SOUTH WAIRARAPA DISTRICT COUNCIL
Kia Reretahi Tātau

GREYTOWN COMMUNITY BOARD

Agenda

NOTICE OF MEETING

An ordinary meeting will be held in the WBS Room, Greytown Town Centre, 89 Main Street, Greytown on Wednesday, 3 August 2022 at 6:00pm. Masks and physical distancing are recommended.

MEMBERSHIP OF THE COMMUNITY BOARD

Ann Rainford (Chair), Simone Baker, Shelley Symes, Graeme Gray, Cr Alistair Plimmer and Cr Rebecca Fox

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PUBLIC BUSINESS

1. EXTRAORDINARY BUSINESS:

2. APOLOGIES:

3. CONFLICTS OF INTEREST:

4. ACKNOWLEDGMENTS AND TRIBUTES:

5. PUBLIC PARTICIPATION:

5.1 Jen Butler – Pukaha Mount Bruce

6. ACTIONS FROM PUBLIC PARTICIPATION:

As per standing order 14.17 no debate or decisions will be made at the meeting on issues raised during the forum unless related to items already on the agenda.

7. COMMUNITY BOARD MINUTES:

7.1 Minutes for Approval: Greytown Community Board minutes of the meeting held on 22 June 2022. **Pages 1-4**

***Proposed Resolution**: That the minutes of the Greytown Community Board meetings held on 22 June 2022 be confirmed as a true and correct record.*

GREYTOWN COMMUNITY BOARD
Kia Reretahi Tātau

Greytown Community Board

Minutes – 22 June 2022

Present:	Ann Rainford (Chair), Shelley Symes, Simone Baker, Graeme Gray, Councillor Rebecca Fox and Councillor Alistair Plimmer
In Attendance:	Amanda Bradley (General Manager, Policy & Governance) and Kaity Carmichael (Committee Advisor)
Also In Attendance:	Frank Mineham (Friends of O'Connors Bush) and Shane Atkinson (Greytown Trails Trust)
Conduct of Business:	This meeting was conducted in public in the WBS Room, Greytown Town Centre between 6.00pm and 7.05pm.

1. EXTRAORDINARY BUSINESS

Ms Rainford noted that the Covid-19 Home Care kits, signs at Papawai Marae and funding for a dog poo bin on the corner of Jellicoe Street and Massey Street would be discussed under the Chairperson Report.

2. APOLOGIES

GCB RESOLVED (GCB 2022/29) to receive apologies from Councillor Fox
(Moved Gray/Seconded Cr Plimmer) Carried

3. CONFLICTS OF INTEREST

There were no conflicts of interest declared.

4. ACKNOWLEDGMENTS AND TRIBUTES

Ms Symes acknowledged the passing of her father and thanked the board for their support during this time.
Ms Baker thanked the board for the flowers while she was recently unwell.

5. PUBLIC PARTICIPATION

Shane Atkinson – Greytown Trails Trust
Mr Atkinson updated members on progress of the Tauherenikau bridge project and provided an update on the proposed location of the pou in Clifford Square. Mr Atkinson spoke about the engagement process and thanked the board for their support of the project.

Frank Mineham – Greytown Arbor Week 2022

Mr Mineham noted that it has been 50 years since the passing of Stella Bull and shared that a rotary tree will be planted in the park. Mr Mineham spoke about the upcoming tree plantings and activities associated with Greytown Arbor Week 2022. Mr Mineham requested support with advertising for the activities.

6. ACTIONS FROM PUBLIC PARTICIPATION

Members acknowledged the work by Greytown Trails Trust on the Tauherenikau bridge and pou project.

Ms Rainford noted that the Greytown Arbor Week 2022 would be advertised in the Grapevine and on the Greytown Community Board Facebook page. Ms Bradley undertook putting the events on the Council Facebook Page.

7. COMMUNITY BOARD MINUTES

7.1 Greytown Community Board Minutes – 11 May 2022

GCB RESOLVED (GCB 2022/30) that the minutes of the Greytown Community Board meeting held on 11 May 2022 be confirmed as a true and correct records.

(Moved Cr Plimmer/Seconded Gray) Carried

7.2 Greytown Community Board Minutes – 25 May 2022

GCB RESOLVED (GCB 2022/31) that the minutes of the Greytown Community Board meeting held on 25 May 2022 be confirmed as a true and correct record.

(Moved Symes/Seconded Gray) Carried

8. CHAIRPERSON REPORT

8.1 Chairperson Report

GCB RESOLVED (GCB 2022/32) to receive the Chairperson Report.

(Moved Symes/Seconded Baker) Carried

Mrs Rainford spoke to items outlined in the Chairperson Report and thanked those involved with the organization of Greytown Arbor Week 2022.

Members discussed funding available to the Memorial Wall at Soldiers Memorial Park and noted they will continue to work with the Greytown RSA on the project.

Members queried the large number of high speed sewage trucks on Papawai Road during times of heavy rain water and requested a more solution focused response from officers.

GCB RESOLVED (GCB 2022/33) to grant $1,500 to place a dog poo bin on the corner of Jellicoe and Massey Street in Greytown, to be funded through the beautification fund.

(Moved Rainford/Seconded Cr Plimmer) Carried

Ms Rainford provided an update on the Seniors IT project at Kuranui College, the Covid-19 Home Care Kit community project and the signs at Papawai Marae.

9. DECISION REPORTS FROM CHIEF EXECUTIVE AND STAFF:

There were no decision reports from Chief Executive and staff.

10. INFORMATION REPORTS FROM CHIEF EXECUTIVE AND STAFF

10.1 Officers' Report

GCB RESOLVED (GCB 2022/34) to receive the Officers' Report.

(Moved Cr Plimmer/Seconded Gray) Carried

Cr Plimmer acknowledged the work of Wellington Water following a lightning strike of the wastewater treatment plant.

10.2 Income and Expenditure Report

GCB RESOLVED (GCB 2022/35) to receive the Income and Expenditure Report for the period ending 31 March 2022.

(Moved Gray/Seconded Baker) Carried

Members queried the number of committed funds remaining in the beautification budget and requested clarification on why there are several committed funds remaining unpaid.

GCB RESOLVED (GCB 2022/36) to remove the $2000 for the 2021 Christmas in the Park event from the committed funds.

(Moved Gray/Seconded Baker) Carried

10.3 Action Items Report

GCB RESOLVED (GCB 2022/37) to receive the Action Items Report

(Moved Cr Plimmer/Seconded Gray) Carried

Members discussed open action items and noted further updates.
Ms Bradley undertook providing clarification on the removal of notable trees.

GCB NOTED:
Action 278: Request an update on the removal of the two flags in central Greytown which are not on the flag track system.
Action 279: Request an update on the progress of the pavilion project at Soldiers Memorial Park.

11. NOTICES OF MOTION

There were no notices of motion.

12. MEMBER REPORTS (INFORMATION)

Ms Symes spoke to items outlined in the Member Report and provided an update on WREMO training and equipment maintenance.

The meeting closed at 7.05pm.

Confirmed as a true and correct record

…….Chairperson

……..Date

GREYTOWN COMMUNITY BOARD

03 AUGUST 2022

AGENDA ITEM 8.1

CHAIRPERSON REPORT

Recommendations

The chairperson recommends that the Community Board:

1. Receive the Chairperson Report.

2. Consider funding $150 for the planting of spring flowers in the Greytown barrels, from the beautification fund.

3. Consider funding up to $240 for 3 cherry trees in the Greytown Dog Park, from the beautification fund.

4. Consider paying Lamb Peters $216 plus GST for the printing of the first sign for Papawai Marae.

5. Consider funding $7000 for the purchase of two seats for the new Greytown Wheels Park (inscription 'Donated by GCB in 2022', from the beautification fund.

6. Consider funding up to $150 for paint for the maintenance of the bus shelter on Main Street, from the beautification fund.

1. **Changes to prevent speeding in Greytown**
   I have received further concerns from residents regarding speeding on Wood Street, and the need to install speed bumps along Papawai Road. When will a decision be made by Waka Kotahi on the new speed limits and their decisions regarding the use of speed bumps?

2. **Update on the Greytown Dog Park.**
   A row of Tulip trees were planted in the Greytown Dog Park as part of Arbor Day celebrations. Thanks to Frank, Richie and and Graeme for their services planting these trees. I have attached the Greytown Arbor Week report from Frank Mineham in Appendix 1. We have permission from Stefan Corbett to clear the rocky area in the South West of the dog park. Over time Richie will be able to source native trees to plant in this area. This year I would like support to plant three cherry tree in this area.

3. **New Report on the Main Street barrels.**
   Gayle Vittillich, as president of the Greytown Gardeners society, has canvassed support amongst her members, and they have offered to tend to the Main Street barrels this Spring. The society are willing to put in new top soil and undertake the planting of flowers in the barrels. Farmlands have agreed to provide top soil free of cost. The gardener's society are keen to help because they want the barrels to remain as a benefit to the town. They will give their services free, as a service to the community. Recommend that GCB puts aside $150 for planting in Spring. Local businesses will continue to water the barrels.

4. **Sign for Papawai Marae**
   This sign has been printed and will now been taken to the Greytown Men's shed for the supports to be made. I recommend that Lamb Peters be paid $216.00 plus GST for the cost of printing the first sign. We are still awaiting completion of the sign for the Urapa

5. **Seats in the skateboard/wheels park**
   We are nearing the end of our three years in office and I would like us to put $7000 aside for the cost of two seats in the new skate board/wheels park. The seats would contain a plaque which states 'Seats Donated by Greytown Community Board 2022'.

6. **Support for Pukaha Mount Bruce**
   I have asked Jen Butler to speak on this issue and she has submitted a grant application form.

7. **Bus Shelter on Main Street by Cobblestones**
   Two members of the public who live by this bus stop have complained that the bus shelter requires painting and that the roof requires water blasting. They have volunteered to do this work and to work on the historic plaque in the shelter, which is important to the history of Greytown. This is difficult to see at the present time. Do we agree to support this offer, and to provide the paint for this work?

Ann Rainford
Chair
Greytown Community Board

Appendix 1 – Greytown Arbor Week Report

Tuesday, 28 June 2022

GREYTOWN'S VERY OWN ARBOR DAY TRADITION

While the rest of Aotearoa – New Zealand holds Arbor Day on 5 June (World Environment Day), Greytown keeps to its unique tradition and holds it in the week beginning 1 July and as close as practicable to 3 July.

Greytown's first Arbor Day was held with great success on 3 July 1890. It was well supported by the town and mana whenua. Masterton's *Wairarapa Daily* reported on 4 July 1890 that around 400 adults and 250 children attended. The parade to the southern entrance of town where the planting took place was led by the local brass band. At least 150 trees were planted, 5-6 of which survive to this day! None planted were 'natives', they were Spruce and possibly Pinus Tuberculata and Pinus pinaster.

How did this all come about? Well, the first Arbor Day in the world took in 1872 at Nebraska City in what was then the Nebraska Territory. It later took root elsewhere in the United States.

Two newspaper editors, in particular, advocated for an Arbor Day in the Wairarapa. The first call being in 1889 from Joseph Payton of the *Wairarapa Daily.* However, it was a fellow newspaper editor in Greytown, William Nation, who got the show on the road, so to speak.

William Charles Nation was born in Sydney, Australia. He came with his family to Nelson in 1857. His father apparently was a newspaper editor/proprietor and William worked for him as a journalist. After working for a number of South Island papers, he purchased Richard Wakelin's then Greytown based *Wairarapa Standard.*

Nation obviously took up the cause of having a local Arbor Day with great determination. By the 1890s Arbor Day in the States was well established and had a particular focus on tree planting by children. Nation sought the support of the Greytown Borough Council. While Council was supportive of the concept of an Arbor Day, it wasn't monetary wise! Not put off, Nation it seems organised fundraising himself. So it came about that Greytown's first Arbor Day was held on 3 July 1890.

Among Nation's other interests was spiritualism. It appears his family was deeply involved in spiritualism as well and his daughter Bertha was locally well known as a medium.

Greytown's Arbor Day from 1890 – 2022

Arbor Day was suequently observed in the town regularly for a number of years, perhaps until the 1930s. From the 1960s events marking the day re-appeared. There were some very notable events/milestones along the way. In 1922 the Memorial Avenue of Lime trees were planted in the Park on Kuratawhiti Street. On ANZAC Day 1923 the Park's Memorial Gates were blessed and opened, officially marking the acquisition and establishment of Greytown Soldiers' Memorial Park, including the native bush known as O'Connor's Bush, now formally protected under the Reserves Act. Over the years there have been many Arbor Day plantings in the Park and especially in the Bush.

The late Kay Grey organised a major Arbor Day 120 years celebration, including a Main Street Parade, in 2010. Somehow the 125th year slipped by without a significant hui.

In 2022 we have three events planned from the week beginning 2 July and there will be our usual Town Centre Display up (including the splendid banners commissioned by the Greytown Community Board with strong encouragement from now Councillor Leigh Hay).

- Saturday 2 July 10 am – O'Connor's Bush at Greytown Soldiers' Memorial Park, Kuratawhiti Street – meet at tennis courts inside the park. We are planting three kahikatea by the water race that runs through the park.
- Friday 8 July 11 am – Stella Bull Park Greytown – entry off East Street opposite Greytown Primary School. We are planting a Trident Maple – it will be known as the Rotary Tree.
- Saturday 9 July 11 am – Greytown Dog Park – Cotter and Pierce Streets – planting of an avenue of 8 Tulip Trees.

Unlike Council in the 1890s, the Greytown Community Board and Council have been extremely supportive of the 2022 Greytown Arbor week events. The Board approved a grant of $1,000 from its beautification funds and Council staff were involved in selecting and sourcing appropriate trees for the locations. Ann Rainford, Community Board chair, was very keen to see plantings in the dog park in particular and was pro-active in encouraging the application for funding.

Rāpare, 21 Hōngongoi, 2022

21 July 2022

Report to Chair and Members of Greytown Community Board re Greytown Arbor Week 2022

Tēnā koutou, tēnā koutou, tēnā koutou kātoa – ngā mihi ki a koutou kātoa

Background

The Board granted $1,000 from its Beautification Fund towards the 2022 Greytown Arbor Week plantings. I note the Chair, Ann Rainford has reported on Arbor Week in her column in the July edition of *Greytown Grapevine.*

O'Connor's Bush Planting – 2 July

The Friends, supported by *Wairarapa Times-Age* journalist Mary Argue and her father John, planted three kahikatea trees by the water race in the Bush. We were delighted that Alisoun Werry attended and helped plant one of the trees. She founded the Friends of O'Connor's Bush and was convenor for many years.

Greytown Town Centre Display

Thanks to Katie Abbott for putting up our display for Arbor week. As Ann mentioned in *Grapevine,* this was an opportunity to have our four splendid Banners on display in the foyer. These were commissioned by the Community Board when Leigh Hay was chair. I was privileged to have been involved in the project. The banners were designed by local artist Jo Lysaght.

Publicity

Mary Argue and the editor of the *Times-Age* gave us publicity in the newspaper and the weekly *Midweek* published an article I wrote for Greytown Arbor Week 2022. Mike Gray subsequently wrote a letter to *Midweek* published on 20 July – all about the Arbor Day centennial celebrations in Greytown in 1990. It is an important piece of our social history – thank you Mike and my apology for not knowing about it and mentioning it in my own article.

Adverse Weather 8 July

We did not go ahead with the planting of the Rotary Scarlet Maple in Stella Bull Park on the morning of 8 July. Although it fined up somewhat later in the morning, it was raining heavily earlier on. We are trying to re-schedule this event at a time when the new Rotary Chair Tamara Allerhand and other key players are available, including Ritchie Hill arborist. Ritchie has care of the maple in the meantime!

Avenue of Tulip Trees – Greytown Dog Park

Ritchie Hill organised the hole digging, stakes and protection. He had already done a trial planting prior to 11 am on 9 July. It was a very windy morning and the public didn't show (but there were apologies from several who were unwell, a sign of the times). However, Ann Rainford and Graeme Grey were there as well as Carmel Ferguson (chair of the Greytown Heritage Trust), Ritchie and myself. A huge thanks to Graeme and Ritchie for getting the quite large trees into the ground successfully.

Costs and balance of grant remaining

Somewhat to my surprise, Council paid for the maple and tulip trees. So far I have only spent $64.45. That paid for three lovely kahikatea sourced from the Norfolk Road Native Nursery. It's not clear to me whether Ritchie Hill has also been paid by Council. I suspect he is giving his time and expertise pro bono! Richie is also committed to keeping an eye on the tulip trees over summer to ensure their survival. He is also prepared to be involved in the ongoing landscaping/planting in the Dog Park.

The Friends of O'Connor's Bush do not have a bank account. The balance is held for the Friends by the Greytown Heritage Trust.

Recommendation

I recommend the Board/Council do all it can to set up a 'Friends of the Greytown Dog Park' support group.

Action from Greytown Community Board

Please confirm I should arrange to pay back the grant to the Board.

Thank you/kia ora kotou kātoa

Frank MInehan

027 252 1084

GREYTOWN COMMUNITY BOARD

3 AUGUST 2022

AGENDA ITEM 9.1

PROPOSED NAMING OF A NEW PRIVATE ROAD, AT 162 WARDS LINE, IN GREYTOWN

Purpose of Report

To seek the Greytown Community Board's consideration and approval of the name "Kaitara Park Lane" for a proposed private road/right of way to access an 8-lot staged subdivision by *The Ark Farm Holdings Ltd*.

Recommendations

Officers recommend that the Greytown Community Board:

1. *Receive the Proposed Naming of a New Private Road, at 162 Wards Line, in Greytown Report.*
2. *Consider and approve the Proposed Naming of "Kaitara Park Lane" for the proposed private road at 162 Wards Line, Greytown.*

1. Background

The Ark Farm Holdings Ltd (Vicki Karaminas) seek to name a new Private Road which is part of a 8-lot residential subdivision (RC 210029) at *162 Wards Line, Greytown* (see appended plan in Appendix 1).

Council has authority to accept or reject suggested names of roads/rights of way in the South Wairarapa District pursuant to Section 319(1)(j) of the Local Government Act 1974.

There is a current pre-approved list from the Greytown Community Board for new roads in the Greytown area but the applicant has opted to use different names than this list. The proposed name is "Kaitara Park Lane" which is the applicants preferred option for this new private road. There are three other options which are Māori names relating to the history of the surrounding area of the subdivision site. As this application is in the Greytown ward, the Māori Standing Committee (MSC) representatives from Papawai Marae were consulted and are supportive on the use of this name. The preferred suffix for this road name is 'Lane' which is consistent with the policy requirements for private roads. Council has delegated to community boards the authority to approve road names. This report is required to give the Greytown Community Board an opportunity to review and approve the proposed road name.

Subdivision location & scheme plan:

2. Discussion

2.1 Legal situation

Under Council's guidelines (Clause 4.2) for road naming, owners are requested to suggest at least three possible road names.

The names are to be listed in order of preference with a brief statement of their significance.

The applicant has requested that the following names are considered for approval;

1. Kaitara Park Lane
2. Manihera Lane
3. Uruokaite Way

It is unclear why the applicant has requested the 'park' aspect of the preferred name. If considered unnecessary, the name could be approved as Kaitara Lane.

2.2 Assessment of Councils Policy

Council's criteria for Naming of Public Roads, Private Roads and Rights-of-Way (the Policy), includes the following;

4.3.1 There must not be another road with the same name in the South Wairarapa District emergency services area; this includes the same road names with a different suffix. However, existing roads with the same names as of the date of adoption of this Policy are allowed.

The only conflict is with Manihera being an existing paper road name in central Greytown. It is suggested that this name is not considered due to this. Both other names are unique and meet the policy.

4.3.2 Identical names with different spellings will not be accepted (e.g. Beach, Beech).

No issue identified.

4.3.3 The name should have significant local content or meaning.

The application has set out why the preferred names have been selected. The following information has been copied from the road name application.

The private road/easement will service Lots 2-8 in accordance with 4.3.6 of the Road Name Policy. The choice of names have significant historical relevance to Wards Line and the immediate area and vicinity. The area was known as Kaitara in 1870 and prior and consisted of 321 acres of Uruokakite Block. Manihera Rangitakaiwaho was one of the 9 Maori owners (see certificate of title attached and historical map in Appendix 2) before the area was named by settler Hugh Morrison who set up his homestead and farmed the land. We would ask that Council considers our request to reinstate the historical place name.

4.3.4 Names are to be selected in proportion to the length of the road. Long names on short cul-de-sac's can be difficult to display on the map

All proposed names are relatively long in length however should be able to be displayed sufficiently on the maps.

4.3.5 The end name for the roadway should be one that most accurately reflects the type of roadway that it is.

All proposed names are considered consistent with the policy, private road/right of ways having a suffix of Lane or Way.

4.3.6 All private roads and rights-of-ways serving more than four lots are to have the suffix "Lane" or "Way".

All proposed names are considered consistent with the policy.

4.3.7 Where the road is continuation of an existing named road, or will in the future link to an existing named road, then the current road name will automatically apply.

Not applicable.

2.3 Procedure for Naming Roads of the Naming of Public Roads, Private Roads and Rights-of-Way Policy Review

Section 4.2 will be reviewed and aligned with the community board delegation to name roads when it is next reviewed.

3. Conclusion

The proposed names are consistent with the guideline criteria in the road naming policy with the only potential conflict with the second option, Manihera Lane, being similar to Manihera Street which already exists in Greytown as a paper road. The applicant has submitted three road name options which all reflect the history of the area surrounding the subdivision site. All of the proposed names are Maori and the Maori Standing Committee (MSC) representatives from Papawai Marae were consulted and are supportive on the use of this name. The Greytown Community Board has delegation to approve road names.

4. Appendices

Appendix 1 - Subdivision Scheme Plan

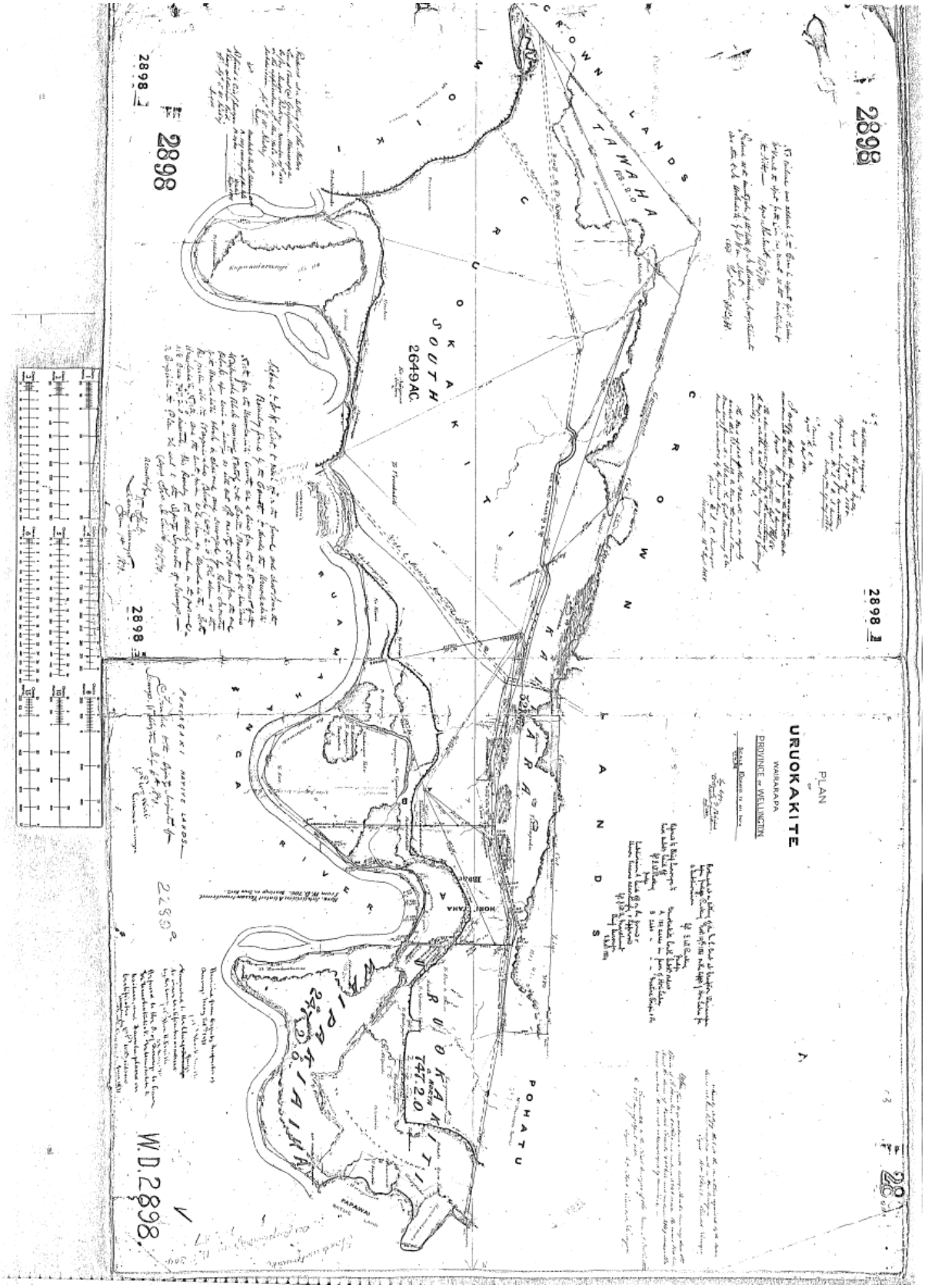
Appendix 2 – supporting information supplied with the road name application

Prepared by/Contact Officer: Harriet Barber, Planner

Reviewed by: Russell O'Leary, Group Manager Planning and Environment

Appendix 1 - Scheme Plan

Appendix 2 – Supporting documents



KAITARA 321 acres
Part of Uruokakite Block
Lower West Wairarapa

1870

27/4/70-CERTIFICATE OF TITLE- NLC, Greytown. Judge Fenton. Kaitara, 321 acres. Owners Manihera Rangitakaiwaho, Komene Piharau, Kaari Te Marau, Ramari Tumai, Renata Hemara, Ripeka Matenga, Ahitana Matenga, Ria Hinewaka and Pauira Te Nohowhare.
(Maori Land Court Hastings General Land File Wai 216, DB p122-123).

17/5/1870-CERTIFICATE OF TITLE- NLC, Greytown. Judge Fenton. Kaitara, 321 acres. Same owners as above.
(LINZ Deeds Registry, Wellington. DB p125).

30/12/70- CONVEYANCE- Kaitara, 96 acres. Manihera Rangitakaiwaho, Komene Piharau, Kaari Te Marau, Ramari Tumai, Renata Hemara, Ripeka Matenga, Ahitana Matenga, Ria Hinewaka and Pauira Te Nohowhare to Charles Cottle for £60. Signed by all of the natives except Ripeka Matenga.
(LINZ Deeds Registry Wellington, D25/68. DB p126).

1871

17/7/71-LEASE- Manihera Rangitakaiwaho, Komene Piharau, Kaari Te Marau, Ramari Tumai, Renata Hemara, Ripeka Matenga, Ahitana Matenga, Ria Hinewaka, Pauira Te Nohowhare to Moritz Hirschberg (Storekeeper). 21 year lease, commencing 1/7/1870. Annual rent £13. Signed by all natives. 276 acres.
(LINZ Deeds Registry Wellington. D25/66. DB p126).

7/12/71-CROWN GRANT- Kaitara, 321 acres. Owners are the above 9 mentioned in the Certificates of Title. NB. Subject to the Government laying roads without compensation.
(LINZ Deeds Registry, Wellington. G8/87. DB p126).
(LINZ Deeds Registry Wellington, ML/WD Plan No. 2898. DB p130).

1872

3/2/72-MORTGAGE- Uruokakite Estate, 747.2.0 acres. Mortgage of £600, Manihera Rangitakaiwaho and others to J. Cattell. This mortgage was procured in order to buy stock for the natives' unoccupied lands. Then, the natives entered into a second mortgage

AGENDA ITEM 9.2

FINANCIAL ASSISTANCE REPORT

Purpose of Report

To present the Community Board with applications received requesting financial assistance.

Recommendations

Officers recommend that the Community Board:

1. *Receive the Applications for Financial Assistance Report.*
2. *Consider the application from Pukaha Wairarapa Garden Tour for $1000 to fund Street Flags to advertise the event.*

1. Background

The Community Board has delegated authority to make financial decisions within the confines of the allocated and available budget and the Board operates its grant fund in accordance with the Council's Grants Policy.

2. Funding Rounds Dates

On the 16 February 2022 Greytown Community Board agreed that grants would be considered twice annually with the final funding round date set for 14 September 22 (GCB 2022/06). Greytown Community Boards will consider grants outside the advertised funding rounds at the discretion of the Chair, should exceptional circumstances exist (GCB 2020/40).

3. Applications for Financial Assistance

The applications received for consideration on 3 August 2022 is summarised in the below table.

Applicant	Amount Requested
Pukaha Wairarapa Garden Tour	$1,000

4. Eligibility Criteria

Council adopted a new Grants Policy which sets out the eligibility criteria for applications. The policy took effect from 1 July 2021.

The eligibility criteria for Community Board grants is as follows:

- Non-profit community organisations with a formed legal structure or a group of individuals who have come together for a common purpose but who do not have a legal structure may apply.
- The applicant does not need to be based in the South Wairarapa or the ward from where the funds are being sought but the applicant must be able to demonstrate that the activity benefits the ward where the funds are being sought.
- Applicants may not be in receipt of any other Council or Council-administered grant for the same activity in the same financial year.
- The Greytown Community Board has a maximum grant limit of $1,000 unless special circumstances are considered to exist (GST will be added to grants approved for GST registered applicant).

4.1 Assessment against Eligibility Criteria

Council adopted a new Grants Policy which sets out the eligibility criteria for applications. The policy took effect from 1 July 2021.

4.1.1. Pukaha Wairarapa Garden Tour

The application from Pukaha Wairarapa Garden Tour has been assessed as meeting the criteria and will be provided to members in confidence.

5. Conclusion

There are no outstanding accountability forms from this applicant.

Contact Officer: Kaitlyn Carmichael, Committee Advisor
Reviewed by: Amanda Bradley, General Manager, Policy & Governance

GREYTOWN COMMUNITY BOARD

3 AUGUST 2022

AGENDA ITEM 10.1

REVOKING POLICIES

Purpose of Report

To inform the community board of the proposal to revoke several policies that officers consider are no longer required or would be more appropriate in another format.

