

Date: Tuesday, 2 October 2018

Time: 1.30pm

Location: Council Chamber, Wairoa District Council,

Coronation Square, Wairoa

AGENDA

Late Reports

Infrastructure Committee Meeting

2 October 2018

The agenda and associated papers are also available on our website: www.wairoadc.govt.nz

For further information please contact us 06 838 7309 or by email info@wairoadc.govt.nz

Order Of Business

8	Gene	ral Items	3
	8.1	Bluebay drinking water upgrade- Update	3
	8.2	Award of Tenders	16
	8.3	Quarterly Report	19

8 GENERAL ITEMS

8.1 BLUEBAY DRINKING WATER UPGRADE- UPDATE

Author: Jamie Cox, Engineering Manager

Authoriser: Steven May, Chief Executive Officer

Appendices: 1. History Bluebay U

1. PURPOSE

1.1 To update the Committee on the status of the bluebay drinking water upgrade and seek direction

RECOMMENDATION

The Engineering Manager RECOMMENDS that Committee accepts the report and provides direction as appropriate

2. BACKGROUND

- 2.1 Following the sale of the bluebay sections, and the pressure to commission the Bluebay drinking water scheme, a Hui was convened with the residents where the estimated costs and a programme to commission the scheme was introduced.
- 2.2 A team including a planner and drinking water consultant was engaged to develop the consent and design the scheme . Initial estimates were developed
- 2.3 A total budget of \$215,000 was set aside in the 2018 LTP for the upgrade of the bluebay water supply based on the cost estimates supplied
- 2.4 The team proceeded to design the new scheme, apply for a water-take consent and develop a water safety plan.
- 2.5 Physical works have been carried out which included testing of the existing bore and its capacity

3. PROCESS

3.1 Initially it was considered unlikely that the existing bore would meet the drinking water standards however on the 7th March 2018, the team meet with the drinking water assessor (DWA) who indicated that the existing bore would meet the drinking water standards using the designed water treatment facility.

This would achieve better than 4-log protozoal treatment and would be considered appropriate for a source that is within a treated wastewater effluent discharge plume.

After the discussions with the DWA, the concept to utilise the existing bore was discussed in a joint meeting with the HBRC and the DWA on the 29th of March 2018. The DWA raised the following points:

The water safety plan to be approved by a DWA.

- The existing bore is in a treated wastewater effluent disposal plume, so the increased risk must be managed.
- The DWA expected the Drinking Water Standards to continue to allow water takes that are influenced by treated wastewater effluent disposal fields. One notable example is Auckland's water intake from the Waikato river downstream of Hamilton's wastewater discharge point.

The HBRC noted:

- This will be the first new water supply for HBRC after the Havelock North incident.
- HBRC will require scope 3 adequacy approval from the Drinking Water Assessor in order to grant consent to take water for public water supply purposes (provided that all the usual requirements are met)
- The DWA would grant scope 3 adequacy approval only if they are satisfied with the water safety plan, and they are satisfied that it has been implemented to the extent that the supply is safe.

On the basis of the meeting with the Drinking Water Assessor, and the joint meeting with the Drinking Water Assessor and the Hawke's Bay Regional Council, it was deemed reasonable and efficient to proceed with using the existing bore and treat the water through a process that exceed the requirements of the Drinking Water Standards, incorporating multiple barriers. A Water Safety Plan was prepared by OPUS and was approved by the Drinking Water Assessor.

The timeline and ability to obtain resource consent to take water from the bore was placed at risk when the Medical Officer of Health requested to be considered an affected party. It was indicated that concerns would be raised with regards to the approach to abstract raw water from an area that is influenced by a treated wastewater effluent discharge, despite the proposed treatment process exceeding the requirements of the Drinking Water Standards.

The implications of this new status of the application meant that a hearing would then be required with the commissioner likely to be influenced by current public perception around contamination of ground water sources. Regardless of the outcome of the hearing, the implications were that Hearing and consultant costs in excess of \$100k would be incurred with our advice indicating that the outcome would be unlikely to be affirmative.

- 3.2 The decision was then taken to evaluate the option of a new bore outside of the existing wastewater plume.(as originally intended) The capacity of this bore has been tested and the cost for the new bore and associated pipework has been costed out.
- 3.3 The new cost is outside existing budgets and a hold has been put on the work until a direction is approved. This means that Bluebay will not have a commissioned water supply by Christmas 2018

4. ESTIMATE CHANGE

Initial estimate dated 29 March 2018:

Treatment plant: \$171,000

New bore (not considered necessary at the time): \$155,000

Pumping main (not considered necessary at the time): \$32,000

Total: \$358,000

The estimated cost for the project is now \$678,000.

This is an increase of \$319,000 and can be attributed to:

Low estimate: \$40,000

Price pressure due to short construction timeframe: \$73,000

Change in scope due to requirement for new bore and raw water storage: \$206,000

Based on the updated budget, the cost per resident would be approximately \$15,500

5. OPTIONS

- 5.1 The options identified are:
 - a. Retain the user-pays financial model and go back to the Community with the updated information and a new financial model
 - b. Consider a financial model that allows a greater portion of the upgrade costs to be derived from the drinking water renewals reserve
 - c. Develop an options report which outlines the advantages, disadvantages and costs of all alternative options for drinking water supply to Bluebay
- 5.2 Under a user –pays model, the capital cost per resident of a loan funded scheme would now be approximately \$1,000 per annum
 - The cost associated with individual supply and treatment using rainwater would likely be in the range of \$5000 to \$10,000 depending on the level of treatment and size of storage
- 5.3 The preferred option is c, this meets the purpose of local government as it will help meet the current and future needs of communities for good-quality infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

6. CORPORATE CONSIDERATIONS

What is the change?

6.1 Council had intended to commission the drinking water supply by Christmas 2018. This will no longer happen

Compliance with legislation and Council Policy

6.2 Council has a provision to re-commission the water supply in the LTP

What are the key benefits?

6.3 The Community has requested that the water supply be re-commissioned

What is the cost?

6.4 As outlined

What is the saving?

6.5 Nil

Who has been consulted?

- 6.6 Blue bay community has been consulted
- 6.7 Further consultation with the bluebay community will likely be required
- 6.8 This item is Culturally neutral

Maori Standing Committee

6.9 Not relevant to the MSC

7. SIGNIFICANCE

- 7.1 Impact 44 residents are impacted by the decision
- 7.2 The new Bluebay community are very engaged in this discussion
- 7.3 Council has not budgeted for the additional costs

8. RISK MANAGEMENT

- 8.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:
 - a. The strategic risks are mostly confined to public perception

Background Papers

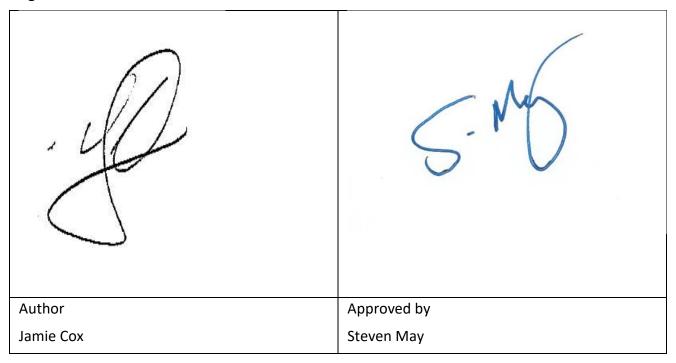
Memo from INFIR attached in appendix

Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

- a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,
- is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories



Memo



To: Stephen Heath, Jamie Cox

From: Johan Ehlers

CC: Neil Cook, Derek Wood, Cam Drury

Date: 29 August 2018

Re: Blue Bay Water supply – Source options

This memo is in response to the request for a summary of the sequence of events that have led to a decision to construct a new bore for the Blue Bay water supply, resulting in additional cost and further time delays.

Background

The water supply at Blue Bay subdivision was constructed around 2005 at the time the subdivision was developed. It was a private supply that would be managed by a body corporate made up of the owners.

