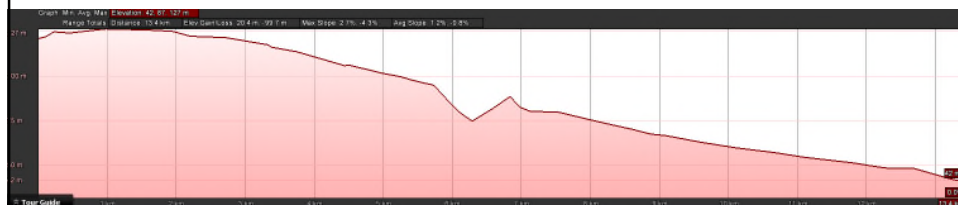
Option B5 - Pipeline from Marton to Bulls. Transport raw effluent from Marton, ANZCO Foods Manawatu and ANZCO Foods Rangitikei to Bulls. Minimum treatment at Bulls for land discharge. Discharge to land at Bulls only.



Preferred Option

Advantages:

- Land disposal is already consented at Feilding (35 years) → no significant issues are expected with a land disposal at Bulls
- Operating costs and inputs for pipelines are much less than for on-site treatment options and have a high degree of certainty and reliability.
- One Plan - desire from local lwi to see wastewater discharged to land.



Current state of affairs

- A Consenting Strategy has been supplied to Horizons at their request
- Have been informed that ANZCO Foods not interested in participation
- Funding provided for project in the Long Term plan
- Some initial design is underway to see if some cost savings can be made if first phase of project can be undertaken concurrently with MDC centralisation
- Nutrient balance undertaken
- Draft report prepared. Intended for Assets and Infrastructure committee 9 August 2018



Draft report

- Sets out consenting environment – key points are strong community and lwi distaste for direct water body discharges and regulatory environment favouring land disposal and discharge
- Issue with Council commitment to land disposal
- Recap of Better Business Case. Note that land disposal at Bulls is preferred option with or without ANZCO participation
- Marton options outlined. Land disposal at Santoft cheapest option
- What are the thoughts of the Steering Group?



Project phasing

- Phase 1 is Marton to Bulls – gets wastewater out of the Tutaenui stream
- Phase 2 (this financial year) is to secure land for disposal and begin land disposal consenting process
- Phase 3 is Marton effluent to land once consent is granted
- Phase 4 is Bulls effluent to land
- Phase 5 is treatment optimisation



Other thoughts

- What about Ohakea? Interest from NZDF. How do we approach this?
- Similarly do we allow for some ANZCO capacity? Bulls in particular?
- Leasing rather than purchasing land?



Attachment 3

Memorandum

Subject: Consenting strategy update for Council's wastewater treatment plant upgrade projects

To: Assets & Infrastructure Committee

From: Glenn Young

Date: 1st August 2018

File: 6-WW-1

Hunternville WWTP

The Hunternville plant is currently exceeding its maximum discharge consent limit of 250m³/day, during wet weather flows. Heavy rainfall can result in upto 200m³ of stormwater entering the plant, making our discharge volume non-compliant. We have submitted a draft consent variation (Sec 127 request) to Horizons to vary this condition to make our existing discharge volumes compliant to provide for the wet weather flows. Horizons have in turn required us to consult with the original parties to the 2015 consent including Iwi. RDC Officers met with Ngati Hauiti and Ngati Apa on 12th June 2018 for a pre-hui, to discuss the Hunternville WWTP and the application to vary the exiting max volume discharge condition. RDC officers again met, 1st August 2018 with Ngati Hauiti to further discuss any concerns they may have over the volume discharge. Ngati Hauiti have requested that an Independent Initial Impact assessment be carried out and consideration be given to a riparian planting plan as mitigation of the discharge. The next hui is programmed for 30th August 2018.

Ratana WWTP

Suitable land parcels for the proposed irrigation works for the WWTP have been identified and negotiations with potential vendors/land owners is commencing. Horizons have indicated that land acquisition is key to the whole project and Horizons would like a timeframe in place to give assurance. Under the FIF project, land has to be acquired by June 2019, but the process should be started well in advance. RDC indicated that timeframes of funding availability through the FIF prevented any formal discussions commencing before 1st July 2018. We have indicated that we are proposing to have sale & purchase agreements in place by Dec 2018.

It was agreed with Horizons that the FIF consultation group could also act as the consultative group for the WWTP consent application. This will need to consist of those mentioned in the FIF application as a minimum; any others required for the consent process can be brought in

The FIF deed has not yet been finalised, but Horizons will provide a copy when available.

The first meeting of the FIF Steering group is planned first week of Sept 2018.

Taihape WWTP

The Draft Application has been sent to Horizons for consideration, who in turn have required consultation with Iwi. Upstream water quality issues remain, which has an impact on the ability to assess the effects of the discharge from the WWTP. Horizons are looking into an alleged illegal discharge upstream of the WWTP. Further improvements are also required at the WWTP to address algal growth in the ponds; the algae is not able to be readily removed by the clarifier and is likely being picked up in in-stream monitoring results as elevated chlorophyll-a levels. The installation of measures and additional treatment options to reduce algal growth are being advanced by RDC.

Additional monitoring is still required to describe the effects of the WWTP discharge with confidence once upstream water quality issues are resolved. A timeline for completing remaining works at the WWTP (to address algae), resolving the illegal discharge, and completing monitoring to gather sufficient data to describe the effects of the discharge was discussed. It was agreed that this would be able to be completed by the end of May, 2019. This would provide time for the upgrades to be installed and for a full summer of monitoring data to be collected and interpreted. This would then allow for the preparation of a legal opinion to confirm whether the required changes to the consent to address remaining areas of non-compliance could be achieved by variation, or if a new consent was required. RDC Officers met with Nga Iwi Mokai Patea Environmental Working Party (EWP) who have requested to wait till the results from the summer testing are available, prior to any consideration by themselves.

Consenting Strategy timeline

The below table lists the proposed timeline for addressing the relevant matters ahead of 31 May 2019:

Month	Actions
July 2018	Horizons to provide feedback to RDC on the draft Section 127 Variation Application
Ongoing	RDC to undertake engagement with tangata whenua and previous submitters, Hunterville, Ratana & Taihape
June – December 2018	RDC to complete remaining treatment improvements and upgrades at the Taihape WWTP
June – December 2018	Horizons to progress investigation into alleged illegal discharge into the Hautapu River upstream of the Taihape WWTP
Summer 2018/2019	RDC to complete summer water quality and ecology monitoring to assess the impact of the discharge on the Hautapu River, Tahape

March 2019	RDC to seek legal opinion to confirm whether the required changes to the consent to address remaining areas of non-compliance could be achieved by a variation, or if a new consent is required, Taihape
On or before 31 May 2019	RDC to complete and lodge a final applications for either a variation or new consents with Horizons

Recommendation

That the memorandum 'Consenting strategy update for Council's wastewater treatment plant upgrade projects' to Assets/Infrastructure Committee on 9 August be received.

Glenn Young
Utilities Manager

Appendix 1

Attachment 1. Summary of issues and recommendations from Mr John Crawford's review of the WWTP and proposed or completed steps to address the issues.

Issue identified	RDC Proposed Actions	Status as at March 2018
Discrepancy in Inflow – Outflow volumes	Both flow meters have been checked and correct installation confirmed. Identified that flow meter records recycled flows. New meter to be installed downstream of tertiary plant by 1 st September 2018.	In progress
Wastewater influent characterisation is unknown	Data is being reviewed by John Crawford, who will make recommendations re. a suitable influent characterisation programme, to be started by 1 July 2018.	In progress
Hydraulic residence time – short circuiting potential Tornado aerator functioning	Will manage short circuiting through curtains and baffles. Will be installed by 1st December 2018. Aerator requirements to be assessed at the same time as the curtain design.	In progress
Hydraulic residence time - Sludge accumulation unknown. The pond has never been desludged and could have 30 years of build-up.	Funding has been identified in the Long Term Plan for desludging the pond during 2020.	Future improvement
Algal concentration in the pond discharge	RDC are currently looking at options to reduce algae including through floating wetland and possible fine air bubble diffusing, with measures expected to be in place by 1 st December 2018.	In progress
Flash Mixer. The site of injection of coagulant does not allow for flash mixing to occur.	Flash mixer has been installed in the last six months.	Completed
Loss of Power and ability to close off the pond discharge in event of power loss to protect clarifier.	Fail safe system to be installed by 1 st December 2018.	In progress
Clarifier feed uniformity and optimisation	Optimisation and fitting of feed channel baffles has been completed.	Completed
Clarifier surging		Completed

Issue identified	RDC Proposed Actions	Status as at March 2018
Clarifier life and corrosion protection	RDC will investigate options. Not a critical priority item at this stage.	Future improvement
Lamella solids carry over	Partly addressed through the feed uniformity, surging and pond discharge measures. No further action required at this stage.	Not urgent
Clarifier scum removal	Will complete mechanical barrier first. If floating algae carry over is still occurring, RDC will consider installing a scum removal slot in each cell.	Not urgent
Tertiary sludge management	Investigating sludge removal options at a District- wide scale. RDC is considering sending the clarifier refusal sludge straight to a geo bag.	In progress
Sources of nitrogen	RDC will investigate sources of nitrogen, and complete a trade waste characterisation.	In progress
Incorrect recording of by-pass discharges	RDC are in the process of relocating the flow metre to avoid measuring rainwater as a discharge,	In progress

Attachment 4



Memorandum

TO: Assets/Infrastructure Committee

FROM: Blair Jamieson – Strategy & Community Planning Manager

DATE: 26 July 2018

SUBJECT: **Biological Control: Taihape oxidation pond and associated considerations.**

FILE: 6-WW-1-8

1 Background

- 1.1 The Taihape Wastewater Treatment Plant (TWTP) oxidation pond suffers from a number of issues; all contributing to the excessive presence of phytoplankton (algae). Whilst algae provide a vital role in the freshwater ecosystem, they can also do harm when reaching the levels that grow out of control: toxins entering the food chain by-products cause health issues to animals that consume it.
- 1.2 High algae content in the effluent from the Taihape oxidation pond historically caused rapid clogging of membrane filters, resulting in an increase in staff resourcing and a decrease in plant activity. As a result, the filtration plant has not been able to process the whole effluent volume, and part (and sometimes all) of the effluent had to bypass the treatment plant. The bypass discharges were not authorised, except during high river flows, causing non-compliance with Horizons consent conditions.
- 1.3 Council has implemented a programme of capital works over the past three years to improve plant performance. However, floating algae in the effluent coming out of the ponds and entering the tertiary treatment plant (dosing/clarifier/filtration) remains a challenge. Further improvements have been proposed to address this, such as micron-mesh curtains to keep the algae in the oxidation pond and stop it from entering the tertiary treatment plant.
- 1.4 Whilst there are improvements for reducing algae from entering the treatment plant, staff are seeking to reduce the levels of algae in the oxidation pond by 50%.
- 1.5 The use of silver carp for biological algae control has been investigated for the Taihape oxidation pond.
- 1.6 Supplementary to the issues at Taihape, the use of the herbivorous grass carp for biological aquatic weed control has been requested at Dudding Lake by E.B Gordon Limited, identified for suitability by Horizons, and noted by staff as an effective means to control aquatic weed, reduce the application of herbicide and reduce the likelihood of reciprocating environmental issues such as algal blooms.
- 1.7 This memorandum provides an overview as to the forms of biological control, the issues facing Council and considerations for endorsement by the Committee.

2 Species overview

Silver carp (*Hypophthalmichthys molitrix*)



- 2.1 Silver carp are filter feeding planktivores, typically consuming algae from 20µm up to several mm in diameter and growing up to 20kg in weight. Silver carp were imported into New Zealand by the predecessors of the National Institute of Water and Atmospheric Research (NIWA) for the purpose of helping managers of water bodies control of algal blooms.

Grass Carp (*Ctenopharyngodon idella*)



- 2.2 Grass carp are herbivorous, preferably consuming exotic aquatic weeds, and growing up to 35kg in weight. Grass carp are the largest species of freshwater fish in New Zealand and have an introduced range covering most of the country. They were originally imported by Auckland University and the predecessors of NIWA for the purposes of controlling pest aquatic weeds, reducing the need for herbicide or mechanical dredging.
- 2.3 Both species were imported to New Zealand in the late 1960's and have been classified as restricted. Neither species is able to breed naturally in New Zealand, however they must be contained within the approved waterbody, usually achieved through screening.
- 2.4 Both species are actively used throughout New Zealand as biological control agents, primarily being sought by district, city and regional councils.

3 Species application

Silver carp (*Hypophthalmichthys molitrix*)

- 3.1 The use of silver carp to reduce phytoplankton in waste water treatment facilities is undertaken across the world, most commonly in Asian countries where access to this species is common. It is not uncommon for silver carp to reduce suspended solids and phytoplankton levels for at least 100 days, and reduce the total algal density by 70% in these environments.
- 3.2 Research highlights that silver carp can play a useful nutrient stripping and water quality improvement role in some treatment facilities but not all.
- 3.3 Whilst being able to effectively reduce algal biomass in eutrophic¹ lakes, ponds and well-managed water treatment facilities (such as Rosedale, Watercare) in New Zealand, it is uncertain as to how this species will take to surviving in a raw-untreated oxidation pond. It should be noted that the national experience with this species is that, provided there is adequate dissolved oxygen, they survive and grow in farm effluent ponds.
- 3.4 The assessment of the potential uses and impacts of silver carp was produced in 2010 by NIWA, highlighting the outcomes of the trials in the Hawkes Bay lakes. Photographs below show surface-water cyanobacterial blooms in the partitioned side of Lake Orakai not stocked with silver carp (left: 22 January 1979, right: 29 March 1982 after silver carp stocking was reversed).



- 3.5 The variability highlighted in 3.2 and 3.3 no doubt reflects the complex interactions in such diverse environments and underlines the need to undertake a feasibility exercise before making any commitment to long-term use.

Grass Carp (*Ctenopharyngodon idella*)

- 3.6 The use of grass carp to manage aquatic weeds has been widely tested and is regarded² as the most effective tool for aquatic weed controlⁱ in artificial and functional waterways provided that stocking levels are not excessive.

¹ Having waters rich in phosphates, nitrates, and organic nutrients that promote a proliferation of plant life, especially algae.

² Ministry of Fisheries (April, 2011) *Standard operating procedures for the transfer of Aquatic Life*, Auckland.

- 3.7 No evidence has been produced that grass carp have direct harmful effects upon either native biota or introduced salmonids.
- 3.8 The national body of research suggests that the known impacts of grass carp are less than weed removal by other common methods such as the use of excavators or the use of chemicals.
- 3.9 Assessments on the effectiveness of grass carp are undertaken quarterly for the majority of Councils who use them for biological control. The photographs below highlight the effectiveness of the species in controlling pest aquatic weed species; being the same species that are present in the waterways noted below.



4 Other waterways of concern

- 4.1 Whilst the present focus is on the Taihape WWTP, a number of other Council owned waterways suffer from the effects of pest aquatic weeds and algae, the most significant of these being Dudding Lake and Marton B and C Dams.
- 4.2 There is significant benefits in having a number of sites considered within the required approval process; highlighted in item 6.
- 4.3 Horizons Report 2017/EXT/1540 produced by NIWA (see Attachment 1) has identified Dudding Lake³ as being on the threshold of being in poor condition (87% impact in 2015) due to the invasive impact of exotic aquatic weeds requiring intervention other than herbicide. The outcomes of the herbicide application in January 2017 saw the lake suffer from algal blooms and a temporary shut down of function.
- 4.4 Additionally, and in regard to Dudding Lake, E.B Gordon Ltd have signaled that the costs of maintaining a grass carp programme could be included in the payment for services already received if Council (as the landowner) acquired the approval; noting that Council would not be asked to increase its grant.
- 4.5 Marton B and C Dam, whilst having had historic issues with algae and the taste of the treated water, has also been found to have the presence of the same weeds as in

³ Dudding Lake is owned by Council with the site being subcontractually managed by Mr Bruce Gordon of E.B Gordon Limited.

Dudding Lake. Whilst not an issue presently, any chance of issues could be mitigated by the release of approximately 15 fish⁴ in each dam, costing no more than \$900 per dam per year (noting that there is no cost for replacement fish if incidents occur).