Recommendations

Officers recommend that the Community Board:

1. *Receive the 'Revoking Policies' Report.*
2. *Note that Council will be asked to consider revoking the following policies: Committees and Working Parties (A100), Hire of Council Facilities (E200), Display of Artworks in the Greytown Town Centre (E700), Street Days, Appeals and Raffles (H600), and Street Banners and Flags (C700).*
3. *Provide any feedback members would like officers to take into account in seeking Council support to revoke the above policies and undertake the suggested further actions.*

1. Background

The purpose of policies is to set direction and guide the principle of why we do something. It is different from the "how" which is a process or procedure and could be in the form of a guide, application form or public facing information on the Council website.

A review of policies is underway and officers have identified a number of policies that we consider are no longer required or would be more appropriate in another format:

- Council, Committees and Working Parties Policy (A100)
- Hire of Council Facilities Policy (E200)
- Policy for the Display of Artworks in the Greytown Town Centre (E700)
- Street Days, Appeals and Raffles (H600)
- Street Banners and Flags Policy (C700).

The full policy documents are available in Appendix 1.

The Street Banners and Flags Policy is expected to be of most interest to the Community Boards given the role of community boards in maintaining the FlagTrax system and calendar of flags for their town. The Policy for the Display of Artworks in the Greytown Town Centre is expected to be of interest to the Greytown Community Board.

Officers intend to seek Council approval to revoke these policies and to support officers in undertaking the suggested further actions. Community Boards are asked to provide any feedback they would like to be taken into consideration during this process.

2. Discussion

The below table summarises the rationale for revoking the policies and suggested further action(s) where applicable.

#	Policy	Purpose	Reasons for revoking	Suggested further action(s)
1	Council, Committees and Working Parties Policy.	To provide details of the SWDC governance structure	Updated information is replicated in the Local Governance Statement published on the SWDC website. This is the appropriate place for this information as it is a legislative requirement of the Local Governance Statement under section 40(f) of the Local Government Act 2002 to include information on the governance structures and processes, membership and delegations. This policy is therefore considered redundant. Replicating the information in multiple places increases the risk of updates being made to one location and not the other. Information contained in the policy is out of date (relates to the 2016-2019 governance structure).	None. Content is already available in the Local Governance Statement on the Council website which incorporates the governance structure, membership and Terms of Reference for the 2019-22 triennium.
2	Hire of Council Facilities Policy	To provide guidelines for staff and public about the provision of Council facilities that are available for hire	Does not set policy direction and information contained is available in other locations e.g. Terms and Conditions of hire for each facility and hire charges are contained within separate documents. Information about the venues available to hire are listed on the venues page of the Council website.	Make any necessary additional information available on the venues page on the Council website.
4	Policy for the Display of Artworks in the Greytown Town Centre	To provide guidelines for the acquisition, management,	Provides for a governance structure (consisting of a sub-committee of the Greytown Community Board) to approve	Replace with an internal operational procedure for the affixing of artwork more generally

		display and storage of artworks in the Greytown Town Centre	and affix artwork which has not been reconstituted. The content is operational in nature and would be better supported by an operational procedure.	to ensure a consistent approach across the Council venues.
6	Street Days, Appeals and Raffles	To provide guidelines for those wishing to conduct street days, appeals and raffles.	The activity requires permission under the Wairarapa Consolidated Bylaw: Part 12 Public Places and does not require a separate policy. The process to seek permission can be by way of an application form to officers with accompanying Terms and Conditions. This is consistent with the approach of other Councils, and provides a more streamlined approach to bookings.	Replace with an application form and terms and conditions on the Council website.
7	Street Banners and Flags Policy	To provide guidelines for the display of flags and to streamline the approach of taking bookings for street flags throughout the district	The policy does not set direction, rather it guides the application process and criteria for community boards taking bookings for FlagTrax. Officers consider internal guidance for staff and an application form to support the process would be more user friendly for applicants and community boards, and do not consider that a separate policy is required.	Replace with internal guidance for staff and with a public facing application form for community groups wishing to make a booking through the Community Boards to display flags.

2.1 Options

The following options will be available to councillors. Community Boards are invited to provide any feedback they would like to be taken into account during consideration of the options by Council.

#	Option	Advantages	Disadvantages
1	Revoke all policies **Recommended option**	Removes outdated and contradictory information where applicable aiding trust and confidence in Council. Utilises a more appropriate format which provides a more user-friendly experience for the public. Allows officers to focus on policy reviews of higher priority.	There is a short term cost in terms of officer time in implementing suggested actions (e.g. website updates, creation of application forms). This disadvantage would be outweighed by the longer term advantage of not needing to maintain and review policies that officers consider are no longer fit for purpose.
2	Revoke some but not all policies	This would depend on the number of policies being retained. The full advantages of Option 1 would not be realised.	This would depend on the number of policies being retained. Disadvantages of Option 3 would apply to a lesser extent.
3	Do nothing	There is a short term time saving advantage of not implementing suggested actions (e.g. website updates, creation of application	Published documents that are no longer fit for purpose and/or outdated provide the public and staff with

#	Option	Advantages	Disadvantages
		forms). This advantage would be outweighed by the longer term requirement to review and maintain policies that officers consider are no longer fit for purpose.	inaccurate information reducing trust and confidence in Council. A less user-friendly experience for members of the public. Officer time distracted from policy reviews of higher priority.

2.2 Consultation

Community Boards have been provided with an opportunity to provide feedback given their interest, particularly in relation to the Street Banners and Flags Policy, and the Display of Artworks in the Greytown Town Centre (for the Greytown Community Board).

The decision to be considered by councillors is considered of low significance and therefore consultation is not required.

2.3 Legal Implications

There are no legislative implications associated with the decisions in this report.

2.4 Financial Considerations

There are no financial considerations associated with the decisions in this report.

3. Conclusion

A review of SWDC policies is underway and officers have identified a number of policies that are no longer fit for purpose, or would be more appropriate in another format. Council will be asked to consider revoking these policies and support officers undertaking the suggested further actions.

4. Appendices

Appendix 1 – Policies to Revoke

Contact Officer: Steph Frischknecht, Policy and Governance Advisor
Reviewed By: Amanda Bradley, Policy and Governance Manager

Appendix 1 – Policies to Revoke

COUNCIL COMMITTEES AND WORKING PARTIES

Rationale

This policy includes the governance structure which details how South Wairarapa District Council will carry out its governance functions according to the provisions and requirements of the Local Government Act 2002.

Guidelines

1. Appointments are normally for the electoral triennium.
2. All appointments are decided by the Mayor in accordance with the Local Government Act 2002 or by resolution by Council.
3. The Mayor can remove or change an appointee.

Council Structure

1. The Council has a current structure comprising of the following community boards, committees, , working parties and groups:
    - Martinborough Community Board
    - Featherston Community Board
    - Greytown Community Board
    - Māori Standing Committee
    - Hearings Committee
    - District Licensing Committee
    - Chief Executive Officer's Review Committee
    - Finance, Audit and Risk Committee
    - Assets and Services Committee
    - Planning and Regulatory Committee
    - 57 Fitzherbert Street, Featherston Subcommittee
    - South Wairarapa Long Term/Annual Plan Working Party
    - Tenders Working Party
    - Community Safety and Resilience Working Party
    - Civic Awards Working Party
    - Sport NZ Rural Travel Fund Assessment Group
    - Creative Communities Assessment Group
    - Water Race Subcommittee
    - Community Housing Working Party

2. The Council is a member of the following joint Wairarapa council working groups/committees:

- Wairarapa Library Service Joint Committee (with CDC)
- Wairarapa Combined District Plan Joint Working Group (with CDC, MDC)
- Wairarapa Policies Working Group (CDC, MDC)
- Wairarapa Economic Development Governance Group (CDC, MDC)
- Wairarapa Trails Action Group

3. The Council is a member of the following joint Wellington region working groups/committees:

- Wellington Regional Waste Management and Minimisation Plan Joint Committee
- Waste Forum - Wellington Region
- Wellington Region Climate Change Working Group
- Wellington Region Transport Committee
- Wellington Regional Strategy Committee
- Remutaka Hill Road Working Party

4. The Council is a member of the following working groups/committees convened by Greater Wellington Regional Council:

- Awhea Opouawe Scheme Committee
- Lower Valley Development Scheme Advisory Committee
- Wairarapa Moana Wetlands Governance Group
- Ruamahunga Whaitua (Catchment) Committee
- Waiohine Floodplain Management Plan Steering Group
- Wairarapa Committee

5. The Council appoints members to the following; convened by other parties:

- Cobblestones Museum Trust
- Arbor House Trust Board
- Destination Wairarapa
- Wairarapa Safer Community Trust
- Wairarapa Road Safety Council Inc.
- Pukaha to Palliser (P2P)

6. The Mayor unless specifically included or excluded, is ex officio a member of all committees, working parties and groups with the exception of the Hearings Committee.

7. All community boards, committees, working parties and groups make recommendations to Council, for matters beyond their delegations. The Chief Executive Officer or Group Managers convene the appropriate committee meetings,

working parties or groups which come within their areas of responsibility unless otherwise indicated.

8. Committees, working parties and groups should only be formed with at least the following information:

    a. Membership

    b. Consideration to chairperson appointment/election

    c. Meeting frequency

    d. Quorum

    e. Functions/Delegations

    f. Responsibility for convening/hosting/minuting the meeting

    g. Terms of Reference

9. Working parties or groups often have a sunset or winding up clause to ensure they are not on-going beyond their original brief, which if not sooner will be at the end of every triennium.

Council, Committees, Working Parties and Groups

Council

Chairperson:	Mayor (Deputy Mayor as alternative).
Membership:	The Mayor and all councillors. The Māori Standing Committee chairperson may attend and participate in debate but does not have voting rights.
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Chief Executive Officer.
Quorum:	Five members.
Meeting Order:	Conducted in accordance with Standing Orders and the Local Government Official Meetings and Information Act 1987.

Functions:

The Local Government Act 2002 shows the purpose of local government is:

- To enable democratic local decision-making and action by, and on behalf of, communities.
- To meet the current and future needs of communities for good-quality local infrastructure, local public services and performance of regulatory functions in a way that is most cost-effective for households and businesses. (Local Government Act 2002, section 10 (1)).

Council makes its own decisions about how it will structure or organise itself to work for and on behalf of its community.

Activities that can only be decided by the full Council, include:

- Setting rates and making bylaws.
- Borrowing money, or buying or selling land, unless already approved under the long-term plan.
- Adopting a long-term plan, annual plan or annual report.
- Adopting policies in response to LTP or by the local governance statement.
- Appointing a Chief Executive.
- To hear and consider matters as related to but not limited to the Resource Management Act, the Dog Control Act, Wairarapa Gambling Policy and the Reserves Act.

Martinborough Community Board

Chairperson:	An elected member appointed by Martinborough Community Board members.
Membership:	Four Martinborough ward members elected by the community. Two councillors appointed by the Mayor.
2016-2019 Appointments:	Cr Pip Maynard and Cr Pam Colenso.
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Chief Executive Officer.
Quorum	Three members.
Meeting Order:	Conducted in accordance with Standing Orders and the Local Government Official Meetings and Information Act 1987.

Functions:

- Refer to the Community Board Terms of Reference.

Delegations:

- All matters relating to urban reserves, urban amenities and town main streets that meet current Council policy or management plans and fall within the Annual Plan/Long Term Plan budget.
- Recommendations to Council for naming public roads, private roads and rights of way.
- Discretionary spend on projects and community grants.
- Recommendations to Council on the governance of the Pain Farm Estate, and on the distribution of income from the Pain Farm Estate in accordance with the Pain Farm Estate Policy
- Determination of priorities for and expenditure of town beautification fund.

Featherston Community Board

Chairperson:	An elected member appointed by Featherston Community Board members.
Membership:	Four Featherston ward members elected by the community. Two councillors appointed by the Mayor.
2016-2019 Appointments:	Cr Colin Olds and Cr Ross Vickery
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Chief Executive Officer.
Quorum:	Three members.
Meeting Order:	Conducted in accordance with Standing Orders and the Local Government Official Meetings and Information Act 1987.

Functions:

- Refer to the Community Board Terms of Reference.

Delegations:

- All matters relating to urban reserves, urban amenities and town main streets that meet current Council policy or management plans and fall within the Annual Plan/Long Term Plan budget.
- Recommendations to Council re naming for public roads, private roads and rights of way.
- Discretionary spend on projects and community grants.
- Determination of priorities for and expenditure of town beautification fund.
- Recommendations to Council on suitable projects for funds received from the sale of 57 Fitzherbert Street, Featherston.

Greytown Community Board

Chairperson:	An elected member appointed by Greytown Community Board members.
Membership:	Four Greytown ward members elected by the community Two councillors appointed by the Mayor.
2016-2019 Appointments:	Cr Mike Gray and Cr Colin Wright
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Chief Executive Officer.
Quorum:	Three members.
Meeting Order:	Conducted in accordance with Standing Orders and the Local Government Official Meetings and Information Act 1987.

Functions:

- Refer to the Community Board Terms of Reference.

Delegations:

- All matters relating to urban reserves, urban amenities and town main streets that meet current Council policy or management plans and fall within the Annual Plan/Long Term Plan budget.
- Recommendations to Council re naming for public roads, private roads and rights of way.
- Discretionary spend on projects and community grants.
- Determination of priorities for and expenditure of town beautification fund.
- Recommendation to Council on the appointment of a representative to the Arbor House Trust Board.

Māori Standing Committee

Chairperson:	The chairperson and deputy chairperson are elected by the Committee.
Membership:	Three councillors appointed by the Mayor. Two representatives from each of the three South Wairarapa district marae, two representatives from Pae tu Mokai o Tauira, and one representative from each of the two Wairarapa iwi. Nominations must be received in writing from each participating body. Membership is ratified by Council.
2016-2019 Appointments:	Cr Pip Maynard, Cr Brian Jephson and Cr Ross Vickery
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Chief Executive Officer.
Quorum:	7 members.
Meeting Order:	Conducted in accordance with Standing Orders and the Local Government Official Meetings and Information Act 1987.

Functions:

- Refer to the Māori Standing Committee Terms of Reference.

Delegations:

- Discretionary spend on community grants and projects.
- Determination of criteria and allocation of marae development fund granted in the 19/20 Annual Plan to local marae.

Hearings Committee

Chairperson:	A Councillor who holds the 'chair' and hearings commissioner[1] accreditation except when independent hearings commissioners are appointed for hearings under the Resource Management Act (RMA). An appointed councillor for all other hearings.
Membership: (*on RMA matters*)	Up to three councillors who hold the hearings commissioner accreditation which may include appointments from Carterton or Masterton District Councils. Independent commissioners will be appointed for specific hearings as required.
Membership: (*on other matters such as but not limited to, hearings under the Dog Control Act, Wairarapa Gambling Policy and Reserves Act*)	Above members *PLUS* other councillors if appointed (by the Mayor).
Membership: (*on Reserve Management Plan Hearings)*	Mayor and all councillors.
Meeting Frequency:	As required.
Convened by:	Group Manager Planning and Environment.

Notes:

1. Hearings commissioner accreditation is required for Resource Management Act hearings only.
2. Current RMA accredited members: Mayor Viv Napier, expiry 30 June 2022 and Deputy Mayor Brian Jephson, expiry 30 June 2020

Functions

- To hear and consider matters as related to but not limited to the Resource Management Act, the Dog Control Act, Wairarapa Gambling Policy and the Reserves Act.

District Licensing Committee

Chairperson:	Commissioner.
Membership:	One councillor, one commissioner and seven external members appointed by Council.
Membership:	One councillor, one commissioner and seven external members appointed by Council.
Appointments:	Julie Riddell (Chair), Cr Margaret Craig (Deputy chair), Damien Pivac, Gregory Ariell, Jessie Hunt, Catherine Rossiter-Stead, Bruce Farley, Andrew Beck, Donald Adams (until 30 June 2023). Note: Chair appointed until 30 June 2023, but appointment subject to a review on 30 June 2021
Meeting Frequency:	As required.
Convened by:	Group Manager Planning and Environment.

Functions and delegations:

- s187 of the Sale and Supply of Alcohol Act 2012.

Chief Executive Officer's Review Committee

Chairperson:	Mayor.
Membership:	Mayor, Deputy Mayor and three councillors appointed by the Mayor. All councillors to participate in a pre-review workshop to discuss performance matters.
Appointments:	Mayor Viv Napier, Cr Colin Olds, Cr Brian Jephson, Cr Pip Maynard and Cr Colin Wright
Meeting Frequency:	As required.
Convened by:	Mayo in conjunction with an external advisor
Quorum	Three members.

Functions:

- Refer to the Chief Executive Officer's Review Committee Terms of Reference.

Finance, Audit and Risk Committee

Chairperson:	Deputy Mayor.
Membership:	Deputy Mayor and three councillors appointed by the Mayor.
Appointments:	Cr Brian Jephson, Cr Colin Wright, Cr Ross Vickery and Cr Pam Colenso.
Meeting Frequency:	Quarterly
Convened by:	Group Manager Corporate Support.
Quorum	Two members.

Functions:

- Refer to the Finance, Audit and Risk Committee Terms of Reference.

Assets and Services Committee

Chairperson:	Cr Jephson The chair is appointed by the Mayor.
Membership:	Six councillors (one ward based with the remainder skill based), chair of each community board and the chair of the Māori Standing Committee appointed by the Mayor.
Appointments:	Cr Jephson, Cr Gray, Cr Carter, Cr Colenso, Cr Olds, Cr Wright Community Board Chairs: Lisa Cornelissen, Robyn Ramsden, Leigh Hay Māori Standing Committee Chair: Raihānia Tipoki
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Group Manager Infrastructure and Services
Quorum:	Five members (half the appointed members).

Functions:

- Refer to the Assets and Services Committee Terms of Reference

Planning and Regulatory Committee

Chairperson:	Cr Olds The chair is appointed by the Mayor.
Membership:	Six councillors (one ward based with the remainder skill based), chair of each community board and the chair of the Māori Standing Committee appointed by the Mayor.
Appointments:	Cr Olds, Cr Carter, Cr Vickery, Cr Jephson, Cr Maynard, Cr Wright Community Board Chairs: Lisa Cornelissen, Robyn Ramsden, Leigh Hay Māori Standing Committee Chair: Raihānia Tipoki
Meeting Frequency:	6-weekly, dates as per an adopted schedule of meetings. Extraordinary meetings may be held on occasions.
Convened by:	Group Manager Infrastructure and Services
Quorum:	Five members (half the appointed members)

Functions:

- Refer to the Planning and Regulatory Committee Terms of Reference

57 Fitzherbert Street Subcommittee

Chairperson:	Robyn Ramsden The chair is elected from within the Subcommittee.
Membership:	Three Featherston councillors and the chair of the Featherston Community Board.
Appointments:	Cr Vickery, Cr Olds and Cr Carter Featherston Community Board Chair: Robyn Ramsden.
Meeting Frequency:	As and when required in order to progress the purpose in a timely manner.
Convened by:	SWDC Amenities Manager.
Quorum:	Three members.

Note:

The SWDC Chief Executive and SWDC Amenities Manager will attend as officers to work with the Subcommittee.

Functions:

- Refer to the 57 Fitzherbert Street, Featherston Subcommittee Terms of Reference
- Reports directly to Council.

Annual Plan/Long Term Plan Working Party

Chairperson:	Mayor.
Membership:	Mayor and all councillors, chair of each Community Board, one representative of the Māori Standing Committee.
Meeting Frequency:	As required in the six months prior to the release of the Annual/Long Term Plan.
Convened by:	Group Manager Corporate Support
Quorum:	Seven members (half the appointed members)

Functions:

- Refer to the South Wairarapa Annual Plan/Long Term Plan Working Party Terms of Reference.

Tenders Working Party

Chairperson:	Mayor.
Membership:	Mayor and one councillor.
Appointments:	Councillor to be co-opted based on availability.
Meeting Frequency:	As required.
Convened by:	Any of the Group Managers as required.
Quorum:	Two members.

Functions:

- Refer to Procurement of Goods and Services Policy M500.

Community Safety and Resilience Working Party

Chairperson:	Cr Pam Colenso Chair appointed by the Mayor
Membership:	Three councillors, one representative from each community board, others as per the Terms of Reference.
Appointments:	Cr Lee Carter, Cr Pip Maynard, and Cr Pam Colenso.
Meeting Frequency:	Quarterly
Convened by:	Infrastructure and Services Group Manager
Quorum:	Four members, two to be elected members.

Functions:

- Refer to the Community Safety and Resilience Working Group Terms of Reference.

Civic Awards Working Party

Chairperson:	Cr Margaret Craig Chair appointed by the Mayor.
Membership:	Mayor and three councillors (one councillor from each ward) appointed by the Mayor.
Appointments:	Mayor Viv Napier, Cr Pam Colenso, Cr Margaret Craig and Cr Lee Carter.
Meeting Frequency:	As and when required for holding awards biennially.
Convened by:	Mayor.
Quorum:	Two members.

Functions:

- Refer to the Civic Awards Working Party Terms of Reference.

Sport NZ Rural Travel Fund Assessment Group

Chairperson:	Deputy Mayor
Membership:	Deputy Mayor and two councillors appointed by the Mayor.
Appointments:	Cr Brian Jephson, Cr Lee Carter, and Cr Pip Maynard
Meeting Frequency:	As required but generally once a year.
Convened by:	Committee Advisor.
Quorum:	Two members.

Functions:

- Refer to the Grants Policy and Sport NZ Rural Travel Fund Assessment Group Terms of Reference.

Creative Communities Scheme Assessment Group

Chairperson:	Elected from within the group on a yearly basis.
Membership:	Councillor appointed by the Mayor. Other non-elected members appointed as per the contract with Creative NZ.
Appointment:	Cr Lee Carter.
Meeting Frequency:	Between two-four times per year.
Convened by:	Committee Advisor.
Quorum:	Three members.

Functions:

- Refer to the Grants Policy and the Creative Communities Scheme Assessment Group Terms of Reference.

Water Race Subcommittee

Chairperson:	Cr Olds Chair appointed by the Mayor.
Membership:	Two councillors appointed by the Mayor. Other non-elected members selected as per the Terms of Reference: • Three representatives from Moroa Water Race area (one must be a Greytown urban representative) • Two representatives from Longwood Water Race area
Appointments:	Cr Colin Olds and Cr Mike Gray
Meeting Frequency:	At least 3 times a year.
Convened by:	Asset and Operations Manager
Quorum:	Four members (half the appointed members

Functions:

- Refer to Water Race Users Group Terms of Reference.
- Reports to the Assets and Services Committee.

Community Housing Working Party

Chairperson:	Cr Wright Chair appointed by the Mayor
Membership:	Five elected members (1 from each ward)
Appointments:	Cr Pam Colenso, Cr Margaret Craig, Cr Ross Vickery, Cr Colin Olds and Cr Colin Wright
Meeting Frequency:	As required
Convened by:	The chair
Quorum:	Three members

Functions:

- Refer to the Community Housing Working Party Terms of Reference

Wairarapa Joint Working Groups and Committees

Wairarapa Library Service Joint Committee (a joint committee with Carterton District Council)

Chairperson:	Elected from committee
Membership:	Two elected South Wairarapa District Council members. It is recommended that one elected member is an elected community board member. Interest is sought from all community board members. Appointments are made by the Mayor. Carterton District Council's representatives as determined by their Mayor and/or Council
Appointments:	Cr Pam Colenso, Featherston Community Board Chair Robyn Ramsden.
Meeting Frequency:	Quarterly and as required.
Convened by:	SWDC Amenities Manager and CDC Library Manager

Functions:

- Refer to the Wairarapa Library Service Joint Committee Terms of Reference.

Delegations:

- To hear and determine submissions to the WLS Strategic Plan for recommendation to each Member Authority.

Wairarapa Combined District Plan Working Group (a joint working group with Carterton and Masterton)

Chairperson:	Elected from within the working group.
Membership:	Mayor and two councillors. Masterton and Carterton District Council's representatives as determined by their mayors.
Appointments:	Mayor Viv Napier, Cr Brian Jephson and Cr Colin Olds.
Meeting Frequency:	As required.
Convened by:	Planning and Environment Group Manager following the recommendation from one or more of the Wairarapa councils that a plan change is required.

Functions:

- To approve proposed plan changes for notification, hear submissions and release decision.
- To instigate reviews of the Wairarapa Combined District Plan.

Wairarapa Policies Working Group (a joint working group with Carterton and Masterton)

Chairperson:	Elected from within the Working Group
Membership:	Two councillors appointed by Mayor Masterton and Carterton District Council's representatives.
Appointments:	Cr Mike Gray, Cr Ross Vickery
Meeting Frequency:	As required
Convened by:	Chairperson

Functions:

- Formulation and review of Wairarapa combined policies and bylaws.

Wairarapa Economic Development Governance Group (a joint group with Carterton and Masterton)

Chairperson:	Dame Margaret Bazley
Membership:	Mayor Masterton and Carterton District Council's Mayors.
Appointment:	Mayor Napier
Meeting Frequency:	As required.
Convened by:	The chair

Functions:

- To identify key economic development objectives for the Wairarapa region.
- To foster collaboration between Councils and local businesses to create opportunities that generate positive economic outcomes.
- To consider and advise Councils on Wairarapa wide economic developments proposals and projects.
- To report progress to the Wellington Regional Economic Development Agency (WREDA) and Wellington Regional Strategy Committee.

Wairarapa Trails Action Group

Membership:	One SWDC councillor appointed by the Mayor
Appointment:	Cr Colin Olds
Meeting Frequency:	Quarterly

Functions and delegations:

- Refer to the Wairarapa Trails Action Group Terms of Reference.

Wellington Region Joint Working Groups and Committees

Wellington Region Waste Management and Minimisation Plan Joint Committee

Chairperson:	Elected from within the Committee at least once a triennium.
Membership:	Wellington regional representative councillors appointed by their council including one SWDC representative.
Appointment:	Cr Pam Colenso
Meeting Frequency:	As required.
Quorum:	Four members.

Functions and delegations:

- Refer to the Waste Management and Minimisation Plan Joint Committee Terms of Reference.

Waste Forum - Wellington Region

Chairperson, and other officers	Elected annually at the Forum Annual General Meeting
Membership:	One Councillor appointed by the Mayor or by Council resolution and one Council officer. Appointments from other councils within the boundaries of Greater Wellington and associate members.
Appointment:	Cr Pam Colenso
Meeting Frequency:	As required.
Quorum:	Four members.

Functions and delegations:

- Refer to the Waste Forum Terms of Reference.

Wellington Region Climate Change Working Group

Chairperson	Elected from within the Working Group at least every triennium
Membership:	One main and one alternate elected member from each council in the Wellington region and three mana whenua representatives from Ara Tahi.[1]
Elected Member Appointment:	Cr Brian Jephson (voting member) and Cr Lee Carter (alternate)
Meeting Frequency:	Quarterly

Functions and delegations:

- Refer to the Wellington Region Climate Change Working Group Terms of Reference.

Wellington Regional Transport Committee

Appointments:	The Mayor to represent Council, Deputy Mayor may attend as alternative.
Set up:	Under the Land Transport Act.

Wellington Regional Strategy Committee

Appointments:	One Wairarapa appointment made in agreement with the other Wairarapa councils.
2016-2019 Appointment:	Mayor Lyn Patterson (Masterton), Deputy John Booth (Carterton)

[1] Ara Tahi is a leadership forum of Greater Wellington Regional Council (GWRC) and its six mana whenua partners who meet to discuss strategic issues of mutual interest (Ara Tahi membership comprises two representatives from each mana whenua authority, two GWRC Councillors and GWRC's Chief Executive).
GWRC will appoint up to three representatives from Ara Tahi, one each representing: East Coast: Wairarapa; West Coast: Otaki to Porirua; Central: Wellington and Hutt Valley. Ara Tahi representatives are entitled to receive GWRCs standard daily meeting fee and mileage allowances for each meeting they attend.

Remutaka Hill Road Working Party

Chairperson:	Elected from within the Committee at least once a triennium.
Membership:	Mayors of Upper Hutt City Council, Carterton District Council, Masterton District Council and South Wairarapa District Council. Representatives from NZTA, NZ Police, Road Transport Association and Automobile Association.
Appointments:	Mayor Viv Napier.
Meeting Frequency:	As required.
Quorum:	Four members

Functions:

- A collaborative group which discusses and addresses issues regarding improving the Remutaka Hill Road which is the key link to the Wairarapa from the South.

Greater Wellington Regional Council (GWRC) Committees

From time to time requests are received for Council representation on Greater Wellington Regional Council Committees.

Wairarapa Committee

Membership:	One councillor (voting) and one alternate appointed by the Mayor. The GWRC Wairarapa elected councillor and two other GWRC councillors. Elected members from MDC and CDC. One member from each of the two Wairarapa iwi, appointed by GWRC
Elected Member Appointment:	Cr Colin Wright (voting) and Cr Brian Jephson.
Convened by:	GWRC.
Frequency:	Quarterly and as required
Function:	Refer to Wairarapa Committee Terms of Reference

Awhea Opouawe Scheme Committee

Appointments:	One councillor appointed by the Mayor.
Elected Member Appointment:	Cr Brian Jephson.
Convened by:	GWRC.

Lower Valley Development Scheme Advisory Committee

Appointments:	One councillor appointed by the Mayor.
Elected Member Appointment:	Cr Colin Olds.
Convened by:	GWRC.

Wairarapa Moana Wetlands Governance Group

Appointments:	One councillor appointed by the Mayor.
Elected Member Appointment:	Cr Colin Olds.
Convened by:	GWRC.

Ruamahunga Whaitua (Catchment) Committee

Appointments:	One councillor appointed by the Mayor.
Elected Member Appointment:	Cr Colin Olds. (Note: there is additional remuneration for this role).
Convened by:	GWRC.

Waiohine Floodplain Management Plan Steering Group

Appointments:	Two councillors appointed by the Mayor
Elected Member Appointment:	Cr Mike Gray and Cr Colin Wright
Convened by:	GWRC.

Representation on Other Organisations

From time to time requests are received for Council representation on community organisations or initiatives. These requests are considered on a case by case basis with appointments made as seen fit by the Mayor.

Destination Wairarapa Board

Appointments:	Councillor or member of the public with business and/or financial skills appointed by the Mayor or by Council resolution.
Council Appointment:	Paul Broughton (External appointment)
Role Description:	As per the Destination Wairarapa Constitution. To report quarterly to Council on Destination Wairarapa activities and to take Council's views back to Destination Wairarapa Board.