While there were a number of sections sold at the time the development was being completed, for many reasons the development did not proceed as planned and the subdivision effectively lay idle apart from one attempt at construction of a dwelling that was abandoned after fire destroyed the partially built house.

Around the same time Council was progressing community wastewater options for the Mahia area. Initially proposed as a single scheme for the Mahia Beach, Opoutama, Mahanga and Oraka communities, a decision was made in 2009 to proceed with two separate schemes – Mahia Beach and Opoutama. After an extended period of engagement with the Opoutama community a preferred solution was developed that ultimately led to the wastewater treatment facilities at Blue Bay being purchased by Council with a view to expanding them as and when necessary to service the entire Opoutama community including Blue Bay subdivision. As part of the purchase of the wastewater facilities Council took on the obligation of operating the water supply for the Blue Bay subdivision.

To service the wider Opoutama community with wastewater, Council had to obtain a new discharge consent. As part of that process it was determined that the position of the drinking water source bore 5458 was a public health high risk due to its proximity to the proposed wastewater discharge fields. Council proposed to relocate the bore to mitigate the risk. It is not clear why the original location was considered acceptable when the subdivision consents were originally granted.



At the time there was no pressing need to relocate the bore as the subdivision was not being built on and the water supply was not being used. Council's focus was on getting the community wastewater scheme operational and the bore relocation was deferred until such time as the capital expenditure was necessary.

2009 assessment

In 2009 Pattle Delamore Partners Limited carried out an assessment of the effects of a proposal to dispose of treated wastewater to ground at a new, extended site at Opoutama, at the northern boundary of the Blue Bay development. The direction of groundwater flow is to the south, where bore 5458 is located.

The Pattle Delamore report considered that the bore would need to be relocated as a result of the discharge, and recommended a new bore site to the north, on YMCA Road near bore 5457. A resource consent application to drill a bore in this location and to take groundwater for drinking water purposes was subsequently prepared by Planoramic Ltd in December 2009. A consent to take water was granted but has lapsed.

2018 water quality and risk assessment

A water quality and catchment risk assessment was completed by Infīr Limited in January 2018. The assessment considered the wider catchment and specifically the proposed bore site near bore 5457 on YMCA Road. The features, characteristics and information relating to the catchment of the proposed bore was summarised as follows:

- Groundwater flows have been analysed and are well understood
- The aquifer is highly permeable
- Most of the aquifer recharge comes from rainfall in the recharge zone
- Groundwater level readings indicate groundwater is hydraulically linked to surface water (in the wetland at least)
- Water quality is likely to be influenced by high intensity rainfall events the upper Kopuawhara and Opoutama stream catchments causing surface ponding over wide areas of the isthmus
- There is potential for the formation of cyanobacteria in the wider buffer zone and beyond. Therefore, cyanotoxins in the groundwater is a possibility
- No significant land uses or resource consents issued nearby that could impact on groundwater quality other than a resource consent for the aerial application of glyphosate herbicide
- The inner and wider buffer zones are clear of livestock
- · A cemetery is within the wider buffer zone
- There are no septic tanks in service in either buffer zone
- The proposed bore site is above the 1% AEP storm event flood level
- Other bores in the area could pose a risk of groundwater contamination if not managed properly
- The discharge field for a wastewater treatment plant is nearby but the plume characteristics are well understood and should not pose any risk
- Water quality is highly variable, indicating a surface water influence
- Several aesthetic determinands exceed their MAV/GV some of these could cause problems with some treatment processes

2 INFÎR

 There is inadequate and incomplete water quality data to date on which to develop an optimised treatment process

The NZ Drinking Water Standards and Guidelines do not mention cemeteries, but international guidance suggest a minimum buffer of 250m between groundwater sources and cemeteries. The proposed bore site near bore 5457 on YMCA Road was therefore discounted.

2018 Source options assessment

Following the catchment risk assessment, which found that the proposed bore site on YMCA Road is too close to an operational cemetery, an options analysis was undertaken, as described in Infīr Limited's report J17012-2A dated 29 March 2018.

Seven source options were considered:

Option 1: Existing bore: Section 10 of the Drinking Water Standards allows for this scenario, where a groundwater source is in the plume of a wastewater effluent disposal field, and describes two treatment processes to treat water to a standard that is safe for human consumption. The existing bore is therefore considered to be a suitable source.

Option 2: North of the treatment plant site. This site is approximately 100 metres from graves in the Urupa in YMCA Road. While the Drinking Water Standards are silent on the proximity of cemeteries to bores used for public water supplies, a World Health Organisation report and water regulations in the United Kingdom require a minimum separation of 250 metres. This source is therefore considered unsuitable.

Options 3 and 4: East and west of the railway line at the Ormond Road crossing. The western wastewater disposal field's plume may extend to these sites if that field is developed. As for option 1, the Drinking Water Standards allow for this scenario by prescribing a high standard of treatment. An advantage of these sites, as for option 1, is that they are removed from surface water and therefore not subject to cyanotoxins. These sources are considered suitable.

Option 5 and 6: Both these sites are near streams which is potentially subject to cyanobacteria growth during hot weather. Treatment can be provided for cyanotoxins, but it is preferable to avoid the issue altogether. Whilst these sites can be used as water sources they are not recommended.

Option 7: Opoutama Stream surface water: This option was discounted because of the variability of raw water quality during high rainfall events, when water in the streams becomes turbid.

Consultation with the Drinking Water Assessor and Hawke's Bay Regional Council

A February 2018 draft of the options assessment report listed the use of the existing bore but did not comment on the viability of this option. Before the options assessment report were finalised, Council followed the process set down and engaged with both the Drinking Water Assessor (DWA) and HBRC.

Consultation with DWA

At a meeting on the 7th of March 2018 the DWA noted that this is a small water supply and if a water safety plan approach was followed under Section 10 of the Drinking Water

3 INFÎR

Standards, that treatment as shown on Table 10.1 of the Drinking Water Standards could be considered.

Table 10.1 requires bacterial and 4-log protozoal treatment of water from sources in unprotected catchments with septic tanks and/or sewage discharges from human habitations and/or intensive livestock operations harbouring gatherings of pre-weaned and juvenile stock (eg, non-secure bore water drawn from a depth less than 10 m, or a spring, lake or reservoir, stream or river). To achieve 4-log protozoal treatment, Table 10.1 lists two options:

- Microfiltration (eg, membrane filter, 1 µm absolute pore size) followed by chlorine disinfection, or
- Microfiltration (eg, cartridge, 5 µm nominal pore size) followed by UV disinfection.

It was indicated that the preference would be to combine the two options and treat the water through1 µm absolute pore size membrane filtration, followed by UV disinfection, followed by chlorine disinfection. This would achieve better than 4-log protozoal treatment and would be considered appropriate for a source that is within a treated wastewater effluent discharge plume.

The discussion with the DWA included the point that the viable alternative bore location to the east of the railway line in Ormond Road is inside the plume of a future, consented, wastewater effluent disposal field. Rather than rush in and construct a new bore that in future may be confronted by the same issue as the existing bore, a measured approach was proposed where the existing bore would be used in combination with a treatment plant that contains more treatment barriers than required by the Drinking Water Standards. This would allow time for the location of future expansions to the wastewater effluent disposal fields to be considered. It would also allow time for decommissioning of the existing field to be incorporated with a future expansion, thereby shifting the effluent plume away from the existing bore.

Consultation with HBRC

After the discussions with the DWA, the concept to utilise the existing bore as described above was discussed in a joint meeting with the HBRC and the DWA on the 29th of March 2018. The DWA raised the following points:

- No issue with using section 10 of the Drinking Water Standards. This is a small community supply because fewer than 500 people will be serviced.
- Section 10 requires a water safety plan to be approved by a DWA.
- The existing bore is in a treated wastewater effluent disposal plume, so the increased risk must be managed.
- The DWA considered:
 - Install 1-micron filters now, on the basis that it means that chlorine disinfection can be viewed as an 'extra' rather than a compliance measure. Chlorine for compliance require more stringent monitoring, so to some extent the capital cost for 1-micron filters could be offset by reduced chlorine monitoring requirements.
 - o Continuous monitoring of turbidity and UV intensity would be required.
 - Monitoring of raw water for heavy metals associated with wastewater would be required.