5 Impacts and risk

- 5.1 The risk of silver carp forming naturally spawning populations in the district is nil. In the unlikely event an escape occurred the effects would be limited to the lifetime of the fish.
- 5.2 The risk of grass carp forming naturally spawning populations in NZ is nil. In the unlikely event an escape occurred there would be no long-term effects.
- 5.3 Prior to a release happening, DOC would have to approve the security measures. Once this has occurred and fish have been approved for release no recapture costs can be placed on the permit holder (Council).
- 5.4 Prior to any release, the Conservation Act 1987 requires applicants to undertake two public notices in the newspaper that is distributed within that area. Council may wish to undertake a press release to inform the public and mitigate the risk of residents confusing these fish species with those that are pests.
- 5.5 If the Committee wished to endorse the introduction of silver/grass carp at the Taihape oxidation ponds, Iwi/hapū would be consulted prior to the lodgement of any application with DOC.
- 5.6 It is suggested that a feasibility exercise is undertaken as an initial step. The cost of such an exercise has been quoted below.
- 5.7 The most significant risk for the collective number of waterbodies is if Council decides to do nothing. The suggested use of fish species typically decreases the costs of relying on other forms of remediation or resourcing.

6 Approval process and cost considerations

- 6.1 Application for approvals for the initial release of all species of fish is required from DOC as per the legislative requirements under section 26ZM(3) of the Conservation Act 1987. The cost for each undertaking ranges from \$3000+GST to \$4000+GST, noting that if multiple sites were to be included in one application then substantial cost savings⁵ could be incurred.
- 6.2 If multiple sites were included in the application to DOC, a release into these other waterways would not need to be immediately undertaken. Applicants can allow for up to three years before a release occurs when requested.
- 6.3 Consultation for this process (being for all species) is required to occur between the applicant and the Ministry for Primary Industries (Conservation Act 1987), the

⁴ Estimation received by the supplier of grass carp; being NZ Waterways Restoration Ltd.

⁵ Undertaking a 26ZM(3) approval for individual vs multiple sites is often within a 10-30% price variation.

respective Iwi/hapū (Conservation Act 1987) and with local Fish and Game (Regulation 59 - Fresh Water Fisheries Regulations). There is no fee for this process.

- 6.4 The cost for conducting a Taihape WWTP feasibility exercise is \$5,607+GST; being conducted by the supplier NZ Waterways Restoration Limited. The exercise is by way of a contained and monitored programme whereby a large meshed cage is placed within the waterway to ensure survivability after adjustment processes have taken place.
- 6.5 Of note for future consideration, pending the outcome of the feasibility study, it is expected that the cost of using fish within the Taihape WWTP oxidation pond for the first three years is \$18,000 (one off payment). If continued after the three year period the price is \$1800 per year.
- 6.6 Releases of any additional fish are solely managed by the Ministry for Primary Industries as governed by section 26ZM(2) of the Conservation Act. There is no fee for this process.

7 Recommendations

- 7.1 That the memorandum 'Biological Control: Taihape oxidation pond and associated considerations' to the 9 August Assets/Infrastructure Committee meeting be received.
- 7.2 That the following activities be approved by the Assets/Infrastructure Committee:

EITHER

That a 26ZM(3) application be made to the Department of Conservation for the Taihape Wastewater Treatment Plant oxidation pond,

OR

That a joint 26ZM(3) application to the Department of Conservation be made for the Taihape Wastewater Treatment Plant oxidation pond, [AND/OR] Dudding Lake, [AND/OR] Marton B and C Dam;

AND

That a feasibility exercise for using silver carp at the Taihape Wastewater Treatment Plant oxidation pond be undertaken.

Blair Jamieson
Strategy & Community Planning Manager

ⁱ "From the results we have seen on the use of grass carp to control nuisance aquatic plants over many years, their effect has been mostly beneficial and we are not aware of any adverse effects resulting from the use of grass carp provided stocking levels are not excessive. While potential risks need to be assessed, we consider that there are benefits in using grass carp compared to other methods and these benefits should also be considered when processing applications. Other aquatic weed control methods such as the use of herbicides and mechanical removal of nuisance weeds result in considerable loss of aquatic life and can result in degradation of the habitat through rotting vegetation and disturbance of sediments. These methods do not require approvals from any agencies, provide temporary respite and require frequent applications over the warmer months.

MFish considers grass carp should be the preferred method for aquatic weed control, for sites where aquatic weed control is required and:

- the extensive growth of aquatic weeds interferes with the main functions of the site (e.g. stormwater management, water sports),
- carp can be contained within the site,
- the water quality is suitable for survival of carp."

Ministry of Fisheries (April, 2011) Commentary on the standard operating procedures for the transfer of Aquatic Life, Ministry of Fisheries: Auckland

Appendix 1



Assessment of 22 Lakes in the Manawatu-Wanganui Region using LakeSPI



June 2017

Horizons Report 2017/EXT/1540



Prepared for:

Abby Matthews
Science & Innovation Manager
Horizons Regional Council

June 2017
Report No. 2017/EXT/1540
ISBN 978-1-98-853700-9

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Client Report 2017223HN
NIWA Project HRZ17201

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Assessment of 22 lakes in the Manawatu-Wanganui Region using LakeSPI

Prepared for Horizons Regional Council

June 2017



Prepared by:
Tracey Burton




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NIWA CLIENT REPORT No: 2017223HN
Report date: June 2017
NIWA Project: HRZ17201

Quality Assurance Statement		
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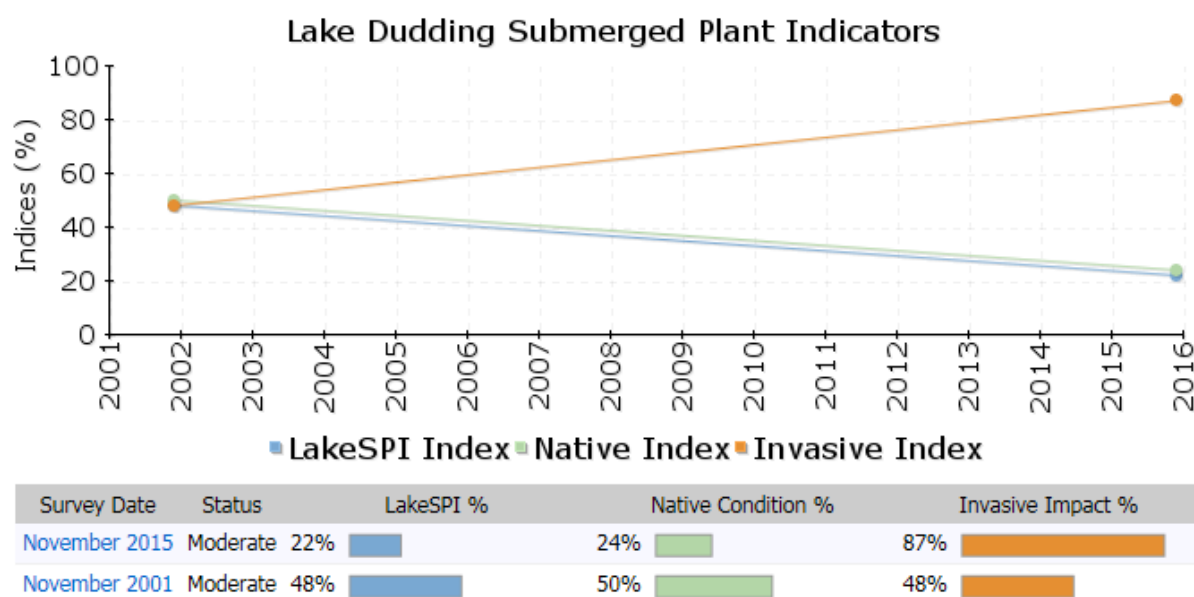
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3.12 Dudding Lake

3.12.1 Results



Lake condition:	Moderate
Lake ranking:	10 th equal
Lake maximum depth:	12.8 m
Max depth of vegetation:	6.3 m



*Note: 2001 survey based on only 2 sites.

Figure 36: LakeSPI results for Dudding Lake. LakeSPI Indices expressed as a percentage of lake maximum potential.

Dudding Lake is categorised as being in moderate ecological condition with a LakeSPI Index of 22% (Figure 36).

Egeria (*Egeria densa*) dominated the submerged vegetation in Dudding Lake forming surface reaching weed beds around the lake margins, up to 5.5 m tall (Figure 37), and extending down to a maximum depth of 6.3 m at all five LakeSPI baseline sites. Other introduced weeds included *Elodea canadensis*, *Potamogeton crispus* and *Ranunculus trichophyllus*.

Native vegetation consisted of the pondweed *Potamogeton ochreatus*, three charophyte species (*Nitella* sp. aff. *cristata*, *Chara australis*, *Nitella masonae*) and a turf forming species *Glossostigma diandrum*. Two charophyte species (*Nitella* sp. aff. *cristata*, *Chara australis*) were recorded growing beyond the depth range of *egeria* (c. 5.2 – 6.1 m) at all LakeSPI baseline sites. Charophyte meadows

(>75% cover) were present at two of the five LakeSPI sites, recorded to a maximum depth of 6.1 m at one of the two sites.

At the time of survey, underwater visibility was estimated by divers as between 0.5 - 1 m. Freshwater mussels and sponges were also observed.

Historic notes: When the submerged vegetation was surveyed in November 2001 (Edwards and Clayton, 2002) it was described as “predominantly native and dominated by pondweeds and charophytes”. Elodea was recorded for the first time during this survey although noted as common down to 3 m but forming only an open cover allowing other native plants to coexist. Species composition was similar to that observed by Kelly (1978) with vegetation recorded as growing down to a maximum depth of 5 m in 1977 and 6.5 m in 2001. This is very similar to the maximum depth recorded during the recent 2015 survey of 6.3 m suggesting that overall water clarity has remained similar over the last 40 years.

3.12.2 Discussion

Dudding Lake currently has a moderate LakeSPI Index of 22% but is close to the threshold between moderate and poor condition (20%). This result shows the LakeSPI Index has more than halved from 48% in 2001 (Figure 36) while also showing an increase in the Invasive Impact Index over this same timeframe driven by the invasion of egeria in the lake. Other invasive weeds (*Elodea canadensis*, *Potamogeton crispus* and *Ranunculus trichophyllus*) recorded from the lake are having little impact in comparison to the egeria.

The predominantly South Island charophyte species, *Nitella masonae*, was recorded from Dudding Lake during the 2015 survey. This species had previously been recorded from within the Taranaki region (Wood and Mason, 1977), but no further North Island records had been found since.

A high risk of hornwort (*Ceratophyllum demersum*) introduction to Dudding Lake remains a major threat to current lake condition due to the popularity of this waterbody for recreational use and its close proximity to water bodies that contain this plant (e.g., Lake Wiritoa). Should hornwort get into Dudding Lake, it would likely occupy a deeper depth range than egeria, with the potential to displace deeper water charophytes currently co-existing with egeria.



Figure 37: *Egeria densa* growing up towards the surface in Dudding Lake. Egeria formed surface reaching weed beds up to 5.5 m tall and down to 6.3 m water depth.



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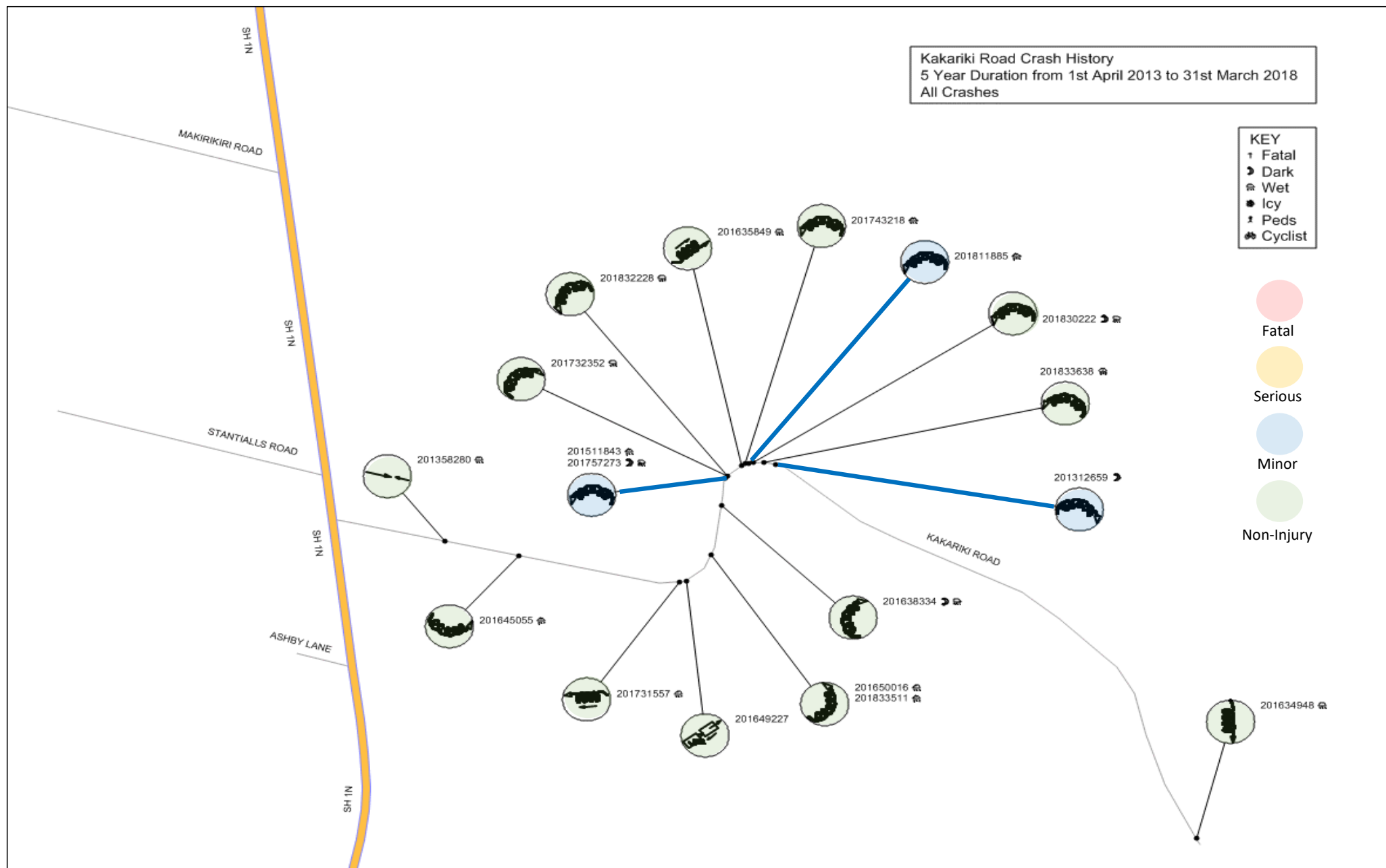
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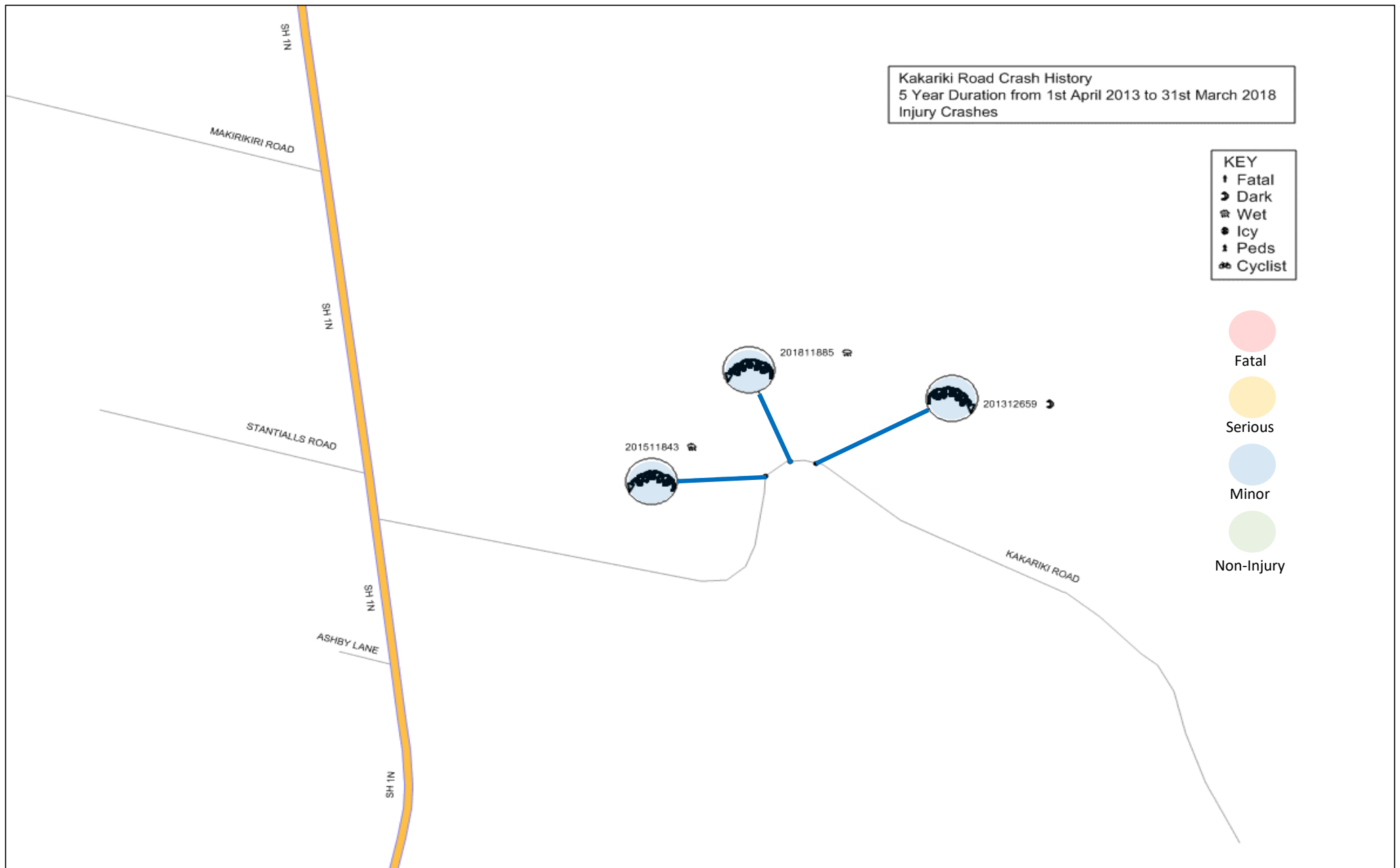
Attachment 5