Cobblestones Museum Trust

Appointments:	One Councillor appointed by the Mayor or by Council resolution.
Elected Member Appointment:	Cr Colin Wright
Role Description:	As per the Cobblestones Museum Trust Document.

Arbor House Trust Board

Appointments:	One representative appointed by Council resolution (to be recommended by the Greytown Community Board).
Appointment:	Dr Rob Tuckett (External appointment)
Role Description:	As per the Arbor House Trust Deed

Wairarapa Safer Community Trust Board

Appointments:	One Councillor appointed by the Mayor or by Council resolution.
Councillor Appointment:	Cr Pam Colenso

Wairarapa Road Safety Council Inc.

Appointments:	One Councillor appointed by the Mayor or by Council resolution.
Councillor Appointment:	Cr Colin Olds
Role Description:	As per the Wairarapa Road Safety Council Constitution.

Palliser to Palliser (P2P)

Appointments:	One elected member
Memberships	Department of Conservation, local government agencies, iwi, Federated Farmers
Council appointment:	Clive Paton (External appointment)
Convened by:	Department of Conservation

Hire of Council Facilities

1. RATIONALE:

To provide general guidelines for both the general public and Council staff in the provision of Council facilities that are available for hire.

2. PURPOSE:

To set out broad details of the conditions applicable to the Council facilities/halls used by responsible organisations, groups and individuals.

3. GUIDELINES:

3.1 Terms and Conditions

The Council provides details of the terms and conditions applicable for the hire of each Council facility which is available from the Council offices, Service Centres and website.

The Terms and Conditions including charges, set out full details of a hirer's obligations and responsibilities. These include details of the responsibilities regarding supply or sale of alcohol during the hire period and the areas these specifically relate to.

The CEO may vary the area to include a specified area external to a hall or Council property depending on the nature of the event or activity.

Terms and Conditions are reviewed from time to time and may be amended, altered or rescinded at any time.

Full Terms and Conditions of Hire for each facility are available on the following links:

- Featherston - Anzac and Kiwi Halls
- Featherston Stadium
- Greytown Town Centre
- Martinborough Town Hall and Supper Room

3.2 Payment of Charges

All charges are payable by the relevant due dates and no credit will be given. Refunds of bonds will be made only after Council staff have carried out a detailed post-hire inspection.

4. CURRENT FACILITIES AVAILABLE:

4.1 Halls and Meeting Rooms

Featherston

- Anzac Hall (including Supper Room)
- Kiwi Hall
- Card Reserve Sports Stadium

Greytown

- Town Centre (including Forum, WBS Room and upstairs meeting rooms)

Martinborough

- Town Hall (including Supper Room)
- Supper Room

4.2 Bookings for the use of the facilities are administered by the Council officers. Details of bookings made are held primarily by the Council officers with information also available from the respective offices:

- Martinborough : Council office
- Featherston : Library/Service Centre
- Greytown : Library/Service Centre

4.3 Terms and Conditions of hire, together with a schedule of hire charges, an Evacuation Guide for hirers, and an application to hire form, are held by the Council officers and also available from the respective offices.

5. REVIEWS:

5.1 This policy will be reviewed as shown below.

5.2 Charges are reviewed annually at the time of the Annual Plan/LTP.

5.3 Terms and Conditions and Hire Charges are reviewed from time to time and are issued by the Chief Executive Officer.

Policy for the Display of Artworks In the Greytown Town Centre

1. **RATIONALE:**
   To provide guidelines for the acquisition, management, display and storage of artworks in the Greytown Town Centre

2. **PURPOSE:**
   To ensure there is a consistent approach when displaying or affixing any form of artwork within the Greytown Town Centre to ensure all display is consistent, effective and enhances the public spaces of the building.

   The focus of this policy is **only** on art works to furnish the interior of the building, including the Foyer, Forum, WBS Room, Library, stairwell and Joe Rewi meeting room.

3. **GUIDELINES:**

   3.1 A sub-committee of three persons, appointed by the Greytown Community Board plus a Council Officer, at the commencement of each triennium, will be responsible for approving and determining the method of affixing and display of all artworks.
   3.2 The sub-committee will also be responsible for the location, management and conservation of all artworks in the building.
   3.3 The sub-committee will meet as required to determine acquisition, displays and rotation of artwork.
   3.4 Definition of artworks includes but is not limited to plaques, photos, prints, paintings, wall hangings, sculptures, banners or needlework being displayed or affixed on any surface of the building.
   3.5 Artworks do not include photocopies, stickers, brochures, newsletters, posters and signs - none of which should be affixed to any vertical surface of the building without approval.
   3.6 All staff must ensure that sub-committee approval is provided prior to affixing any item to the walls or any other surface apart from the library furniture.
   3.7 No individual has the right to affix any item to a wall or other surface without prior approval of the sub committee.
   3.8 All displays of artwork must be affixed in a manner that will not damage any surface of the building.
   3.9 Donations of artworks from individuals and groups in the community, including bequests, may be accepted at the discretion of the sub-committee.
   3.10 In general, more significant works will be displayed in key public spaces. Adequate circulation of stock will be maintained, especially turnover of works in key public spaces. The focus of display will be on matching works to appropriate spaces, in terms of dimension, visibility and profile.
   3.11 An inventory of artworks held in the collection will be maintained.
   3.12 Artwork not currently displayed will be stored securely in the archives pod.
   3.13 Insurance of privately owned artwork approved for display will be the responsibility of the owner.
   3.14 Hirers of the facility wishing to display items during the period of hire, e.g. exhibitions, promotions, displays, concerts and functions which must comply with the terms and conditions of hire held at the SWDC Greytown Service Centre.

3.15 In case of dispute or any ambiguity, the final decision will rest with Council.

STREET DAYS, APPEALS AND RAFFLES

1. RATIONALE:

Council wishes to loosely manage activities on the streets in the District such as street days, appeals and raffles to minimise any inconvenience to the public and businesses.

2. PURPOSES:

To set out conditions for those conducting street activities.

3. GUIDELINES:

3.1 Persons or organisations wishing to conduct a street day or a raffle must register their interest with the Council and request approval of a date.

3.2 Where there is competition for allocations of a street day, South Wairarapa District organisations will be given priority.

3.3 The management of businesses and shops adjacent to an intended location at which an appeal is based or used is to be consulted prior to the day on which an appeal is to take place.

3.4 On authorised street days, any prizes that may be offered, can be displayed over a maximum of two parking spaces provided that the approval of adjacent shop owners is obtained and official "No Parking" signs are hired from the South Wairarapa District Council office.

3.5 For any event that involves food being prepared, or cooked, on site, other than pre-packaged food, as part of fund raising activities, the Council's Environmental Health Officer is to be consulted prior to the approved date for the event, or appeal.

3.6 Street day appeals may not be located in or near Council owned or occupied premises without Council's permission.

3.7 Applicants may not physically approach the public to ask for donations or other support.

Note. This Policy should be read in conjunction with the Public Places and Trading in Public Places By laws.

STREET BANNERS AND FLAGS

1. RATIONALE

Council supports many events and organisations through the display of street banners and flags. To ensure a consistent approach for all organisations and groups, including Council, a flags policy is required to assist officers and Council determine priorities in display.

2. PURPOSE

1. To set out guidelines to Council's elected members and Council employees who are required to determine use of poles and brackets and what may be displayed.
2. To streamline the approach of taking bookings for street flags throughout the district.

3. GUIDELINES

1. To streamline the approach of taking bookings for street flags throughout the district, Council requires that anyone wanting to install street flags or banners make an application through the respective community board in writing. The application must include:

    a. The dates of installation and removal.

    b. Reason for installation, event details.

    c. Description or picture of the banner or flag.

2. While the respective community board approves and takes bookings for street flags it is the applicant's responsibility to arrange installation and removal of their flags on the applied dates by a Council approved contractor.
3. It is the responsibility of the applicant to maintain the standard of the flags during the installation period.
4. It is the responsibility of the applicant to reinstate flags previously hanging.
5. Due to the application being required to go to the appropriate community board for comment and allowing time for amendments in design (if required) and subsequent print times, applications must be received no later than forty (40) working days prior to the applied installation date.
6. Applicants (or the approved contractor) are required to apply for a non-excavation Corridor Access Request/Works Access Permit via the link on the SWDC website and supply a Traffic Management Plan at least fifteen working days prior to the installation date.

7. Any deviation from the approved banner/flags or event signage without previous agreement with the respective community board may result in the removal of the banner/flag or event signage.

8. The applicant is responsible for all charges incurred by Council in the event of any emergency works necessary to make the street flags safe and for any removal and reinstatement costs incurred by Council should the applicant fail to remove the flags by the agreed date.

9. In determination of appropriate usage the community board will consider the following:

   a. Previous use and historical context.

   b. The commercial or community nature of the event or occasion.

   c. Cost recovery or financial support to the event or occasion.

   d. The financial contributions made by or to the applicant present or historical.

   e. To help make the design more effective it is recommended that:
   - Graphics be simple and bold.
   - Text only be used where it forms part of the established image of the event or logo.
   - Text be large enough to be read from a distance and be kept to no more than a few words.
   - Dates and venues are best avoided, as they are difficult to read.
   - Montages, slogans and extended text should be avoided.
   - White backgrounds should be avoided as they soil easily and are difficult to see against the greyness of the winter weather, often inhibiting legibility.
   - Material deemed to be inappropriate or offensive to the community at large, or to any sector of the community, will not be permitted.

10. The community board reserves the right to refuse design applications at its discretion.

11. Any sign or banner must not contravene the Wairarapa Combined District Plan or other plans, bylaws or guidelines.

OFFICERS' REPORT

Purpose of Report

To report to the board on general activities.

Recommendations

Officers recommend that the board:

1. Receive the Officers' Report.

PLANNING AND ENVIRONMENT GROUP REPORT

This report was presented to the Planning and Regulatory Committee on 13 July 2022.

1.1 Planning Services

The regular flow of land use and subdivision consent applications continues, some recent cases tending to me more complex. Subdivision certifications busy, many residential and rural lots being completed, and ongoing subdivision for 4ha lots in rural zone. Team is active across the realms of consenting and advice, future policy, growth work, including the WCDP review and Featherston Masterplan work.

1.2 Building Services

Timely processing for building consents continues with the team. The bi-annual audit of our BCA by IANZ was completed successfully, thanks to Sara and team for the multiple efforts in responding to related matters. Team is still seeing a steady number of applications for building work, the volume of inspections has been high, and helpful inspection advice given out across the district.

1.3 Environmental Services

Overall, the team remains busy in the various licensing, regulatory work throughout the district. The dog registration period for 2022/23 year is upon us and it has run relatively smoothly so far. Alcohol team have recently inquired into alcohol applications which has seen opposition being raised by the agencies, these matters likely to be answered by a hearing process. COVID has still had an impact on staff.

1.4 Proposed Legislative Change to the RMA

The Government continues to reform the Resource Management system, the RMA 1991 will be repealed, replaced by 3 new Acts:

- Natural and Built Environments Act (NBA) - for land use/environmental regulation (the primary replacement for the RMA). The draft was released for submissions
- Strategic Planning Act (SPA) - to integrate with other legislation relevant to development, and require long-term regional spatial strategies
- Climate Change Adaptation Act (CAA) - address issues managed retreat, adaptation.

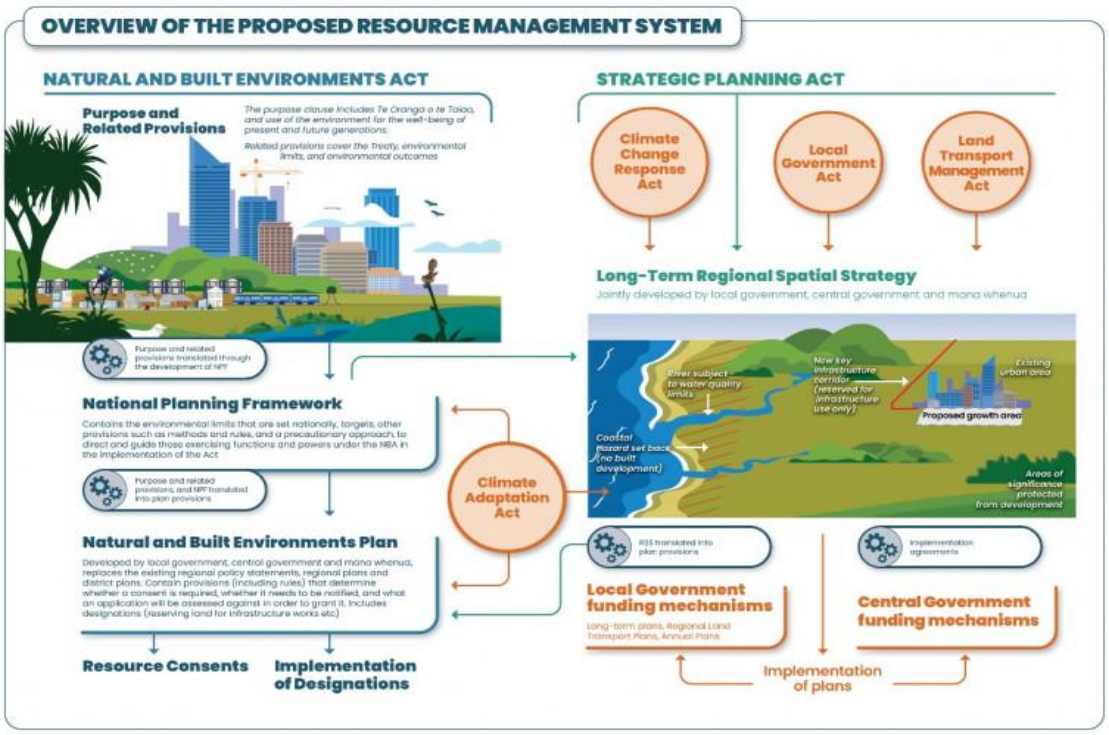
On the changes MFE information also advises that:

- The Natural and Built Environments Act and the Strategic Planning Act will be formally introduced in 2022.
- Standard legislative and select committee process will follow, the aim of NBA being passed into law this parliamentary term. The CAA will be progressed in this time too.

In terms of the objective of the reforms, together this suite of legislation will:

- protect and restore the environment and its capacity to provide for the wellbeing of present and future generations
- better enable development within natural environmental limits
- give proper recognition to the principles of Te Tiriti of Waitangi and provide greater recognition of te ao Māori including mātauranga Māori
- better prepare for adapting to climate change and risks from natural hazards, and better mitigate emissions contributing to climate change
- improve system efficiency and effectiveness, reduce complexity while retaining appropriate local democratic input.

Underlying themes within the reform include new regional level planning documents, more cohesive planning, providing stronger future spatial planning, and the use of natural environment limits.



1.5 South Wairarapa Spatial Plan / The Featherston Masterplan

The Council prioritised and approved the development of a Featherston Masterplan following the adoption of the District Spatial Plan in 2021. Masterplan work in 2022 involves engagement with agencies, community engagement, options considerations, integrated planning, infrastructure assessment, forming of a foundation discussion document, reporting, compilation of a draft masterplan, consultation and feedback, refinement work and compilation of final masterplan.

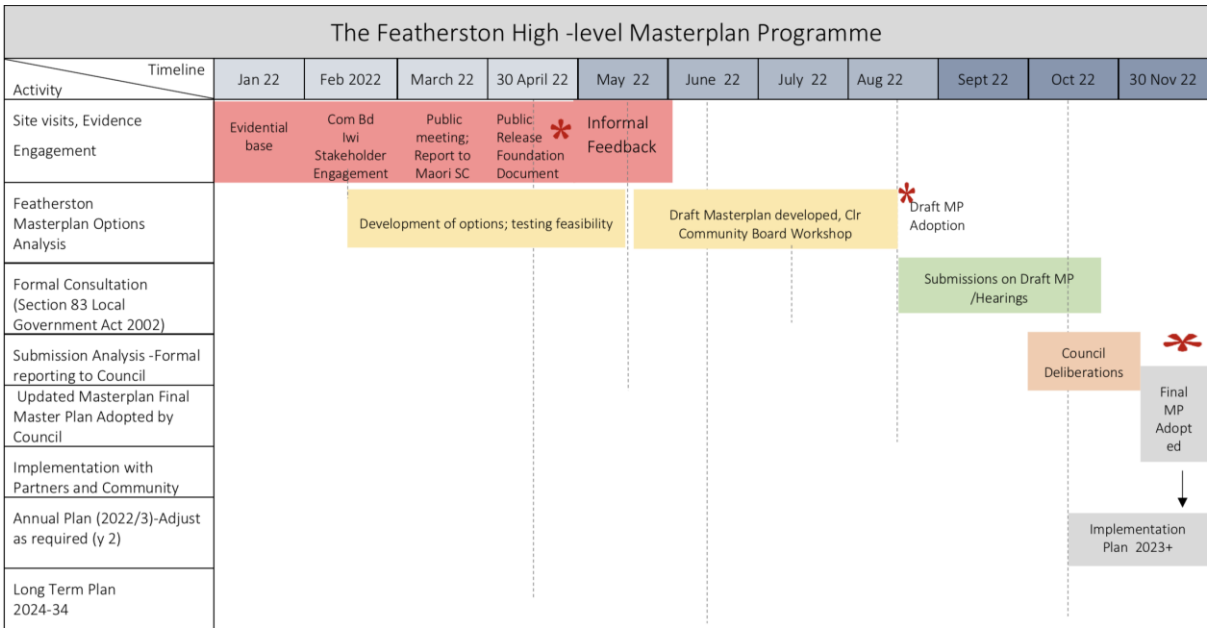
Initial Engagement	Date
• Meeting with Chair Maori Standing Committee (MSC) • Meeting with Chair MSC, and member Karen Mikaere (Mana whenua and MSC member) • Report to MSC	1 Feb 21 Feb 29 Feb
• Report to Featherston Community Board	22 Feb
• Meeting with Chair Wairarapa Economic Dev Strategy Governance Group	1 Feb
• Online meetings with GWRC, Waka Kotahi, MHUD/Kainga Ora	22 Feb
• Online meeting with Masterton District Council Staff	21 Feb
• Public Meeting	30 March
• Planned meeting with Fab Feathy	31 March

Further Engagement Undertaken for the Masterplan has included the following:

- Engagement with representatives of Pae tū Mokai o Tauira. This included meetings in person and online. It also included a Pae tū Mokai o Tauira representative engaging directly with Māori residents to seek their views on future of Featherston.

- Discussion Featherston Knitting Group - 29 April
- Discussion with Booktown representative - 23 May
- Discussion with Fareham House Creative Space -26 May
- Meeting with Five Trails Trust - 26 May
- Discussion with Powerco - 31 May
- DIA/Fab Feathy meeting - 1 June
- Meeting with Wairarapa Moana Trail – 7 June
- Discussion with Powerco – 17 June 2022

Note. A report and Draft Featherston Masterplan Foundation Discussion Document will be presented for consideration at the Council Meeting of 14 July 2022.



1.5.1. Next steps

- Ongoing engagement multiple sectors, community
- Developing a Foundation Document, further engage, draft options for feedback
- Complete draft Masterplan
- Further engagement/formal consultation under Local Government Act 2002
- Finalise masterplan
- Use this to help inform the new District Plan, the Long-Term Plan and projects including projects with central government.

1.6 Featherston Master Plan - included within Complex Development Opportunities for Wellington Regional Growth

Featherston has been included within a key list of growth area projects for the wider Wellington region. The Featherston Master Plan was recently placed 7th on the list of the 7 key CDO's Complex Development Opportunities for growth within the region. The

seven CDO's are understandably representative of important growth locations and area initiatives for the whole of Wellington. The seven identified CDO areas of growth focus are:

- Riverlink – HCC
- Waterloo Station – GW
- Trentham – UHCC
- Otaki – KCDC
- Porirua North – PCC
- Let's Get Wellington Moving, Courtney Place – WCC
- Featherston - SWDC

Going forward, the purpose is to progress and implement these key projects via combined place-shaping, align agency efforts and support with the growth work of the subject Council. This means that Featherston like the other CDO's will have applied inter-agency liaison, further support, and government investment for implementing growth provision results.

1.7 District Plan Review

District Plan Review Committee continues to consider extent of change needed for chapters, alongside the national planning standards, national direction. The DP review is a partial review; a mix of general review of key chapters, targeted review for some, minor review. The review is across 2021-2023, appeals work in 2024. Release of the draft provisions for informal consultation has been discussed, with the timeline moved to late October. It will result in additional workloads to get the draft completed, including additional Committee meetings to ensure that there is no slippage and that the draft be completed on time and meet National Planning Standards timeline in 2024.

The advisory group and combined WCDP Review Committee continue to examine the draft chapters and issues. Both groups are meeting more regularly through until the completion of drafting in August, preparation for informal consultation on the draft in October. Work has included the topics of, notable trees, subdivision, future urban, open space, infrastructure, energy, natural hazards, heritage, biodiversity, residential, settlement zones.

Topic work to come includes the matters of transport, subdivision standards, zoning/maps, Māori purpose and tangata whenua chapters, noise, lighting. Key area to note is work that SWDC are doing on the Martinborough wine growing soils with Wairarapa Wine Growers Society. The team met with MPI to talk through the unique nature of the South Wairarapa and the importance of soils to the vitality of its centres.

Workshops were held with staff on new approach to financial contributions, several models and approaches are being looked at. Solution for framework on natural hazards, particularly stormwater and river flooding are still being sought in conjunction with GWRC and WWL.

1.8 Proposed Council Dog Pound

Officers have identified an area of 1800m2 located at 23 Viles Road, Featherston (the former golf course). There has been engagement with the necessary stakeholders

regarding the land and officers are progressing with the necessary variation to lease arrangements. Staff have entered the procurement process for the container build. There were 3 parties which formally expressed interest.

This dropped to 2 entering the Request for Proposal (RFP) stage, and finally a preferred supplier has been selected and now entering a contractual arrangement to design/build container. Parties are excited by the opportunity to work through this project. Supplier quotes have been sought for the remaining aspects in the building of the pound.

The requirements around the power source, septic, and water requirements are proving challenging. The quote pricing has been updated due to the shifting construction costs. Please note that the quotes are time restricted and on expiry expect continual increases. SWDC officers are mindful as to other council interests that may want to engage with SWDC, be open for options that do not take away from the SW plan. Map showing location below.

1.9 Building Topic – Earthquake Prone Buildings Update.

The following update covers context information to June 2022. After a change of legislation in 2017 there was a review of the buildings listed on our earthquake-prone buildings register to determine if any could be removed as not falling in the new categories. One of the significant changes was buildings constructed primarily of timber framing without other construction materials providing lateral support, were no longer considered earthquake prone.

This resulted in a significant reduction in the number of buildings on our list with approx. 68 buildings no longer considered earthquake-prone either because they did not meet the profile categories or were primarily timber framed buildings. This review was carried out by LGE Consulting Ltd, in conjunction with Council Building Officers.

On the 5 March 2018 there were 15 Earthquake-Prone building notices issued to properties that had provided reports to Council which identified that a building did not meet the 33% NBS threshold and therefore considered to be an earthquake prone building.
At the same time there were 20 buildings identified as being potentially earthquake-prone which required the owner to provide an engineer's report to verify this. Of the 20 buildings:

- 1 was found to be incorrectly identified and removed from the list.
- 1 building was demolished.
- 1 building has consent to have strengthening work carried out.
- 3 Buildings have been strengthened.
- 3 have had an extension to provide the engineers report.
- 1 has advised an engineer's report is in progress.
- 2 reports have been received and excluded the buildings from being earthquake prone.
- 8 were issued Earthquake-prone building notices – these buildings are classed as unrated as we have not received an engineer's report.

To date we have issued 23 earthquake-prone building notices, 15 on 5th March 2018 and 8 on 8th January 2020, and of those 23:

- 6 have been either demolished or strengthened
- 2 have consent to strengthen but work has not started or is not complete
- 6 are rated 0-20%
- 2 are rated 20-34%
- 7 are unrated

Note. The buildings that have been issued earthquake-prone building notices have 15 years from the date of the notice to have strengthening work completed.

2. Service Levels

SERVICE LEVEL – Council has a Combined District Plan that proves certainty of land-use/environmental outcomes at the local and district levels.

RESOURCE MANAGEMENT KEY PERFORMANCE INDICATORS	TARGET	RESULT	COMMENT SOURCE AND ACTIONS TAKEN TO ACHIEVE TARGET
Ratepayers and residents' image of the closest town centre ranked "satisfied"	80%	89%	NRB 3 Yearly Survey October 2018 (2016: 87%)
The district plan has a monitoring programme that provides information on the achievement of its outcomes (AER's)		-	Consultants have established data to be recorded and stored to enable effective reporting against AER's in WCDP. A final monitoring strategy is still to be completed.

2.1 Resource Management

2.1.1. Resource Management Act – Consents (Year to date 01/07/2021-31/05/2022)

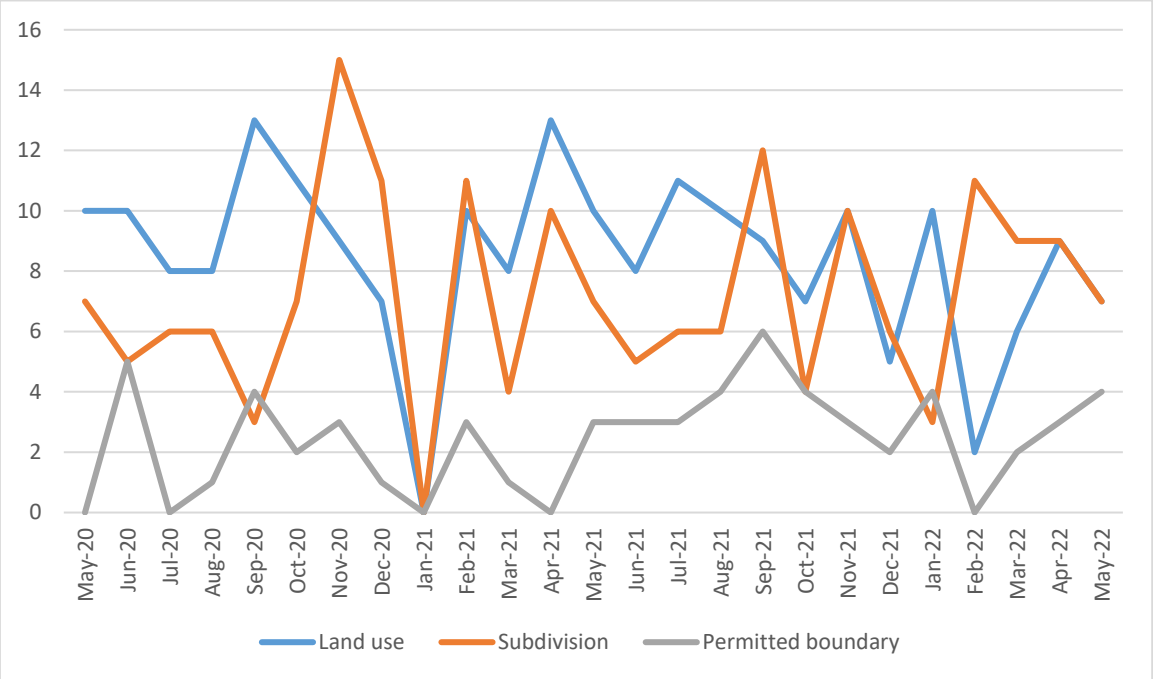
SERVICE LEVEL – All resource consents will be processed efficiently.

RESOURCE MANAGEMENT KEY PERFORMANCE INDICATORS	TARGET	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
Consent applications completed within statutory timeframes	**100%**	**100%**	**Total 197/197**
		100%	79/79 Land Use applications were completed within statutory timeframes. NCS
		100%	84/84 Subdivision applications were completed within statutory timeframes. NCS
		100%	34/34 permitted boundary/marginal activity applications were completed within statutory timeframes. NCS
s.223 certificates issued within 10 working days	100%	100%	59/59 s223 certificates were certified within statutory timeframes. NCS.
s.224 certificates issued within 15 working days of receiving all required information (note no statutory requirement)	95%	100%	53/53 s224 certificates were certified. NCS.

2.1.2. Reserves Act – Management Plans

SERVICE LEVEL – Council has a reserve management plan programme.

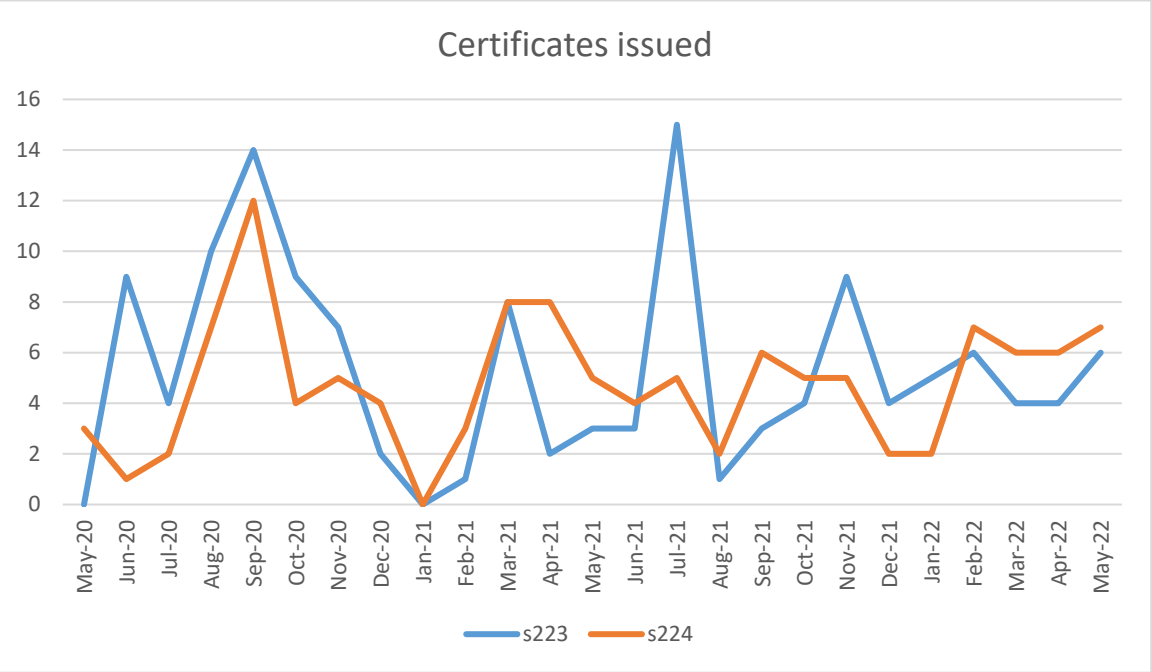
RESOURCE MANAGEMENT KEY PERFORMANCE INDICATORS	TARGET	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
Council maintains, and updates reserve management plans as required.	Yes	Yes	RMP's are generally current and appropriate. It is therefore not anticipated that any updates will be undertaken this year.