The DWA expected the Drinking Water Standards to continue to allow water takes that are influenced by treated wastewater effluent disposal fields. One notable example is Auckland's water intake from the Waikato river downstream of Hamilton's wastewater

4 INFÎR

discharge point. It is likely that compliance requirements will become more stringent over time so opportunities to separate water sources from wastewater discharges should be seriously considered.

The HBRC noted:

- This will be the first new water supply for HBRC after the Havelock North incident.
- HBRC will require scope 3 adequacy approval from the Drinking Water Assessor
 in order to grant consent to take water for public water supply purposes (provided
 that all the usual requirements are met)

The DWA would grant scope 3 adequacy approval only if they are satisfied with the water safety plan, and they are satisfied that it has been implemented to the extent that the supply is safe.

Events following consultation

Finalisation of options report

The discussion at the 29 March joint meeting was in line with informal discussions to that point and the water supply options report was finalised immediately afterwards. A measured approach was proposed, as set out in the final report's recommendation:

- 1. Discuss with the Drinking Water Assessor and the Hawke's Bay Regional Council the approach to manage investment risk by using bore 5458.
- 2. Propose to manage risk to public health by:
 - a. Constructing a treatment plant that meets the requirements of Section 10 of the Drinking Water Standards (Bacterial and 4-log protozoal treatment):
 - i. 20µm and 5µm cartridge filters
 - ii. Ultraviolet disinfection
 - b. Adding chlorine disinfection to the treatment process to provide for a residual disinfectant. The Drinking Water Standards do not currently require this, but it is recommended that chlorination be used because it increases security.
 - c. Providing for the installation of 1 µm cartridge filters later, should they become necessary to deal with changes in source water quality or changes in requirements for treatment. This provision adds flexibility to improve the treatment standard at a relatively low capital cost.
- 3. If the risk management approach is considered acceptable and the hydrogeological assessment of bore 5458 shows it can produce the required flow rate, apply for a consent to take water.
- Acknowledge that depending on changes to the regulations, either the wastewater fields or the drinking water take may need to be relocated.

The report considered that by using the existing bore, changes to the Drinking Water Standards imposing requirements that promote moving either the bore or the wastewater disposal field, or an increased standard of treatment, room will exist to consider the information and take appropriate decisions with regards to infrastructure development at the time.

5 INFÎR

June 2018 Water Safety Plan

A Water Safety Plan that described how to the existing bore could be used and water treated through 1-micron filters, UV and chlorine disinfection was prepared by Opus in June 2018. The WSP was approved by the Drinking Water Assessor. In his report the Drinking Water Assessor noted that the wastewater plume had been discussed and that an indication was given by the DWA that the maximum of 4 log treatment would be required for the treatment plant operating as a Section 10 supply. The proposal as described in the WSP exceeds this requirement.

The Drinking Water Assessor's adequacy report makes seven recommendations and note that a water take from groundwater influenced by a wastewater take is a high-risk proposition:

Recommendation 1: Once the new plant is completed and the monitoring systems are in-place the WSP should be checked to ensure the CCP's are reflective of the new plant and a monitoring plan to meet DWSNZ included (a new WSP will be expected before supply starts).

Recommendation 2: Once chlorine is connected to the supply FAC monitoring should also become a CCP and be continuously monitored.

Recommendation 3: After a situation where contingency plans are referred to/used a debrief should occur and a feedback loop created for any corrective actions should the contingency plans or any of the WSP need updating, rather than waiting for annual review

Recommendation 4: Systematic exercises based on the contingency plans are planned and take place to ensure all plans are effective, appropriate and relevant.

Recommendation 5: WDC is encouraged to look at an alternate source of water not affected by the wastewater treatment plant effluent discharge plume, or; Relocate the existing wastewater disposal field to an area that does not affect the drinking water source, or;

Consider any other alternatives to establish further separation between the water source bore and effluent land applications areas (where one does not affect the other).

Recommendation 6: If the proposed bore (5458) is to be used then WDC is encouraged to look at other forms of real time monitoring and data trending to assist with demonstrating the drinking water is chemically safe (5µm filtration and UV treatment will not remove chemicals such as nitrate).

Monthly nitrate sampling of the raw water and trend analysis of the monitoring results would provide a more robust sampling regime than two yearly sampling (as mentioned on page 4) and act as an indicator to any change which may precede contamination.

Recommendation 7: If the proposed bore (5458) is to be used then consider the inclusion of a treatment process (barrier) which would be appropriate for potential chemical contamination.

The measured approach that was adopted was in line with the recommendations of the DWA assessor.

6 INFÎR

August 2018 application for resource consent to take water for public water supply purposes from bore 5458

The Medical Officer of Health requested to be considered an affected party. It is likely that this will result in unacceptably long delays in processing of the consent and Wairoa District Council therefore decided to proceed with the construction of a new bore. The preferred alternative site is option 3, to the east of the railway line. An implication of locating a bore at this site is that it would be influenced by the treated wastewater plume from the western disposal field, if it was ever constructed. The more likely scenario is that an alternative location for the wastewater field will be required, to the east of Blue Bay.

Outcome

The fact that following these processes the option landed in an area still raising concern is further evidence that the process around establishing drinking water supplies is considerably lacking. Notwithstanding approval of the Drinking Water Safety Plan, and despite incurring additional time delays and cost, WDC is working towards developing an alternative source. A contract for a new bore off Ormond Road, east of the railway line, was awarded on 28 August 2018.

The impact of the treated wastewater disposal field was recognised but considered acceptable given that the technology is well-proven and that the proposed treatment method met, and could be designed to exceed, the requirements of the NZ Drinking Water Standards.

Costs

Wairoa District Council incurred costs in pursuing the option to utilise the existing bore. Not all these costs are lost because the existing bore could be utilised in future, for example if the effluent plume is shifted, or after the required standard of treatment, following the Havelock North event, has been clarified. The bore can also be used as a source for fire-fighting water, provided it is suitable equipped. The Table below shows the costs that have been incurred.

Item	Cost incurred	Extent to which the cost incurred can be utilised
Bore test and hydrogeological report	\$20,000	HBRC has granted a water take consent for the new bore location off Ormond Road to the east of the railway line. A confirmatory test will be required after the new bore has been sunk, which will be a lower cost than what would have been required if the test at the existing bore had not been carried out.
Redevelopment of the existing bore to achieve a flow rate of 1.5L/s	\$8,000	This will only be of benefit if the bore was used in future.

7 INFĪR

Water safety plan and associated consulting fees and staff time	\$ 8,000	A water safety plan was proposed for utilisation of the existing bore, which is now largely redundant.
Increased standard of treatment	Estimated at \$8,000 to \$12,000 capital cost for two additional cartridge filtration units	It may be possible to revert to the requirements of the Drinking Water Standards but this risks further delays
Resource consent application for new bore site	\$11,000	An application had to be prepared and lodged for a new bore, after the application for using the existing bore had already been prepared and lodged. This is a sunk cost.
Management time	\$19,000	Significant management time had to be committed to the process. This would not have been necessary if it was clear from the outset that a new bore would be required, despite the Drinking Water Standards' clear requirements.