Kakariki Road Crash History

5 Year Duration | 1st April 2013 to 31st March 2018

Crash ID	Year	Injury	Type	Surface Condition	Natural Light
201312659	2013	Minor	Loss of Control on Curve	Dry	Dark
201358280	2013	None	Head on Straight	Wet	Overcast
201511843	2015	Minor	Loss of Control on Curve	Wet	Overcast
201634948	2016	None	Loss of Control on Straight	Wet	Overcast
201635849	2016	None	Loss of Control whilst being Overtaken	Wet	Overcast
201638334	2016	None	Loss of Control on Curve	Wet	Dark
201645055	2016	None	Loss of Control on Curve	Wet	Overcast
201649227	2016	None	Loss of Control of Towed Trailer	Dry	Overcast
201650016	2016	None	Loss of Control on Curve	Wet	Overcast
201731557	2017	None	Loss of Control whilst being Overtaken	Wet	Overcast
201732352	2017	None	Loss of Control on Curve	Wet	Overcast
201743218	2017	None	Loss of Control on Curve	Wet	Bright Sun
201757273	2017	None	Loss of Control on Curve	Wet	Dark
201811885	2018	Minor	Loss of Control on Curve	Wet	Overcast
201830222	2018	None	Loss of Control on Curve	Wet	Twilight
201832228	2018	None	Loss of Control on Curve	Wet	Overcast
201833511	2018	None	Loss of Control on Curve	Wet	Overcast
201833638	2018	None	Loss of Control on Curve	Wet	Overcast





Attachment 6

Report

Subject: **Community Housing Update**

To: Assets/Infrastructure Committee

From: Gaylene Prince, Community & Leisure Services Team Leader

Date: 2 August 2018

File: 6-CF-1-14

1 Meetings

- 1.1 Council staff and a representative from MSD met with the Marton and Taihape tenants at the end of July. A presentation provided information on the increase in rents to market rentals, the accommodation supplement, the setting of an upper limit for rentals (e.g. 33% of gross superannuation), discounted electricity rates, and immediate improvements proposed to the housing.
- 1.2 Meeting dates are presently being confirmed for Bulls and Rātana tenants.
- 1.3 Generally the concept has been well-received with staff having received positive feedback.

2 Immediate Upgrade Priorities

- 2.1 The first priority is to meet the changes required as per the updated Residential Tenancies Act 1986 coming into effect on 1 April 2019. This includes the provision of:
 - Heating
 - Curtains
 - Insulation (where practical).
- 2.2 As part of the presentation to tenants, the Strategy & Community Planning Manager advised that these three priorities would be implemented by 1 November 2018.
- 2.3 Council has approximately \$210,000 available for this work - \$100,000 plus \$40,000 carry-forward, plus \$70,000 projected additional revenue November-June.

3 Heat Pumps

- 3.1 Staff have investigated a number of heating options for the units, taking into consideration environmental effects (e.g. noise nuisance to neighbouring tenants) and energy usage.

- 3.2 A Daikin model has been suggested by contacts at a neighbouring council and our initial investigations indicated that this would meet our requirements.
- 3.3 Staff are presently seeking quotes from suppliers based in our region. Initial indications suggest that costs will be in the vicinity of \$123,000.

4 Curtains

- 4.1 Staff are presently looking at options for thermal blinds and curtains, including ready-made, and made to specification.
- 4.2 No quotes are to hand at this time, but staff may be in a position to provide a verbal update at the meeting.

5 Insulation

- 5.1 21 units had insulation installed or topped up in 2013/14 and the eight Cobber Kain units had ceiling insulation topped up in March this year.
- 5.2 A further 14 units are scheduled to be checked in Wellington Road, Marton, this month. If these require topping up, costs are estimated at \$12,000.
- 5.3 The remaining flats are either insulated (and will be monitored for top-ups) or unable to be insulated.

6 Other upgrades

- 6.1 Infrastructure team had programmed an additional streetlight in the vicinity of Matua flats for 2018/19 to assist with security. The Infrastructure team have also been assisting with investigating options for car-parking in the vicinity of Matua flats and Wellington Road and Cobber Kain units.
- 6.2 Staff are presently working through the process of appointing a Handy-person. The calibre of all interviewed applicants was very high, and we are looking forward to confirming an appointment shortly.
- 6.3 Staff are confident that, in conjunction with the successful applicant, an upgrade strategy will be able to be developed and prioritised to plan future renewals.
- 6.4 Inspections of all housing units will be a priority action for the successful applicant.

7 Recommendation

- 7.1 That the 'Community Housing Update' report to Assets/Infrastructure Committee on 9 August be received.

Gaylene Prince
Community & Leisure Services Team Leader

Attachment 7



INFRASTRUCTURE GROUP REPORT

JULY 2018

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1 ROADING

1.1 MAINTENANCE, OPERATIONS AND RENEWALS

- This year's resealing programme of 61 km has been completed.
- Pre-reseal repairs for the 2018/19 year has commenced approx. 80% of the sites completed.
- Installing the new LED streetlights in residential streets is complete. The next stage is replace lights on the busier roads. This is currently under design.

1.2 CAPITAL PROGRAMME 2017/18

Area Wide Treatment Sites

Location	Length	Start construction	Completion Due
Galpins Road (RP1080-1800)	720m	4-Dec-18	Completed
Jefferson's Line (RP3840-4415)	575m	9-Apr-18	Completed
Mangitipona Road (RP1520-2520)	2600m	23-Oct-17	Completed
Parewanui Road/Ferry Road Int (RP0500-0550)	75m	14-Apr-18	Completed.
Parewanui Road (RP5820-7780)	1960m	24-Mar-18	Completed
Pukepapa Road/Hendersons Line Int	75m	20-Mar-18	Completed

Minor Safety Improvements:

Location	Start construction	Completion Due
Turakina Valley Road 3 (RP 2075) Guardrail to bridge approach. Deferred to align with AWT programme.	Deferred to 18/19	
Turakina Valley Road 2 (RP12750 – Mangara Br) Guardrail to bridge approach, in conjunction with seal extension	6-Nov-17	Completed
Pungatawa Road RP 6700 – widen blind corner with large drop-off. Deferred to align with the resealing programme.	Deferred to 18/19	
Turakina Valley Road 2; earthworks for curve and formation width improvements	14-May-18	26-Jun-18 (earthworks completed)
Okirae / Mangatipona curve improvements. Brought forward from 18/19 to provide approx. half of the fill for Mangatipona Road AWT. Pavement work to be completed with Okirae Road AWT in 18/19.	Jan-18	Feb-18 (earthworks completed)

Mangaweka Bridge

Following the deck repairs in October 2016 the bridge was reopened with the following limits: 3T axles, 6T gross, a 10kph speed limit and no stopping signs. This is due to weakened timber girders throughout the length.

The DBC was completed in June 2018, and has been submitted to NZTA. We are now awaiting funding approval for the Pre-Implementation Phase.

1.3 EMERGENCY WORKS

Damage to the network occurred on Pohonui Road in Taihape at Swan St and Turakina Valley Road 2 north of McLeay's. The repairs required at both site are significant and collectively are likely to exceed \$1M NZTA has been advised of the situation and a clam under emergency works is being compiled.

Emergency Works Events Under Repair During this Financial Year:

Event	Status
June-15	Completed
April-17; cyclone Debbie	Repairs for dropouts underway. Completion due June 18
July-17; Snow event	Repairs for dropouts underway. Completion due June 18
Apr-18	Pohonui Road over slip and Turakina-2 north of McLeays, dropout. Pohonui Road has been cleared and TV-2 is in the design phase.
May-18	Swan St, in the design phase.

Uncompleted repairs for April-17 and July-17 totals approximately \$700k. The value of the unspent budget is to be carried forward to 2018/19.

1.4 OTHER PROJECTS

Council is involved in the investigation and implementation of the following projects:

Turakina Valley Seal Extension

Work has started on the remaining 2 km seal extension. Work to date has involved clearing the banks of trees, preparing dump sites and starting the pavement undercut.

Broadway Marton – Infrastructure Upgrade

This project has combined the work from both Roding and 3 Waters into a project covering all aspects.

- Stage 1 – Follett to Signal

Installing the temporary pipework connects at the near the Follett and hotmix surfacing of the footpaths during brief periods of fine weather has completed Stage 1 of the project.

- Stage 2 – Signal to Lambert

This stage is programed to start in September/October and be finished in early December. This stage is similar to Stage 1 in concept, but less complicated to construct.

The scope of works over this section is to lay 100m of 300mm dia trunk main from Lambert to Follett Street, lay a stormwater pipe under kerb, both on the left side of the road. Replace kerbs, resurface the footpaths, lay feeder mains and laterals to the properties on both sides.

The objective of this stage is to:

- complete the 300 dia supply network in upper Broadway,
 - pipe the upper part of the Maunder Street stormwater catchment that current overloads the kerb and channel, and
 - replace collapsing kerbs
- Stage 3 Follett St Roundabout:

This stage is programmed for consultation in October/November with the retailers and construction in February 2019. This site is complex in nature due to the presence of the central business area and the number of underground services crossing the intersection. Threading new pipework between them will require considerable care.

The objective of this stage is to renew the old and fragile pipework through the Follett Street roundabout with new reliable materials. This is so that the roundabout can be resurfaced in the 2019/20 programme providing a surface life of 20-25 years.



Photo: The finished footpath outside the Marton Outdoor Power shop

Ratana 100 Year Celebrations – 7/11 November 2018

Ratana Pah will be celebrating 100 years of the church movement. It is expected that very large numbers will attend the event. The event is expected to place large pressures on Ratana Road the only road to the Pa and SH3 approaching Ratana Road. A lot of work will be required by the event organiser's to quantify the numbers expected, which then set the level of temporary traffic management required. The intersection of Ratana Road and SH3 is at the crest of a hill with limited sight distance, and passing lanes on both sides of the hill. The road geometry combined with very heavy traffic conditions is expected to create safety issues on SH3. To maintain a safe road environment on the SH during the event will require NZTA to provide a very high level of temporary traffic management and a back-up plan to prevent gridlock on the highway.

1.5 ROAD SAFETY

A truck crash occurred on Kakariki Road RP 1300 on Monday 25th May 2018 heading from the Manawatu towards SH1. The cause of the crash appears to be that the truck wandered on to the soft shoulder, over corrected crossing the centerline and into the crash barrier. No injuries were reported. The weather conditions were windy during the day. It's not known if wind gusts were a factor in the incident



Photo: truck crash Kakariki Road RP1300 25 May 2018

1.6 HEALTH AND SAFETY

RDC - ZERO HARM REPORTING

LEAD INDICATORS

Type	Explanation	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Drug and Alcohol Tests	LEAD: Total number of drug and alcohol tests completed in the period for pre-employment	0	3	3	2	2	0	2	3	4	3	4	2
Positive Drug and Alcohol Tests	The total number of positive Drug and Alcohol test results in the period	0	0	1	0	1	0	0	0	0	0	1	0
Site H&S Conversations	The total number of site H&S Conversations completed in the period by Contractors or site	0	3	3	3	5	12	3	3	5	4	3	3
Site Health and Safety Audits	The total number of site Health and Safety Audits completed in the period by the	12	15	13	14	14	5	5	12	12	12	12	12
Safety Briefing	The total number of Safety Briefings completed in the month including pre-starts, toolbox	5	5	5	5	5	5	4	4	5	4	6	5
Near Miss (Close call)	The total number of Near Misses submitted in the month by the site team	1	2	0	1	5	0	0	0	0	0	0	1
Traffic Management Inspection	Total number of audits completed by the designated Site Traffic Manager Supervisor	2	3	2	0	0	0	0	0	0	0	1	1
Sub Contractor Review	Number of Sub Contract Reviews completed by the main Contractor in the period	0	1	0	0	0	0	0	0	1	0	1	0
Stop Work Action	The number of occasions when work is suspended proactively due to a member of the	0	0	0	0	0	0	0	0	0	0	0	0
Positive Reinforcement	The number of occasions the site team have been congratulated of a proactive action or	0	0	3	3	0	12	3	2	4	3	2	2