Land Use	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	5	6	4	3	10	10	8	8	13	11	9	7
2021	0	10	8	13	10	8	11	10	9	7	10	5
2022	10	2	6	9	7							

Sub division	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
2020	4	6	9	4	7	5	6	6	3	7	15	11
2021	0	11	4	10	7	5	6	6	12	4	10	6
2022	3	11	9	9	7							

Permitted Boundary	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	0	0	2	0	0	5	0	1	4	2	3	1
2021	0	3	1	0	3	3	3	4	6	4	3	2
2022	4	0	2	3	4							



S223	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	2	2	4	6	0	9	4	10	14	9	7	2
2021	0	1	8	2	3	3	15	1	3	4	9	4
2022	5	6	4	4	6							

S224	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	8	3	5	3	3	1	2	7	12	4	5	4
2021	0	3	8	8	5	4	5	2	6	5	5	2
2022	2	7	6	6	7							

2.1.3. Local Government Act – LIMs

SERVICE LEVEL – Land Information Memoranda: It is easy to purchase information on any property in the District.

RESOURCE MANAGEMENT KEY PERFORMANCE INDICATORS	TARGET	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
LIMs contain all relevant accurate information (no proven complaints)	100%		G:\LIMs\LIMS PROCESSED 2021-2022
Standard LIMs are processed within 10 days	100%	98.34%	178/181 standard LIMs were completed in time frame
Urgent LIMs are processed within 5 days	100%	100%	55/55 urgent LIMs were completed

	YTD 1ST JULY 2021 TO 31ST MAY 2022	PREVIOUS YTD 1ST JULY 2020 TO 31ST MAY 2021	PERIOD 1ST MAY 2022 TO 31ST MAY 2022	PREVIOUS PERIOD 1ST MAY 2021 TO 31ST MAY 2021
Standard LIMs (Processed within 10 working days)	181	210	17	19

	YTD 1ST JULY 2021 TO 31ST MAY 2022	PREVIOUS YTD 1ST JULY 2020 TO 31ST MAY 2021	PERIOD 1ST MAY 2022 TO 31ST MAY 2022	PREVIOUS PERIOD 1ST MAY 2021 TO 31ST MAY 2021
Urgent LIMs (Processed within 5 working)	55	88	7	4
Totals	**236**	**298**	**24**	**23**

2.2 Building Act - Consents and Enforcement

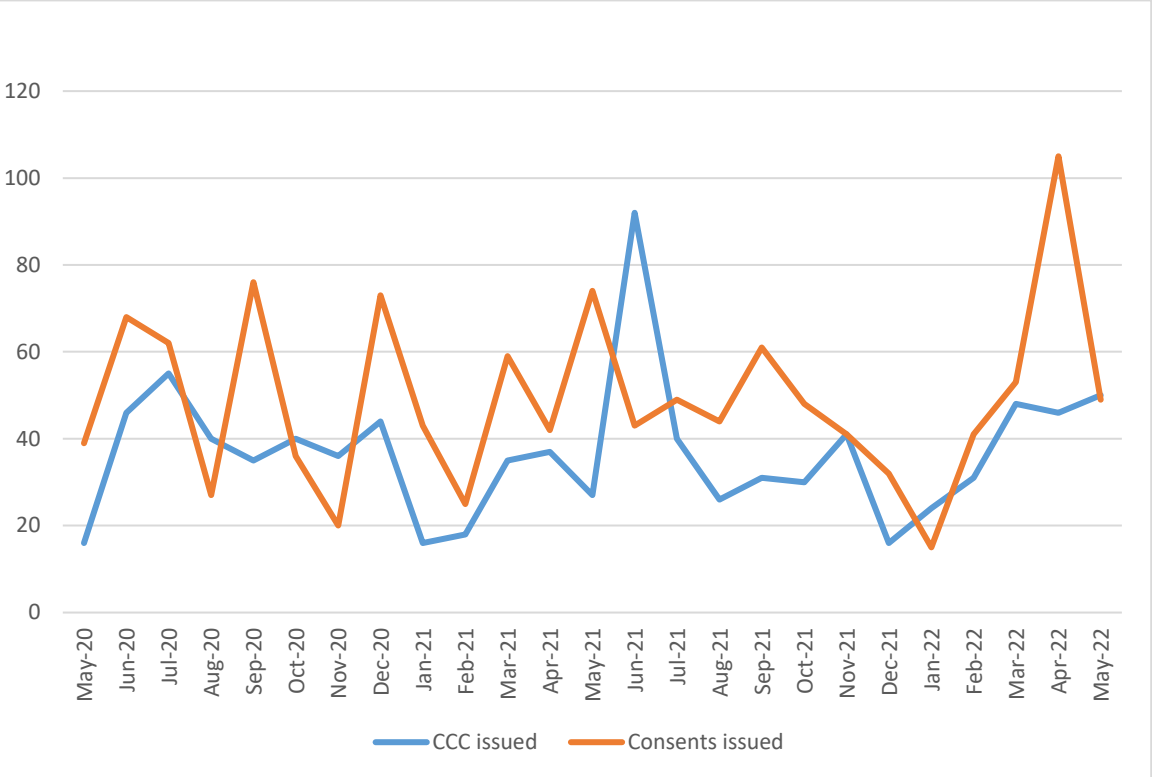
SERVICE LEVEL - Council certifies all consented work complies with the building code, ensuring our communities are safe. The Council processes, inspects, and certifies building work in my district.

PUBLIC PROTECTION KEY PERFORMANCE INDICATORS	TARGET	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
Code Compliance Certificate applications are processed within 20 working days	100%	97.11%	NCS – 370/383 CCC's were issued within 20WD YTD
Building consent applications are processed within 20 working days	100%	97.62%	NCS –534 consents were issued within 20WD YTD 13 consents went over 20WD
Council maintains its processes so that it meets BCA accreditation every 2 years	Yes	Yes	Next accreditation review due January 2022. Council was re-accredited in January 2020
BCA inspects new building works to ensure compliance with the BC issued for the work, Council audits BWOF's and Swimming Pools	Yes	Yes	**Building Consents** Council inspects all new work to ensure compliance May 22 - 500 inspections **BWOF's –** **1** Total 205 average of 4 audits per month required, **Swimming Pools –** Total 408 – average of 12 audits per month required. May 22 – 21 audits
Earthquake prone buildings reports received	100%	N/A	Of the remaining buildings: 17 – Current buildings with Earthquake-prone building notices issued. 2 of these buildings have consent to carry out strengthening work. 3- Requested extension to provide engineers report

2.2.1. Building Consents Processed

TYPE – 1 MAY 2022 TO 31 MAY2022	NUMBER	VALUE
Commercial (shops, restaurants, rest home – convalescence, restaurant /bar / cafeteria / tavern, motel, commercial building demolition - other commercial buildings)	2	$90,000
Industrial (covered farm yards, building demolition, warehouse and/or storage, factory, processing plant, bottling plant, winery)	3	$187,500

Residential (new dwellings, extensions and alterations, demolition of building, swimming and spa pools, sleep-outs, garages, relocations, heaters, solid fuel heaters).	46	$4,777,782
Other (public facilities - schools, toilets, halls, swimming pools)	2	$90,000
Totals	**53**	**$5,145,282**



CCC issued	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	11	24	31	4	16	46	55	40	35	40	36	44
2021	16	18	35	37	27	92	40	26	31	30	41	16
2022	24	31	48	46	50							

Consents issued	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	28	25	35	40	39	68	62	27	76	36	20	73
2021	43	25	59	42	74	43	49	44	61	48	41	32
2022	15	41	53	105	49							

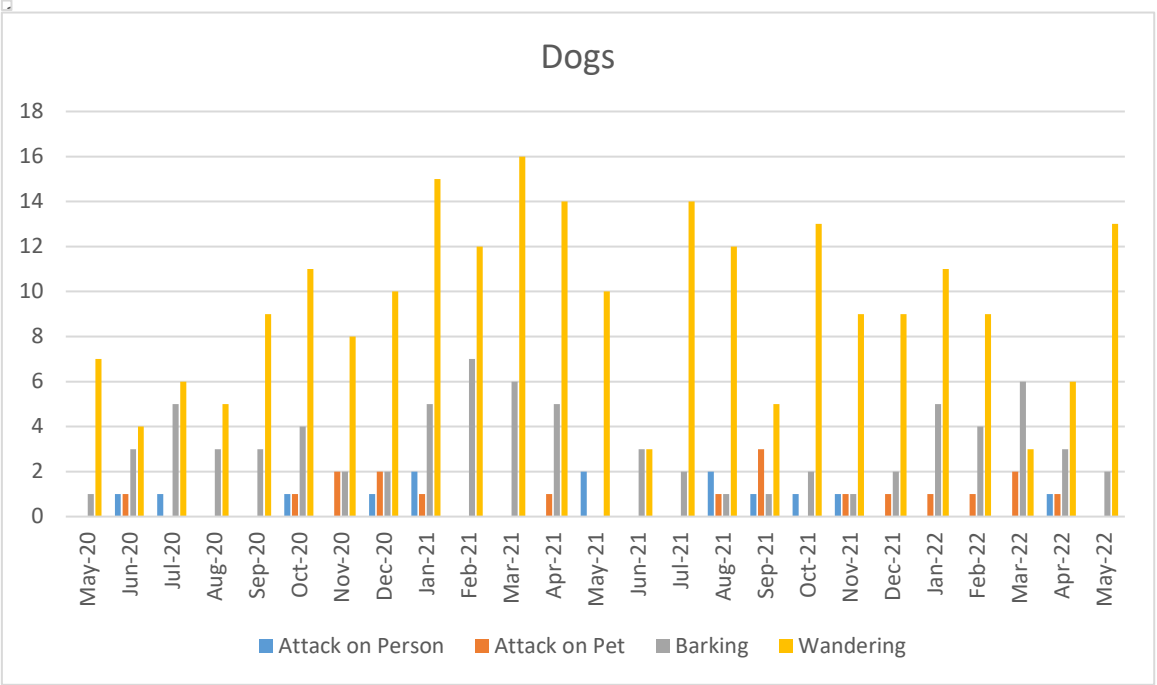
2.3 Environmental Health and Public Protection

2.3.1. Dog Control Act – Registration and Enforcement

SERVICE LEVEL – Dogs don't wander freely in the street or cause menace to humans or stock.

PUBLIC PROTECTION KEY PERFORMANCE INDICATORS	TARGET	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
Undertake public education, school and community visits to promote safe behaviour around dogs and/or responsible dog ownership	3 visits	1	Due to Covid 19 level restrictions this activity is not being able to be undertaken. Dogs n Togs event held in Featherston 2022
Complaints about roaming and nuisance dogs are responded to within 4 hours	100%	100%	K:\resource\Bylaw Officers\Registers\AC Service Requests.xls 188/188
Complaints about dog attacks on persons, animals or stock are responded to within 1 hour	100%	100%	18/18

INCIDENTS REPORTED FOR PERIOD 1ST MAY 2022 – 31ST MAY 2022	FEATHERSTON	GREYTOWN	MARTINBOROUGH
Attack on Pets	-	-	-
Attack on Person	-	-	-
Attack on Stock	-	-	-
Barking	-	1	1
Lost Dogs		1	-
Found Dogs	1	-	-
Rushing Aggressive	1	-	-
Wandering	5	5	3
Welfare	-	-	-
Fouling	-	-	-
Uncontrolled (walked off leash urban)	-	-	-



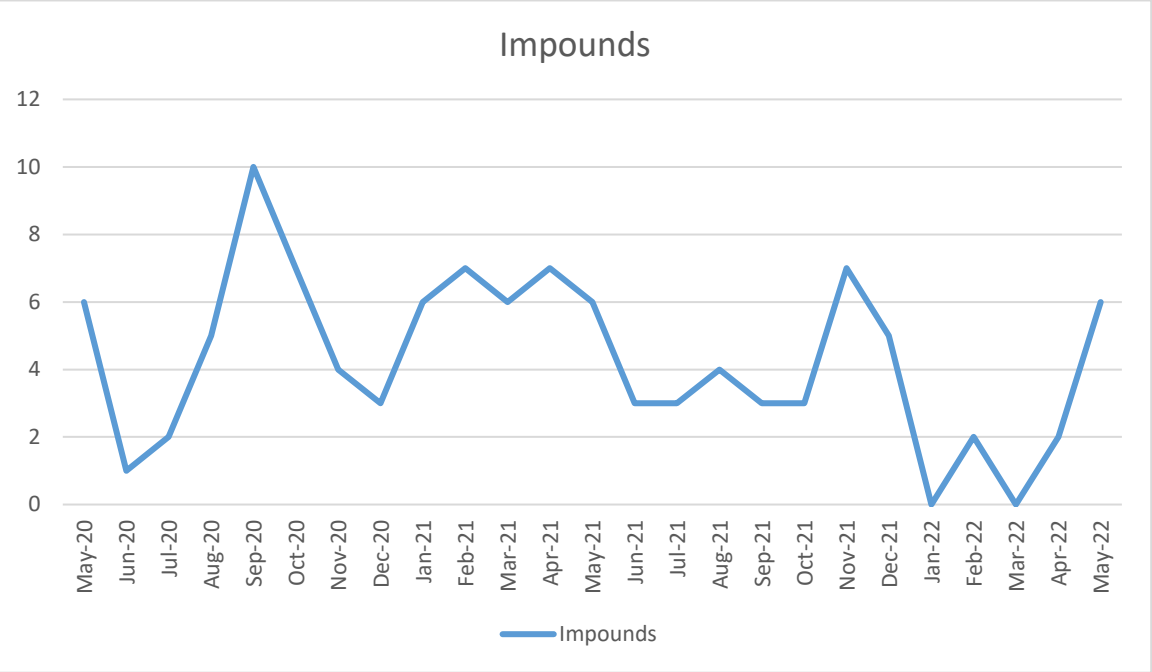
Attack on Person	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
2020	0	2	1	2	0	1	1	0	0	1	0	1
2021	2	0	0	0	2	0	0	2	1	1	1	0
2022	0	0	0	1	0							

Attack on Pet	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	0	0	0	1	0	1	0	0	0	1	2	2
2021	1	0	0	1	0	0	0	1	3	0	1	1
2022	1	1	2	1	0							

Barking	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	1	1	4	2	1	3	5	3	3	4	2	2
2021	5	7	6	5	0	3	2	1	1	2	1	2
2022	5	4	6	3	2							

Wandering	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	11	12	7	3	7	4	6	5	9	11	8	10
2021	15	12	16	14	10	3	14	12	5	13	9	9
2022	11	9	3	6	13							

DOG IMPOUNDS FOR PERIOD 1ST MAY 2022 – 31ST MAY 2022	MAY 2022		
Impounds	6		



Impounds	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	12	15	5	4	6	1	2	5	10	7	4	3
2021	6	7	6	7	6	3	3	4	3	3	7	5
2022	0	2	0	2	6							

2.4 Public Places Bylaw 2012 - Stock Control

SERVICE LEVEL – Stock don't wander on roads, farmers are aware of their responsibilities

PUBLIC PROTECTION KEY PERFORMANCE INDICATORS	TARGET	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
Stock causing a traffic hazard is responded to within 1 hour	100%	100%	K:\resource\Bylaw Officers\Registers\AC Service Requests.xls 32/32
In cases where multiple stock escapes (more than 1 occasion) have occurred from a property taking compliance or enforcement or prosecution action against the property owner	100%	-	No incidents
Council responds to complaints regarding animals within 48 hours.	100%	100%	K:\resource\Bylaw Officers\Registers\AC Service Requests.xls 18/18

INCIDENTS REPORTED	TOTAL FOR YTD PERIOD 1 JULY 2021 TO 31 MAY 22
Stock	38

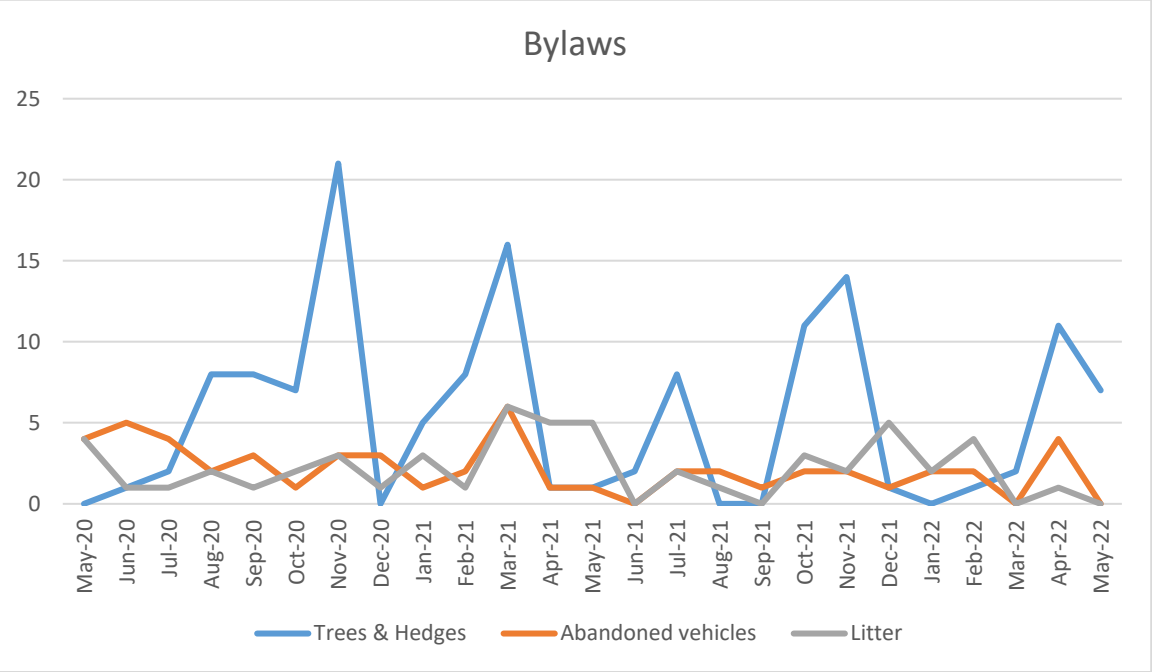
2.4.1. Bylaws

In May 2022 there were:

Trees & Hedges
There were 1 first notices sent by Council requesting the owner/occupier to remove the obstruction from the public space. Following this there are 6 second follow up letters being sent within this period. 0 address has had contractors engaged to remove overgrown vegetation in Greytown.

Litter
0 litter (fly tipping) incidents have been recorded. From these, identification was retrieved from the litter Council officer disposed. 0 requests for information notice have been sent to the identifiable people associated with the incident. 0 incidents recorded for premises where the owner removed immediately.

Abandoned vehicles
There were 0 total vehicle related calls in the SWDC area, of which 4 were abandoned/unlawfully parked vehicles. 0 were removed by their owners and the remaining 0 incident remains open to be resolved.



Trees & Hedges	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	0	0	2	0	0	1	2	8	8	7	21	0
2021	5	8	16	1	1	2	8	0	0	11	14	1
2022	0	1	2	11	7							

Abandoned vehicles	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	5	1	1	0	4	5	4	2	3	1	3	3
2021	1	2	6	1	1	0	2	2	1	2	2	1
2022	2	2	0	4	0							

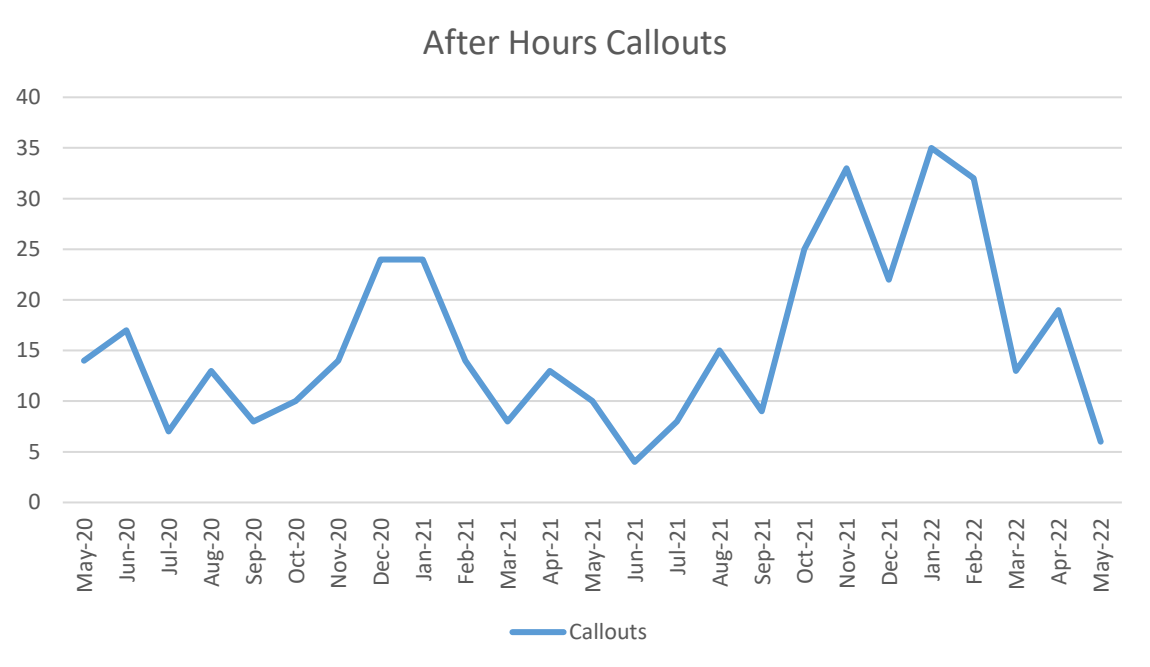
Litter	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	1	3	2	2	4	1	1	2	1	2	3	1
2021	3	1	6	5	5	0	2	1	0	3	2	5
2022	2	4	0	1	0							

2.4.2. Resource Management Act – afterhours Noise Control

SERVICE LEVEL – The Council will respond when I need some help with noise control.

PUBLIC PROTECTION KEY PERFORMANCE INDICATORS	TARGET 21/22	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
% of calls received by Council that have been responded to within 1.5 hours	100%	97.7%	K:\resource\Health\Resource Management\Noise Control Complaints 212/217 attended within timeframe YTD 6 callouts May 2022 6/6 responded to within 1.5 hours

AFTER HOURS NOISE CONTROL COMPLAINTS RECEIVED	YTD 1 JULY 21 TO 31 MAY 22	PREVIOUS YTD 1 JULY 20 TO 30 MAY 21	PERIOD 1 MAY 2022 TO 31ST MAY 2022	PREVIOUS PERIOD 1 MAY 2021 TO 31ST MAY 2021
Total	217	145	6	10



Callouts	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	8	28	27	7	14	17	7	13	8	10	14	24
2021	24	14	8	13	10	4	8	15	9	25	33	22
2022	35	32	13	19	6							

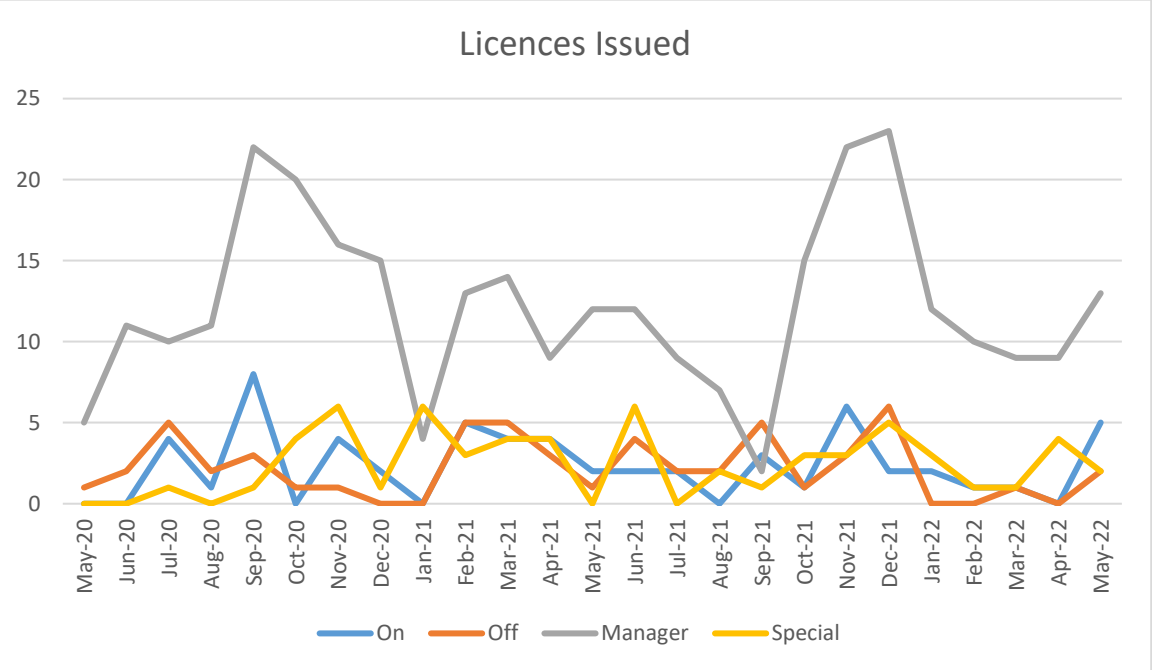
2.5 Sale and Supply of Alcohol Act - Licensing

SERVICE LEVEL – The supply of alcohol is controlled by promoting responsible drinking.

PUBLIC PROTECTION KEY PERFORMANCE INDICATORS	TARGET 21/22	YTD RESULT	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
All premises licences issued have an inspection undertaken by the Inspector prior to issue to assess the licensees understanding of their obligations and responsibilities under the Act	100%	100% YTD	MAY 2022 LICENCES PERIOD YTD On licence NEW 4 8 On Licence RENEWAL 1 15 Off Licence NEW 2 9 Off Licence RENEWAL 0 11 Club RENEWAL 0 4 TOTAL 47 Information source: Inspector records, MAGIQ data, Alcohol Spreadsheet K:\resource\Liquot\Alcohol Master Sheet.xls
Special Licences are issued			MAY 2022 LICENCES PERIOD YTD Special 2 25 TOTAL 25 Information source: MAGIQ data, Alcohol Master Sheet K:\resource\Liquot\Alcohol Master Sheet.xls
All Duty Manager's (DM) certificate holders undertake an interview with the Inspector prior to certificate being issued to assess the manager's level of understanding with the Duty Manager's role			MAY 2022 LICENCES PERIOD YTD Duty Manager NEW 7 50 Duty Manager RENEWAL 6 81 TOTAL 131 Each Duty Managers certificate includes interview with Inspector. These average approximately 1 hour Information source: MAGIQ data, Alcohol Master Sheet K:\resource\Liquot\Alcohol Master Sheet.xls
75% of all licenced premises identified as at 1 July of every year have a compliance visit undertaken by the Inspector before the 30th of June the following year (i.e. within a 12 month period)	75%	32.8% YTD	Due to COVID 19 this activity is not being undertaken. COMPLIANCE VISITS May 22 – 0 YTD 41/125 Information source : Compliance inspection records K:\resource\Liquor\Compliance Visits 21-22

Public Protection Key Performance Indicators	Target 21/22	YTD Result	Comment Source, and actions taken to achieve Target
Average working days to process an application from acceptance by SWDC	25WD	19.95WD	Information source: Alcohol Master Sheet K:\resource\Liquot\Alcohol Master Sheet.xls

Alcohol Licence Applications Processed	YTD 1 July 21to 31 May 22	Previous YTD 1 July 20 to 31 May 21	Period 1 May 22 to 31 May 22	Previous Period 1 May 21to 31 May 21
On Licence	23	32	5	2
Off Licence	20	26	2	1
Club Licence	4	5	0	1
Manager's Certificate	131	146	13	12
Special Licence	25	30	2	0
Temporary Authority	12	4	2	0
Total	**215**	**243**	**24**	**16**



On	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	2	2	3	3	0	0	4	1	8	0	4	2
2021	0	5	4	4	2	2	2	0	3	1	6	2
2022	2	1	1	0	5							

Off	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	4	2	2	3	1	2	5	2	3	1	1	0
2021	0	5	5	3	1	4	2	2	5	1	3	6
2022	0	0	1	0	2							

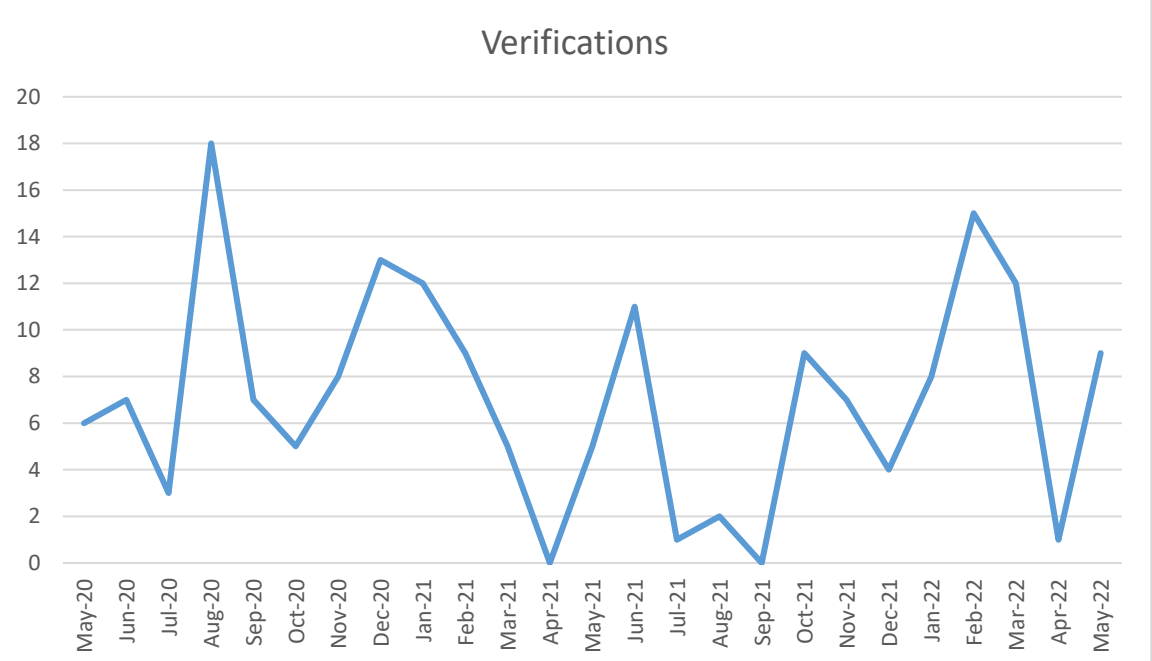
Manager	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	12	10	18	0	5	11	10	11	22	20	16	15
2021	4	13	14	9	12	12	9	7	2	15	22	23
2022	12	10	9	9	13							

Special	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	6	4	3	0	0	0	1	0	1	4	6	1
2021	6	3	4	4	0	6	0	2	1	3	3	5
2022	3	1	1	4	2							

2.6 Health Act - Safe Food

SERVICE LEVEL – Food services used by the public are safe.