8 INFĪR

8.2 AWARD OF TENDERS

Author: Jamie Cox, Engineering Manager

Authoriser: Steven May, Chief Executive Officer

Appendices: Nil

1. PURPOSE

1.1 To ensure adequate provision is available to approve tenders during the construction season

RECOMMENDATION

The Engineering Manager RECOMMENDS that Committee receive the report and adopts the protocol of convening a tenders review panel when required

2. BACKGROUND

- 2.1 Council has an endorsed procurement strategy that ensures that all tenders over \$200,000 that have a recommendation from a certified tender evaluator be considered for approval by a tender review panel
- 2.2 The Infrastructure committee meets quarterly or as required and has the delegation to review tenders

3. TENDER AWARD

- 3.1 Currently the tender review panel is incorporated within the Infrastructure committee structure however in order to manage the timing of tender award to ensure the most efficient use of the construction window, the committee may wish to consider the flexibility to convene a tender review panel as required
- 3.2 The tender review panel would require the infrastructure committee quorum

4. OPTIONS

- 4.1 The options identified are:
 - a. The Committee convene a tender review panel as and when required to respond to marketplace tenders in a timely and efficient manner
 - b. The Committee work within the current meeting schedule to approve tenders
- 4.2 Developing flexibility for the tenders review panel will assist to maintain a healthy and effective local construction marketplace with contracts awarded in a timely manner
- 4.3 The preferred option is a, this meets the purpose of local government as it will help meet the current and future needs of communities for good-quality infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

5. CORPORATE CONSIDERATIONS

What is the change?

5.1 Add flexibility to the tender review panel

Compliance with legislation and Council Policy

5.2 Complies the Infrastructure committee TOR

What are the key benefits?

5.3 Flexibility

What is the cost?

5.4 Minimal

What is the saving?

5.5 Not able to be quantified however the efficiency of contracts would be improved

Who has been consulted?

5.6 N/A

Maori Standing Committee

5.7 Not relevant

6. RISK MANAGEMENT

- 6.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:
 - a. It is expected that this provision would not impose any additional risk on Council

Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

- a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,
- is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories



8.3 QUARTERLY REPORT

Author: Jamie Cox, Engineering Manager

Authoriser: Steven May, Chief Executive Officer

Appendices: 1. Quarterly report 9-18 U

1. PURPOSE

- 1.1 This attached quarterly report provides information for the Infrastructure Committee based on the direction received on an agreed format. No decisions are required by Committee at this stage.
- 1.2 It is anticipated that the analysis of this quarterly report will provide a framework for Committee's discussions

RECOMMENDATION

The Engineering Manager RECOMMENDS that Committee receives the report

Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

- a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,
- is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories



1.0 STRATEGIC SUMMARY

- 1.1 The following table taken from the 2018 Infrastructure strategy aligns Council's vision and agreed Community outcomes with our Goals.
- 1.2 These goals are supported by actions which can be regularly reviewed.
- 1.3 The purpose of this section is to examine the actions for evidence that they are progressing to the committee's satisfaction

1.4 INFRASTRUCTURE STRATEGY SUMMARY

COUNCIL'S VISION	Connected commu	unities, desirable life	styles, treasured en	vironments					
COMMUNITY OUTCOMES	Recreational Facilit	1. A strong, Prosperous and Thriving Economy / 2. A Safe and Integrated Infrastructure / 3. A community that values and promotes its culture and heritage / 4. Safe and Accessible Recreational Facilities / 5. Supportive, caring and valued communities / 6. Strong district leadership and a sense of belonging / 7. A Safe and secure community / 8. A Lifetime of good health, education and well-being / 9. An environment that is appreciated, protected and sustained for future generations							
STRATEGIC CHALLENGES	Economic Development: Ensuring our infrastructure meets growing tourism numbers and higher service expectations	Optimising Infrastructure: Better data (confidence) and better interpretation of that data will enable more informed decisions	Resilience: Ensuring our core infrastructure, and in particular our critical assets, are well- maintained to be responsive and resilient to changing needs and to minimise the impact of emergency events	Water Quality: Ensuring our 3- Water networks meet legislative requirements and public demands for cleaner rivers, lakes etc	Demography: Delivering infrastructure that responds to the needs of changing population demographics including higher proportions of youth and senior citizens whilst accounting for social affordability issues	Affordability: Maximising alternative funding sources, while ensuring that services and service levels match the community's ability to pay	Climate change: Ensuring long and short-term infrastructure planning anticipates the scale and speed of climate change	Technology: Responding to rapidly changing technology in making long- term infrastructure investment decisions	Changes in Land Use: Different land uses will have different requirements/desired levels of service on infrastructure
GOALS	Our infrastructure increases opportunities for new and existing businesses	We get the best out of our infrastructure	The impact of emergency events on our communities is minimised through well-maintained infrastructure.	Our water network discharges meet both public expectations and legislative requirements	Our District caters for the changing needs of both our current and future residents	Our revenue sources can financially sustain our current and future infrastructure needs and expectations	Our infrastructure is resilient and adapting to climate change ahead of it having materially adverse impacts	Our use of technology enables us to deliver better and more cost- effective infrastructure	Our infrastructure is resilient to changes in demand
OUTCOMES SUPPORTED	Outcomes: 1, 3, 4, 5 & 6	Outcomes: 1, 2, 7 & 8	Outcomes: 1, 2, 7 & 8	Outcomes: 1, 7, 8 & 9	Outcomes: 2,5, 7 & 8	Outcomes: 1, 2 & 3	Outcomes: 2, 4, 6 & 9	Outcomes: 1 & 6	Outcomes: 1, 2, 4 & 9
ACTIONS	Better understand nature of future economic development and tourism demands on the District to enable robust	Increase data knowledge to better Inform asset management processes and decision-making	Better understand likely demand and patterns of use Improved knowledge of the scale of investment required and	 Monitor legislative changes and requirements Improved understand-ing of the state of 3- Waters network Develop 	Review levels of service regularly in relation to changes in population – numbers and demographics	 Increased integration of Financial and Infrastruct ure Strategies Investigate alternative funding 	Develop and improve network understanding, especially points of critical failure Monitor flooding, slips,	Improved understanding of the technology opportunities for managing infrastructure Identify	Better understanding infrastructure needs of different land uses Application of rates differentials

	decision- making processes on spending Develop relationships at national/ regional level		options available	knowledge of cost implications of options for better discharge standards		options Unde rstanding of whole of life asset costs and setting priorities	coastal erosion Identify at what stage do issues require action Manage relationships with HBRC / NIWA	where new technology is cost- effective in terms of levels of service	
EVIDENCE	Currently seeking approval from Capacity fund to invest in FTE to develop transport business case for Mahia connectivity and "Gate to Port" strategies	Invested in 3 waters asset management capacity of contractor to deliver data previously not delivered. Currently investing in Unsealed roads contractor systems to deliver improved asset management support	Partnership investment in research around river bank undermining in North Clyde and long term solutions	BPO development stage for waste water discharge consent. Member of working group looking at regional options for 3 waters aggregation proposal Report being developed regarding impacts of lowering of water pressure of life cycle of drinking water	Latest trends indicate increasing aged and young people. Footpath maintenance programme and installation of mobility impaired features is increasing. Recreational asset budget including playground construction and maintenance is increasing. Public toilet installation and maintenance budgets increased	Forestry rates equity addressed. PGF fund targeted for construction projects. Financial strategy outlines use of depreciation reserves over next 10 years to fund infrastructure projects	Attending climate change seminars to get greater understanding	Electronic monitoring and recording of asset performance now embedded. Drone inspections now carried out	Rate differential developed for plantation forestry land use

2 PERFORMANCE MEASURES

Ongoing analysis of the alignment of our operational objectives with the performance measures is an effective means to govern operations

OBJECTIVES

The Infrastructure Strategy has been developed around a set of objectives that are common to all infrastructure activities:

1. RELIABILITY

Consistent delivery of infrastructure services.

2. SAFETY

- Maintain infrastructure in a safe condition.
- Provision of safe infrastructure.
- Appropriate levels of risk management for services.

3. ACCESSIBILITY

- Infrastructure services will be delivered as part of an integrated district network and should offer an increasingly consistent, fit for purpose level of service for users.
- Management of infrastructure assets and services to ensure accessibility for all users where possible.

4. RESILIENCE

- Contingency planning to ensure continuity of service as far as possible during and after incidents and emergency events.
- Provision of alternatives when feasible.
- Restoring services as soon as circumstances allow.
- Mitigation measures in place to avoid disruption for critical services and manage associated risks where appropriate.