LAG INDICATORS

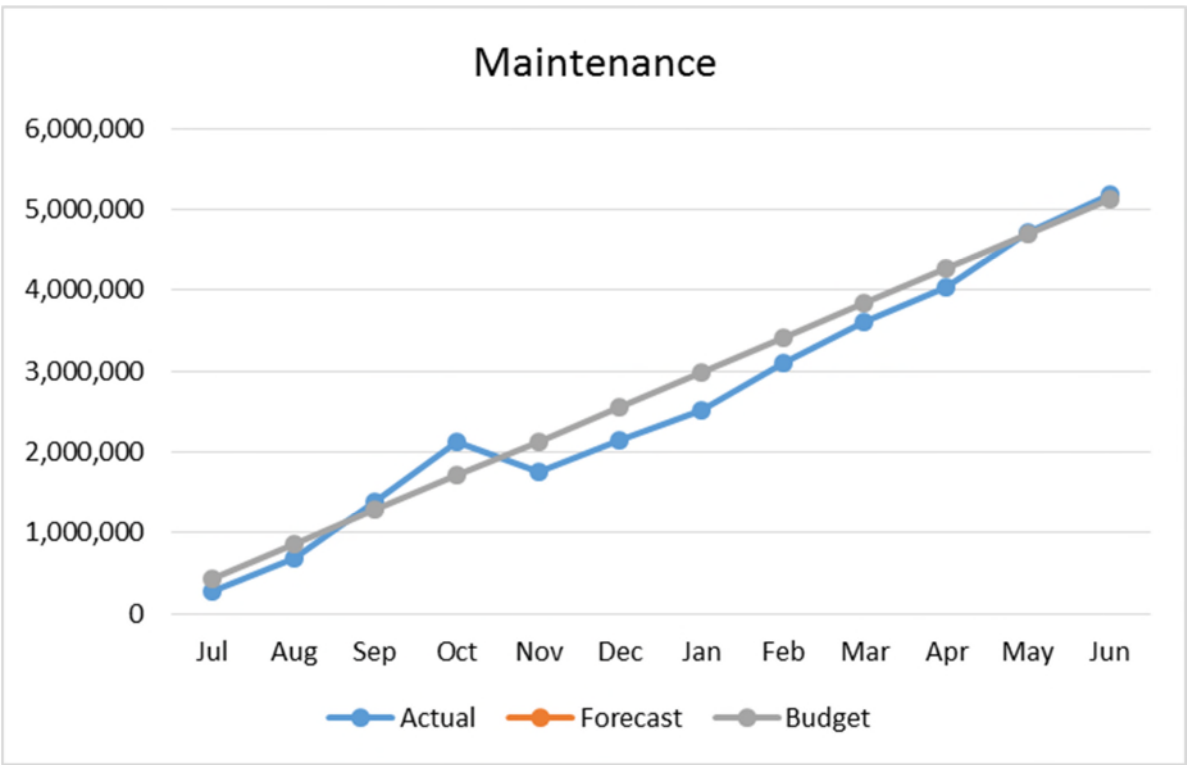
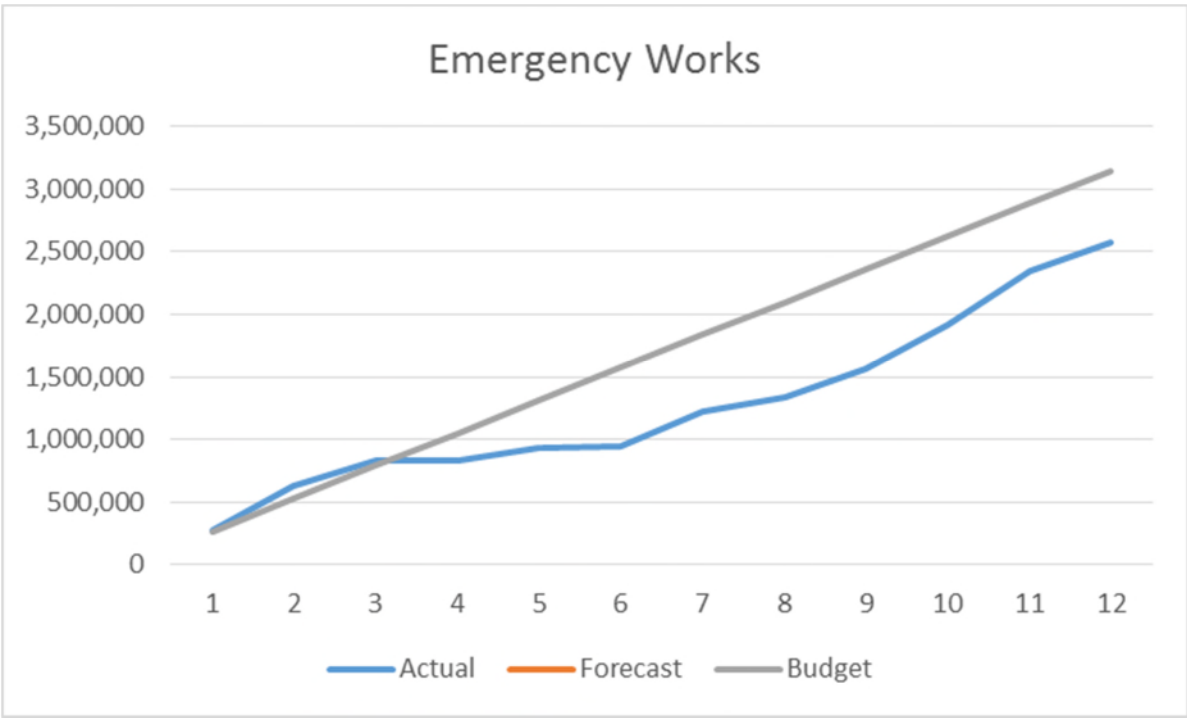
Type	Explanation	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Fatal Injuries	Any incidents resulting the loss of life of a transport agency, contractor or Sub Contractor	0	0	0	0	0	0	0	0	0	0	0	0
Notifiable Injuries	Any incident required under H&S Legislation to be reported to a Statutory Authority e.g. Worksafe	0	0	0	0	0	0	0	0	0	0	0	0
Lost Time Injuries	Any work related injury or illness certified by a Medical Practitioner and compensable under	0	0	0	0	0	0	0	0	0	0	0	0
Medical Treatment Injuries	The Management and care of a patient to effect Medical Treatment or combat disease or	0	0	0	0	0	0	0	0	0	0	0	0
First Aid Injuries	Treatment administered by and within the qualifications of a trained first aid attendant or	0	0	0	0	0	0	0	0	0	0	0	0
Recordable Injuries	NO NOT COMPLETE	0	0	0	0	0	0	0	0	0	0	0	0
Serious Environmental Incidents	Environmental controls absent or construction of a device is so poor that it is likely to or has led to	0	0	0	0	0	0	0	0	0	0	0	0
Service Strikes	Contact with an above ground or buried service resulting in damage or potential damage to the	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	Contact with third party property resulting in damage	0	3	2	0	0	0	0	0	0	0	0	1

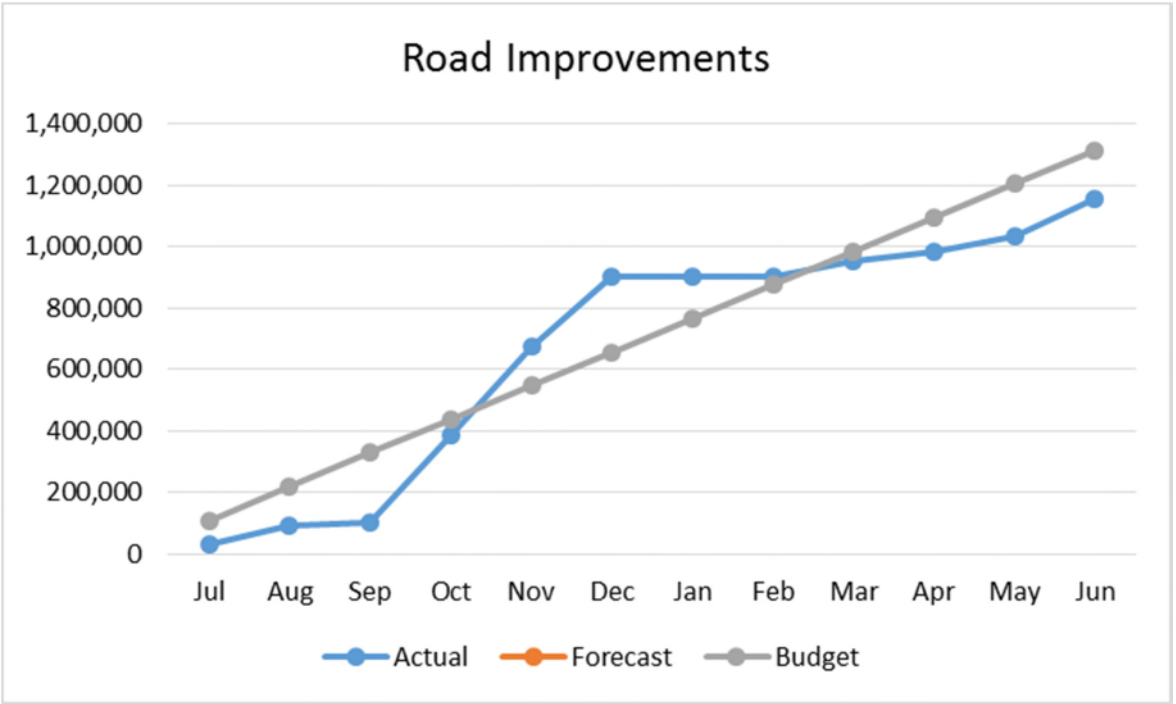
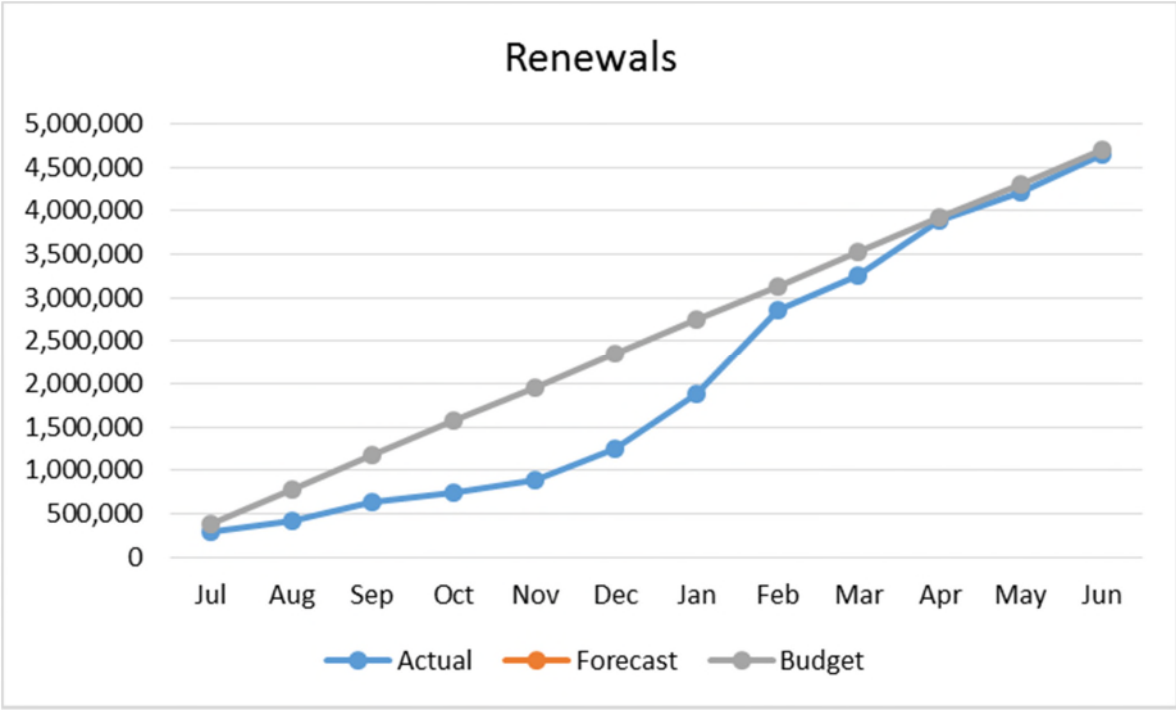
1 minor plant damage – small scratch and dent on ute when it rub against a fence post.

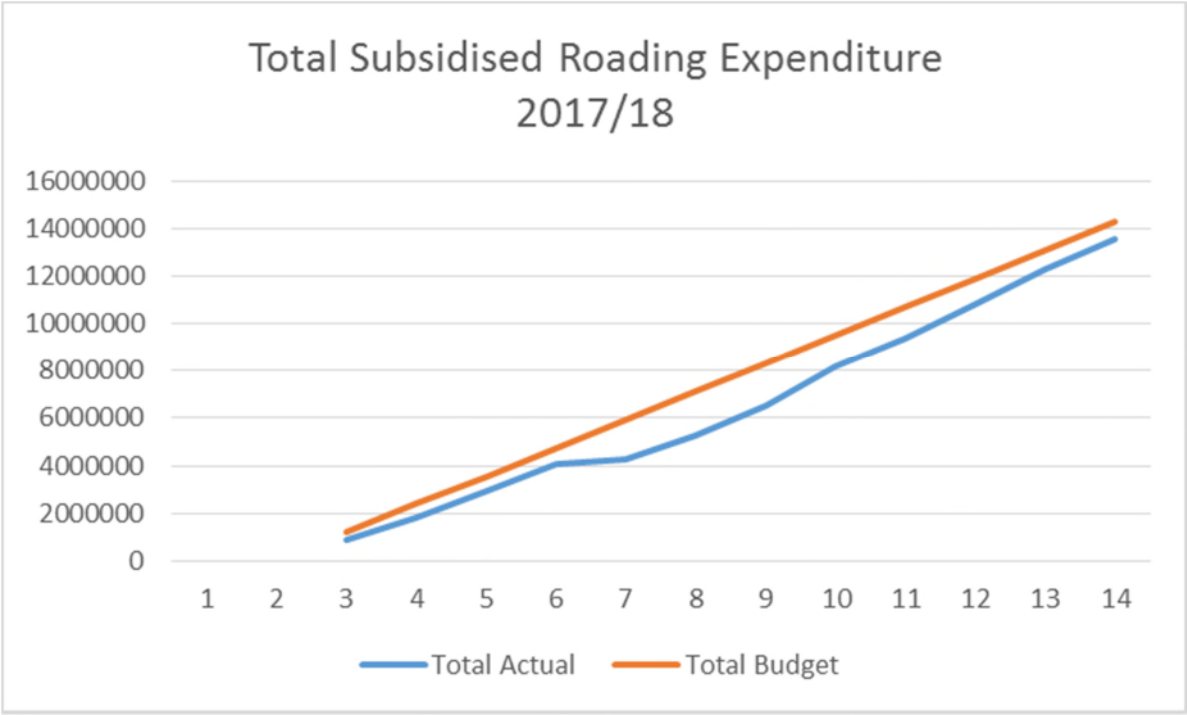
1.7 FINANCIAL TRACKING

Finances included in the report are to the end of June-18:

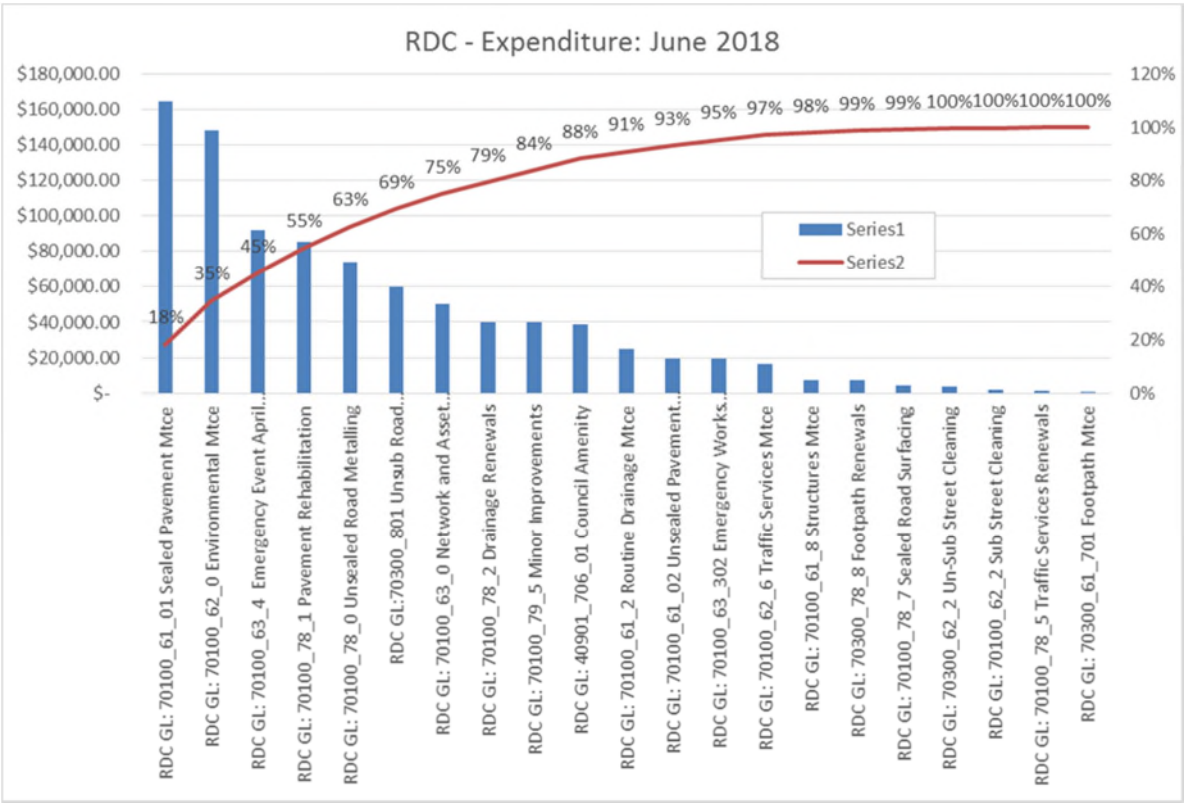
Maintenance			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
141	Emergency Works		Actual												
	Jun-15	827,812		80,265	112,492	122,889	122,889	129,603	129,603	295,603	330,447	395,258	552,636	800,100	722,694
	Apr-17 (Debbie)	322,000			33	193,697	193,697	17,427	30,962	30,962	30,962	43,122	107,412	250,357	561,208
	Jul-17 (Snow)	2,000,000		193,564	516,666	516,666	516,666	779,559	779,559	896,647	973,784	1,124,443	1,263,200	1,292,108	1,295,037
Emergency Works - Totals		3,149,812	Actual	273,829	629,191	833,252	833,252	926,589	940,124	1,223,212	1,335,193	1,562,823	1,923,248	2,342,565	2,578,939
			Forecast												
			Budget	262,484	524,969	787,453	1,049,937	1,312,422	1,574,906	1,837,390	2,099,875	2,362,359	2,624,843	2,887,328	3,149,812
Maintenance															
111	Sealed Pavement Maintenance	900,000		1,134	4,083	12,756	17,175	117,411	272,164	361,808	445,588	579,864	650,914	775,452	939,865
112	Unsealed Pavement Maintenance	383,500		22,450	44,537	66,638	89,197	108,587	127,321	146,055	164,789	190,493	225,194	243,927	263,572
113	Routine Drainage Maintenance	700,000		41,933	105,229	155,534	231,911	305,694	375,319	396,346	506,386	584,643	623,201	684,273	662,996
114	Structures Maintenance	212,800		5,245	16,564	23,579	34,964	43,426	48,730	56,671	62,639	68,495	107,473	207,195	213,667
121	Environmental Maintenance	1,302,176		83,886	324,530	746,410	1,288,425	604,850	681,235	806,915	935,546	1,036,466	1,192,668	1,295,658	1,369,905
122	Traffic Services Maintenance	445,000		20,481	40,407	92,690	113,520	133,695	158,934	196,712	225,835	250,864	276,545	296,839	434,882
124	Cycle Path Maintenance														
131	Level Crossing Warning Devices	30,675			300	300	300	300	300	300	300	300	300	300	300
151	Network & Asset Management	1,151,325		95,992	152,877	293,429	346,553	435,225	486,607	557,935	751,656	900,366	958,524	1,205,806	1,295,571
Maintenance - Totals		5,125,476	Actual	271,121	688,527	1,391,336	2,122,045	1,749,188	2,150,610	2,522,742	3,092,739	3,611,491	4,034,819	4,709,450	5,180,758
			Forecast												
			Budget	427,123	854,246	1,281,369	1,708,492	2,135,615	2,562,738	2,989,861	3,416,984	3,844,107	4,271,230	4,698,353	5,125,476
Renewals															
211	Unsealed Roads Metalling	460,125		59,922	101,625	159,916	211,628	223,395	223,395	223,395	223,395	257,186	274,565	327,421	405,352
212	Sealed Roads Resurfacing	1,789,375		0	500	507	507	507	266,097	663,498	1,323,146	1,043,180	1,404,004	1,404,298	1,408,207
213	Drainage Renewals	352,425		10,167	76,092	76,092	76,092	76,092	109,571	190,123	242,091	261,005	503,200	556,401	603,768
214	Sealed Road Pavement Rehabilitation	1,688,679		49,577	66,834	214,863	269,944	369,386	422,073	565,501	824,083	1,332,468	1,508,951	1,642,127	1,732,529
215	Structures Component Replacements	189,163		0	0	175	175	35,480	45,322	48,084	48,954	148,880	154,680	220,295	234,598
222	Traffic Services Renewal	224,950		167,590	168,677	176,516	183,412	187,175	189,514	199,877	200,157	208,823	46,900	61,358	265,497
231	Associated improvements														
Renewals - Totals		4,704,717	Actual	287,256	413,728	628,069	741,758	892,035	1,255,972	1,890,478	2,861,826	3,251,542	3,892,300	4,211,900	4,649,951
			Forecast												
			Budget	392,060	784,120	1,176,179	1,568,239	1,960,299	2,352,359	2,744,418	3,136,478	3,528,538	3,920,598	4,312,657	4,704,717
Road Improvements															
324	Road Improvements (LED's)	644,332					254,519	400,749	444,479	444,479	444,479	454,304	464,269	464,269	541,682
322	Mangaweka Br Replacement - Detailed E	100,000										41,250	61,500	81,650	81,650
341	Minor Improvements	525,677		33,457	90,962	99,532	131,357	274,666	449,872	451,617	449,872	450,471	450,471	480,796	525,677
325	Taihape Napier Road Seal Extn	42,681				1,345	1,345	1,345	7,645	7,645	7,645	7,645	7,645	7,645	7,645
Renewals - Totals		1,312,690	Actual	33,457	90,962	100,877	387,221	676,760	901,996	903,741	901,996	953,670	983,885	1,034,360	1,156,654
			Forecast												
			Budget	109,391	218,782	328,173	437,563	546,954	656,345	765,736	875,127	984,518	1,093,908	1,203,299	1,312,690







95 % of the total subsidised budget was expended



2 UTILITIES

2.1	Water Supply	Project Manager(s)	% Complete
2.1.1	Ratana Water Treatment Plant	Wiremu Greening	90%
2.1.2	Taihape PRV Chamber	Michael Taylor	5%
2.1.3	Taihape Falling Main	Chye Goh	90%
2.1.4	Huntermville Exploratory Bore	Michael Taylor	5%
2.2	Waste Water (completed for 2017/2018)	Hao Liu	100%
2.3	Stormwater		
2.3.1	Marton Hotspots including Skerman Street, Grey Street & Milne Street	Tunmbi Tokode / Michael Shaw	30%
2.3.2	Taihape - Stormwater renewal Missel Street, Paradise Tce & 92 Goldfinch St	Michael Shaw / Hao Liu	15%
2.3.3	Onga Road - Huntermville	Michael Shaw	5%
2.4	Major Projects		
2.4.1	Bulls - New reservoir at Trickers Road	Chye Goh	10%
2.4.2	Bulls Water Strategy	Chye Goh	5%
2.4.3	Marton - Seismic strengthening of water clarifier	Chye Goh	5%
2.4.4	Taihape - water treatment plant seismic strengthening and roof replacement on reservoir	Chye Goh	5%
2.4.5	Bulls – New 150mm dia. Water Supply Rising Main at Holland Crescent between Bridge St and High Street	Chye Goh	5%
	Completed Projects		
	Takahe Street watermain Renewal - Taihape	Tunmbi Tokode	100%
	Raumaewa Rd watermain renewal - Mangaweka	Hao Liu	100%
	Sewer Relining	Hao Liu	100%
	Marton WW Treatment Plant entranceway upgrade	Michael Shaw	100%
	Bulls - Seismic strengthening of mushroom tower	Chye Goh	N/A
	Broadway Upgrade Marton, Stage 1	Michael Shaw	100%

2.1 WATER

2.1.1 Ratana Water Treatment Plant



Scope of Works

Project involves the design and construction of a new 350 m³/day water treatment plant (WTP) including all process, mechanical and electrical works.

Progress to Date

Filtec have been onsite to undertake commissioning works, as part of process they identified some small issues that will be resolved as part of the final commissioning phase. All siteworks have been completed with commissioning and signoff from MOH underway.

2.1.2 Taihape –PRV Chamber



Scope of Works

Project involves the design and construction of a PRV chamber behind the motel at 27 Mataroa Rd, Taihape. The current setup consists of an open top concrete block work chamber containing a 200mm Bermad 720 fire duty PRV, 100mm Bermad 720 PRV on the bypass, an 80mm Bermad 730 quick relief valve, metering strainers and isolation valves.

The critical valves and chamber are deteriorating and in need of replacement. The location of the chamber is close to the stream and less than ideal.

Progress to Date

Easement has been signed off by LINZ for the property at 29 Mataroa Road. GHD has been engaged to produce a design for the new PRV, based on the new alignment. Registration of the second easement. The next stage is to proceed with design of PRV and watermains on alignment within new easements and procure the construction of the new PRV and associated trunk watermain.

2.1.3 Taihape Falling Main



Scope of Works

The existing steel main is more than 80 years old and will be replaced with a 315mm OD PN 16 SDR11 PE pipe of similar bore.

Progress to Date

Have installed 636m PE100 315OD PN16 SDR11 pipeline in trenched alignment and tested. Final cut in and commissioning to be done in August 2018.

Budget 17/18	Spent to Date 17/18	Committed
\$1,100,000	\$654,000	\$779,430.70 + 15% contingency

2.1.4 Hunterville Exploratory Bore



Scope of Works

The Contract seeks to investigate the potential use of groundwater as the source of supply for the Hunterville Community Water Supply. Subject to the outcome of these works and to final design, the yield required for a production bore is expected to be between 200 and 400 cubic metres per day.

The works comprise the supply of all labour, plant and materials to construct an exploratory bore on council-owned land in Paraekaretu Street, Hunterville.

Depending on the outcome of the drilling, a decision may be taken to construct and develop a production well. Such work is not included in the work for this contract but may be negotiated with the contractor.

Progress to Date

RFT process underway.

2.2 WASTEWATER

ALL PROGRAMMED WORKS COMPLETED FOR 2017/2018

2.3 STORMWATER

2.3.1 Marton Stormwater Hotspots 5b, 9,20, 13, 10, 11 & 16



Flooding near Pukepapa Road towards Harris Street

Scope of Works

Identify, recommend and address ongoing flooding issues in the Marton township.

- Hotspots 9 & 20 – Pukepapa/Harris Street to Russell Street,
- Engineers Estimate \$90,000
- Stage 1 - Clean Drain & remove trees, Engineers Estimate \$40,000
- Stage 2 – Timber retaining wall and concrete floor, Engineers Estimate \$50,000
- Hotspot 13 – Station Road & Main Street
- Hotspots 10 & 11 – beneath the Wellington Road railway line underpass
- Hotspot 16 – Hereford Street outlet to the Tutaenui Stream

Progress to Date

Open drain adjacent to Harris St has been cleared including tree trimming. All other hotspots are with GHD for design. The next stage will be design structure for Harris Street and go out to tender. Clearing remainder of channel once ground conditions improve.

2.3.2 Marton Stormwater Hotspots - Grey Street (5d)



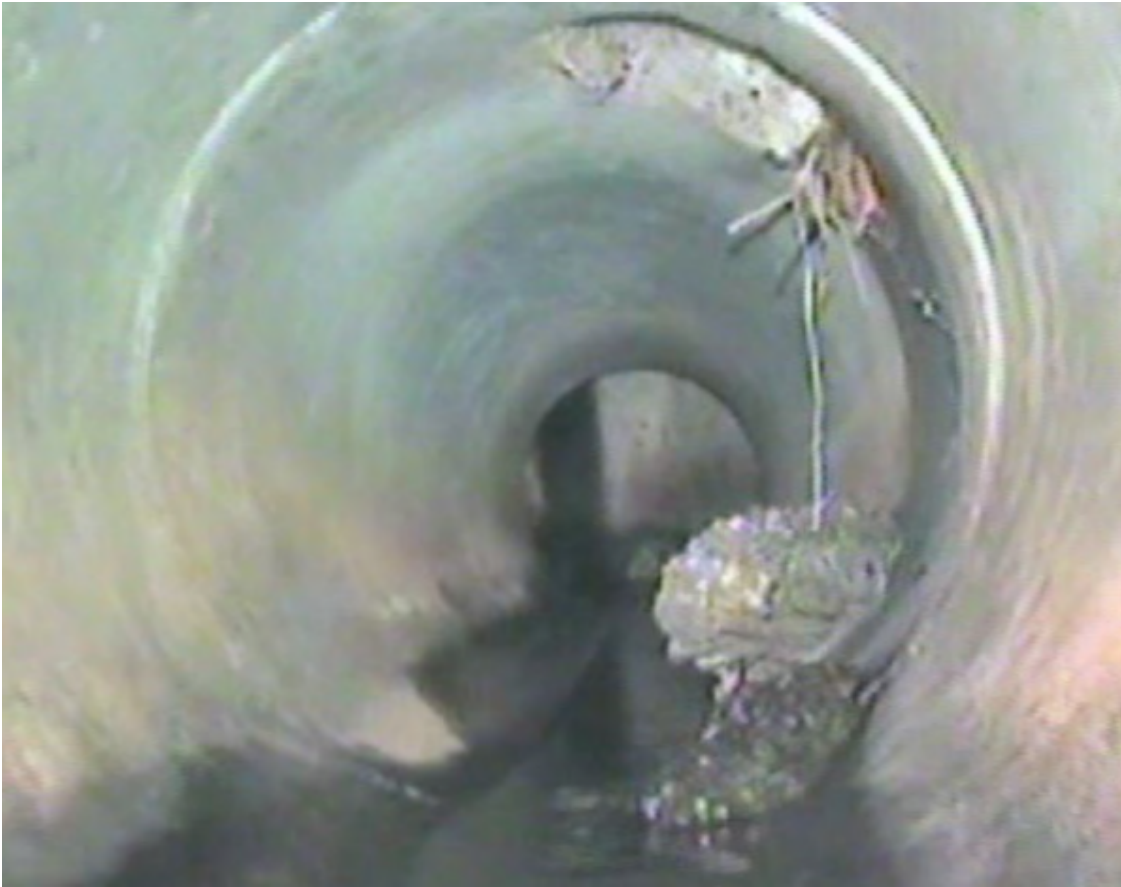
Scope of Works

32-37 Grey St. 750 mm Armco culvert parallel to road, in need of repair or replacement (identified from CCTV). Total length of asset 37 m.

Progress to Date

With GHD for design.

2.3.3 Marton Stormwater Hotspots - Milne Street (5e)



Scope of Works

The existing 450mm diameter stormwater main from 2-17 Milne Street, Marton has been identified as being condition 5, very poor. The scope of the project is to replace the entire length 127m of stormwater main.

Progress to Date

Roading department will be replacing the three sumps in Milne Street. This includes the sump leads. The next stage a manhole will be built on the 450mm dia main, where the two sump leads join the main. Redoing the laterals – (cut flush and mortar joint). Remove the concrete blobs inside the 450mm dia pipe, directly under the existing sump lead connections. This Project will be taken over by the Roding team.

2.3.4 Taihape Stormwater Hotspots – Missel Street (6a)



Scope of Works

The scope of the project is to abandon the existing main running through private property 3 Missel Street and relocating main into road reserve on Missel Street and Thrush Street, linking into the existing system on either Thrush Street or Kaka Street.

Progress to Date

Complete CCTV, cleaning stormwater line and reline stormwater pipe.

2.3.5 Taihape Stormwater Hotspots – Paradise Terrace (6b)



Scope of Works

Contract involves the replacement of 45m 300mm dia stormwater running under an existing walkway adjacent to No. 19 Paradise Tce, and 112m of 100mm watermain within the walkway and into Ruru Road.

Progress to Date

Design underway for stormwater and water replacement. Walkway will be upgraded as part of project. The next stage will be completing the design and going out to tender.

2.3.6 Taihape Stormwater Hotspots - 92 Goldfinch Street (6c)



Scope of Works

Stormwater issue at the lower end of Goldfinch Street due to the low area. Surface flooding has been seen this business affected a number of times and looking at options to upsize the existing stormwater lines to address this problem.

Progress to Date

The manhole is installed and new pipes have been connected.

2.3.7 Ongo Road, Hunterville



Scope of Works

Identify and remedy flooding issues in and around Ongo Road, Hunterville.

Progress to Date

Site survey is being undertaken and Horizons have agreed to clear the downstream drain.

2.4 MAJOR PROJECTS

2.4.1 New Reservoir at Trickers Hill – Bulls



Scope or Works

Negotiate and purchase land where the existing timber tank footprint is encroaching on Mr & Mrs Tricker's land. Provide a new access to the reservoir site separate from the Tricker's farm access. Provide a separate power supply to the reservoir and create a legal easement over the new access route.

Background

Currently the water supply to the two Tricker's property is via a DN 50mm diameter pipe sourced from the reservoir. A 25mm diameter pipeline connected to this pipeline services the adjacent property farmhouse and the milking shed etc.

The DN50mm pipeline was then laid under the Tutaenui Stream and was connected to water supply tanks at the house at 106 Tricker Road. Due to the on-going stream bed erosion of the Tutaenui at his location, the buried pipeline is now exposed and may be damaged from the next significant flood event.