Public Protection Key Performance Indicators	Target 20/21	YTD Result	Comment Source, and actions taken to achieve Target
Premises have appropriate FMP in place and meet the risk based standards set out in the Plan.	100%	100%	FCP (Food Act) –88 NP –68 Total number of premises is subject to change month by month as new businesses open and existing premises close. risk based measure changes
Premises are inspected in accord with regulatory requirements.	100%	77.27%	FCP verifications – 68/88 Covid 19 had an impact. We also had 9 premises close/or transfer to National Programmes this financial year so far. Verifications are booked depending on their outcome status this could be 18 /12/6 months. They do not have a consistent number each month. Verifications undertaken in May 22 9



Verifications	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	4	9	2	0	6	7	3	18	7	5	8	13

2021	12	9	5	0	5	11	1	2	0	9	7	4
2022	8	15	12	1	9							

Contact Officer: Russell O'Leary, Group Manager Planning & Environment
Reviewed by: Harry Wilson, Chief Executive Officer

WATER OFFICERS REPORT

This report was presented to the Assets and Services Committee on 13 July 2022.

3. Water Manager Commentary

I want to note the work of the Wellington Water Limited Capital Projects team, who delivered an intensive programme of work for us in FY21/22. They are forecasting to deliver the programme on budget of $5.8m. Over the past 12 months they have completed a new 8 mega litre treated water reservoir at the Waiohine Water Treatment Plant (WTP), installed an automatic chlorination dosing system at Pirinoa WTP, renewed the sewer at the Memorial Park swimming pool and sports building, commenced a smart meter trial in Greytown, undertaken Boar Bush concrete reservoir remedial work, and upgraded the Papawai Road wastewater pipeline, to name a few!

4. Wellington Water operational performance

Rainfall in June saw a jump in the number of service requests for flooding in Featherston, some of which are due to leaf litter causing blocked road sumps. The recent rain also filled the Harrison St stormwater gravel-pit causing stormwater to overflow down Harrison Street. Fitzherbert Street wastewater main in Featherston was again affected by groundwater infiltration causing wastewater overflows to a small number of residents. Sucker trucks have been required to manage in both situations.

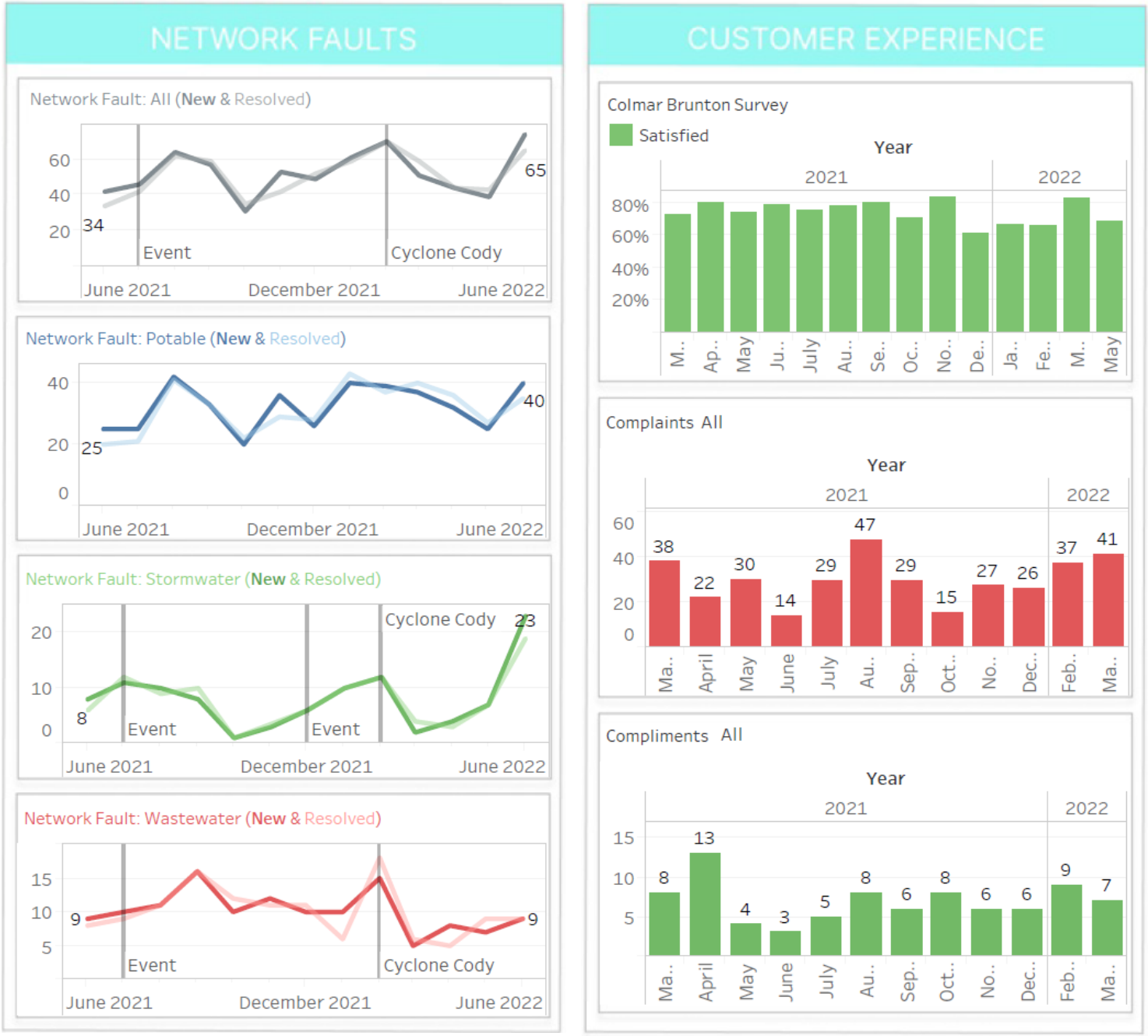


Figure 1. SWDC Customer service request dashboards, June 2022

4.1 Operational response events

4.1.1. Lightning strike Waiohine water treatment plant

On Sunday 12th June the water treatment plant automatically shutoff due to a lightning strike causing damage to electrical components and control instrumentation.

- Water supplied to the Featherston and Greytown communities remained safe to drink, as supplied from the treated water reservoir.
- As a precaution, Wellington Water asked the community to moderate their water usage.
- The operational teams needed to go through all electrical equipment on site to assess the scale of the damage and implement repairs.

The water treatment plant was brought back into full operating service on Wednesday 22nd June.

4.1.2. Boar Bush Gully Road slip risk

Wellington Water previously raised concerns over a slip which occured on Boar Bush Road that has the potential to impact on the water main that fills the Boar Bush concrete reservoir and the main supply line from the reservoir to Featherston.

- Potholing works and a location survey of the pipeline indicates that the pipe is within 1m of the slip face.
- The risk of failure of this asset is considered high, due to two separate pipes which have also been eroded in the same area.
- Wellington Water have made SWDC aware of this risk, for urgent road stabilising works necessary to prevent ongoing erosion.

SWDC has commissioned an engineering assessment that will provide us with remediation options and an estimate of costs. This could take a number of weeks as the company is also working on urgent aspects of the Hinekura Road rebuild. We anticipate that funding will be drawn from the Rural Road Reserve and based on previous experience, may be in the order of $300,000.

In the interim Wellington Water has contingency plans in place and will be able to react to any failure quickly to minimise the impact on customers.

Figure 2 Boar Bush Gully Road slip, May potholing and water main location

4.1.3. Longwood Water Race perched intake

Wellington Water identified over the weekend of the 25th June that no water was flowing in the Longwood water race.

- Investigations found that the Tauherenikau river rock weir had fallen away due to recent flood events
- This had caused the intake to become perched, not allowing water to into the intake
- This affected all users on the Longwood Water Race

A contractor was brought in to top up the rock weir, and water was restored on Thursday 30th June.

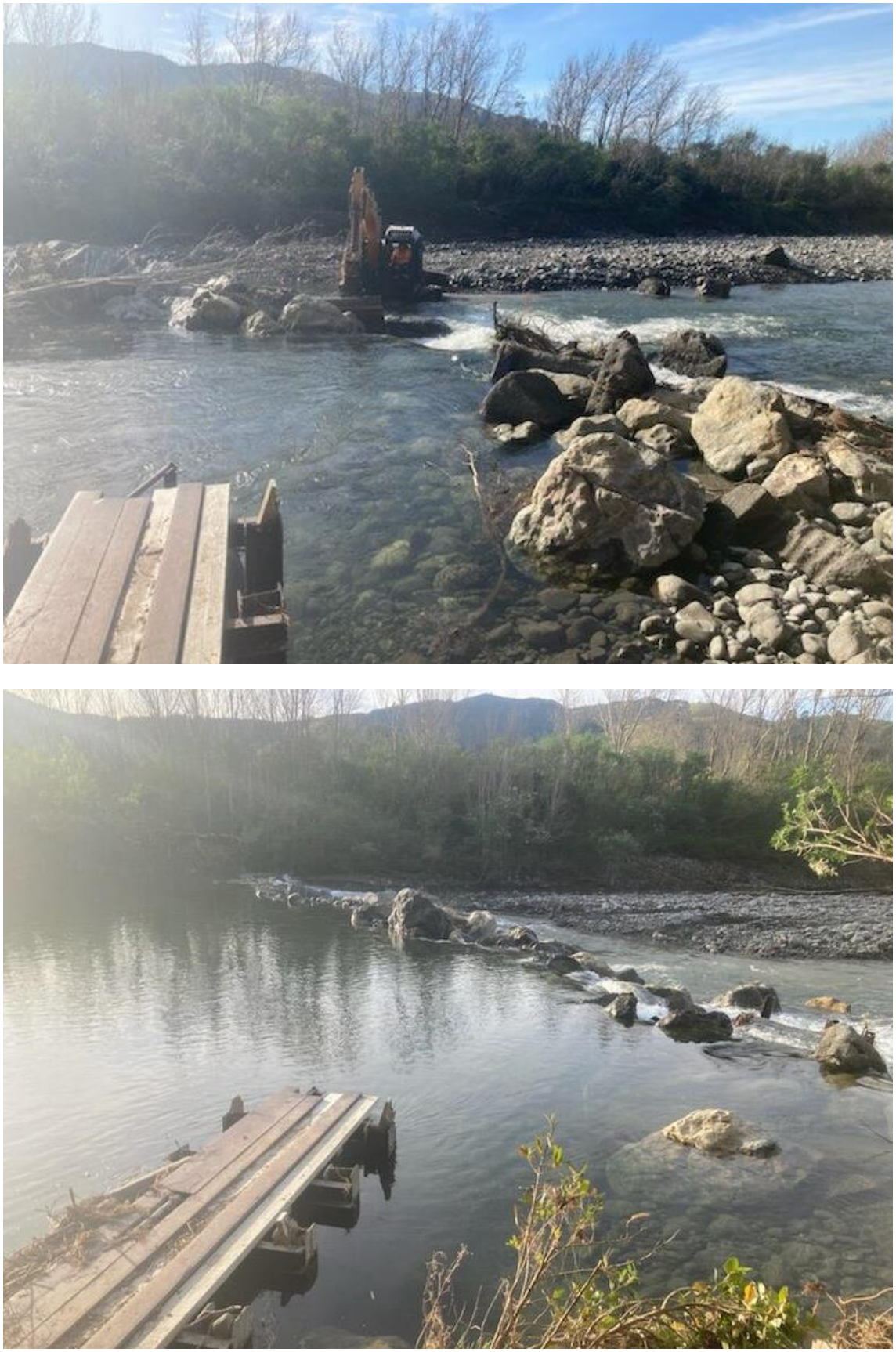


Figure 3 Longwood race intake rock weir being reinstated

5. Water Capex delivery programme

Financial Year 2021-22 has been a busy year for the CAPEX team. They are forecasting to deliver FY21-22 capex programme on budget ($5.8m). There have been some significant highlights delivered, including:

- New 8 mega litre treated water reservoir storage resilience, Waiohine WTP
- Installation of an automatic chlorination dosing system at Pirinoa WTP
- Sewer renewal of the Memorial Park swimming pool and sports building
- Commencement of a smart meter trial in Greytown, funded through the government stimulus package
- Boar Bush concrete reservoir remedial work, reducing contamination risk to Featherston drinking supply
- Upgrade to the Papawai Road wastewater pipeline, reducing overflows and accommodating Greytown population growth
- Completion of the asset condition assessments programme for the very high criticality assets
- New electrical surge protection installed at all water and wastewater treatment plants

Please refer to Appendix 2, Wellington Water monthly capex reports for more detail.

5.1 Capital budgets for 22/23 and 23/24 Financial Years

Please refer to Appendix 3 for advice to South Wairarapa District Council from WWL regarding the three waters services capital expenditure plan for the financial years 2022/23 and 2023/24. Capital expenditure for 2022/23 is $5.3m which is confirmed in the recently adopted Annual Plan. The advice from WWL highlights some risks around capital items that are not funded in 2022/23 and 2023/24 and we are providing this information in full for complete visibility prior to the forthcoming local government elections. The main concerns lie around the following:

- The Greytown and Martinborough Wastewater Treatment Plants are currently under investigation by GWRC and require capital to at least begin planning and implementation towards compliance to avoid potential prosecution.
- Any work required Taumata Arowai may require for SWDC Drinking Water Treatment Plants.
- The Donald Street Pumping station and rising main renewal which is one step towards alleviating the public health risks for the catchment around Fitzherbert and Waite Street, Featherston.
- Tauherenikau Pipe replacement (see below).

We will be working with WWL on any reprioritisation of the 2023/24 budget that might be required to ensure our highest priority items are funded.

5.2 Tauherenikau river pipeline permanent solution

Please refer to the slide pack regarding long term options for the Tauherenikau pipeline repair, and the more detailed Design Report dated 15 June (refer to Appendix 4).

The temporary fix has a limited timeframe of 1-2 years, however it is impossible to be precise, as it is exposed to impact damage from high flows and rocks. The failure mechanisms are:

1. Recent repair breaks again -joints are the weakest point
2. Gets hit by a rock or high flows during a storm and breaks the pipe
3. Storm events undermine the support and the pipe breaks
4. Long term -corrosion leads to deterioration of the wall thickness and the pipe breaks

Options 3 and 4 are the closest fit in terms of affordability, low/zero maintenance, and resilience. Any solution will mean loan funding as this is a considerable unbudgeted expense. We note all water related debts will transfer to the Water Services Entity on 1 July 2024 under the 3W reform model.

We seek a recommendation that we progress option 3 or 4 to Council as a preferred solution, funding to be sourced from a long-term loan.

5.3 Reset of the Featherston Wastewater Treatment Plant

Management has been working with WWL to reset this project, which has suffered from significant delays over the past 24 months. The project has been recalibrated and several steps taken to improve momentum and performance, including the following:

1. Reset of operational governance and communications/reporting with more cognisance of SWDC perspective and needs
2. SWDC representative will be included at all levels of the project (Project Team, Steering Group and Operational Governance)
3. Inclusion of a mana whenua liaison at operational governance level
4. More programme leadership on WWL's side with a senior manager from WWL picking up more of the liaison and leadership with officers and council
5. More oversight and performance management on the SWDC side. This will be a primary focus of the newly appointed SWDC Principal Adviser (water transition)
6. More collaboration between the WWL and GHD Project Leads to improve alignment/momentum

WWL have produced a comprehensive revised Project Management Plan for Council (refer to Appendix 5).

6. Appendices

Appendix 1 – Wellington Water SWDC Major Projects Monthly Report, May 2022
Appendix 2 – Wellington Water SWDC CAPEX Programme Update, May 2022
Appendix 3 – WWL Advice to SWDC Regarding Three Waters Services CAPEX Delivery Plan for the Financial Years 2022/23 and 2023/24 (Y2&3 CDP)
Appendix 4 – Tauherenikau Pipeline Repair, Detailed Design and Long-Term Solutions, July 2022
Appendix 5 – Featherston Water Treatment Plant, Project Management Plan, July 2022

Contact Officer: Stefan, Group Manager Partnerships and Operations
Reviewed by: Harry Wilson, Chief Executive Officer

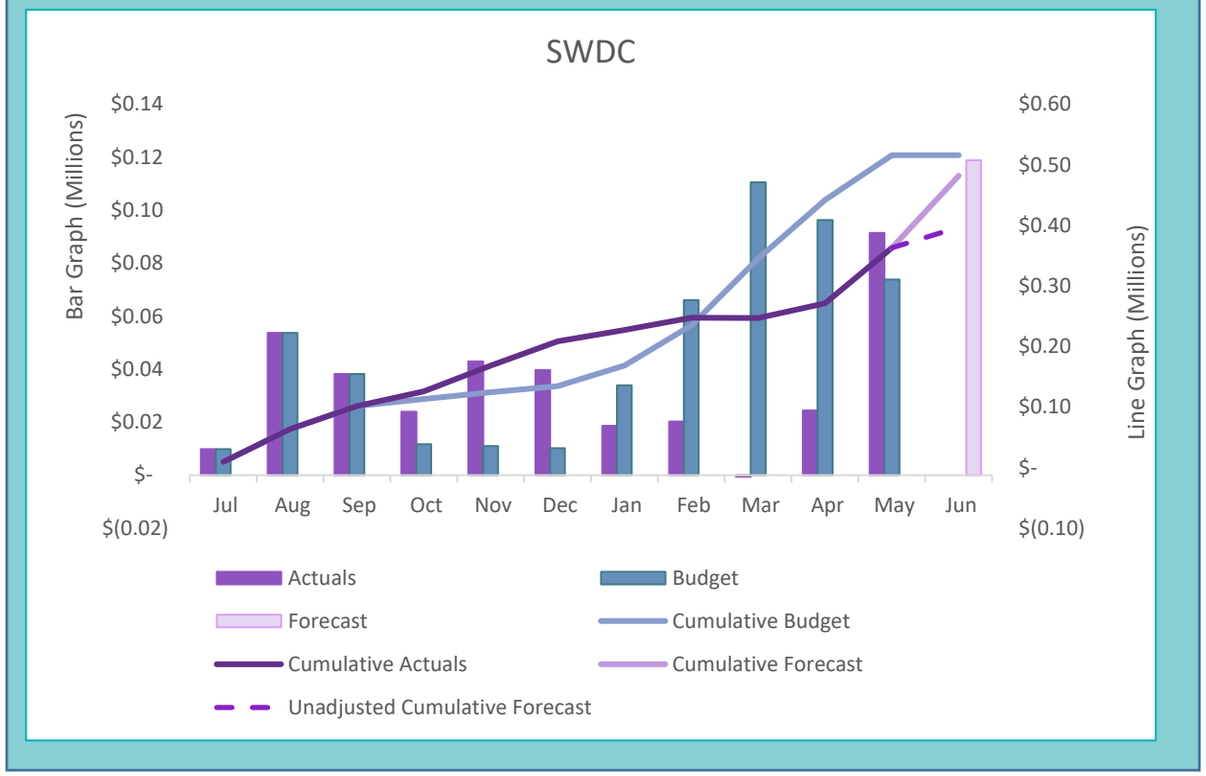
Appendix 1 – Wellington Water SWDC Major Projects Monthly Report, May 2022

SWDC Major Projects Monthly report – May 2022

Regional summary:

We are through the worst of covid and are managing its impacts, mainly cost for delays and materials. We have a number of strategically important projects in construction, or in the award phase in the region which means great progress on outcomes.
SWDC's two major projects are in the planning phase and largely unaffected by Covid. The Featherston WWTP will be discussed at a public meeting in June.

Major Project Financial progress: Forecast; Actual, budget



Risk profile

	H,S,Q,E	Stakeh.	Risk	Finance	Prog.	Rating
Featherston WWTP Upgrade						
Tauherenikau River Crossing						

Programme

	Cost Estimate			2020		2021				2022				2023				2024		
PROJECT	LTP	Current	Level	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Featherston WWTP Upgrade	3m	$0.5M	L4			Concept														
Tauherenikau River Crossing	0	$5m	L0											***To be discussed***						

Project	Objectives	Commentary
Featherston WWTP Upgrade ***Priority Ranking 6**	Upgrade of wastewater treatment plant to meet likely improved discharge conditions. This objective is twofold: 1. An affordable solution that enables a consent for 5 – 10 years 2. A long term solution for Featherston that meets environment outcomes	**Phase 1 - Short Term Consent** • Noted GWRC's expectation of a hearing in February 2022. WWL drafted the response for SWDC, that we will be well progressed by then, but unlikely to be progressed to that stage. • MBBR trial results are coming in. The process is being adjusted to accommodate the WWTP conditions, for example low alkalinity is being balanced by adding bi-carbonate soda • Paper issued to SWDC ahead of SWDC transition workshop to decide whether to bring the project in house to SWDC (planned for early June) • Consenting strategy, environmental monitoring and project management plan all underway to be completed in June • Meeting was held with Rangitane o Wairarapa to discuss short term consent plan **Phase 2 – Long Term Consent** • No project activity. Need to discuss with officers how we meet the GWRC requirement to keep this moving while not distracting from the short-term consent process • There has been issues around progress raised by the public following comments by Council. A public meeting is scheduled for late June which WWL will attend with SWDC officers with agreed messaging
Tauherenikau River Crossing	Identify long term preferred option for crossing the Tauherenikau River	• An options assessment (MCA) workshop was completed in May. Additional lines of enquiry were identified in the MCA workshop which has delayed the report by 2 weeks • Report expected to be issued to SWDC in mid-June to outline process and preferred option. A date to discuss with council will be agreed shortly • Meeting held with Rangitane o Wairarapa to discuss project and options being considered • * **Note** – ***the project is currently unfunded, we need to discuss and agree the ideal timing of the project and construction with the Council***

SWDC Stimulus Funding Programme update – May 2022

Overall Programme Summary:
We are closely managing budgets as they get close to being expended, and some funds will move between workstreams to ensure that we make maximum use of the available funding.

Project	Commentary	H,S,Q,E	Stakeh.	Risk	Finance	Prog.	Rating
1. Capital renewals	The construction of these watermain renewals in Fox Street in Featherston commenced as scheduled in September 2021 and 302m of 63ODPE watermain and 421m of 180ODPE watermain was completed. During regular QA some defects in the construction have been identified and the team has worked with the contractor, this was successful, and all site works were completed, and Practical Completion issued in March 2022. Final project close out is in progress.						
2. Asset conditions assessment	Physical assessment of five SWDC reservoirs has been completed with the remaining two at the Waiohine WTP to be assessed this week (ending 3/6). The reservoir conditions are generally average from a structural perspective - there are however contamination vulnerabilities that need to be addressed and these are being placed in the forward works programme as a matter of priority. Physical inspection of the water treatment plant and pipe assets is complete. There remain challenges in accessing the potable water pressure mains for assessment for a number of reasons, ePulse testing was progressed as workaround in two locations. Whatever works remain uncompleted at this point will be put into the forward works programme however future assessments will be constrained by historically limited opex budgets. The Tauherenikau River pipe crossing leak has been repaired. There have been two recent breaks in the Boar Bush reservoir outlet main and this confirms the desktop study condition assessment of 5 (very poor rating) - status unchanged. Once we've finished the work we intend to present to councils on detailed findings for their assets and how this will influence the forward works programme.						
3. Maintenance	May spend was for planned and reactive maintenance. See the Stimulus Funding Programme financial dashboard for more detail.						
4. Asset management systems and processes and 5. Data and technology systems	We are planning how we will continue the momentum stimulus funding has given us in this space, building on the work completed so far. How much we can do will be dependent on funding available, but we now have: - A Cyber Partner in place, the first steps in our cyber roadmap complete or underway and a plan of what we need to do next. This is resulting in increased system resilience and improved protection from cyber-attack. - Good progress in the asset data space, improving the completeness and quality of the asset data we have, and the processes and base resources to continue this work. This supports the efficiency and effectiveness of our asset management processes and will enable us to handover the data Entity C needs to ensure continuity of service and investment. - With our focus on core business for the next two years we will be targeting continued improvements to our asset management processes that make an immediate difference to our efficiency. - The development of Source Water Risk Management Plans, as required under the Water Services Act 2021, is on track to deliver by end June 2022. Technical assessment of source water management areas is complete, and the results formed the basis for the recently concluded engagement phase. The outputs of these engagement workshops will now be turned into documentation that can be incorporated into the Drinking Water Safety Plans.						
6. Leakage management	6.3 Proof-of-concept trial for smart household water meters to identify network or private leaks: The installation of the smart meters is now completed, however due to the supply chain issue, the 50 units of vibration sensors will not arrive in time for installation. WWL has proactively ordered and instralled additional 50 base meters. This means we will have the intended number of participants, but the vibration sensor trial will be deferred. The trial will assess the ways in which smart water metering technology can help residents better manage their water usage and assist in detecting potential water leaks at private properties. The team is currently working on meter data integration as well as meter communication issues - around 10% smart meters are transmitting no or poor data, this could be due to a combination of deployment and network issues. Meter supplier's local technician and Vodaphone have been engaged to provide technical support. Due to Stimulus Fund cease after June, WWL is exploring revenue to fund the project beyond June, as the trial is scheduled to complete by December 2022.						
7. Water safety priorities	7.1 Reservoir Repairs – no reservoir roof maintenance is planned in SWDC 7.2 Reservoir cleaning: we have purchased a remote-operated cleaning drone and mobile clarifier, and it is in use. Significant savings of time, cost and water loss are already evident. Project is complete. 7.3 Real time monitoring: no work on this project in SWDC 7.4 Audit Programme. Programme is continuing largely on an opportunity basis with the assistance of head office NMG staff where possible. There are limitations around access to plants/operators due COVID protocols, actual cases and their operational workloads. Audits of environmental management and investigations, largely remotely, into the Boar Bush and Newlands boil water incidents and Ruamahanga bore incident are nearing completion. Further work is being programmed out to the end of June when the contract ends. Beyond contract end in June, an outline audit programme and estimated resourcing is under preparation for management consideration Process Writing. completed 7.5 Chlorine Trailer – The trailer has been manufactured. 7.6 Bypass study – the draft report has been completed and it is currently under review by WW senior engineer. 7.7 Chlorine analyser for the Pirinoa WTP: work was completed in January to design and deliver a chlorine analyser.						
8. Capital projects	Boar Bush reservoir: The decommissioning of the contact tank and reconfiguration of the pipework is complete.						
9. Regional Water Reform Project aka Preparation for reform (Note: this is led by councils, not by WWL)	Review and analysis of information from DIA has continued to be a major focus, along with trying to align with other councils in the Entity C area to support consistent information. Collateral has been developed to help explain the reforms process, key issues and potential next steps including workshop packs, public information and sections of council reports. Numerous meetings have been held with Wellington region councils, councils across the entity C area and with DIA. An ongoing challenge has been to get clarity of information from DIA or opportunities to help co-design the timeframes and process for the reforms to inform resource planning within councils. To mitigate this issue, the WWL and shareholder councils have agreed to establish a transition structure and plan to work through key transition keys and tasks. This provides a strong counterfactual to test the NTU work programme as it becomes more clear, or to help DIA to co-design this process. The plan is outcomes focused in relation to customers, staff and efficient use of resources through the transition process. Further funding will be required from DIA to support this transition work over the next 2 years. The team has coordinated the work of PCC, GWRC and WWL on the commercial and legal information request from DIA and supported a number of discussions in relation to the better off funding. A number of key updates have been expected through May including timing and process for the Bill, a clear forward work programme, details of funding support for councils and the role and key tasks for the Local Transition Team (LTT). Based on the forward work programme, the focus will be on two workstreams: - Policy - review and input into: Public information on Bill / reforms; Select Committee process; Further legislation; Economic regulation policy and legislation. - Transition and programme coordination: Due diligence and data collection processes; Transition planning for WWL; Engagement with DIA, the National Transition Unit and the proposed working groups; Iwi / Māori engagement; Wider engagement across entity C; Support for better off funding request processes; Workforce engagement and change process for the WSE.						

KEY On Hold ~~On Track~~ Some Concern Off Track/Major Concern

Appendix 2 – Wellington Water SWDC CAPEX Programme Update, May 2022

May 2022 SWDC PMO CAPEX Programme Update

Information as at
26 May 2022

Executive summary:

The total programme remains on track to spend the full year 21-22 budget. Two significant contracts for construction next financial year remain the focus for award in Q4. Supplier materials cost escalations continue to be experienced, in particular on the recent tendered contracts. Wellington Water's annual planning process has also been re-evaluating SWDC's water priority projects, with a focus for investment efforts in drinking water compliance and wastewater treatment plant consent compliance. This will likely see changes to the types of projects in years 2 and 3 of the LTP capex delivery programme.

Monthly updates of significance:

Construction Completed:
- No construction sites were completed in the month of May.

Construction Underway:
- Greytown Papawai Rd pipeline upgrade (wastewater). Practical completion forecast to be issued Q4.
- Featherston Waiohine WTP treated water reservoir (water). The project team continue to work to close out remaining items post-commission.

Contracts Awarded:
- Greytown Memorial Park WTP upgrades (water). Contract has been awarded to Brian Perry Civil. Project team are working through the required enabling works prior to scheduling a start date for construction.