5. AMENITY

- Aesthetics and comfort of our services.
- Infrastructure services will be delivered in a manner which balances the current and future impact on the environment and makes use of sustainable practices.

6. COST-EFFECTIVENESS

- We will look for new ways and innovative practices to enable us to cost effectively deliver our services.
- Value for money and whole of life cost will be considered to deliver affordable levels of service.

The following charts outlines our level of service statement with the performance measure

		WATER SUPPL'	Υ
LEVEL OF SERVICE STATEMENT	COMMUNITY OUTCOME	Performance Measure	TARGET 2018 - 2020
Council will own, operate and maintain reliable drinking water systems serving Wairoa, Frasertown, Tuai and Mahanga, protecting public health.	1, 2, 5, 7 & 8	All domestic households and non-domestic premises connected to the water supply systems will be provided with a service that delivers a reliable supply of drinking-water.	The method of measurement for this performance measure is the percentage of respondents who indicate they are 'very satisfied' or 'fairly satisfied' with the Water Supply expressed as a percentage excluding 'don't know' respondents.
			The annual target is for the sum of 'very satisfied' and 'fairly satisfied' to be no less than 80%.
Council will comply with current standards, legislation and Council	7,8&9	Council shall meet the requirements of the New Zealand Drinking- water Standards	The method of measurement for this performance measure is the extent to which the drinking water supply complies with:
bylaws.		Council and all legislative requirements.	(a) Part 4 of the Drinking-water Standards (bacteria compliance criteria), and
			(b) Part 5 of the Drinking-water Standards (protozoal compliance criteria).
			The annual target for this measure is 100% compliant.
Council will maintain water supplies to ensure long-term sustainability.	,	7, 8 & 9 Percentage of water loss from the reticulation systems through leakage, shall reduce with time.	The method of measurement for this performance measure is the percentage of real water loss from the local authority's networked reticulation system (calculated using minimum night flow).
			The annual target for this measure for percentage of water loss being 46%, 44% and 42% for each of the years.
		The average consumption of drinking water per day, per resident shall reduce with time.	The annual target for this measure is 550 litres per person per day, in 2018/19, reducing to 540 in 2019/20 and 530 in 2020/21.
Customers will receive a prompt and efficient service.	7	Complaints received annually shall not exceed stated limits:	The method of measurement for this performance measure is analysis of the CSR database to identify the number of complaints related to each of the water supply complaint categories.
			The target is to receive no more than the following number of complaints per 1000

			 20 for drinking water clarity 20 for drinking water taste 20 for drinking water odour 40 for drinking water pressure or flow 40 for continuity of supply 20 for response to issues.
		Council shall respond to faults/interruptions in the network reticulation.	The method of measurement for this performance measure is analysis of the CSR database to identify the number of call-outs in response to a fault or unplanned interruption to the networked reticulation system, the following median response times will be measured: (a) attendance for urgent call-outs: from the time that the local authority receives notification to the time that service personnel reach the site (b) resolution of urgent call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption (c) attendance for non-urgent call-outs: from the time that the local authority receives notification to the time that service personnel reach the site (d) resolution of non-urgent call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption. The target for this performance measure is: (a) 1 hour for Wairoa/Frasertown and 2 hours for other areas: (b) 4 hours from Wairoa/Frasertown and 5 hours for other areas. Priority Work in Contract: (c) 2 days and (d) 3 working days. Note these measures correspond to the 3 Waters maintenance contract response times for emergency works and priority works.
Council will implement systems/processes to ensure continued service delivery in	7	Contingency plans shall be implemented for emergency events such as earthquake, tsunami and fire which result in the	The method of measurement for this performance measure is that the contingency plans have been reviewed and presented to a civil defence team meeting each year.

emergency events.		inability to provide the service.	
		WASTEWATER	
LEVEL OF SERVICE STATEMENT	COMMUNITY OUTCOMES	Performance Measure	Target 2018 - 2020
Council will comply with current legislation and Council bylaws.	7 & 9	Council shall comply with conditions of consent for all systems.	The method of measurement for this performance measure is compliance with the resource consents for discharge from the wastewater system, measured by the number of: (a) abatement notices (b) infringement notices (c) enforcement orders (d) convictions received in relation to those discharges. The annual target for (a) to (d) is zero.
	1, 7, 8 & 9	There shall be no dry weather sewage overflows.	The method of measurement for this performance measure is the number of dry weather sewage overflows from the sewage system, expressed per 1000 connections to the system. The annual target is that instances will not exceed 16 per 1000 connections - this is over the 4 networks.
Customers will receive a prompt and efficient service.	7,8&9	Council shall respond to sewage overflows resulting from a blockage or other fault in the sewerage system.	The method of measurement for this performance measure is analysis of the CSR database to identify the number of requests relating to sewage overflows resulting from a blockage or other faults in the sewerage system, with the following median response times measured: (a) attendance time: from the time that the Council receives notification to the time that service personnel reach the site (b) resolution time: from the time that the Council receives notification to the time that service personnel confirm resolution of the blockage or other fault. The target for this performance measure is (a) 1 hour for Wairoa and 2 hours for Tuai

		The total number of complaints received shall not exceed the stated limit.	areas; (b) 4 hours for Wairoa and 5 hours for Tuai areas. Priority Work in Contract: (c) 2 days and (d) 5 working days. Note these measures correspond to the 3 Waters maintenance contract response times for emergency works and priority works. The method of measurement for this performance measure is analysis of the CRS database to identify the number of complaints related to each of the wastewater complaint categories. The target for this performance measure is complaints received annually shall not exceed: 20 for sewage odour 20 for sewerage system faults 20 for responses to issues with sewerage system per annum and expressed per 1000 connections.
Council will implement systems/processes to ensure continued service delivery in emergency events.	7 & 9	Contingency plans shall be implemented for emergency events such as flooding, earthquake, tsunami or fire which result in the inability to provide the service.	The method of measurement for this performance measure is the contingency plans have been reviewed and presented to a civil defence team meeting each year.
		STORMWATER	
LEVEL OF SERVICE STATEMENT	COMMUNITY OUTCOME	Performance Measure	TARGET 2018 - 2020
Council will comply with current legislation and Council bylaws.	1, 2, 4, 7 & 9	Council shall comply with conditions of cons for any systems.	The method of measurement for this performance measure is compliance with the resource consents for discharge from the stormwater system, measured by the number of: (a) abatement notices (b) infringement notices (c) enforcement orders (d) convictions received in relation to those discharges. The annual target for (a) to (d) is zero.
Council will maintain stormwater systems to ensure long-term	1, 2, 4, 5, 7, 8 & 9	The stormwater system shall be managed limit the number of flooding events when the stormwater is the stormwater system.	to The method of measurement of this performance measure is : nere

sustainability.		'flooding event' means an overflow of stormwater from the stormwater system and the impact of those flooding events on properties.	 (a) The number of flooding events that occur in the district (b) For each flooding event, the number of habitable floors (Expressed per 1000 properties connected to the district's storm 	affected
			The annual target is that (b) will not exceed 50 inhabitable properties affected by a flooding event.	e floors per 1000
Customers will receive a prompt and efficient service.	5	Level of customer satisfaction through annual survey indicates 'fairly good', 'very good' or better minimum 80% approval rating	The annual target for this measure is 80% of respondents indic satisfied or 'fairly satisfied' with stormwater, expressed excluding 'don't know' respondents.	
		Council shall respond to flooding events.	The method of measurement for this performance measur response time to attend a flooding event, measured from t Council receives notification to the time that service personnel receives	he time that the
			The annual target for emergency work is 1 hour and urger Emergency work and urgent work are as defined in the 3 Waters	
		The total number of complaints received shall not exceed 50 per 1000 connections.	The method of measurement for this performance measure complaints received by Council about the performance of its steexpressed per 1000 properties connected to the stormwater system.	ormwater system,
			The annual target is 50 or less.	
Council will implement systems/processes to ensure continued service delivery in emergency events.	1, 2, 4 & 7	Contingency plans shall be implemented for emergency events such as flooding, earthquake, tsunami or fire which result in the inability to provide the service.	The method of measurement for this performance measure is plans have been reviewed and presented to a civil defence to year.	
		WASTE MANAGEMENT		
LEVEL OF SERVICE STATEMENT	Community Outcome	Perfori	MANCE MEASURE T	ARGET 2018 - 2020