As part of this land acquisition agreement Mr. Tricker has requested a connection to his property from the town supply.

Progress to Date

- The report detailing expected project costs completed and forwarded to Utility Manager for review. This report will be forwarded to RDC management for consideration after this review.

- Property Group emailed changes to MOU which take into account the comments from CR Law and RDC.
- Arrange a meeting with Property Group to discuss final format of MOU before presenting this MOU to Trickers
- Met with the Trickers to understand their requirements going forward.
- Draft MOU prepared.
- Location for the access has been identified and agreed with the landowner.
- Looking at water supply options to landowners house, milking shed and farm managers house.
- Looking at power supply relocation from milking shed to new access way.

Next Stage

- Provide a report to Ross McNeil with estimated costs of the land purchase, power supply, owner's water supply connections and the new access to the Bulls Reservoirs.
- Investigate costings to relocate rising & falling main into new access way from Johnson St.
- MOU reviewed and accepted by RDC and the Trickers.
- Finalise Bulls water strategy. Waiting on outcome of Bulls water Strategy. Phase 2 which will provide costings on various supply options

2.4.2 Bulls Water Strategy

The purpose of the Bulls Water Strategy is to provide recommendations as to the route and sizing of the rising main and fire main in the section of State Highway between Holland Crescent and High Street. This section of watermain replacement has become urgent due to the pressing needs of NZTA who are upgrading SH3 between Holland Crescent and High Street.

Water Sources

There are a number of options for the future water sources for Bulls, these are:

1. The current bores
2. Sanson Supply
3. Marton Supply
4. New Bores outside of the flood zone

Reservoir Location

Likewise there are a number of options for the location of the reservoir(s).

1. Current location (Trickers Hill)
2. At or near any of the points of supply above with water pumped directly into the network.
3. New elevated site to enable gravity feed into town. This would need to be at or higher than the elevation of the current reservoirs (ground level roughly 80 m)

Reticulation in the section of SH Reconstruction

It is understood that there is a 63 mm PE rider main in the western berm of this section of the SH and that this rider main does not require renewing as a result of the planned roading works.

On the eastern side of the road is a 150 mm fire main that will require renewing as part of the works. This renewed main should be sized such that it is suitable for any of the possible future configurations discussed above. A key component to this is that the state highway runs through the "CBD" of Bulls and as such the majority of the State Highway is lined with commercial properties. This means that the main should be sized to convey fireflows of somewhere between 50 to 100 l/s as discussed above.

To convey the fire flows alone, a main larger than 200 mm is required to keep pipeline velocities to a reasonable value. For this reason it is recommended that the water main in the State Highway be sized such that it forms the spine of the water network. It should be sized to convey fireflows to the CBD as well as demand to the rest of the network. For this reason it is recommended that a 300 mm main be installed as the water main in the State Highway between High Street and Holland Crescent. Selecting a 300 mm main will enable the system to meet the level of service requirement in this area for all of the possible future configurations discussed above.

Health & Safety

- Low levels of PFAs contaminants detected in four of the five Bull's bores.

Progress to Date

- Bulls Water Strategy Phase 1 Report received from GHD

- GHD engaged to design a 150mm water main along Holland Crescent to replace the existing rising and falling main on SH1.
- GHD will forward an offer of service to continue with Phase 2 of the water strategy
- Next week as their Project Manager is away.
- GHD's proposal for Phase 2 of Water Supply Strategy has been accepted.
- Met GHD's Peter Free and Chris Anderson. Discussion centred around possible sources of water to supply Bulls. Options include new bores in Bulls and Marton. The effect of recent discovery of PFAS containment in Bulls bores is will be considered.
- Met with NZTA to confirm funding and project timelines on 3 May 2018. Still waiting on an update.

Next stage

MDC to provide costings for betterment of services renewal depending on the pavement thickness adopted for the road rehabilitation work.

2.4.3 Marton – Seismic Strengthening of water clarifier



Scope of Works

Contract involves the investigation and design for seismic repairs to the Marton water Clarifier.

Strengthening works to include:

- Angle Brackets to Wall Joints
- Soil Anchors tying Slab/Walls to Ground
- New Concrete wall Internal

Progress to Date

- Design completed by Calibre consulting
- Project on hold until water strategy completed for Marton to Bulls

Next Stage

- Awaiting outcome of water strategy

2.4.4 Taihape – Seismic Strengthening of Reservoir



Scope of Works

Contract involves the investigation and design for seismic repairs to the Taihape water Reservoir.

Major strengthening is required in three main areas as follows:

1. Reinforced concrete wall-hoop force capacity:
 - Provide hoop wire rope or metal bar tensioning anchorage
2. Base circumferential sliding and wall uplift
 - Provide reinforced concrete ring beam between the wall and the foundation
3. Steel roof connection to the concrete wall for seismic load transfer
 - Provide fly bracing between the top chords of the roof steel truss. Provide Cross angle bracing at the underside of roof sheeting at the last bays between the truss and concrete wall.

Progress to Date

- Design completed by Calibre consulting
- Expanded scope of project to include the following options:
 - cost a temporary reservoir to meet Taihape daily consumption and fire-fighting demands.
 - Replacing existing reservoir
- Calibre has provided a draft report for the size of new/temporary reservoir.
- This report has been forwarded to the Utility team for comment.
- Following a meeting between Calibre and an internal meeting within the Operations-Projects team it was decided that:

- Investigation of available land for a new reservoir site engage CDS to confirm WTP property boundaries and topography.
- If land is available carry out a business case which include options of new reservoirs, combination of new and refurbishing existing reservoirs etc.
- CDS is currently engaged to undertake to carry topography survey of the Treatment Plant.

Next week a professional services brief detailing investigation, design, costings for options and locations of a new reservoir on this site will be prepared for pricing.

Next Stage

- Awaiting outcome of water strategy.

2.4.5 Bulls – New 150mm dia Water Supply Rising Main at Holland Crescent between Bridge Street and High Street



Scope of Works

Contract involves the investigation and design for a 150mm dia. water supply rising main at Holland Crescent between Bridge St and High Street. This work is undertaken due to the upcoming SH1 road rehabilitation work which is expected to affect the existing rising main.

Progress

- Design and investigation work on-going by GHD

Next Stage

- Awaiting outcome of water strategy.
- Awaiting response from NZTA.

3 THREE WATERS COMPLIANCE

3.1 EXECUTIVE SUMMARY

3.1.1 This report is a summary of Rangitikei District Council's overall compliance. Compliance is assessed with respect to the following:

- Water supply resource consent conditions (July 2018).
- Drinking Water Standards (July 2018).
- Section 69Z of the Health Act 1956 – the duty to prepare and implement water safety plans.
- Wastewater resource consent conditions (July 2018).

Information on compliance has been derived from our Water Outlook system, and laboratory results and where applicable, communications with compliance monitoring officers at Horizons.

3.1.2 As a result of this assessment the following key outcomes have been identified:

- Health related potable water limits are being achieved at all of the treatment plants;
- Water safety plans are being reviewed as a result of the findings from the Havelock North review;
- Ratana's new water supply is currently being commissioned and is due to be operative by 31 August 2018;
- Annual reporting for Rangitikei Wastewater Treatment Plants have been completed for 2018;
- Applications to increase the discharge volume for Bulls, Taihape (draft) and Hunterville Wastewater treatment plants have been submitted to Horizons;
- Wastewater treatment plants complying with quality limits in July 2018.

3.2 WATER SUPPLY – CONSENT COMPLIANCE

3.2.1 Table 1 shows the compliance of each water supply scheme against consent conditions. Only those schemes for which Rangitikei District Council is the consent holder have been shown.

Table 1: Consent Compliance – Water Supply

Scheme	Compliance June 2018	Comments	Actions
Marton	Water abstraction consents.	-	-
	Compliant		
	WTP discharge consent.	Volume of treated water discharged exceeding consented limit.	A consent renewal application was lodged on 12 August 2016. Consultation with Horizons to progress the application ongoing.
Taihape	Compliant	-	Upgrades commissioned 2018
Bulls	Compliant	-	-
Mangaweka	Compliant	-	New limits and River flow have been added to Water outlook
Ratana	Not assessed	Consent to use new bore for production has been acquired. Currently commissioning plant.	Plant operation not expected to commence until August 2018
Erewhon Rural	Compliant	-	-
Hunternville Rural	Compliant	-	-
Omatane Rural	Compliant	-	-

3.3 WATER SUPPLY – DRINKING WATER STANDARDS COMPLIANCE

3.3.1 Table 2 shows the compliance of each water supply scheme against the Drinking-Water Standards for New Zealand 2005 (Revised 2008). Only those schemes for which Rangitikei District Council is assessed have been shown.

Table 2: DWSNZ Compliance

Scheme	Compliance July 2018 – Bacteria	Compliance July 2018 – Protozoa
Marton		
	Bacteria /E-coli Compliant : Not Detected	Protozoa/ UVT Achieved <95% validation Compliant: Yes – 100%
	Bacteriologically and protozoally compliant	
Taihape		
	Bacteria /E-coli Compliant : Not Detected	Protozoa/ UVT Achieved <95% validation Compliant: Yes – 100%
	Bacteriologically and protozoally compliant	
Bulls		
	Bacteria /E-coli Compliant : Not Detected	Protozoa/ UVT Achieved <95% validation Compliant: Yes
	Bacteriologically and protozally compliant.	
Mangaweka		
	Bacteria /E-coli Compliant : Not Detected	Protozoa/ UVT Achieved <95% validation Compliant: Yes – 100%
	Bacteriologically and protozally compliant .	
Ratana		
	Bacteria /E-coli Compliant : Not Detected	Protozoa/ UVT Achieved <95% validation
	There is currently no ability to treat protozoa adequately at the Ratana plant. This will be rectified when secure bore status is conferred on the new Ratana bore, due to be commissioned in August 2018.	
Hunternville Urban	Bacteria /E-coli Compliant : Not Detected	Protozoa Not Achieved <95% validation Compliant – UVT 99.99% The non compliances are occurring when the plant is turning on and off and therefore not reflective of the potable water provided to the community.
	Bacteriologically compliant. We will be asking Drinking Water Assessor for consideration for filter turbidity issues under certain parameters.	

3.4 SECTION 69Z OF THE HEALTH ACT 1956

- 3.4.1 Pursuant to s69Z the Health Act 1956 Water Safety Plans must be in place for all plants. As a result of the Havelock North review additional critical control points need to be added to the Water Safety Plans.
- 3.4.2 Critical control points have been identified for the six water supplies identified below. The Bulls, Hunterville Urban, and Mangaweka safety plans are currently being updated prior to their submission to the Drinking Water Assessor in August 2018.
- 3.4.3 Health related potable water limits are being achieved at all of the treatment plants.
- 3.4.4 Table 3 shows the status of the Water Safety Plan, at the end of June 2018, for each plant; the status of the Annual Review for each plant; the expiry date of each Water Safety Plan; the plan going forward to ensure compliance; and the progress made in the reporting period.

Table 3: Health Act Compliance – Status of Water Safety Plans

Plant	Water Safety Plan Status	Annual Review Status	Expiry Date	Plan Going Forward	Progress
Bulls	Approved June 2016	Review underway	June 2021	Submit updated Water Safety Plan August 2018	Critical control points Identified
Hunterville Urban	Approved June 2017	Review under way	May 2022	Submit updated Water Safety Plan August 2018	Critical control points Identified
Mangaweka	Approved June 2017	Review underway	May 2022	Submit updated Water Safety Plan August 2018	Critical control points identified
Marton	Approved December 2015	Up to date. Due next in December 2018	December 2020	No immediate action required	N/A
Ratana	No Water Safety Plan in place at present*			Submit Water Safety Plan August 2018	Commissioning new water supply.
Taihape	Approved October 2015	Up to date. Due next in October 2018	October 2020	No immediate action required	N/A

* Permanent population below 500 so not compulsory.

The statement received from the Director-General of Health relating to the Health Act 1956 s 69ZZZC is attached it should be noted that all Council operated drinking water supplies in the Rangitikei are treated.

3.5 WASTEWATER

3.5.1 Compliance against consents, is shown per wastewater treatment plant (WWTP) in the Table 4 below.

3.5.2 Ongoing consultation with Horizons continues to occur. Horizons has a level of comfort with the three non compliances identified below for the following reasons:

- Non compliances are limited to discharge volume only;
- Full compliance with quality limits is being achieved;
- Applications to increase the discharge volumes are currently being worked on for three of the four identified sites;

Table 4: Consent Compliance – Wastewater Treatment Plants

Scheme	Compliance July 2018	Comments	Actions
Marton	Compliant	Upstream and downstream testing completed in July 2018.	
Taihape	Non-Compliant	Non-compliant with respect to flow volume and rate for the entire month of July 2018	A draft application to increase the discharge volume limits has been submitted to Horizons. Regular consultation with Horizons continues to occur
Bulls	Non-Compliant	Non-Compliant with Discharge Limit for the whole month meter needs investigating	Discharge Meter needs investigating
Mangaweka	Non -Compliant	Non – compliant with discharge volume on one occasion. 6.7% exceedance	Ongoing I&I investigation occurring to reduce influent volumes.
Huntermville	Compliant		An application to increase discharge volume limits has been submitted to Horizons. Regular consultation with Horizons continues to occur.
Ratana	Compliant	No testing carried out in July	
Koitiata	Compliant	Compliant with respect to sampling requirements, however flow cannot currently be assessed due to issues with the flowmeter	

Attachment 8

Community and Leisure Assets

Project updates, July 2018



1. Centennial Park, Marton – Skatepark upgrade

July has been another busy month for this development with a number of meetings being held to look at further funding opportunities and to seek community buy-in for the project.

A meeting was held with the parents of the current skatepark users, this meeting was hosted by Pania and Ray Hemopo and Nardia Gower. A plan was developed for future fundraising opportunities within the community for the coming months.

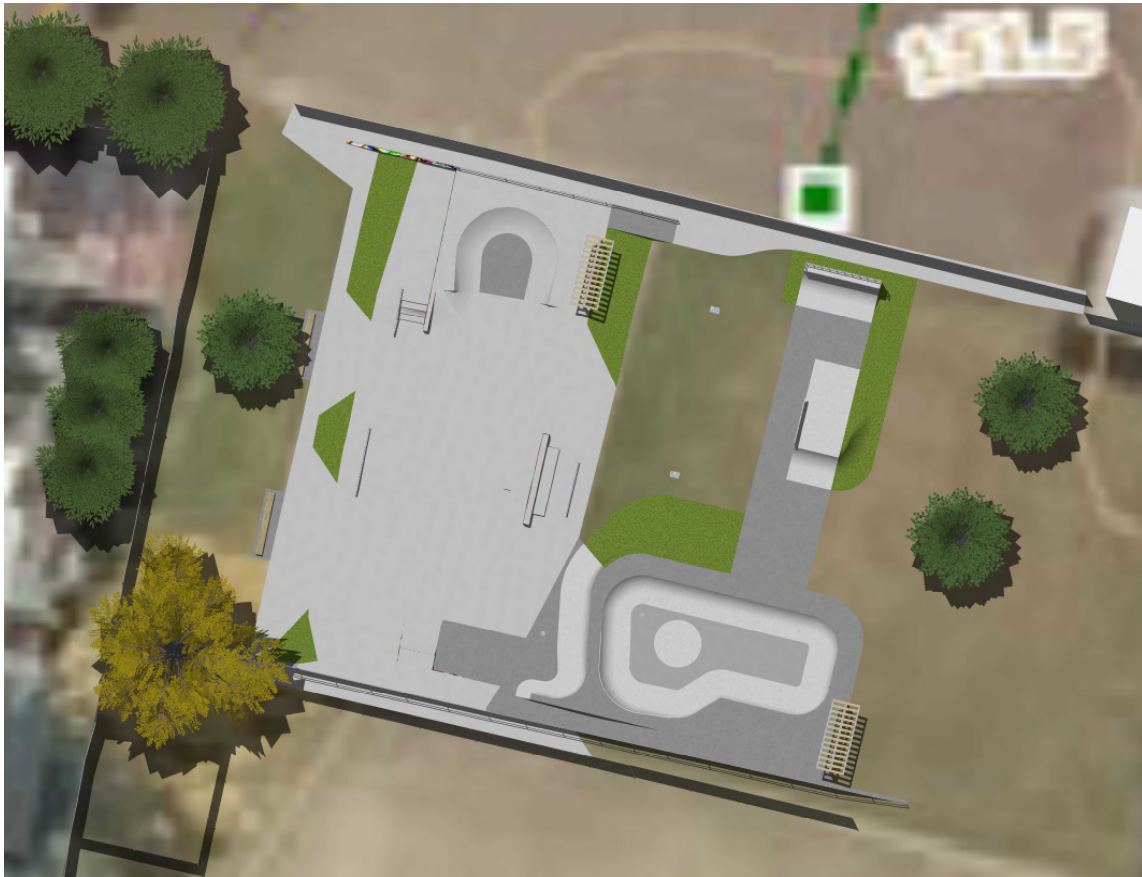
The finalised plans (PS1) have now been received back from the RDC consents team and the application for Exempt Building Work Schedule 1 (2) has been approved.