In Procurement:
- Featherston Donald St pump station renewal (wastewater). Tender review process underway, where contract award remains forecast for Q4. Construction start date will be scheduled around funding availability within the LTP.

Design Development:
- Featherston Waiohine WTP stage 3 upgrades (water). Includes the pH dosing system upgrade. Design activities and contract award within FY22-23.

Top Risks and Issues :

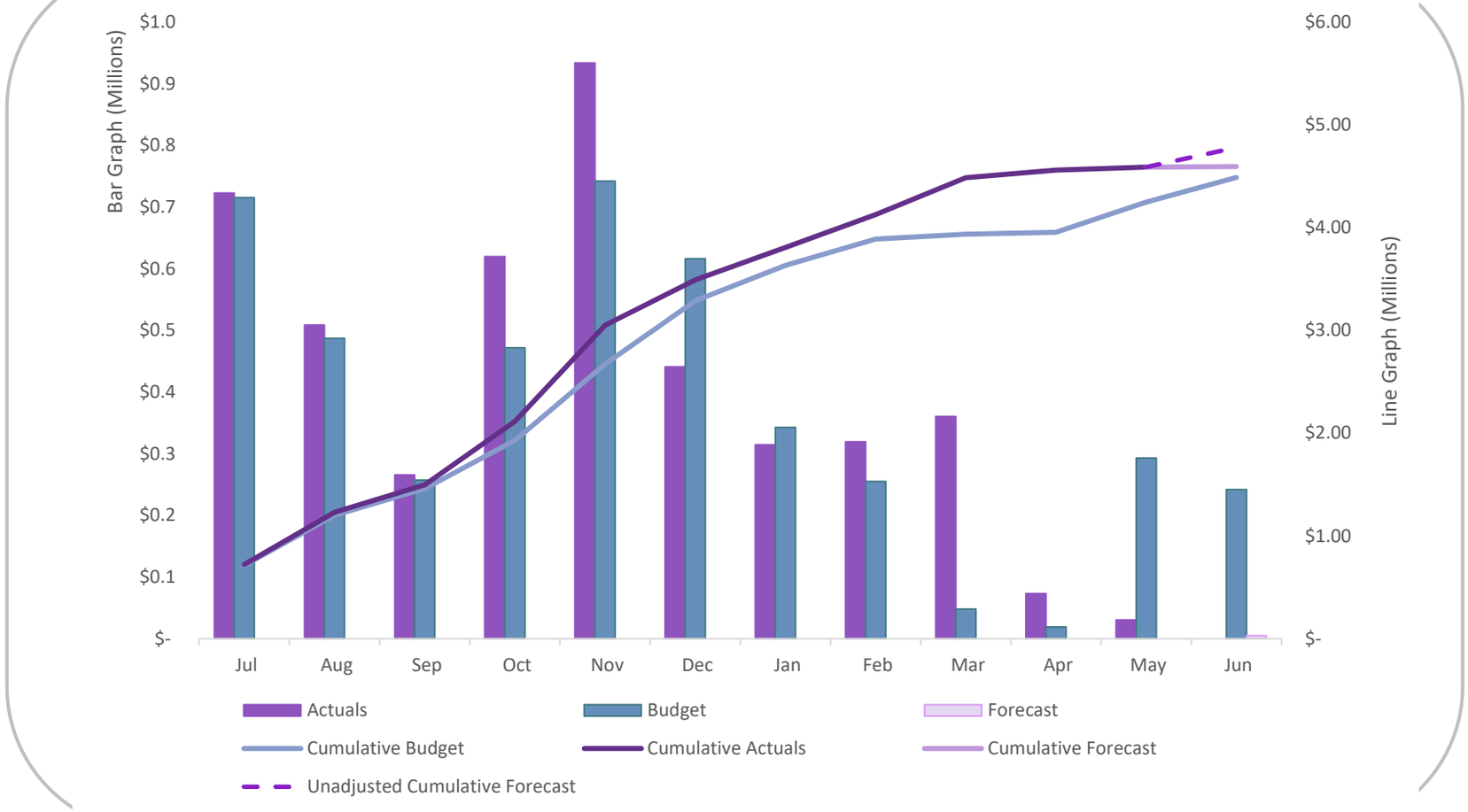
Risk Description	Mitigation / comments
The Memorial Park WTP upgrade project may experience a delay in commencing construction	Contract has been awarded to Brian Perry Civil however the project team have a number of enabling works to complete prior to construction commencing. Outstanding snags need closing out at the Waiohine TWR to ensure drinking water supply can continue whilst Memorial Park WTP is turned off for upgrades
A reduction of available clean fill tips in the Wellington region for excavation material which could see large cost escalations	The are now only two clean fill tips in the region due to others either being filled up or being unable to comply with their consent conditions. This is likely to result in cost escalations should a regional solution not be found. Contractors in the short term are trying to manage the situation however this is also affecting productivity.
Donald Street pump station is at risk of failure due to poor condition which would require a temporary generator and pump system whilst an urgent renewal is undertaken	The draft year 2 & 3 capex programme includes the recommended renewal of this pump station. Tendering activities are currently underway, where scheduling of construction will be able to occur upon securing budget.

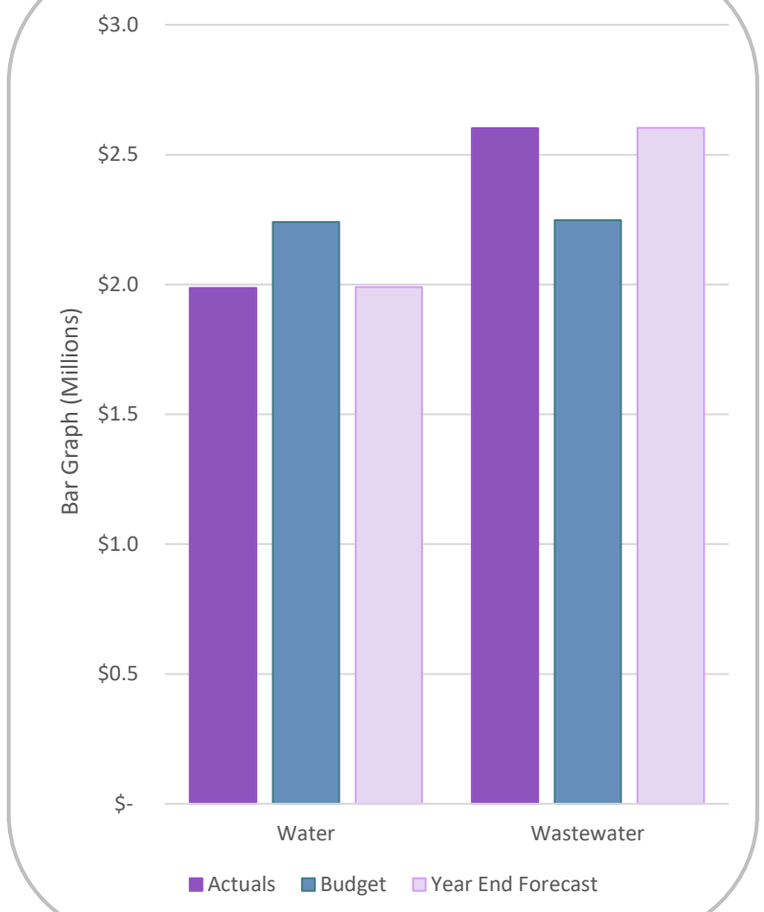
Issue Description	Mitigation / Comments
A number of snag items post commissioning of the treated water reservoir at the Waiohine WTP have caused delays in completing stage 2 delivery	Work continues on closing out the remaining operational items for the TWR which have been challenging due to the hybrid of old and new infrastructure.
Reinstatement issues along Pah Rd, Papawai	The asphalt reinstatement in some areas have experienced slumping following large rain events. These areas have been repaired by the contractor however one area remains a concern and may be related to groundwater movements. The project team have collaborated with the SWDC Roading team to identify an acceptable solution.

May 2022 SWDC PMO CAPEX Programme Update

Information as at
26 May 2022

Total Programme spend by month





Appendix 3 – Wellington Water Advice to SWDC Regarding Three Waters Services CAPEX Delivery Plan for the Financial Years 2022/23 and 2023/24 (Y2&3 CDP)

Advice to South Wairarapa District Council (SWDC) Regarding Three Waters Services Capital Expenditure (CAPEX) Delivery Plan for the Financial Years 2022/23 and 2023/24 (Y2&3 CDP)

TO	Stefan Corbett, SWDC
COPIED TO	Harry Wilson, CEO SWDC
	Karon Ashforth - General Manager Finance
	Wellington Water - Tonia Haskell, Julie Alexander, Laurence Edwards, Steve Hutchison, Adam Mattsen
FROM	Susannah Cullen
DATE	01 July 2022

Action sought

	Action sought	**Deadline**
South Wairarapa District Council	**Approve** the recommendations in this paper. **Note** this updated memo incorporates actions from the initial meeting (12/05/2022) and subsequent communications.	06 July 2022

Contact for telephone discussion (if required)

Name	**Position**	**1st Contact**	
Tonia Haskell	Group Manager Network Development & Delivery, Wellington Water	027 496 1970	
Susannah Cullen	Manager Programme Practice, Wellington Water	021 927 942	✓

Purpose of this advice

1. This paper provides a high-level summary of the draft capital delivery plan (CDP) Wellington Water plans to deliver in Year 2 of the Long Term Plan (LTP) (FY22/23).
2. It provides additional programme information over and above the high-level advice provided in the *SWDC 2-22/23 Annual Plan Advice* memo which was sent in January 2022.
3. The option presented reflects the funding availability advised by SWDC (20/06/2022) and the associated risks with this funding profile.
4. An indicative plan for delivery in Year 3 (FY23/24) is included for information, noting this will be further refined throughout Year 2.

Summary

5. The budget instructed by SWDC for Year 2 is **$5.3M**.
6. This comprises $4.0M from the LTP Year 2 and $1.3M brought forward from LTP Year 3 to fund the Featherston Wastewater Treatment Plan project.
7. The budget for Year 3 is **$6.2M**. This comprises the Year 3 LTP of $7.5M minus $1.3M brought forward to the Year 2 budget.
8. Figure 1 presents the budgets proposed by SWDC against the original LTP values.
9. A breakdown of the budget is provided at Appendix A, and by LGA Classification and Water Type at Appendix B.
10. The total value of the projects proposed equals the budgets assigned ($5.3M and $6.2M for Years 2 and 3 respectively). A list of the projects proposed within the funding envelope advised by SWDC are presented at Appendix C.
11. Several memos were issued to SWDC in January 2022 providing information on known status and risks in the water and wastewater systems, an indication of required funding for FY22/23 and a relationship update; these papers are attached in Appendix D1 to D4 for reference.
12. Further information was issued to SWDC regarding proposed funding scenarios in earlier versions of this memo; these are summarised at Appendix E.
13. The limited budget advised relative to the investment need introduces risk to SWDC around compliance with consent requirements, aging network assets, risk to current level of service and limits opportunities for planned network renewals, growth and level of service improvements.
14. Progress against the budget spend will be reported throughout FY22/23 via the monthly finance and programme meetings.
15. Works to begin delivery of the projects which are outcomes of the Very High Criticality Assets (VHCA) assessment programme have been introduced to the Year 3 plan only due to the funding limitations in Year 2.
16. The plan for delivery in Year 3 (FY 23/24) will be further developed throughout Year 2.

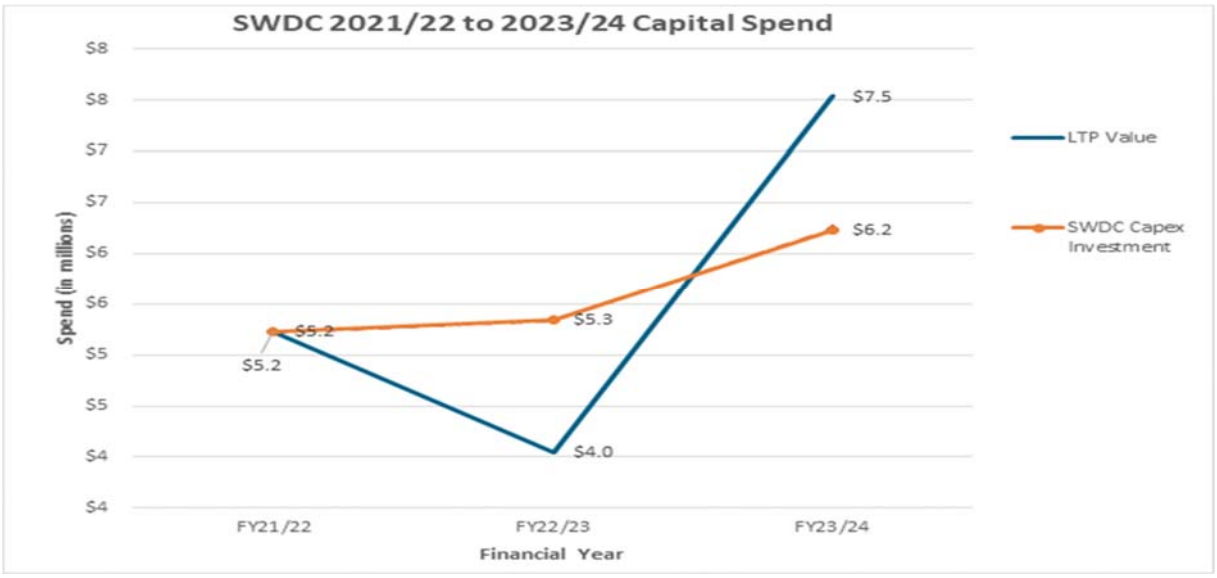


Figure 1 - Three-year LTP values and revised profile for Featherston Funding

Introduction

17. Wellington Water has been working to improve the efficiency and effectiveness of what we are delivering, by focusing on delivering the right assets at the right time; whether this be a renewal, service level increase or to support growth although our current emphasis is on renewals. The Very High Criticality Asset Health Assessment (VHCA) Project, which will inform key projects, is a key enabler that will help drive more effective programme delivery.

SWDC Capex

18. The confirmed SWDC Capex investment is $5.3M and $6.2M for Year 2 (FY22/23) and Year 3 (FY23/24) respectively (inflated values).

19. We have reassessed project delivery within Years 2 and 3 to align with the budgets advised by SWDC, and the proposed projects and spend on these projects are presented at Appendix C. The risks associated with the proposed capital delivery programme are highlighted at Table 1.

CDP proposed	Included	Excluded
Proposed Year 2 CDP = $5.3M	• Continue delivery of Featherston Wastewater Treatment Plant project • Projects to continue drinking water compliance journey, incl. Memorial Park • Reactive renewal budgets – treatment plant and network • Modelling (reduced scope)	• Other Wastewater treatment plant compliance projects at Martinborough, Greytown and Lake Ferry • Tauherenikau Pipeline long term solution renewal • Smart meter works • Planned network renewals • Growth • Level of service improvements • WWTP Health and Safety upgrades • Donald Street Pump Station. • Planning and design for VHCA renewals

Table 1- Key inclusions & exclusions

20. This section provides a high-level description of risks associated with activities that are excluded:

21. **Reduced level of service resulting from budgetary constraints** - the limited budget available means that no works can be scheduled beyond those which are required to facilitate safe drinking water, continue work on the Featherston WWTP compliance project, and reactive capital budgets.

22. **Exposure to penalties and prosecution associated with un-consented discharges from Featherston WWTP** - whilst funding has been approved for the Featherston WWTP project, a risk to SWDC of prosecution un-consented discharges at Featherston WWTP will remain until the works are completed. This may result in penalties and potentially prosecution by GWRC, who have already issued 'Please Explain' notices.

23. **Exposure to penalties and prosecution associated with non-compliance with consent conditions at other WWTPs (Greytown, Martinborough and Lake Ferry)** – by not funding consenting works and / or the requirements under the existing WWTP consents or other network consents, there remains a risk of non-compliance. This may result in penalties and potentially prosecution by GWRC, who have already issued 'Please Explain' notices.

24. **Lack of investment in asset renewals programme leading to reduced level of service –** condition of the water, wastewater and stormwater assets degrades at a rate exceeding the renewal rate leading to an increase in required operational interventions (and cost) to fix asset failures and other resulting asset issues.

25. **Lack of investment in the VHCA programme leading to reduced condition of VHCA assets and increased network performance risk** – risk to resilience of the water, wastewater and stormwater systems resulting in a lower level of service for customers, communities and the environment.

26. **Limited investment in modelling reduces data quality** – a risk that the lack of quality of data available to residents on flood risk, water supply and wastewater capacity could increase issues in network such as contributing to wastewater spilling, a lack of pressure and fireflow availability, and risk of flooding. Accurate and maintained models are important for more efficient design and trouble shooting in the network when there are performance issues and advice on capital improvements. Lack of quality data from models may contribute to poor decisions in infrastructure. Models are required to inform the Spatial Plans and population growth to allow SWDC to make low risk and integrated planning decisions.

27. **Continued network risk associated with poor condition of the Donald Street Pump Station** – this is a named project in the LTP, designed to address the poor condition of the pump station, increase the pump capacity and construct an emergency storage overflow. Failing to fund this project creates the risk of continued one-off high opex costs during moderate to high weather events or single pump failure. There also remains a risk that the pump station may fail completely, which would necessitate implementation of contingency plans in the short term whilst the renewals works are fast-tracked to replace the asset.

28. **Lack of water security caused by poor condition of Tauherenikau Pipeline** – the current pipeline asset is located in a vulnerable position, exposed to abrasion from gravel movements by the river. The recent repair efforts have created a sacrificial rock weir structure to bury the pipe; it is expected to require maintenance every 6-12 months. There remains on ongoing risk of the pipeline failing during a large flood event and/or lateral river movements. This is the only safe drinking water supply for the Featherston township. This budget does not enable funding to be allocated to progress the planning and design on this project until Year 3.

29. **Ongoing increased operational costs until the Waiohine WTP Stage 3 upgrades are completed** – this project is to design and implement an appropriate pH dosing system solution as well as address some other operational and H&S issues that have been identified. This budget allows for undertaking initial design in Year 2 (FY22/23) with detailed design and procurement in Year 3 (FY23/24) and construction in Year 4 (FY24/25). Until this work is complete there will be ongoing increased opex costs to run the temporary pH dosing system which is currently onsite. Several health and safety noncompliance issues remain at the site.

30. **Delivery of Proposed Y2&3 CDP** - historically, Wellington Water has underspent capital against council budgets. We have worked to mitigate this risk by over-programming against the LTP across the three years. This approach has not been used for the FY22/23 SWDC Programme.

31. **Resource and Supply Chain Constraints** – there is currently an industry wide constraint in availability of resources (both materials and personnel) which may impact the delivery of projects. To mitigate the likelihood and impact of this risk, we have worked with Consultant and Contractors to apply a deliverability lens across the projects proposed i.e. to only propose projects that we are confident we can deliver within the current known constraints.

32. **COVID-19 Pandemic** - We continue to face impacts of the global COVID-19 pandemic. We expect to continue to see challenges with global supply chains, freight, transportation and associated price increases which will impact delivery of the programme.

Next steps

33. Once the Year 2 CDP is agreed with SWDC, we will communicate the plan with Wellington Water Groups, including our Consultant &Contractor Panel, and commence delivery.

34. Delivery against the agreed budget will be monitored throughout Year 2 and progress updates communicated to the council via the established monthly finance and programme meetings.

35. We will develop the Year 3 plan through Year 2 with a plan to submit the final Year 3 capital delivery plan at the start of Q4 FY22/23.

Recommended action

26. We recommend that you:

    a **note** that maintaining the current LTP Capex limits the capacity for delivering further capital projects.

    b **consider** the risks and issues identified above and seek to implement controls.

    c **note** that further work will be required during Year 2 to determine the Year 3 budget and plan.

Wellington Water

Appendix A – Budget Breakdown (Scenario 3)

Financial Year	Sustained Uplift ($)			LTP Value (inflated values) ($)	Change to LTP spend profile ($)	SWDC Capex Investment ($)	Total Planned Projects ($)	Project Forecast vs Revised Budget ($)
	Lower	Mid-Point	Upper					
Year 1 (FY21/22)	5,000,000	6,000,000	7,000,000	5,224,500	0	5,224,500	5,224,500	**100%**
Year 2 (FY22/23)	5,000,000	6,000,000	7,000,000	4,040,629	1,300,000	5,340,000	7,827,000	**100%**
Year 3 (FY23/24)	5,000,000	6,000,000	7,000,000	7,534,277	-1,300,000	6,235,000	3,742,000	**100%**
Totals	**15,000,000**	**18,000,000**	**21,000,000**	**16,799,406**	**0**	16,799,406	**16,799,500**	**100%**

Wellington Water

Appendix B – Scenario 3 Spend by Water Type and LGA Classification

Budget Breakdown by Water Type (Scenario 3)

Water Type	Reprofiled LTP Year 2 ($)	Proposed Year 2 ($)	Reprofiled LTP Year 3 ($)	Proposed Year 3 ($)
Water	1,997,720	3,235,000	4,383,894	1,435,000
Wastewater	3,342,908	1,985,000	798,382	4,720,000
Stormwater	0	120,000	1,052,000	80,000
Total	**5,340,629**	**5,340,000**	**6,234,277**	**6,235,000**

Budget Breakdown by LGA Classification (Scenario 3)

Water Type	Reprofiled LTP Year 2 ($)	Proposed Year 2 ($)	Reprofiled LTP Year 3 ($)	Proposed Year 3 ($)
Growth	665,496	0	2,840,400	0
ILOS	3,953,152	4,485,000	2,638,541	2,250,000
Renewal	721,981	855,000	755,336	3,985,000
Total	**5,340,629**	**5,340,000**	**6,234,277**	**6,235,000**

Wellington Water

Appendix C – Proposed Projects & Spend

Project Title	Water Type	LGA Classification	Value Year 2 ($)	Value Year 3 ($)
GTN Memorial Park WTP Upgrades - Stage 3	Water	Level of Service	2,450,000	-
FTSN WWTP Consent (alternative disposal systems FTSN)	Wastewater	Level of Service	1,300,000	1,000,000
FSTN Waiohine WTP Stage 3 upgrades	Water	Level of Service	300,000	330,000
Greytown WWTP Compliance	Wastewater	Level of Service	50,000	200,000
MTB WWTP Compliance	Wastewater	Level of Service	50,000	200,000
South Wairarapa - WW network renewals - 2018 Base	Wastewater	Renewal	50,000	100,000
GTN PW Reactive Renewals	Water	Renewal	45,000	45,000
MTB PW Reactive Renewals	Water	Renewal	45,000	45,000
FSTN PW Reactive Renewals	Water	Renewal	45,000	45,000
Martinborough WTP Reactive Renewals	Water	Renewal	45,000	45,000
Waiohine WTP Reactive Renewals	Water	Renewal	45,000	45,000
FSTN Featherston WWTP Reactive Renewals	Wastewater	Renewal	45,000	45,000
GTN Greytown WWTP Reactive Renewals	Wastewater	Renewal	45,000	45,000
FSTN Lake Ferry WWTP Reactive Renewals	Wastewater	Renewal	45,000	45,000
MTB WWTP Reactive Renewals	Wastewater	Renewal	45,000	45,000
MTB WW Reactive Renewals	Wastewater	Renewal	40,000	40,000
GTN WW Reactive Renewals	Wastewater	Renewal	40,000	40,000
FSTN WW Reactive Renewals	Wastewater	Renewal	40,000	40,000
Reservoir Water Quality Improvements - Reactive	Water	Level of Service	35,000	35,000
WTP Testing	Water	Level of Service	30,000	100,000
SWDC-CPX-FSTN Lake Ferry WWPS Reactive Renewals	Wastewater	Renewal	30,000	30,000
FSTN WW Pump Station Reactive Renewals	Wastewater	Renewal	30,000	30,000
GTN WW Pump Station Reactive Renewals	Wastewater	Renewal	30,000	30,000
SWDC WW Basestation establishment	Wastewater	Renewal	30,000	30,000
SWDC PW Basestation establishment	Water	Renewal	30,000	30,000
SWDC Archestra Graphics and Historian intergration	Water	Level of Service	25,000	-
SWDC Archestra Graphics and Historian intergration	Wastewater	Level of Service	25,000	-
Pirinoa WTP Reactive Renewals	Water	Renewal	20,000	20,000
WWTP - Generator readiness	Wastewater	Level of Service	20,000	20,000
FSTN Water Modelling	Water	Level of Service	20,000	20,000
SWDC-CPX-GTN Water Modelling	Water	Level of Service	20,000	20,000
SWDC-CPX-MTB Water Modelling	Water	Level of Service	20,000	20,000
Memorial Park WTP Reactive Renewals	Water	Renewal	20,000	20,000
FSTN Global SW Consent	Stormwater	Level of Service	20,000	-
GTN Global SW Consent	Stormwater	Level of Service	20,000	-
SWDC-CPX-MTB Global SW Consent	Stormwater	Level of Service	20,000	-
GTN WW Control Systems Reactive Renewals	Wastewater	Renewal	10,000	10,000
FSTN WW Control Systems Reactive Renewals	Wastewater	Renewal	10,000	10,000
MTB WW Control Systems Reactive Renewals	Wastewater	Renewal	10,000	10,000
SWDC GTN DW Control Systems Reactive Renewals	Water	Renewal	10,000	10,000
SWDC FSTN DW Control Systems Reactive Renewals	Water	Renewal	10,000	10,000
SWDC MTB DW Control Systems Reactive Renewals	Water	Renewal	10,000	10,000
FSTN WW Modelling	Wastewater	Level of Service	10,000	10,000
FSTN SW Modelling	Stormwater	Level of Service	10,000	10,000
SWDC-CPX-GTN Stormwater Modelling	Stormwater	Level Of Service	10,000	10,000
MTB SW Modelling	Stormwater	Level Of Service	10,000	10,000
GTN WW Modelling	Wastewater	Level of Service	10,000	10,000
MTB WW Modelling	Wastewater	Level of Service	10,000	10,000

Project Title	Water Type	LGA Classification	Value Year 2 ($)	Value Year 3 ($)
SWDC Treatment Plant Datalogging	Water	Level of Service	10,000	-
SWDC Treatment Plant Datalogging	Wastewater	Level of Service	10,000	-
GTN SW Reactive Renewals	Stormwater	Renewal	10,000	10,000
FSTN SW Reactive Renewals	Stormwater	Renewal	10,000	10,000
MTB SW Reactive Renewals	Stormwater	Renewal	10,000	10,000
FSTN Donald Street Pump Station upgrade	Wastewater	Renewal	-	2,600,000
Tauherenikau Pipeline Crossing	Water	Renewal	-	300,000
WWTP - Health and Safety (H&S) upgrades - Fencing/security upgrades	Wastewater	Level of Service	-	100,000
FSTN Water Main Renewals 21-24	Water	Renewal	-	100,000
Upgrades to WTP telemetry networks	Water	Level of Service	-	25,000
Featherston - Smart Meters/Universal Metering	Water	Level of Service	-	10,000
Greytown - Smart Meters/Universal Metering	Water	Level of Service	-	10,000
Martinborough - Smart Meters/Universal Metering	Water	Level of Service	-	10,000
SWDC - New Smart Services	Water	Level of Service	-	10,000
SWDC Reservoir VHCA Remedial Works	Water	Renewal	-	20,000
SWDC-PW-VHCA Pipe Renewal Programme	Water	Renewal	-	20,000
SWDC-SW-VHCA Pipe Renewal Programme	Stormwater	Renewal	-	20,000
SWDC-WW-VHCA Pipe Renewal Programme	Wastewater	Renewal	-	20,000
Upgrades to WTP telemetry networks	Water	Level of Service	-	80,000

APPENDIX D

Appendix D1

Memo December 2021 Update on South Wairarapa District Council Water Supply Matters

Appendix D2

Memo December 2021 SWDC Wastewater Treatment Plant – Resource Consent Compliance Risk Review

Appendix D3

Memo 22 December 2021 South Wairarapa District Council as Wellington Water shareholder – Summary two years in

Appendix D4

Memo December 2021 SWDC 2-22/23 Annual Plan Advice

Appendix E – Summary of Scenarios Previously Presented

1. In the previous version of the memo (issued 13/06/2022), we presented four scenarios for capital investment in FY22/23. These are as summarised in the following and the associated risks presented at Table E1:

   a **Scenario 1** – follow budgets as set out in LTP, budget of $4.0M, projects listed in Appendix E1.

   The existing LTP is outdated; based on our current knowledge of risks to the network, Wellington Water no longer considers these to be the highest priority for funding in FY22/23.

   b **Scenario 2** – reprioritises works within the LTP budget of $4.0M (see Appendix E2), although noting that no capital construction works are completed on the Donald Street Pump Station.

   c **Scenario 3** – budget of $7.83M for Year 2 and $3.74M for Year 3 (total $11.6M to align with inflated LTP funding across the two years). This scenario provides some funding to progress consenting works at the WWTPs, capital for Donald Street Pump Station Construction Works and funding to progress Tauherenikau Pipeline, in addition to those presented in Scenario 2. See Appendix E3. It is noted that this budget proposal is focused on the most important water services for the Council - safe drinking water projects and reactive capex only. There is no budget allocation for delivering any other high risk, or network improvement projects. This introduces significant risks around resource consent compliance and ability to address residual network condition and performance risks.

   d **Scenario 4** – budget increase to $8.8M – as Scenario 2 and 3, and also includes increased funding for the Featherston WWTP Consent Project, smart services and WWTP health and safety compliance works (see Appendix E4).