Council will continue to own and deliver the waste management activity to ensure protection of public health and the environment.	• 2,7 & 9	 Council will operate and maintain the Wairoa landfill for the disposal of domestic and commercial refuse, being open for the public at least: 5 hours per day 300 days per year. Council shall continue to provide for the community-run waste disposal and recycling service in	Achieve measure.
		Waikaremoana and Raupunga.	
 Customers will receive a prompt and efficient service. 	• 5	Missed household refuse service requests responded to by 12 pm the next day (on validation).	 Achieve measure.
Provide safe and reliable The first and a subject to the state of the state o	• 5,7&9	Minimum frequency of kerbside refuse and recycling service in Wairoa & Frasertown - fortnightly.	• Achieve
refuse and recycling kerbside collection services and rural waste services.		Minimum frequency of collection from specified dropoff points from Mahia, Nuhaka and Mohaka – twice a month.	measure.
		No health and safety breaches by waste services contractors.	
effects on the natural	• 9	Zero significant non-compliance events with the resource consent conditions for the Wairoa Landfill	 Achieve
environment are minimised		Zero significant non-compliance events with the resource consent conditions for the closed landfill sites	measure.
Council facilitates waste minimisation practices and promotes reduction of the amount of waste going to landfill	• 9	The amount of material diverted from landfill by the Wairoa community increases from 75 tonnes (note target excludes green waste) •	Achieve measure.
		LAND TRANSPORT	
Level of Service	Community	Performance Measure	Target 2018 -
STATEMENT	Оитсоме		2020
Council will manage the land transport system in a sustainable manner, sufficient to meet the	1, 2, 3, 4, 5 & 9	The percentage of the sealed local road network that is resurfaced, expressed as a number (new mandatory performance measure)	The percentage of the sealed local road network that is
current and projected demand		All bridges on key industry transport routes meet HCV class 1 requirements. To ensure the network is accessible to the industries for the efficient movement of freight	resurfaced, expressed as a number.
Customers will receive a prompt	1, 3, 5, 6, 7 & 9	The public and other road users satisfied with the overall level of service provided. Target is to have no less	Year on year improvement 75% satisfaction
and efficient service	1, 3, 3, 0, 7 & 7	than 75% of respondents consider the land transport service to be 'fairly good, very good, or better', as measured by the annual public satisfaction survey	rating

When using the network, all road users will experience a "fair" ride quality on a well-maintained and managed asset (qualified to the extent that it has to be appreciated that over 66% of the network is unsealed)	2, 3, 4, 8 & 9	Council's target is to provide a 'fair' ride quality i.e. average sealed road NAASRA <110 for 'fair' ride quality (new mandatory performance measure)	Average NAASRA of the sealed road network <110				
		AIRPORT					
Level of Service	Community	Performance Measure	Target 2018 -				
STATEMENT	Оитсоме		2020				
Council will maintain the airport and associated facilities to ensure long term sustainability	1,4,7 & 8	Maintenance, capital and renewal works are carried out in accordance with the plan	Works undertaken are in line with milestones outlined in airport plan (see the weblink on page 12)				
Customers will receive a prompt and efficient service	2, 3, 4 & 9	Percentage of respondents 'very satisfied' or 'fairly satisfied' with airport service	80% achievement				
		CEMETERIES					
Level of Service	Community	Performance Measure	Target 2018-				
STATEMENT	Оитсоме		2020				
Customers will receive a prompt and efficient service.	5	Level of customer satisfaction through annual survey indicates a 'fairly good', 'very good' or better minimum 80% approval rating.	80% satisfaction rating.				
		How the service is delivered to the community will be monitored through the CSR system.					
	PARKS AND RESERVES						
LEVEL OF SERVICE	Community	Performance Measure	Target 2018-				
STATEMENT	Оитсоме		2020				
Customers will receive a prompt and efficient service.	9	Level of customer satisfaction through annual survey indicates a 'fairly good', 'very good' or better minimum 80% approval rating.	Achieve measure at 80% or higher.				

2 OCTOBER 2018

Provide playgrounds in line with standards and legislative requirements.	2,4&7	Record of inspection schedules as method of maintaining safety standards. Percentage of playground assets complying with safety standards.	Achieve measure at 85% or higher.
Provide public toilets that are well maintained.	2 & 7	Percentage of public toilets inspected and cleaned twice daily in all areas, to ensure faults and maintenance issues are recorded and dealt with promptly.	Achieve measure not less than 95%.
Parks and reserve assets that are well maintained.	2,4 & 7	Percentage of parks assets in satisfactory condition (condition grades 1, 2 or 3), to ensure faults and maintenance issues are recorded and dealt with promptly.	Achieve measure not less than 95%.
		Percentage of playgrounds maintained in a safe and clean condition weekly (minimum) in all areas, to ensure faults and maintenance issues are recorded and dealt with promptly.	Achieve measure at 85% or higher.
Provide prompt responses for service.	9	Single response performance measure covering cemetery internment requests, public toilet, playground and parks related urgent customer enquiries. Percentage of open space requests responded to within 24 hours.	Achieve measure at 85% or higher.

3. MONITORING

 Financial -With the LTP signed off, we are now in a position to populate our budgets and initiate financial analysis for specific jobs. It is anticipated that once the annual report is signed off, financial resource will be available to provide financial reports for specific projects from the LTP.

We expect to deliver a preliminary financial draft for the next scheduled committee meeting

PROGRESS ON LTP SPECIFIC PROJECTS

WASTEWATER CONSENT AND PIPE NETWORK REHABILITATION

- Council agreed to the preferred option which includes the modification of the existing
 wastewater facilities such as: significantly increased treatment processes, transitioning to a
 land-based discharge, a network renewals commitment and an ongoing commitment to a river
 health partnership strategy. The total cost of \$6.5 million was approved
- The Wairoa discharge consent will expire in May 2019. However Council plans to lodge the new application 6 months prior, which will allow the status quo to continue until the new BPO is rolled out and key milestones are reached.

It is expected that a draft consent will be available in November. Work is progressing as per the project plan

BRIDGE STRENGTHENING PROGRAMME

- Council endorsed the bridge strengthening programme which will ensure the district's roading network meets Central Government requirements, including accommodating increased dimension heavy-production motor vehicles on our roads. The bridge strengthening programme will also provide resilience and economic benefits for current and future land use in the district.
- The total cost is \$320,000 per annum for four years, in addition to the existing \$120,000 per annum
 - 2 bridge strengthening and renewals packages have been prepared and will be tendered out this season

PIPING OPEN DRAINS AND NEW FOOTPATHS

 Council choose to make the Kitchener St open drain a priority and carry out the footpaths work under the subsidised roading programme

Design has commenced for piping the Kitchener street open drain Footpaths- A schedule of works is being developed for the new funding cycle

MAHIA GREENWASTE AND RECYCLING CENTRE

• Council agreed to spend \$150,000 on the establishment of a greenwaste and recycling centre at Mahia to improve facilities and management of waste at Mahia.

Discussions have commenced and conceptual plans are being developed for the new/upgraded facility and a draft options report will go to the committee

WAIROA LANDFILL AND RECYCLING CENTRE

• Changes will see an increased minimum charge for general waste and greenwaste, increased fee per tonne by for general waste and for greenwaste, and landfill and recycling centre closed on one day during the week. This combination of change will see savings of about \$30,000 and an increase of \$70,000 in revenue.

The revised Landfill charges are to be implemented from November 1. The new opening days will be implemented subject to the new waste management contract structure.