The steering group lodged a further application to the Lion Foundation for an additional \$25000, the outcome of this application will be known in 80 days.

The steering group also requested from Council approval to apply to Pub Charity for a further \$80000 for this project. Council approved this request and a application will be made to Pub Charity under the RDC name for \$80000.

The Steering group were unable to apply directly to Pub Charity's due to the requirement for applications be made only by the land owner the facility will be located on.





2. Marton B & C Dams

During July replanting of the harvested areas has continued. Fencing has now been completed in further areas along Makukou Road to secure the area.

July has seen no further dumping of rubbish, vandalism or unauthorised access to this site.

Community planting days have continued throughout July at the lower Makukou Road area. Although we are not getting large numbers of volunteers for these days the enthusiasm that is being shown by the local community to getting this area looking great makes up for the low numbers on any day.

Weed control has also continued throughout July with our focus on eradication of pampus grass, gorse, pink ragwort and holly.

The Parks team have also employed an additional staff member to help with weed eradication on site for a 10 week period.



3. Hautapu River Parks

During July Isthmus Group Ltd finalised the concept plan based of the feedback they received from the Friends of Taihape Society, RDC Councillors, HRC and other interested parties.

The group are keen to commence work within the reserve during summer 2018/2019 and a meeting is to be held during August to look at a work program during the upcoming summer.

Health and Safety requirements for working within the reserves have been discussed with the group and were partly finalised during July.

Joe Coogan Contracting has been pre-qualified as a preferred contractor to the RDC. Joe is a local contractor that is willing to volunteer and is member of the Friends of Taihape.

This exciting project is attracting a lot of interest from the local community and in time will be a major draw card to Taihape providing recreational opportunities to locals and visitors.



Attachment 9

ROADING AND FOOTPATHS GROUP OF ACTIVITIES 2018/19					Jul-18
Major programmes of work outlined in the LTP 2018/28					
Pavement Rehabilitation	Route Position Length	Status	Start date	Completion date	Planned for the next two months
Rehabilitation of 6.52 km of existing sealed roads subject to Project Feasibility Reports to determine validity for progressing to the design and construction phase.					
Mangahoe Road	RP 3.995 - 5.157	Removal of vegetation/trees first, physical works to follow	18-Jul	19-Feb	Proceed with physical works
Parewanui Road/Ferry Road	approx 500m2	Intersection to Works - AC		18-Apr	This site was completed 17/18
Spooners Hill Road		This site to be replaced by a section on Ratana Road.	19-Feb	19-Apr	Design to be completed.
Taihape Napier Road 2	RP 3.83 - 5.67		19-Feb	19-Apr	
Pukepapa Road - (Reserve project)	RP 9.420 - 9.530		19-Apr	19-May	
Pavement Seal widening		Status	Start date	Completion date	Planned for the next two months
Makirikiri Road	RP 2.993 -4.633	subject to preliminary design.			
Mangatipona/Kauangaroa/Okirae Road Intersection	At the intersection of these roads length approx 700m	subject to geotech design			
Ruanui Road	RP 0.425 - 1.575	subject to preliminary design.			
Bridge Replacement	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Planned for the next two months
Mangaweka Bridge	Business plan complete. Awaiting next stage/approval from NZTA				
Te Kapua Bridge	Design being worked on.				
Bridge Strengthening	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Planned for the next two months
Kakariki Bridge	Design being worked on				
Moawhango Bridge	Design being worked on.				
Otara Road Bridge	Report to Council for this bridge almost complete.				
Street Lighting	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Planned for the next two months
Accelerated renewal programme of LED carriageway lighting	Stages 1&2 completed.		18-Aug	18-Sep	Stage 3 to complete
Carry forward programmes from 2017/18					
Bulls: Parewanui Road, pavement rehabilitation	RP. 5820-7780; 1960m				Design in its final stages
Bulls: Parewanui Road, pavement rehabilitation	RP. 9720-9920; rescheduled as seal widening for forestry traffic				Design being worked on
Taihape Kiwi Road, footpath renewal	Site under investigation and design.				
Taihape Mataroa Road/SH1, footpath renewal	various locations	Targeted maintenance			This site now completed.
Taihape Kuku Street, footpath renewal	site under investigation and design.				
Taihape Robin Street, new footpath	Design completed.				Initial design for this site being reassessed. Scope indicates high cost.
Bulls: Parewanui Road – seal widening – location subject to Safety Study					Complete analysis of the Safety study report which involves draft designs (Options) ongoing.
Turakina Valley Road 3 (Otairi) RP 2075 – guardrail to bridge approaches	Deferred to 2019/20 to be carried in conjunction with a pavement rehab				

Turakina Valley Road 3 (Otiwhiti) RP 3040 – replace wire rope barrier with guardrail	Deferred to 2019/20 to be carried in conjunction with a pavement rehab				
Turakina Valley Road 3 Bridge 45 Concrete Ford, RP 6000	Brought forward from 2019/20 programme was incorporated with the James Road emergency works project		Mar-18	May-18	This project all completed.
Repairs to damage from Debbie event April 2017	Designs for all sites completed.				Sites approx 90% complete.
Repairs for damage to network arising from July 13/14 event.	Designs for all sites completed.				Sites approx 80% complete.
Taihapa-Napier Road - Professional services and resource consenting for three large armco culverts in Taihapa-Napier Road which require concrete linings to rusted inverts.	Consultant being sought to design and scope the work to address these culverts.				Design to address the problems with these culverts about to be implemented.

WATER SUPPLY GROUP OF ACTIVITIES 2018/19				Jul-18
Major programmes of work outlined in the LTP 2018-28				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton - pipe replacement programme (ongoing)	Broadway design underway			
Bulls State Highway 1 - renewal of mains	Scope to be confirmed	Stage 1 of Bulls water Strategy completed by GHD. Meeting required with NZTA to understand timeframes.		
Taihape (Hautapu River) - resource consent renewal	Draft consent with Horizons			
Huntermville Water Supply upgrade	In the final year of Capital assistance Programme, funding was received from the Ministry of Health to enable a new source of water to be developed for the Huntermville Urban water supply. This project is to sink an exploratory borehole on council land on Paraekaretu St to determine water quality and availability.	RFT process underway.		
Water Reticulation Renewals - District wide				
Erewhon				
Taihape Falling main	design for next stage underway			
Taihape Kokako Street	Renewal of 380m 150mm dia steel watermain	Design underway by GHD -RFT to be undertake over the next couple of months		
Taihape Wren Street	Renewal of 175m of 100mm dia steel watermain from 8-21 Wren St	Design underway by GHD -RFT to be undertake over the next couple of months		
Taihape Lark/Swan Street	Renewal of 188m of 100mm dia cast iron watermain from Pukeko St to Swan St.	Design underway by GHD -RFT to be undertake over the next couple of months		
Managaweka Rising Main	Scope to be confirmed			
Marton Tutaenui Rd Trunk Main (Survey and design)	Priority to be reviewed			
Marton Wellington Road 200m	Scope to be confirmed			
Major Projects Carry over from 2017/18				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Taihape reticulation – falling main (stage 3) (\$1,119,987)	Renewal of 832m of 225mm dia steel raw water falling main	WIP	Contract awarded to I D Loaders of Wanganui. All work to be completed by end of August 2018.	
Taihape: Mataroa Road – water main renewal (\$470,786)	Renewal of 963m 225mm dia steel watermain along SH1 from Goldfinch to Linnet Street.	Design underway by GHD -RFT to be undertake over the next couple of months		

Taihape: Mataroa Road – trunk main and rider main renewal (\$42,853)	Renewal of 304m of 100mm dia steel watermain outside motel.	Design underway by GHD -RFT to be undertake over the next couple of months		
Taihape: Kawau Road water main renewal (\$15,959)	Renewal of 73m of 100mm dia AC watermain from 2-8 Kawau St	Design underway by GHD -RFT to be undertake over the next couple of months		
Bulls: physical works to replace one of the two Trickers Hill reservoirs and seismic strengthening work (\$933,000)	New reservoir at Trickers, seismic strengthening of Concrete building and filter at Bridge St (est. \$100-\$200k) and possible strengthening of mushroom at Bulls. New reservoir to be minimum 900m³, preferably 1200m³, with new access track on legal title. Seismic assessment of mushroom indicates \$300-\$400k of strengthening work required. Money available will depend on cost of new reservoir and a requirement for the mushroom to remain as a feature of Bulls. Annual Plan budget – renewals to reservoirs and lift pumps (\$757,000 for seismic strengthening). Physical works (\$933k) deferred to 17/18 as part of revised 16/17 budget allocation.	(1) Investigation underway, in discussions with landowner for reservoir, Access and easements required. Road design underway, Seismic analysis will be handled as part of larger contract. Lift pump options being investigated. (2) stage 2 for Bulls water strategy underway looking at alternative options for water supply and reticulation needs. (3) Seismic strengthening of Bulls Mushroom no longer required.		
Marton: seismic strengthening of clarifier (\$225,000), poly machine renewals and rotork valves etc. (\$70,000).	Detailed seismic investigation underway.	Tender awarded to Calibre. Initial design completed, but on hold until water strategy completed between Marton & Bulls. Bulls water strategy including supply options underway with GHD	Investigation only	
Taihape: water treatment plant seismic strengthening and roof replacement on reservoir (\$604,000)	Reservoir deemed earthquake prone requiring \$200-\$300k of earthquake strengthening. Reservoir is also in need of new roof supporting structure.	Tender awarded to Calibre. Initial design completed but have now increased the scope of work to now include options for: temporary reservoir that can service Taihape until seismic repairs are completed and a replacement reservoir.		
Mangaweka: physical works for seismic strengthening of the treatment plant (\$558,037)	Seismic assessment shows reservoir needs approx \$200-\$300k of strengthening. Investigate options for a new reservoir with an increased height and size.	1) No seismic strengthening required		

Taihape: WTP Structural repairs as a result of seismic assessment (\$129k)	Reservoir deemed earthquake prone requiring \$200-\$300k of earthquake strengthening. Reservoir is also in need of new roof supporting structure. Investigate option of a new reservoir to replace existing and report by 30 September 2016. Work may be required over two years.	Tender awarded to Calibre. Initial design completed but have now increased the scope of work to now include options for: temporary reservoir that can service Taihape until seismic repairs are completed and a replacement reservoir.		
Mangaweka: Structural repairs as a result of seismic assessment (\$80k)	Seismic assessment shows reservoir needs approx \$200-\$300k of strengthening. Investigate options for a new reservoir with an increased height and size. Investigate condition of river pump station and intake structures to enable renewal of consent for abstraction. Physical works for seismic strengthening (\$558k) carried forward to 17/18 because of revised budget in 16/17.	1) No seismic strengthening required	Investigation only	completed
Bulls: Design and construction of new reservoir as a result of seismic assessment (\$633k)	New reservoir at Trickers, seismic strengthening of Concrete building and filter at Bridge St (est. \$100-\$200k) and possible strengthening of mushroom at Bulls. New reservoir to be minimum 900m³, preferably 1200m³, with new access track on legal title. Seismic assessment of mushroom indicates \$300-\$400k of strengthening work required. Money available will depend on cost of new reservoir and a requirement for the mushroom to remain as a feature of Bulls. Annual Plan budget - renewals to reservoirs and lift pumps (\$757,000 for seismic strengthening). Physical works (\$933k) deferred to 17/18 as part of revised 16/17 budget allocation.	(1) Investigation underway, in discussions with landowner for reservoir, Access and easements required. Road design underway, Seismic analysis will be handled as part of larger contract. Lift pump options being investigated. (2) looking at alternative options / sites for a reservoir in Bulls. (3) Seismic strengthening of Bulls Mushroom no longer required.		

Marton: Broadway duplication (\$140k)	Programme was for 2015-2016 ahead of major Roding work; approx. 460 m between High St and Signal St; duplicate existing 150 mm AC on east side with new 150 mm on west side. Design only and defer to year 6 or later to align with replacement of AC main. Stage 1- Follett to Signal block, upsizing from 150 mm to 200 mm to align with 2017/2018 roding programme.	Tender awarded to I D Loaders 31 August 2017, watermain and stormwater have been installed. Western side now complete and have started work on the Eastern side.	Project underway.	Stage 1 - completed
Ratana; water supply upgrade - new reservoir, bore and treatment system. (Est \$1.6M)	Water treatment system under design	Water treatment building Tender awarded to Kiwispan Ltd. (est\$130k) Water treatment processing awarded to Filtec. (est \$630k). Application made to Ministry for extension of time to complete works June 2016. Approved.	Filtec commissioning have started with additional plant identified and ordered. Siteworks have been completed and working with MOH for bore security and feeding water into network underway.	

SEWERAGE AND THE TREATMENT AND DISPOSAL OF SEWAGE GROUP OF ACTIVITIES 2018/19				Jul-18
Major programmes of work outlined in the LTP 2018-28				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton and Bulls combined Wastewater Scheme: Pipeline Marton to Bulls ; Land purchase	design underway, steering group recommendation to be given to AIN committee. (see separate report)			
Ratana Wastewater Treatment Plant Upgrade	see separate report			
Taihapa - Papaya Rd Wastewater Reticulation Renewals	scope t be confirmed			
Wastewater Reticulation Renewals - District wide				
Bulls High street	with NZTA			
Infiltration reduction through relining programme	2018/2019 programme to be prioritised			
Other major programmes of work carried over from 2017/18				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete

STORMWATER GROUP OF ACTIVITIES 2018/19				Jul-18
Major programmes of work outlined in the LTP 2018-28				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Stormwater Reticulation Renewals and Improvements - District wide				
Scotts Ferry - new drainage system (\$505,000)	Design underway			
Marton - Harris/Pukepapa drain (258,000)	Stormwater design underway for Marton Hotspots through to outlet			
Marton - Russell St catchment (\$95,000)	Stormwater design underway for Marton Hotspots through to outlet			
Marton - Wilson Place (\$75,000)	Stormwater design underway for Marton Hotspots through to outlet			
Marton - Wellington Road drain (\$245,000)	Stormwater design underway for Marton Hotspots through to outlet			
Taihape - Paradise Walkway \$80,000)	Design underway			
Programmes Carried over from 2017/18				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton: renewal of stormwater reticulation in Milne Street (\$80,000).	Renewal of 450mm dia culvert between 2-17 Milne Street Marton as existing main assessed as condition 5 (very poor)	Investigation underway, CCTV of pipe shows little defects with majority of problems with sump leads. Stormwater repairs to be done in conjunction with roading defects. Start date TBC		
Taihape: renewal of stormwater reticulation in Missel Street (\$99,000)	Design for stormwater line to redirect water away from private property.	Investigation underway to determine if main can be connected into Thrush Street or Kaka St or option of relining existing stormwater line.		
Other major programmes of work carried out during 2018/19				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete

RUBBISH AND RECYCLING GROUP OF ACTIVITIES 2018/19			Jul-18
Major programmes of work outlined in the LTP 2018-28			
What are they:	Targets	Progress to date	Work planned for next three months
Greenwaste Acceptance:			
Ratana		Awaiting outcome of Council workshop	Awaiting outcome of Council workshop
Hunternville		Awaiting outcome of Council workshop	Awaiting outcome of Council workshop
Other projects			
What they are:	Targets:	Progress to Date	Work planned for next three months
Waste minimisation	Waste Education NZ visits.	No schools visited yet	
Waste minimisation	Horizons Enviroschools programme.	No workshops held at this early stage	