2. A summary of the key inclusions, exclusions and risks with each of the scenarios presented is given at Table E1.

Table E1 - Summary of scenarios and associated risks

Scenario description	Includes	Exclusions
Scenario 1 Year 2 LTP Budget of $4.0M *Undertake project works as set out in LTP.*	• Project development for Martinborough New Water Source, some funding for Waiohine WTP, Smart meters, Implement water resilience strategy, some funding for network renewals • Some funding for: Greytown trunk main upgrade, some funding for the Greytown, Martinborough and Featherston WWTPs, WW network renewals	• Memorial Park WTP Project • Inadequate funding for other WTP minor works required for compliance • Reactive capex • Controls projects • Donald Street Pump Station; shortfall of $1.2M in LTP to complete physical works. • All modelling • Note budgets included for WW compliance projects will not achieve compliance, they are only to begin the planning and implementation of the journey toward compliance, this is because the works required for compliance will take time to plan and implement

Scenario description	Includes	Exclusions
Scenario 2 Year 2 $4.0M *Undertake drinking water safety projects & use reactive renewals budgets for the remainder of the treatment plants and network*.	• Projects to continue drinking water compliance journey, incl. Memorial Park • Reactive renewal budgets – treatment plant and network	• Wastewater treatment plant compliance projects including Featherston, Martinborough, Greytown and Lake Ferry • Tauherenikau Pipeline long term solution renewal • All modelling • Smart meters works • Planned network renewals • Growth • Level of service improvements • Donald Street Pump Station.
Scenario 3 **Year 2 = $7.83M &** **Year 3 = $3.74M** Use combined LTP funding for Years 2 and 3 ($11.6M total) to undertake drinking water safety and begin compliance projects and commence Donald Street project	• Projects to continue drinking water compliance journey, incl. Memorial Park • Reactive renewal budgets – treatment plant and network • Some funding for wastewater treatment plant compliance projects including Featherston, Martinborough, Greytown and Lake Ferry • Donald Street Pumping Station works ($2M). • Modelling & consent works completed. • Tauherenikau Pipeline long term solution renewal	• Note budgets included for WW compliance projects will not achieve compliance, they are only to begin the planning and implementation of the journey toward compliance, this is because the works required for compliance will take time to plan and implement • Funding for Featherston WWTP Consent project is not at level required to deliver to the current delivery plan. • Smart meter works • Planned network renewals • Growth • Level of service improvements
Scenario 4 **Year 2 $8.8M** Priority Projects	• Projects to continue drinking water compliance journey, incl. Memorial Park • Reactive renewal budgets – treatment plant and network • Some funding for Donald Street PS • Modelling • Wastewater treatment plant compliance projects including Featherston, Martinborough, Greytown and Lake Ferry, note that funding for Featherston WWTP is increased in this scenario to reflect current delivery plan for Years 2 & 3 • Progressing Tauherenikau Pipeline renewal • Progressing some smart meter works • WWTP Health and Safety compliance projects	• Note budgets included for WW compliance projects will not achieve compliance, they are only to begin the planning and implementation of the journey toward compliance, this is because the works required for compliance will take time to plan and implement • Early design for some growth • Early design for some Level of service improvements

3. The risks, issues and opportunities presented in the earlier version of the memo is as presented in this version, with the exception of Memorial Park WTP project, which is now funded under the current proposed projects. The risk associated with Memorial Park is summarised as:

   a **Memorial Park WTP project** – this project is to design and construct a containerised drinking water treatment plant to provide safe and compliant drinking water. The existing bore pump is at the end of its useful life and has issues with turbidity. The existing treatment plant does not meet current NZWDS which requires upgrades to meet 4-log treatment (UV, Filtration, Chlorination and pH correction). The existing chemical dosing room within the swimming pool is currently an operational and public health risk which requires decommissioning. By not funding this project, this treatment plant will continue to be non-compliant. Ongoing high opex costs are required for the temporary pH and UV systems. Continued operational bore pump turbidity issues will persist.

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Appendix E1 - Scenario 1

Proposed Budget $4.0M

Compliant with 2021-24 Long Term Plan

Projects and budgets identified in the 2021-24 Long Term Plan

Project Title	Water Type	LGA Classification	Value Year 2 ($)
Martinborough new water source	Water	Growth	432,000
Featherston - Waiohine Upgrade	Water	Level of Service	97,200
Smartmeters	Water	Level of Service	1,000,000
Implement water resilience strategy	Water	Level of Service	50,000
Network Renewals	Water	Renewals	366,000
Greytown trunk main upgrade	Wastewater	Growth	216,000
Greytown treatment plant	Wastewater	Level of Service	58,200
Martinborough treatment plant	Wastewater	Level of Service	270,000
Health and Safety Upgrades	Wastewater	Level of Service	108,000
Featherston treatment plant	Wastewater	Renewals	1,000,000
Reticulation renewals	Wastewater	Renewals	337,000

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Appendix E2 - Scenario 2

Proposed Budget Year 2 = $3.95M

Drinking Water Safety and Reactive Capex Focus (no capital works at Donald Street Pump Station)

Project Title	Water Type	LGA Classification	Value Year 2 ($)	Value Year 3 ($)
GTN Memorial Park WTP Upgrades - Stage 3	Water	Level of Service	2,450,000	-
FSTN Waiohine WTP Stage 3 upgrades	Water	Level of Service	300,000	600,000
MTB WW Control System Upgrades	Wastewater	Level of Service	90,000	100,000
SWDC - Remote Water Quality Sensors - zone monitoring	Water	Level of Service	75,000	-
Upgrades to WTP telemetry networks	Wastewater	Level of Service	75,000	80,000
GTN PW Reactive Renewals	Water	Renewal	45,000	50,000
FSTN PW Reactive Renewals	Water	Renewal	45,000	50,000
MTB PW Reactive Renewals	Water	Renewal	45,000	50,000
FSTN Featherston WWTP Reactive Renewals	Water	Renewal	45,000	50,000
GTN Greytown WWTP Reactive Renewals	Water	Renewal	45,000	50,000
FSTN Lake Ferry WWTP Reactive Renewals	Wastewater	Renewal	45,000	50,000
MTB WWTP Reactive Renewals	Wastewater	Renewal	45,000	50,000
Martinborough WTP Reactive Renewals	Wastewater	Renewal	45,000	50,000
Waiohine WTP Reactive Renewals	Wastewater	Renewal	45,000	50,000
GTN WW Reactive Renewals	Wastewater	Renewal	40,000	35,000
MTB WW Reactive Renewals	Wastewater	Renewal	40,000	35,000
FSTN WW Reactive Renewals	Wastewater	Renewal	40,000	40,000
SWDC-CPX-FSTN Lake Ferry WWPS Reactive Renewals	Wastewater	Renewal	30,000	30,000
GTN WW Control Systems Reactive Renewals	Wastewater	Renewal	30,000	30,000
FSTN WW Pump Station Reactive Renewals	Wastewater	Renewal	30,000	30,000
GTN WW Pump Station Reactive Renewals	Wastewater	Renewal	30,000	30,000
SWDC WW Basestation establishment	Wastewater	Renewal	30,000	30,000
SWDC PW Basestation establishment	Water	Renewal	30,000	30,000
SWDC Archestra Graphics and Historian integration	Water	Level of Service	25,000	-
SWDC Archestra Graphics and Historian integration	Wastewater	Level of Service	25,000	-
Pirinoa WTP Reactive Renewals	Water	Renewal	20,000	20,000
Memorial Park WTP Reactive Renewals	Wastewater	Renewal	20,000	20,000
FSTN WW Control Systems Reactive Renewals	Wastewater	Renewal	20,000	20,000
MTB WW Control Systems Reactive Renewals	Water	Renewal	20,000	20,000
SWDC GTN DW Control Systems Reactive Renewals	Water	Renewal	20,000	20,000
SWDC FSTN DW Control Systems Reactive Renewals	Water	Renewal	20,000	20,000
SWDC MTB DW Control Systems Reactive Renewals	Water	Renewal	20,000	20,000
WTP Testing	Water	Level of Service	10,000	100,000
SWDC-SW - Reactive Renewals Controls	Stormwater	Renewal	10,000	2,000
GTN SW Reactive Renewals	Stormwater	Renewal	10,000	10,000
FSTN SW Reactive Renewals	Stormwater	Renewal	10,000	10,000
MTB SW Reactive Renewals	Stormwater	Renewal	10,000	10,000
SWDC Treatment Plant Datalogging	Water	Level of Service	6,000	-
SWDC Treatment Plant Datalogging	Wastewater	Level of Service	6,000	-
WWTP - Generator readiness	Water	Level of Service	-	20,000

Appendix E3 - Scenario 3 – Proposed Scenario

Proposed Budget Year 2 = $7.83M and Year 3 = $3.74M

Redistributes Year 2 & 3 LTP Values. As Scenario 2, with allowance for construction works at Donald Street Pump Station, some allowance for progressing WWTP consenting works, and some funding to progress Tauherenikau Pipeline Crossing consenting and design.

Project Title	Water Type	LGA Classification	Value Year 2 ($)	Value Year 3 ($)
FSTN Donald Street Pump Station upgrade	Wastewater	Renewal	2,230,000	-
FTSN WWTP Consent (alternative disposal systems FTSN)	Wastewater	Level of Service	500,000	250,000
Tauherenikau Pipeline Crossing	Water	Renewal	300,000	800,000
Greytown WWTP Compliance	Wastewater	Level of Service	250,000	400,000
MTB WWTP Compliance	Wastewater	Level of Service	250,000	250,000
Reservoir Water Quality Improvements - Reactive	Water	Level of Service	50,000	50,000
FSTN Water Modelling	Water	Level of Service	40,000	20,000
SWDC-CPX-GTN Water Modelling	Water	Level of Service	40,000	20,000
SWDC-CPX-MTB Water Modelling	Water	Level of Service	40,000	20,000
FSTN WW Modelling	Wastewater	Level of Service	20,000	20,000
FSTN SW Modelling	Stormwater	Level of Service	20,000	20,000
SWDC-CPX-GTN Stormwater Modelling	Stormwater	Level Of Service	20,000	20,000
MTB SW Modelling	Stormwater	Level Of Service	20,000	20,000
GTN WW Modelling	Wastewater	Level of Service	20,000	20,000
MTB WW Modelling	Wastewater	Level of Service	20,000	20,000
FSTN Global SW Consent	Stormwater	Level of Service	20,000	-
GTN Global SW Consent	Stormwater	Level of Service	20,000	-
SWDC-CPX-MTB Global SW Consent	Stormwater	Level of Service	20,000	-

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Appendix E4 - Scenario 4

Year 2 Proposed Budget $8.8M

All Priority Projects (Scenarios 2 and 3 + the following additional projects, including an increase to the values proposed for the Featherston WWTP consent project)

Project Title	Water Type	LGA Classification	Value Year 2 ($)	Value Year 3 ($)
FTSN WWTP Consent (alternative disposal systems FTSN)	Wastewater	Level of Service	1,300,000	1,600,000
WWTP - Health and Safety (H&S) upgrades - Fencing/security upgrades	Wastewater	Level of Service	100,000	280,000
Featherston - Smart Meters/Universal Metering	Water	Level of Service	10,000	75,000
Greytown - Smart Meters/Universal Metering	Water	Level of Service	10,000	75,000
Martinborough - Smart Meters/Universal Metering	Water	Level of Service	10,000	75,000
SWDC - New Smart Services	Water	Level of Service	10,000	30,000
FSTN Water Main Renewals 21-24	Water	Renewal	-	200,000
South Wairarapa - WW network renewals - 2018 Base	Wastewater	Renewal	-	100,000
SWDC Reservoir VHCA Remedial Works	Water	Renewal	-	20,000
SWDC-PW-VHCA Pipe Renewal Programme	Water	Renewal	-	20,000
SWDC-SW-VHCA Pipe Renewal Programme	Stormwater	Renewal	-	20,000
SWDC-WW-VHCA Pipe Renewal Programme	Wastewater	Renewal	-	20,000

**Funding for Featherston WWTP is increased in this scenario to reflect the project team's current delivery plan for Years 2 & 3.*

Appendix 4 – Tauherenikau Pipeline Repair, Detailed Design and Long-Term Solutions, June 2022

Design Report

Project Name: Tauherenikau River Crossing Options

Project No.: OPC 101202

Date: 15 June 2022

Our water, our future.

Document Control

Panel Member	Stantec
Panel Project Manager	Paul Marsden
Client Council	South Wairarapa District Council

REVISION SCHEDULE						
Current Status			Draft			
No	Date	Description	Prepared by	Checked by	Reviewed by	Approved by
1	03/06/22	Draft for review	PB	BH	PM	PM
2	15/06/22	For approval	PB	BH	PM	PM

Executive Summary

The purpose of this project is to identify, design repair the existing pipe or construct a replacement pipe across the Tauherenikau River. The project is required because the current pipe crossing is exposed in the river and at a high risk of failure.

Six options were identified as possible solutions to the problem:

1) Do minimum – keep existing pipe as is and undertake annual maintenance
2) Reinforce the existing pipe
3) Trenchless installation (pipe ram) 4m deep at existing crossing site
4) Open trench installation 4m deep at existing crossing site
5) Suspension bridge close to existing crossing site
6) Diversion to rail line and crossing on rail bridge

A multi-criteria analysis process was used to assess the options against a set of criteria developed for this project. The main criteria included cost, resilience, effects and Mana Whenua Values.

The options were scored against the criteria and the results moderated in an MCA workshop. Mana Whenua Values were not scored in the workshop as no input had been received from local iwi. However, in a meeting between Wellington Water and Rangitane ō Wairarapa following the MCA workshop, the iwi expressed a view that they do not support having a pipeline in the river. At time of writing, no response had been provided by Ngāti Kahungunu.

Results from the MCA Workshop and subsequent sensitivity analysis showed that the open trench installation option below the river was the highest scoring. The Level 1, 95% cost estimate for this option was identified as $2.75M.

The key risks associated with this option include obtaining resource consent for works in the river and the potential hazard posed by an open trench in a high-risk area for inundation.

This report recommends that the open trench option be taken forward to preliminary design.

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List of Appendices

1 Introduction

1.1 Project location and layout

This project is located across the Tauherenikau River to the North-East of Featherston. Figure 1 below shows the river crossing location

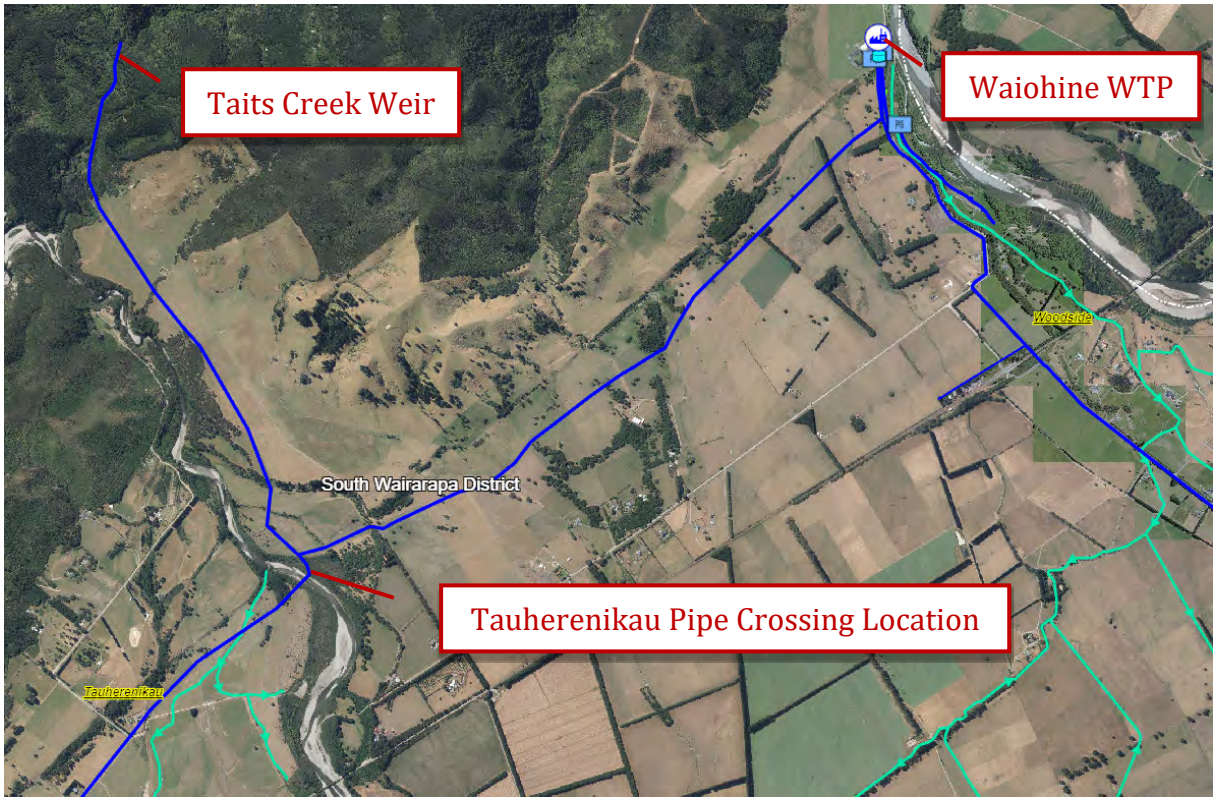


Figure 1 Waiohine Water Treatment Plant and Tauherenikau Crossing

1.2 Project background

Featherston township was supplied with water from a small dam constructed in 1964 in Boar Bush Gully. This system was extended in 1975 to include a weir and intake on Taits Creek and a pipeline connecting it to Boar Bush Dam. The pipe crossed beneath Tauherenikau River.

In 1999, due to water quality and quantity issues, a new pipeline was installed to Featherston from Greytown's water treatment plant on Waiohine Valley Rd in Woodside, as shown in Figure 1. The pipeline linked in to the Taits Creek pipeline before the Tauherenikau River crossing. This pipeline supplies most of Featherston's water and is a critical asset.

The pipeline was originally installed under the riverbed. However, in the proceeding years, due to a combination of downstream riverbed mining and the river path shifting, the bed of the river has dropped, exposing the Featherston water supply pipeline. Evidence from aerial photos suggests the pipe was first exposed sometime around mid-2013, refer Figure 2.

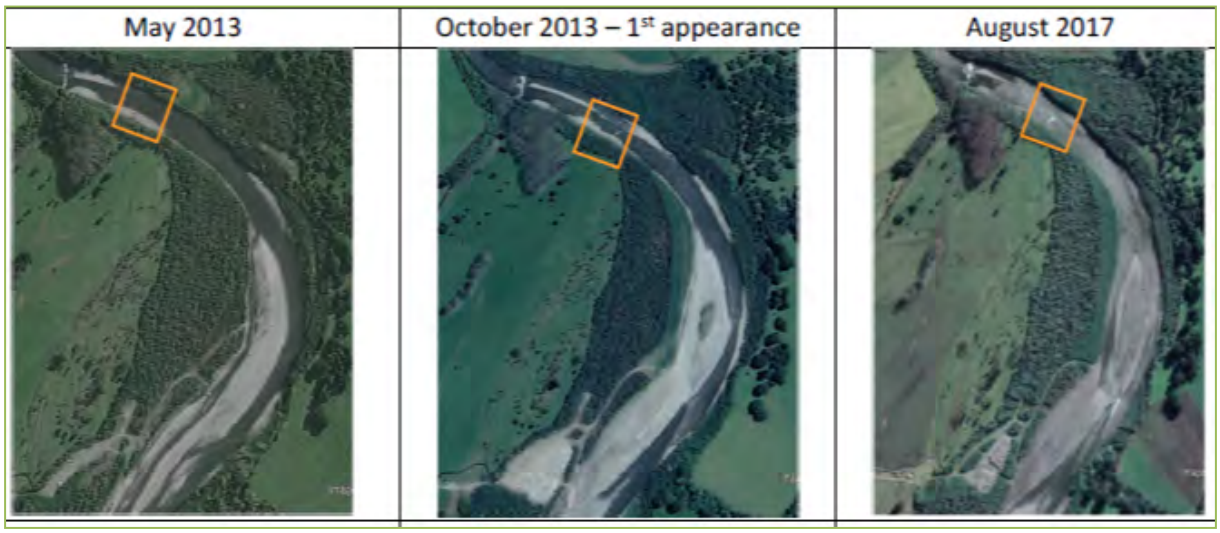


Figure 2 Aerial photos showing appearance of water supply pipe in Tauherenikau River

In early 2021, Wellington Water engaged Stantec under an emergency works agreement to look at options to strengthen or replace the pipeline, with the aim of completing construction works in summer 2021/22.

Stantec visited the site with representatives from Wellington Water and South Wairarapa District Council in March 2021. Photos taken of the exposed pipe show part of the pipeline encased in concrete and part of the pipeline as bare steel, refer Figure 3. The condition of the steel could not be determined. It is understood that the exposed section of steel pipe used to be outside the main river flow but as the river has shifted and dropped, the pipe has been exposed.

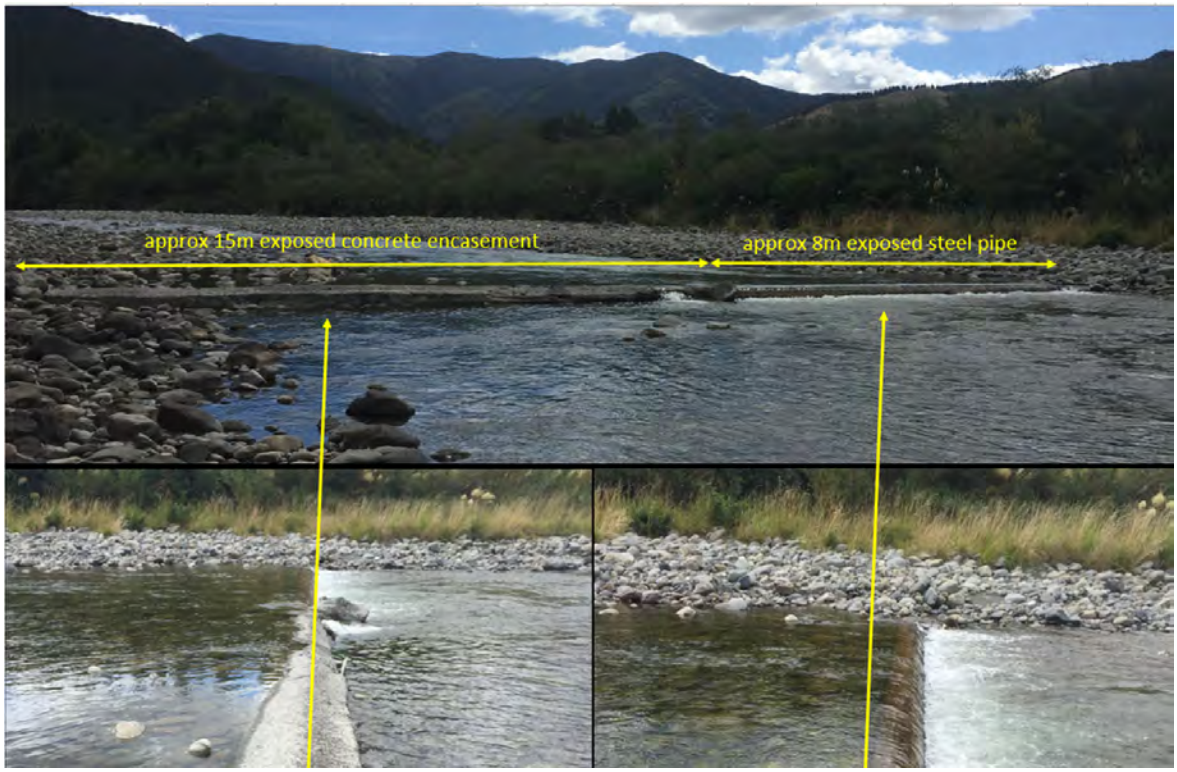


Figure 3 Photos of exposed pipe in Tauherenikau River

The condition of the pipeline is unknown. From site observations, the exposed steel section appears clean and shiny in places, and the original coating apparent in other places. This could suggest the steel thickness has not been adversely affected, but this would need to be confirmed by testing. The condition of the internal lining is also unknown but could have suffered damage through external rock strikes. This would need to be confirmed by testing.

In December 2021, a cracked pipe joint was observed on the exposed pipe in the river. The broken joint was allowing water to leak out of the pipeline, with potential also for unsafe water to enter the pipeline and contaminate the supply. A repair of the coupling was completed by Fulton Hogan in early 2022. They also placed some additional rock around the pipe to provide some additional protection.

Observations from the riverbed and banks suggest that there has not been recent transport of large boulders down the river. This may be due to the presence of a diversion weir upstream of the pipe crossing, installed to feed a stock water race. The upstream weir may be currently blocking large boulders from tracking further down the river in high flow events. However, it is likely that the pipe will continue to be undermined and exposed by river flows, leading to damage of the pipeline (as happened in 2021) and moderate risk of complete failure of the pipeline. Complete pipe failure would leave Featherston without drinking water until emergency water trucking was in place.

The pipeline is also located close to the Wairarapa fault. Evidence from the previous rupture event in 1855 suggests the fault could move up to 18m laterally in a large event[1]. In this case, the pipeline will most likely fail. Designing and installing a pipeline to survive such an event would be very difficult and very expensive. According to GNS Science[2], the return period of a large event on the Wairarapa fault is 1150-1200 years. Given the last fault rupture was in 1855, the fault is not expected to rupture within the lifetime of the existing pipe.

Wellington Water Customer Operations Group have developed an operational response plan in the event that this pipeline fails.

1.3 Project summary

The objective of this project is to design and repair the existing pipe or construct a replacement crossing of the Tauherenikau River for the current water pipe.

The options developed in the first stage of this project include a new section of pipe below the river, rerouting the pipe to an existing bridge, or local intervention to reinforce the existing pipe. The initial phase includes a Multi-Criteria Analysis (MCA) to define the highest scoring option.

2 Scope of Design

The scope of the design to support the optioneering process is as follows:

- Outline alignment of pipeline from existing pipe to river crossing and tying back to existing
- High-level design of river crossing options to support comparative cost estimate
- Geotechnical desktop assessment to support analysis of below-ground options

[1] Little, Schermer, Van Dissen, Begg, Carne (2008). *Field Trip 5*. GNS Science, Lower Hutt
[2] How do we know which fault is most likely to rupture next in Wellington? / Wellington Fault / Major Faults in New Zealand / Earthquakes / Science Topics / Learning / Home - GNS Science. Last accessed 11/05/2022

- River geomorphological assessment so support analysis of pipe installation depth

3 Basis of Design

This project is based on the activity brief issued by Wellington Water dated February 2022. The subsequent design will be completed based on the following standards and specifications:

- Regional Standard for Water Services, 2021.
- Regional Specification for Water Services, 2021.
- Wellington Water and South Wairarapa District Council (SWDC) H&S Standards, Policies and Procedures.

Pipe sizing has assumed replacing existing with similar internal diameter. Design flows will be confirmed during Preliminary Design

4 Scope of Works

The Optioneering and Concept Design scope covers the following work:

1) Develop a shortlist of options including reinforcing the existing pipe, a new pipe under the river and a new pipe attached to the existing rail bridge.
2) Prepare concept designs and Level 1 cost estimates for the shortlisted options.
3) Confirm the feasibility and practicality of the different shortlist options, identifying any critical constraints or risks.
4) Assess the likelihood of pipeline failure due to river movement and scour for the short-listed options.
5) Complete a Multi-Criteria Analysis (MCA) to systematically score and rank the shortlist options to identify a highest scoring option. The MCA should include elements of resilience, operational impact, financial impact, environment impact and social/cultural impacts.
6) Prepare and submit an Options Assessment report incorporating Wellington Water's comments and the outcome of the MCA process and investigations.
7) HOLD POINT – Wellington Water will assess and confirm the preferred approach.

5 Existing Network Configuration

The existing water network configuration is shown in Figure 4.

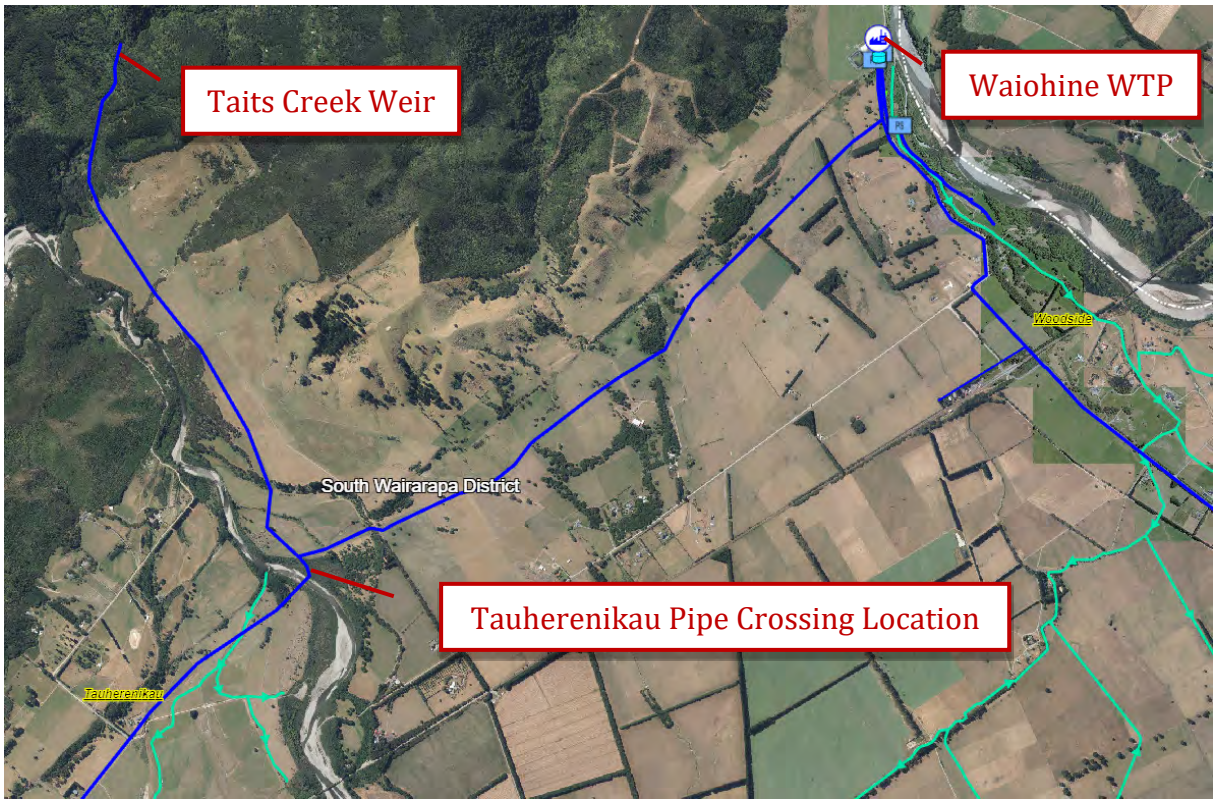
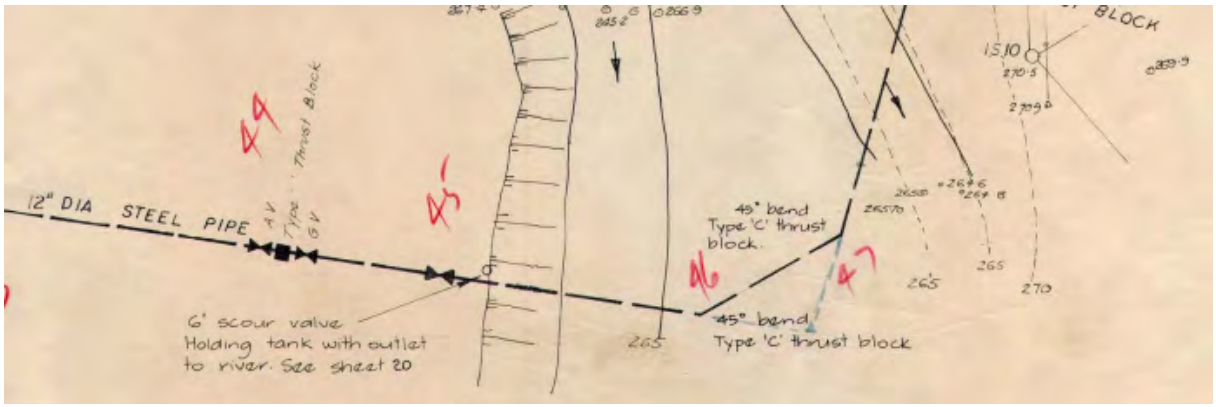


Figure 4 Water Network Configuration

The Tauherenikau River crossing point is connected to Taits Creek Weir (constructed 1975) and the Waiohine WTP (constructed 1999). This is the sole water pipeline connecting the Waiohine WTP to Featherston.