CLIENT SERVICE REQUEST SUMMARY

The attached summary of CSR closure outlines current closure rates

				CSR Sumn	nary		
July - August 2018							
Type of request	No. Requests	Open	Closed	Avg to close CSR (days)	Comments on open CSRs		
CP Cemeteries/Plot Enquiries	2	2	0		Request regarding charges and others installing headstones without permit etc. Issue of being able to connect permitted activity from accts to site and audit. Still in discussion with Pickerings		
CP Pensioner Houses	1	0	1	1			
MS Abandoned Vehicles	4	0	4	19.5	Delay contacting owners who do not want to be found. Legal period of 15 days before we can move after notice given		
MS Bridge Underpass	1	0	1	42			
P Offal	2	0	2	14	Delay in closing off after clearing		
P Rubbish/Litter	8	0	8	8.25			
P Water	3	0	3	0.67			
RB Contracts	16	1	15	10.13	Have discussed foglines on Ruakituri Road with James Brownlie. Have done some work on it, but havent finished. Left it open as it is not complete.		
RB Footpath	4	0	4	13.75			
RB Slips/Dropouts	2	0	2	6			
RB Surfaces	7	0	7	6.86			
RB Traffic Safety/Accidents	4	2	2	0.5			
RP General	3	2	1	24	One is for a resident at Mahia that has flooding issues. This requires ongoing work, and left it open as a way to keep on task with this. The other one is for a private vehicle crossing, working with the owner ti make her understand this is a private issue. Left it open as we haven't finalised this with her.		
S Contracts	6	0	6	6.67			
S Long Grass Along Roads/Boundaries	2	0	2	6			
S Overhanging Trees - Paths/Roads	1	0	1	14			
S Parks/Reserves	1	0	1	28			
S Public Toilets/Rest Rooms	2	0	2	7			
S Rubbish/Collection Etc.	3	0	3	4			
S Sewerage	6	0	6	0.83			
S Signs	3	0	3	6			
S Stormwater/Drainage	7	0	7	6.71			
S Street Lighting	11	0	11	10.45			
S Toby	16	0	16	0.81			
S Trees Fallen Across Roads	3	0	3	0			
S Water	7	0	7	1.14			
S Water Main	6	0	6	0			
S Water Meters	1	0	1	0			
	132	7	125				
Current Status							
7 CSRs still open							
Average time to close CSR (days)							
6.68 days							

4. RISK MANAGEMENT

It is the committee's role to understand and mitigate infrastructure risk. The charts below taken from the asset management plans schedule out the high risk areas in each activity.

An analysis of the risk mitigation processes in place is appropriate.

Through the development of the risk register, Council's top five risks for the 3-Waters activity have been identified as:

RISK	CAUSE	RISK ASSESSMENT	CONTROLS (ANY EXISTING POLICY, PROCEDURES, ETC)	MITIGATION STRATEGIES
Public safety is jeopardised through administrative failure	Lack of communication between District Health Board and Hawke's Bay Regional Council; Standard Operating Procedures (SOPs) incomplete or missing for critical activities; Lack of Emergency Response Plans (ERP); Poor Water Safety Plan (WSP) understanding and implementation	Critical	Quarterly meetings between stakeholders with agendas and minutes; Developing SOPs for critical activities	Develop SOPs; Update WSPs; Review the effectiveness of the Contingency Plans; .
Water supply becomes contaminated	Damage to reticulation system resulting in unknown groundwater or sewerage infiltration; Lack of maintenance and sediment build up	Critical	Chlorine residual maintained in treatment; Dead end flushing programme in place; Implement the WSPs	Develop ERP; Develop a water supply shutdown procedure; Develop a water disconnection procedure; Develop prepared boil water notice
Raw water becomes contaminated making treatment ineffective	Natural disaster including flooding, tsunami, earthquake, third party damage, terrorist attack	High	SCADA alarms; Operator training; Implement the WSPs	Review the effectiveness of the Contingency Plans with the scheduled WSP updates; Develop ERP
demand cannot be met	for Wairoa township; Budget constraints for new works / upgrades; Demand faster than predicted (ie new industrial customer); Unexpected failure of a critical asset.		and response planning; Reactive response to requests for service; Developed proactive risk based renewals programme	Resilience Plan development for the alternative water source for Wairoa township (such as a package plant)
Public safety compromised such as person falling into open manhole causing injury or death	Popping stormwater manhole; Stormwater manhole or pump station lid left off by contractor staff	High	Emergency response to service requests by O & M contractor; Contract Quality Plan and Work Procedures	Identify repeatedly popping manholes fitted with safety device; Undertake root cause of sites with repeatedly popping manholes; Find long term solution rather than short term fix

WASTE MANAGEMENT

Table 5-1: Critical and high risk events

RISK EVENT	CAUSED BY	INITIAL RISK
Fire damage to property specifically neighbouring council owned forestry block	Landfill control operations not sufficient to mitigate the risk	Critical
Public or personnel incident resulting in ill health, injury or death	Explosion due to combustible atmosphere	High
Public or personnel incident resulting in ill health, injury or death	Contact with contaminated material	High
Public or personnel incident resulting in ill health, injury or death	Exclusion zones improperly enforced resulting in fall from height or interface between pedestrians and heavy machinery	High
Cost of landfill operation becomes unaffordable	 One or more best practice landfill management practices currently not being undertaken are enforced. For example, daily cover instalment Wairoa's population declines 	High
Consent breach at Wairoa Landfill due to leachate overload	Change in wastewater treatment plant consent impacts the nutrient load limits. Current stormwater separation at landfill is incapable of mitigating risk	High

RISK MANAGEMENT STRATEGIES

- Review of fire mitigation controls completed and firebreak clearing has commenced
- Review of safety procedures for the following high-risk areas:
- Confined space –contained in Council H&S manual needs a specific section for landfill. This could
 extend to the identification of low lying depressions where landfill gas could accumulate to high
 levels
- Asbestos handling –Council protocol developed
- Staff inoculations –sop's developed which include inoculations
- Pedestrian exclusion zones specifically regarding the tipping wall and machinery operation –locked gate now installed
- Regular review of the level of control in place to prevent a sudden increase in the cost of landfill operation- procurement and options assessment underway
- Quantification of the composition and volume of leachate produced by Wairoa landfill and a move towards greater stormwater separation- pending

ROADING

WAIROA -

RISK	RISK REGISTER	RISK EVENT	RISK MITIGATION	STATUS	
	UNIQUE IDENTIFIER				
Very High	Eng.RS.02.001	Inadequate maintenance and renewals fails to address deterioration of infrastructure resulting in unsafe network.	1) Establish risk-based (prioritised) asset management plan. 2) Establish effective condition assessment programme to reduce uncertainty around life cycle stages of infrastructure.	Established prioritised asset management plans. Established dTIMS and developing unsealed road life cycle studies.	
Very High	Eng.RS.02.002	Insufficient knowledge of legislation (outside of consent conditions) that relates to the activity (OSH etc.) or failure to monitor for change.	Review and document requirements. Seek external advice.	Ongoing reviews and training. Independent experts and peer reviews applied.	
Very High	Eng.RS.02.004	Insufficient funding for monitoring and enforcement activities.	Review enforcement options. Explore possibility of devolving some function(s) to contractors i.e. reporting.	Restructured in-house professional engineering services to improve resources. Monitoring. Local 'roadman' type contract options under development to drive 'buy-in' by local suppliers to improved quality and compliance.	
Very High	Eng.RS.02.005	Lack of technical expertise to provide planning/design resulting in absence of, or inappropriate planning/design knowledge to enforce or verify compliance.	Establish resource plan to either obtain knowledge inhouse or readily accessible in consultant organisation.	In-house consultancy established July 2010. Increased range of professional service providers and technical experts developed.	
Very High	Eng.RS.02.006	Lack of labour resource to implement required changes and/or maintain standards.	Utilise longer timeframes to allow contractors sufficient time to obtain resources. Develop relationship with other labour users in region to synchronise activities.	1) Contract let with longer 'windows' in work programmes. 2) Council annual reseals and pavement marking works 'piggy-backing' off NZTA Contract No. 1056/W6.	
Very High	Eng.RS.03.003	Asset inventory incomplete resulting in deterioration or loss of assets.	Establish plan for periodic review of inventory.	Established annual reviews and monthly update processes.	
Very High	Eng.RS.03.004	Absence of or inaccurate asset condition information resulting in inappropriate maintenance or renewal.	Establish plan for periodic condition assessment.	Developing specific bridge stock AMP and unsealed road studies to improve RUL data.	
Very High	Eng.RS.04.002	Lack of technical expertise to provide planning/design resulting in absence of or inappropriate planning/design.	Establish resource plan to either obtain knowledge inhouse or readily accessible in consultant organisation.	In-house consultancy established July 2010. Increased range of professional service providers and technical experts developed.	
Very High	Eng.RS.04.003	Lack of labour resource to implement required changes and/or maintain standards.	Utilise longer timeframes to allow contractors sufficient time to obtain resources. Develop relationship with other labour users in region to synchronise activities.	1) Contract let with longer 'windows' in work programmes 2) Council annual reseals and pavement marking works 'piggy-backing' off NZTA Contract No. 1056/W6.	