COMMUNITY AND LEISURE ASSETS GROUP OF ACTIVITIES 2018/19			Jul-18
Major programmes of work outlined in the LTP 2018-28			
Parks and Open Spaces	Progress to date	Progress for this period	Planned for the next two months
Parks Upgrade Partnership Fund	No applications so far this year	No progress to report	No known applications due at this stage
Skatepark at Marton Centennial Park	Design confirmed. PS1 completed. Pricing confirmed. Fundraising nearing completion.	Council confirmed additional funding. Exemption for building consent granted. Working through H&S requirements with the contractor.	Continue fundraising with Skate Park Committee. Confirm the construction company.
Marton B&C Dams - implement the management plan for the B & C Dams	Management Plan has been completed.	Community planting day held. Ongoing plantings with the community. Parks Team implementing site wide-weed control. New contracted staff member. Fencing to secure the site. Tracks installed.	Weed control, planting.
Marton Memorial Hall Playground - (community-led upgrade/redevelopment)	Concept plan and quote confirmed in writing.	Community establishing a Incorporated society to hold funds. Fundraising. Meeting with RSA to confirm their requirements.	First meeting to form a incorporated society.
Hautapu Park Taihape - develop and implement a plan to maximise recreational opportunities	Draft concept plan from Isthmus Group recieved.	Concept Plan submitted to Friends of Taihape Society for comment.	Finalise plans. H&S. Develop summer works programme.
Santoft Domain - community-led upgrade	Development Plan drafted	Develop Development Plan.	Finalisation of Development Plan. Felling of pines. Weed control.
Parks and Reserves: carry forward projects from 2018/19			
Investigate and report on fencing the open drain at Marton Park The objective in fencing is to prevent small children falling into the deep-sided drain. However, it needs to be of an open mesh design so that the area remains visible.	An alternative to fencing is to create a gentle swale with a gradient which can be mowed. This will be discussed with the group involved in planning the upgrade of Marton Park.	No progress to report	This project will have to be defered until summer 2018/2019 due to wet ground conditions. Creating a culvert will be considered.
Community Buildings	Progress to date	Progress for this period	Planned for the next two months
Bulls Community Centre - award of tender and start construction	Final design and specifications Have been completed. Building consent has been lodged.	Discussions have been held with Heritage NZ re an archaeological authority. Tenders were called for, and close at 12 noon, Friday 10 August.	Tenders will be evaluated and report presented to Council at its meeting on 30 August.
Marton Civic Centre Development - design	Lottery & Heritage declined Council's application for a Heritage feasibility precinct study for Marton CBD.	A business case is being prepared on options for making Library, and 46 High Street fit for purpose and the development of Cobbler / Davenport / Abraham and Williams sites. Opus have been invited to submit a proposal for developing the concepts designs.	An application will be made to the Provincial Growth Fund for a heritage feasibility study.
Taihape Memorial Park Amenities Facilities	Council requested a further report outlining various options and their costs.	A public meeting will be held on Friday 3 August to obtain clearer insights into community views on the preferred site location of the amenities building.	
Asbestos Management	Overarching Asbestos Management Plan has been prepared. Asbestos surveys have been carried out at Memorial Hall (Marton) and Taihape Town Hall, Marton and Taihape Swim Centres, Taihape Women's Club, Marton RDC Admin buildings, and Marton Library.	An Asbestos Awareness presentation was provided by Precise Consulting to key staff. Contractors who work on Council buildings were also invited to attend. A letter has been sent to the majority of clubs who have buildings on Council owned or managed land, making them aware of the Health & Safety at Work (Asbestos) Regulations 2016. Signage has been ordered to be placed on Council buildings.	Letters will be sent to the remaining clubs. Signage will be installed as appropriate. Asbestos Management Plans for each building will continue to be developed/updated.
Community Buildings: carry forward projects from 2018/19			

22 Tui Street development \$50,000 - Demolition of Conference Hall or to re-roof Womens Club building.	Taihape Drama Group have advised that, due to lack of club members (currently three) and their concern about the future of the club, they are not in a position to confirm 'take-over' of the building. Taihape Drama Group has again expressed an interest in this building. Staff are presently assessing whether this is an option.	Following the Asbestos report on the Womens Clubrooms, prices were obtained to remove the asbestos and to renovate those areas. It is suggested that a separate report be prepared for options at this site.	Decision to be made on whether to demolish Conference Hall, or leave as is and spend funding on the Women's Clubrooms. Consideration to be given as part of greater Taihape Town Planning concept programme.
Swimming Pools	Progress to date	Progress for this period	Planned for the next two months
Taihape - re-painting of the main pool	Funding allocated in 2018/19 budget.	Painting commenced 30 July.	Painting will be completed in August.
Taihape - addition of covers	Funding allocated in 2018/19 budget.	Refreshed quotes have been sought along with timeline for manufacture and installation.	It is intended that covers will be manufactured and installed prior to opening date.
Marton - re-painting	Funding allocated in 2018/19 budget.	Learner Pool painting is complete.	Main Pool programmed to be painted at the end of the swim season.
Marton - balance tank	Funding allocated in 2018/19 budget.		Balance tank programmed to be actioned at the end of the swim season.
Swimming Pools: carry forward projects from			
Complete upgrade to heating and filtration at the Taihape Swim Centre Contract 1057 was awarded to Ian Coombes Limited for \$374,900 being the tendered price of \$249,500 excluding GST plus \$125,400 plus GST for the concrete block shed and medium pressure UV treatment together with 20% contingency. An on-site meeting was held with Council and contractor representatives to confirm key roles, scope of work, health & safety, etc. CCTV of pipework has been conducted. Drawings have been prepared for utilisation of space in current plant room, which has been emptied of miscellaneous items.	Ground works (removing ground tiles, replacing pipework etc) completed. Concrete reinstatement completed. New lighting installed. Opening delayed due to incomplete commissioning of the automatic water level controllers and UV treatment for one pool. There was an issue with the main pool not holding water. This manifested itself in two ways: with the launder on one side of the pool not accepting flow while the other one was, which indicates that the pool has become (or was always ?) out of level by a 7 mm fall across the pool width-ways; and an apparent leak with an associated crack in the wall of the pool. The leak was in the order of 1 L per second, reducing to around 0.2 L per second, and then appeared to have disappeared altogether. If the pool had moved, then it's conceivable that there could be a leak which has subsequently reduced to a negligible rate, possibly as the result of the pool lifting / splitting and then subsequently resettling. Alternatively, it may be that if the pool is continuing to settle it will right itself and may have done so in the past. In the meantime there doesn't appear to be an issue. Automatic water levels controllers, and UV treatment for the Leaner pool was installed. Ventilation installed in plant room. Claims have been paid, aside from retentions.	50% of retentions have been paid.	
Community Housing	Progress to date	Progress for this period	Planned for the next two months
Refurbishment of housing stock	Funding allocated in 2018/19 budget.	Options were considered for heating . Prices are being sought for thermal curtains. Meetings held with Marton and Taihape tenants re increasing rentals to market rates.	Heating and curtains to be installed before 1 November.
Property	Progress to date	Progress for this period	Planned for the next two months

Dudding Lake - sealing of driveway	Funding allocated in 2018/19 budget.	Initial conversations have been had between infrastructure and property staff.	Depending on weather conditions, work planned for October.
Property: other projects			
Proceed with intended disposal of surplus sites in Bulls to help fund the new multi-purpose facility	High-level consideration of Council involvement in subdivision rather than outright sale of the larger surplus properties. Detailed scrutiny of the circumstances behind the acquisition of the Walton Street site, Haylock Park and the Criterion Street carpark behind the Medical Centre (with particular regard to offer back requirements). Clarification sought from Heritage New Zealand on how the heritage covenant on the Willis Redoubt could impact on other parts of the Walton Street site. At its January meeting, Council endorsed the formal agreement for the sale of the parking lot behind the medical centre to the Bulls Medical Centre Ltd. Settlement to be completed as soon as the new Certificate of Title is available. Staff held on-site meeting at Haylock Park to determine district plan and utilities requirements for proposed subdivision. Working on obtaining easements for sites containing Council infrastructure.	Options are being investigated for the subdivision and development of land at Walton Street and Johnson Street, Bulls.	Confirmation of disposal process for Walton Street and Haylock Park sites.
Public Toilets	Progress to date	Progress for this period	Planned for the next two months
Marton - 24/7 toilets installed		No progress to report	
Mangaweka Village	Taihapa ward Councillors, the Mayor and Chief Executive met to discuss options for Mangaweka toilet block. It was agreed that the Mayor would approach two property owners in Mangaweka re the possibility of siting a toilet block on their properties.	Mayor Watson has made an approach to two property owners in Mangaweka to establish if they would be prepared to allow a toilet block to be located at their businesses. Both were receptive. Was unsure if they owned the piece of land suggested and Council staff are presently identifying this.	
Cemeteries	Progress to date	Progress for this period	Planned for the next two months
Ratana - hard surface roadway	Meeting with Roding/Cr Peke-Mason to discuss requirements.	Ongoing discussions.	Will likely occur in the Summer if funding allows. Seek quote.
Mt View - roadway extension Stage 1	Plans drawn.	No progress to report	Planned later in the financial year.
Cemeteries: carry forward projects from 2018/19			
Ratana - urupa extension		Initial conversations have been had between infrastructure and property staff.	A report will be presented to the August meeting of the Ratana Community Board.
Ratana - urupa upgraded road	Some remedial work has been actioned on the roadway from the road to the Urupa.	Initial conversations have been had between infrastructure and property staff.	

Service Request Breakdown for the month of June 2018

Service Requests Department	Compliance Current	Overdue	Responded in time	Responded late	Grand Total
Council Housing/Property	2	4	21	4	31
Council housing maintenance	1		8	2	11
Council property maintenance	1	2	7	1	11
General enquiry			1		1
Halls maintenance		1	5		6
Libraries maintenance		1		1	2
Grand Total	2	4	21	4	31

Percentage responded in time 68%

Service Request Breakdown for June 2018 - Resolutions

Service request Department	Compliance Completed in time	Completed late	overdue	Grand Total
Council Housing/Property	21	8	2	31
Council housing maintenance	9	2		11
Council property maintenance	7	2	2	11
General enquiry	1			1
Halls maintenance	4	2		6
Libraries maintenance		2		2
Grand Total	21	8	2	31

Percentage completed in time **68%**

Service Request Breakdown for the month of June 2018

Service Requests	Compliance	
Department	Overdue	Grand Total
General enquiry	1	1
General enquiry	1	1
Grand Total	1	1

Percentage responded in time 100%

Service Request Breakdown for June 2018 - Resolutions

Service request Department	Compliance overdue	Grand Total
General enquiry	1	1
General enquiry	1	1
Grand Total	1	1

Percentage completed in time 0%

Service Request Breakdown for the month of June 2018

Service Requests Department	Compliance Overdue	Responded in time	Grand Total
Parks and Reserves	1	3	4
Empty rubbish bins - parks and reserves only		1	1
General enquiry	1		1
Maintenance (parks and reserves)		1	1
Water leak - parks and reserves only		1	1
Grand Total	1	3	4

Percentage responded in time 75%

Service Request Breakdown for June 2018 - Resolutions

Service request Department	Compliance Completed in time	overdue	Grand Total
Parks and Reserves	3	1	4
Empty rubbish bins - parks and reserves only	1		1
General enquiry		1	1
Maintenance (parks and reserves)	1		1
Water leak - parks and reserves only	1		1
Grand Total	3	1	4

Percentage completed to in time **75%**

Service Request Breakdown for the month of June 2018

Service Requests	Compliance		
Department	Overdue	Responded in time	Grand Total
Public Toilets	1	6	7
Maintenance (public toilets)	1	1	2
Toilet cleaning issues		5	5
Grand Total	1	6	7

Percentage responded in time 86%

Service Request Breakdown for June 2018 - Resolutions

Service request	Compliance		
Department	Completed in time	overdue	Grand Total
Public Toilets	6	1	7
Maintenance (public toilets)	1	1	2
Toilet cleaning issues	5		5
Grand Total	6	1	7

Percentage completed in time **86%**

Service Request Breakdown for the month of June 2018

Service Requests		Compliance			Grand Total
Department		Overdue	Responded in time	Responded late	
Stormwater		1	2	1	4
Stormwater blocked drain (non urgent)		1	2	1	4
Grand Total		1	2	1	4
Percentage responded in time		50%			

Service Request Breakdown for June 2018 - Resolutions

Service request	Compliance		
Department	Completed in time	overdue	Grand Total
Stormwater	2	3	5
Stormwater blocked drain (non urgent)	2	3	5
Grand Total	2	3	5

Percentage completed to in time 40%

Service Request Breakdown for the month of June 2018

Service Requests	Compliance	
Department	Responded in time	Grand Total
Wastewater	2	2
Caravan effluent dump station	1	1
Wastewater overflow (wet weather)	1	1
Grand Total	2	2

Percentage responded in time 100%

Service Request Breakdown for June 2018 - Resolutions

Service request	Compliance		
Department	Completed in time	Completed late	Grand Total
Wastewater	1	1	2
Caravan effluent dump station	1		1
Wastewater overflow (wet weather)		1	1
Grand Total	1	1	2

Percentage completed in time50%

Service Request Breakdown for the month of June 2018

Service Requests Department	Compliance Overdue	Responded in time	Grand Total
Water	2	21	23
HRWS No water supply		1	1
Location of meter, toby, other utility	1	3	4
No drinking water supply		1	1
Replace meter, toby or lid		7	7
Water leak - council-owned network, not parks or cemeteries	1	7	8
Water leak at meter/toby		2	2
Grand Total	2	21	23

Percentage responded in time 91%

Service Request Breakdown for June 2018 - Resolutions

Service request Department	Compliance Completed in time	Completed late	overdue	Grand Total
Water	21	1	1	23
HRWS No water supply	1			1
Location of meter, toby, other utility	4			4
No drinking water supply		1		1
Replace meter, toby or lid	7			7
Water leak - council-owned network, not parks or cemeteries	7		1	8
Water leak at meter/toby	2			2
Grand Total	21	1	1	23

Percentage completed to in time

91%

Service Request Breakdown for the month of June 2018

Service requests Department	Compliance Current	Overdue	Responded in time	Responded late	Grand Total
Footpaths	1		1		2
Footpath maintenance	1		1		2
Roads	9		16		25
Bridges	1				1
Culverts, drains and non-CBD sumps	3		4		7
Potholes	1		1		2
Road maintenance - not potholes			2		2
Road signs (except state highway)	2		1		3
Road surface flooding - danger to traffic	2		8		10
Street Cleaning			1	1	2
CBD cleaning (gutters/sumps) - Hunterville/Taihape			1	1	2
Street Lighting		7	2		9
Street lighting maintenance		7	2		9
Grand Total	10	7	20	1	38

Percentage responded in time

53%

Service Request Breakdown for June 2018 - Resolutions

Service Requests Department	Compliance Completed in time	Completed late	overdue	Grand Total
Footpaths	2			2
Footpath maintenance	2			2
Roads	22		3	25
Bridges	1			1
Culverts, drains and non-CBD sumps	7			7
Potholes	2			2
Road maintenance - not potholes	2			2
Road signs (except state highway)	2		1	3
Road surface flooding - danger to traffic	8		2	10
Street Cleaning		2		2
CBD cleaning (gutters/sumps) - Hunterville/Taihape		2		2
Street Lighting	6	1	2	9
Street lighting maintenance	6	1	2	9
Grand Total	30	3	5	38

Percentage completed to in time

79%

Service Request Breakdown for the month of June 2018

Service Requests	Complaine		
Department	Overdue	Responded in time	Grand Total
Roads		4	4
Road maintenance - not potholes		1	1
Road surface flooding - danger to traffic		3	3
Street Lighting	1	2	3
Street lighting maintenance	1	2	3
Grand Total	1	6	7

Percentage responded in time 86%

Service Request Breakdown for June 2018 - Resolutions

Count of Rec No	Column Labels	
Row Labels	Completed in time	Grand Total
Roads	3	3
Road maintenance - not potholes	1	1
Road surface flooding - danger to traffic	2	2
Street Lighting	3	3
Street lighting maintenance	3	3
Grand Total	6	6

Percentage completed to in time 100%