WAIROA

RISK	RISK REGISTER UNIQUE IDENTIFIER	RISK EVENT	RISK MITIGATION	STATUS
Very High	Eng.RS.04.005	Inadequate monitoring of staff, consultants and contractors results in maintenance and renewals not being completed.	Establish quality control/review process.	Established performance monitoring for contract management and LOS.
Very High	Eng.RS.05.001	Insufficient knowledge of communities' desires resulting in inappropriate targets.	Develop consultation process/plan.	Consultation Policy (2009) adopted. In 2010 stakeholder workshop 'clusters' developed and progressively implementing workshops.
Very High	Eng.RS.06.001	Lack of technical expertise to provide planning/design resulting in absence of or inappropriate planning/design.	Establish resource plan to either obtain knowledge inhouse or readily accessible in consultant organisation.	In-house consultancy established July 2010 (IBU). Increased range of professional service providers and technical experts developed.
Mitigated	Eng.RN.05.001	Insufficient knowledge of communities' desires resulting in inappropriate targets.	Develop consultation process/plan.	Consultation Policy (2009) adopted. In 2010 stakeholder workshop 'clusters' developed and progressively implementing workshops.
Mitigated	Eng.RN.06.001	Lack of technical expertise to provide planning/design resulting in absence of or inappropriate planning/design.	Establish resource plan to either obtain knowledge inhouse or readily accessible consultant organisation.	In-house consultancy established July 2010. Increased range of professional service providers developed with emphasis on fit-for-purpose to reduce overheads.

AIRPORT

RISK DESCRIPTION	UNIQUE IDENTIFIER	RISK EVENT	TREATMENT	STATUS
VERY HIGH	Eng.WA.02.003	Insufficient knowledge of legislation (outside of consent conditions) that relates to the activity (OSH etc.) or failure to monitor for change.	Review and document requirements. Seek external advice.	Formal process to be developed. Currently ad-hoc approach relying on industry information (SOLGM, LGNZ etc.).
VERY HIGH	Eng.WA.02.001	Inadequate maintenance and renewals fails to address deterioration of infrastructure resulting in unsafe facilities/conditions.	 Establish risk-based (prioritised) AMP. Establish effective condition assessment programme to reduce uncertainty around life cycle stages of infrastructure. 	Risk management brought into this AMP. Valuation planned 2014/15 which will significantly improve asset register.
HIGH	Eng.WA.02.005	Insufficient funding for monitoring activities.	Review enforcement options. Explore possibility of devolving some function(s) to contractors i.e. reporting.	To be developed.
HIGH	Eng.WA.02.006	Lack of technical expertise to provide planning/design resulting in absence of or inappropriate planning/design knowledge to verify compliance.	Establish resource plan to either obtain knowledge in-house or readily accessible in consultant organisation.	In-house professional services has a senior engineer tasked with procurement effectiveness reviews across infrastructure activities.
нісн	Eng.WA.01.005	Insufficient resources to 'hook into' funding mechanisms (time, cost, expertise).	Resourcing Plan.	To be developed.
нісн	Eng.WA.03.005	Absence of, or inaccurate asset valuation information resulting in inappropriate depreciation values.	Establish plan for periodic valuation review.	Formal valuation to be undertaken.
нісн	Eng.WA.04.004	Inadequate planning for the implementation of the annual programme.	Ensure robust documentation of current plans to act as template. Include issue in handover plans. Succession planning.	AMP in place. Handover plans N/A at this time. In-house professional services along with cadetship programmes have strengthened resilience as far as succession planning is concerned.
нісн	Eng.WA.04.005	Inadequate monitoring of staff, consultants and contractors results in maintenance and renewals not being completed.	Establish quality control/review process.	In-house professional services has a senior engineer tasked with procurement effectiveness reviews across infrastructure

5. RESOURCING AND PROCUREMENT

5.1 Council currently has the following procurement processes underway (Chart)

		Tender	Evaluation		
Date	Contract Description	Closed Date	Methodology	Status	Comments
31/01/2018	18/02 Unsealed Road Maintenance	21/02/2018	Brook's Law (two	Tenders being evaluated	
			envelope		
			approach)		
5/04/2018	18/03 Solid Waste management services	6/06/2018	Weighted		From 1st October, the management of
			attribute		the solid waste activities will transfer
					from QRS to WDC. This management
					arrangement will be in place as a
					transitional measure until the end of
					February 2019 to allow establishment
					for the future provision of the services
1/08/2018	18/11 Flood Damage Contract 1 - Tuai Main Road	12/09/2018	Lowest price	Tenders being evaluated	
1/08/2018	18/10 Corridor Vegetation Control	19/09/2018	Lowest price	Tenders being evaluated	
1/08/2018	17/06 Blacks Beach - Blowhole Repair		Weighted	Tender documents under review	
			attribute		
20/08/2018	18/13 Flood Damage Contract - Mohaka/Waiau		Lowest price	Tender documents being written	
10/09/2018	18/14 Flood Damage Contract 3 - Waikaremoana/Ruakituri		Lowest price	Tender documents being written	
19/09/2018	18/05 Wairoa reserves maintenance	31/10/2018	Lowest price	Currently advertised	
19/09/2018	18/06 Wairoa public toilets	31/10/2018	Lowest price	Currently advertised	
19/09/2018	18/07 Wairoa gardens maintenance	31/10/2018	Lowest price	Currently advertised	
19/09/2018	18/08 street cleaning and urban care	31/10/2018	Lowest price	Currently advertised	
19/09/2018	18/09 Cleaning of council buildings	31/10/2018	Lowest price	Currently advertised	
1/10/2018	18/15 Bridge Strengthening & Renewals - Package 1		Lowest price	Tender documents being written	
30/01/2019	18/17 Bridge Strengthening & Renewals - Package 2	Feb-19	Lowest price	Design Underway	
1/02/2019	Flood Damage Contract 4		Lowest price	Site selection underway	
1/02/2019	Flood Damage Contract 5		Lowest price	Site selection underway	
TBC	Mahanga Water Treatement Plant	1/01/2019			Initial Scope for water take completed.
TBC	Wairoa Sewer Upgrades - Kopu Road New Sewer and Rising Main	1/08/2019	Lowest price		Tender documents yet to be written.
TBC	Wairoa Waste Water Treatement	1/12/2019			New Discharge consent application
					underway due for submision to HBRC
					Nov 30th 2018
TBC	Bluebay Water Treatement Plant Upgrade	TBC	Lowest price		Currently on hold

6. ADDITIONAL ITEMS

The most recent weather event has led to approximately \$1.8M in clean up works with a further \$5-6 M in road repairs required. Due to the scale of the event, the subsidy level will be 95% however a fuller reconciliation of local share costs will be reported as this comes to hand. The quantum of costs is in accord with neighbouring districts and NZTA has been notified of the scale of the costs