The original river crossing longsection shows the pipe being installed on a gentle slope below the riverbed.



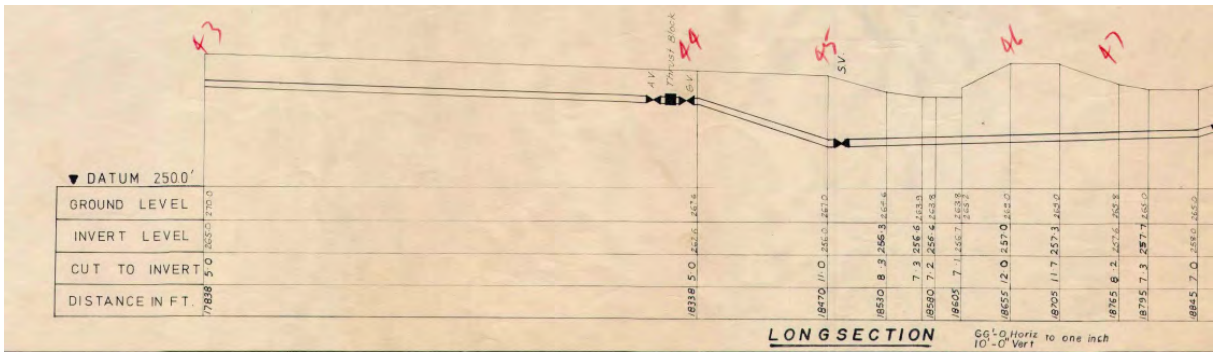


Figure 5 Original Tauherenikau River Crossing Longsection

However, when the pipe was re-laid across the river in 1999 it appears to have been installed flat at a shallower depth. The pipe crossing the river channel was encased in concrete in the 1999 replacement.

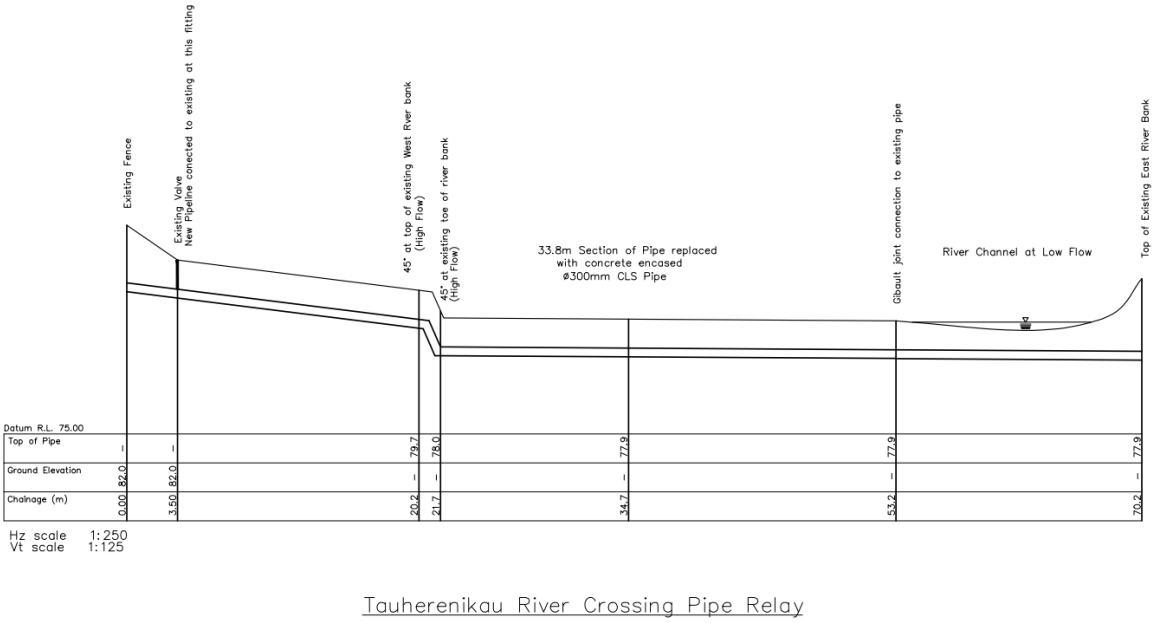
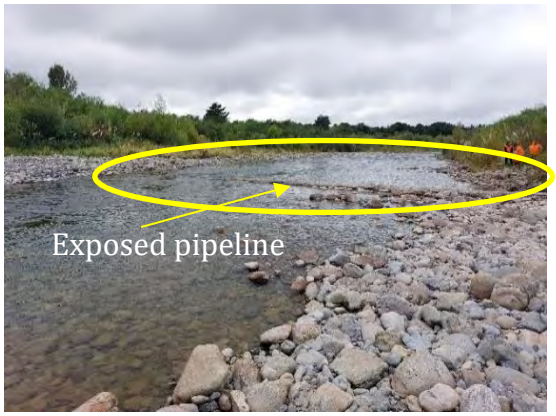


Figure 6 Tauherenikau River Crossing Longsection 1999

6 Site Investigations

6.1 Geotechnical

A geotechnical desktop study was undertaken by Holmes Consulting. This is attached in Appendix A. A site visit was conducted on the 8th of March 2022. A summary of the site investigation is shown in Figure 7



Looking down stream with existing pipe exposed

Looking up stream from the pipe crossing, large boulders and cobbles observed within stream channel.

Large boulders typically 300mm to 800mm in size were observed along the stream bed.

Driven 200UB steel beams and railway irons were observed in the stream bed approximately 180m northwest from the pipe crossing at the diversion inlet.

Figure 7 Site Investigation Record

The land area surrounding the pipe bridge location is pastoral farmland, with minimal area of undisturbed native bush or wetland.

The location of the Wairarapa fault can be seen in Figure 8.

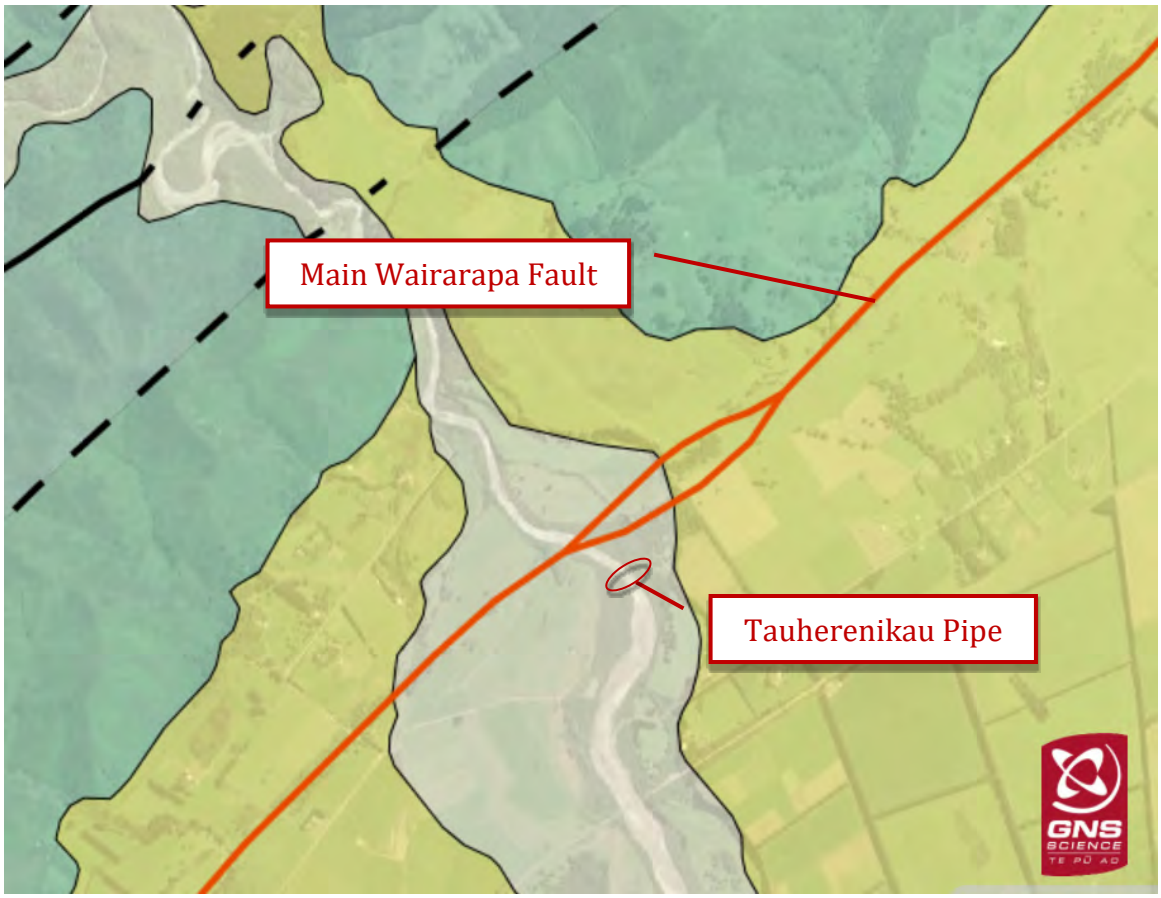


Figure 8 Wairarapa Fault Location

6.2 River Geomorphology

Historic morphology of the Tauherenikau River was the subject of a study conducted by PDP NZ Ltd. on behalf of Wellington Water. The study looked at transects across the river that have been recorded by GWRC since 1992. The report also includes transects at the rail bridge that date back to its construction in 1946.

The report, included in Appendix B, summarises that the historic degradation rate of the riverbed is approximately 30mm per year. The report also concludes that this rate is likely to be suitable for predicting future riverbed degradation. The report provides the following recommended minimum design depths for a new pipe:

Design Life	*Minimum Pipeline Crown Depth Below Riverbed Level (Thalweg at the crossing point)*
50 years	30mm/ year x 50 years = 1.5m + nominal bed scour allowance of 1m = 2.5m
100 years	30mm/ year x 100 years = 3m + nominal bed scour allowance of 1m = 4m

Table 1 – Recommended Minimum Pipeline Depths

7 Analysis

A multi-criteria analysis (MCA) was determined as the most suitable approach to support the development of a preferred solution.

The criteria and their base weighting that were developed for the analysis are shown in Figure 9. The weightings were subsequently discussed and agreed in the MCA Workshop dated 16 May 2022.

Criteria	Sub-Criteria	Description	Weighting (%)
Cost	Capex	Capital cost	30
	Opex	100 year operational cost	10
Resilience (including during-event and post-event recovery)	Fault Rupture	Resilience to ground shaking and lateral movement from a seismic event for initially constructed asset	4.0
	River Morphology	Resilience of initially constructed asset to river bank or river bed erosion	12.0
	Construction Programme	How quickly a pipeline can be constructed that offers more resilience to the existing	4.0
Effects	Natural Environment	Effect each option has (including construction and maintenance) on the natural environment, especially river ecology	10
	Social and Property	Effect each option has (including construction and maintenance) on people and property	10
Mana Whenua Values	N/A	Effect each option has on local mana whenua values	20
			100

Figure 9 MCA Criteria, Description and Weighting

7.1 Operational Cost and Net Present Value

A decision was made to use a 100-year operational cost comparison of the options in a net present value (NPV). 100 years was chosen as the operational timeframe as this is the intended design life of a new pipe. The assumptions that have gone in to calculating the operating cost and NPV are as follows:

- Discount rate of 5% as per treasury.govt.nz advice[3].
- Current real cost estimates for maintenance were used for future costs – inflation was ignored.
- A design life of 50 years was assumed for the suspension bridge, with replacement costs occurring in year 51.

[3] Discount Rates (treasury.govt.nz) last accessed 17 May 2022.

- Most of the current pipe crossing the river was installed in 1999. For the two options that keep the existing pipe, it was assumed that this would be replaced after a life of 100 years, which correlates to year 77 in the NPV.
- It was assumed that the annual maintenance works required for the options that keep the existing pipe would offset riverbed degradation at the pipe location.
- For the options that keep the existing the existing pipe, it was assumed that the pipe would be replaced by open trench at the end of its life and there would be no further rock replacement after the pipe had been replaced.
- No cost was included in the rail bridge option for replacing the bridge. It is assumed that the cost of this would be solely borne by KiwiRail.

8 Options Assessment

8.1 Options

The shortlist of options developed for the Tauherenikau River crossing is shown below. These options were selected to provide a cross-section of installation type, capital cost, operating cost and resilience.

1) Do minimum – keep existing pipe as is and undertake annual maintenance
2) Reinforce the existing pipe
3) Trenchless installation (pipe ram) 4m deep at existing crossing site
4) Open trench installation 4m deep at existing crossing site
5) Suspension bridge close to existing crossing site
6) Diversion to rail line and crossing on rail bridge

These options are outlined in more detail below. Pricing information was supplied by Fulton Hogan as part of an Early Contractor Involvement (ECI) process to support the optioneering. A check on the pricing was undertaken by Alta Consultants.

8.1.1 Option 1 – Do Minimum

Description

Keep the existing pipe in its current condition and maintain on an annual basis or after heavy floods, as required.

Benefits and Risks

Benefits	Risks
- No capital cost - No effects associated with construction	- Pipe condition is currently unknown - Large river flow event could cause washout of

	remedial work exposing or damaging the pipe - Annual risk to environment with rock replacement - High annual cost to maintain - Offers no additional resilience to natural events

Capital Cost Estimate

95% Level 1 Estimate: $0.13

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

- Annual visual inspection
- Annual rock armour replacement, estimated at 30% of volume of current repair works underway
- Pipe replaced on age in year 77 of NPV. Assumed to be open cut through river. No further rock replacement required after new pipe installed

Net Present Value – 100Y Opex: $3.08M

8.1.2 Option 2 – Reinforce the Existing

Description

Keep the existing pipe but provide some encasement and additional armouring around the pipe to protect it from scour – see Figure 10.

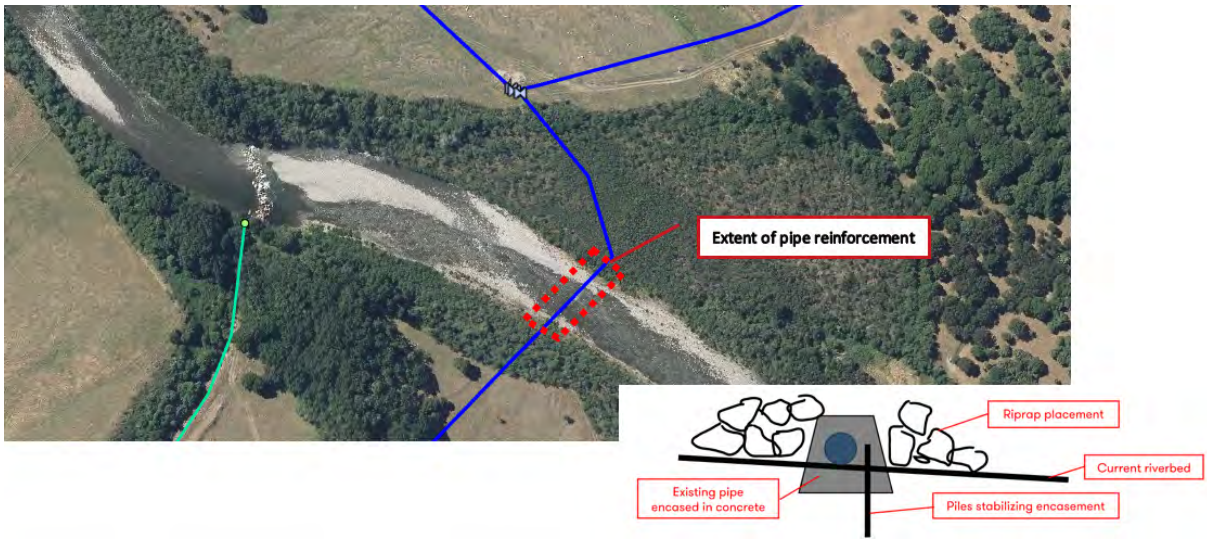


Figure 10 Option 2 - Reinforce the Existing Pipe

Benefits and Risks

Benefits	Risks
- Provides some resilience to high river flow events and scour protection	- Pipe condition is currently unknown - Multiple large river flow events could cause washout of upstream or downstream armouring, putting the encasement at risk of damage and failure - Risk to environment from sediment mobilisation during construction - Annual risk to environment with rock replacement - High annual cost to maintain

Capital Cost Estimate

95% Level 1 Estimate: $5.39M

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

- Annual visual inspection
- Annual rock armour replacement, estimated at 15% of volume of current repair works underway
- Pipe replaced on age in year 77 of NPV. Assumed to be open cut through river. No further rock replacement required after new pipe installed

Net Present Value – 100Y Opex: $1.62M

8.1.3 Option 3 – Trenchless Installation 4m Deep

Description

Install two pits either side of the current flow channel and ram an 800-900mm steel pipe casing across the river at 4m deep. Sleeve a 355mm PE pipe inside the casing. Open trench either side of the crossing to connect back into the existing pipe – see Figure 11.

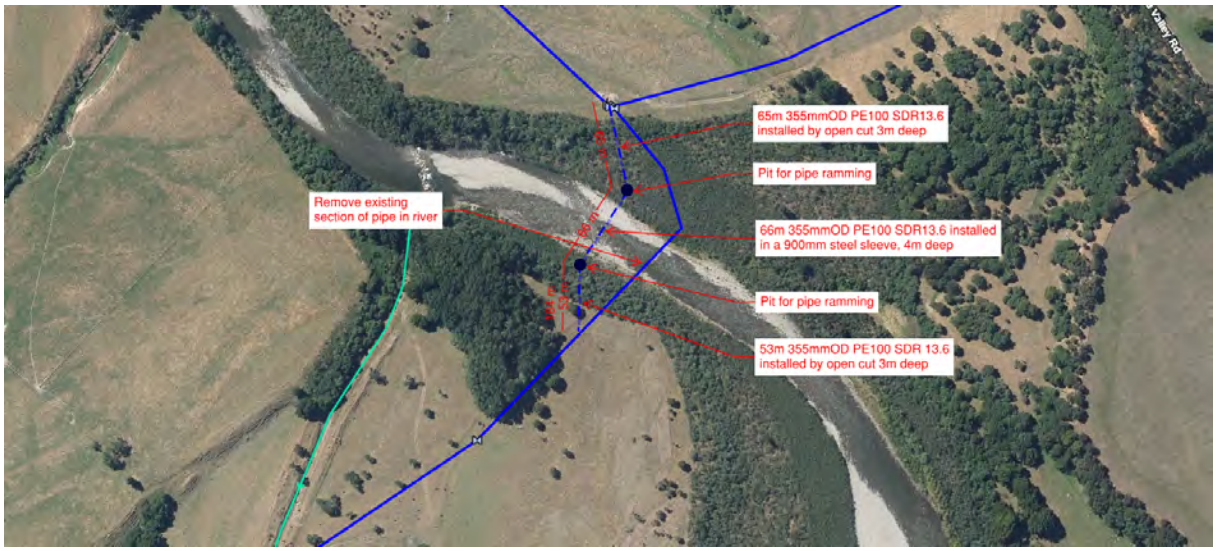


Figure 11 Option 3 – Trenchless Installation

Benefits and Risks

Benefits	Risks
- Provides added resilience to riverbed degradation – can potentially achieve 100-year design life - Does not require construction works in the river - A pipe sleeve potentially provides better access after a seismic event to inspect and/or repair the pipe	- There is evidence of some boulders up to 800mm below the ground surface at this location. The pipe ram could strike a boulder that cannot be passed resulting in an open trench in the river to complete the work – both would need to be consented

Capital Cost Estimate

95% Level 1 Estimate: $4.93M

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

- None anticipated

Net Present Value – 100Y Opex: $0.0M

8.1.4 Option 4 – Trenched Installation 4m Deep

Description

Open trench a 355mm PE pipe across the river at 4m deep and connect back into the existing pipe – see Figure 12.

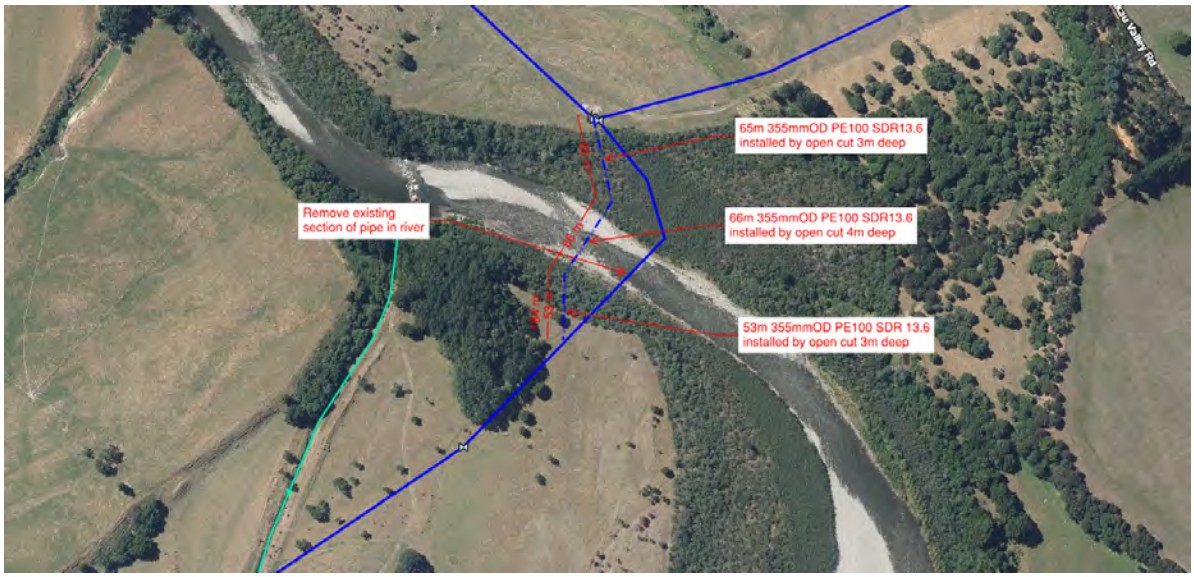


Figure 12 Option 4 – Trenched Installation

Benefits and Risks

Benefits	Risks
- Provides added resilience to riverbed degradation – can potentially achieve 100-year design life - Relatively quick installation time and lower capital cost	- Requires river diversion and likely impact on river environment - Flooding during construction could have safety implications for working around an open trench

Capital Cost Estimate

95% Level 1 Estimate: $2.75M

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

- None anticipated

Net Present Value – 100Y Opex: $0.00M

8.1.5 Option 5 – Suspension Bridge at Existing Site

Description

Open trench a 355mm PE pipe upstream to a location where the historic river channel is constant. Construct a suspension bridge with epoxy-line steel pipe suspended on bridge deck. Open trench 355mm PE pipe back in to existing pipeline – see Figure 13.

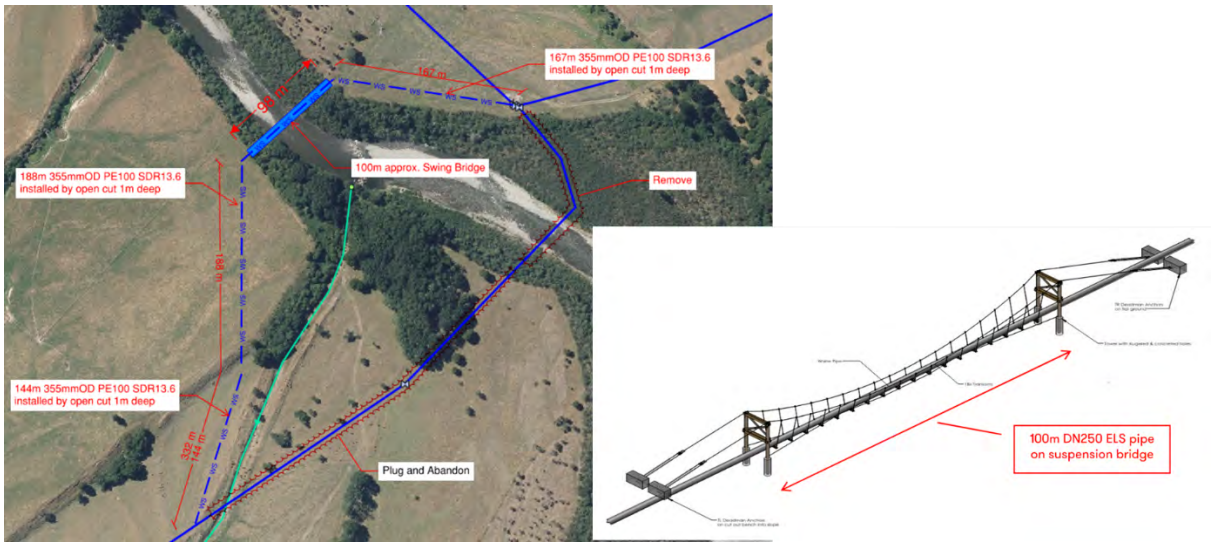


Figure 13 Option 5 – Suspension Bridge at Existing Site

Benefits and Risks

Benefits	Risks
- Provides added resilience to river movement and scour - Does not require work in the river	- Requires additional crossing of Wairarapa fault - Lifespan of a wooden suspension bridge structure is anticipated at 50 years maximum - Requires annual bridge and pipe inspections - Lightweight structure so will move and flex to a high degree in a seismic event, which may put added pressure on the pipe

Capital Cost Estimate

95% Level 1 Estimate: $6.41M

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

- Annual bridge and pipe inspection
- 5-yearly maintenance on bridge to replace parts, increasing with increasing age of bridge
- 20-30 year repainting of above-ground pipe

Net Present Value – 100Y Opex: $0.63M

8.1.6 Option 6 – Diversion and Crossing at Rail Bridge

Description

Open trench a 355mm PE pipe along local roads to the rail bridge. Fix epoxy-lined steel pipe to side of rail bridge deck. Open trench a 355mm PE pipe back through farm paddocks to reconnect to existing pipeline – see Figure 14.

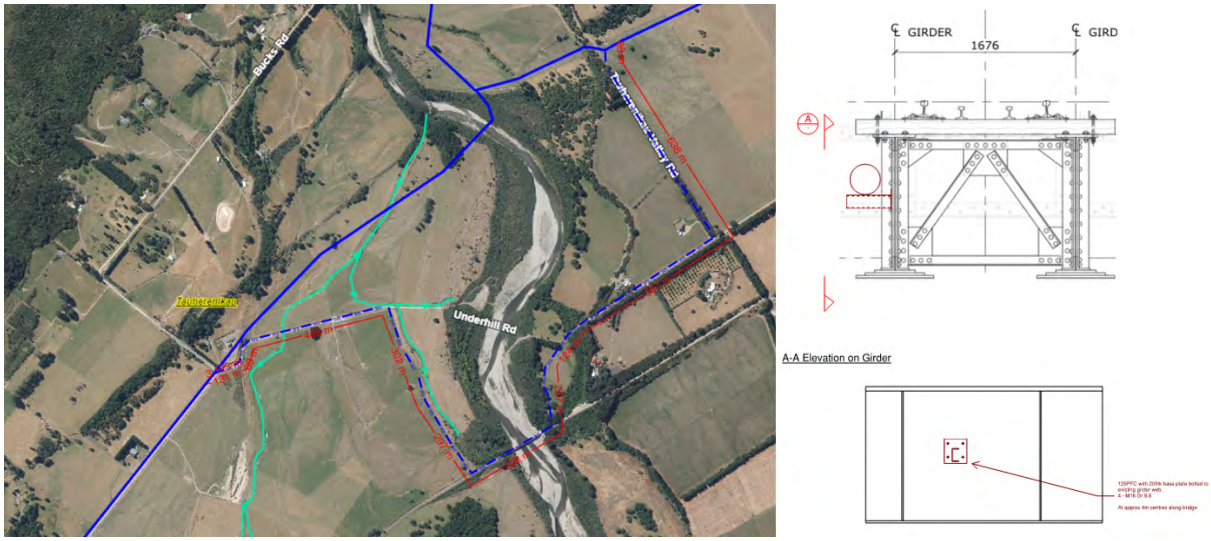


Figure 14 Option 6 – Crossing at Rail Bridge

Benefits and Risks

Benefits	Risks
- Provides added resilience to river movement and scour - Provides added resilience to fault rupture being on a structure that further away from the fault - Does not require work in the river - Bridge structure likely to be maintain by Kiwirail in reasonable condition for the foreseeable future	- Requires annual bridge and pipe inspections on an asset not owned by SWDC. Access agreement may be required with Kiwirail - Over 1.3km of extra pipe length compared to the existing pipe alignment, potentially increases risk of failure in seismic event

Capital Cost Estimate

95% Level 1 Estimate: $7.90M

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

- Annual bridge and pipe inspection

- 20-30 year repainting of above-ground pipe

Net Present Value – 100Y Opex: $0.10M

8.2 MCA Scoring

An MCA workshop was held at Wellington Water's office on 16 May 2022. This was attended by members of Wellington Water, their legal counsel (Dentons), South Wairarapa District Council, the peer reviewer (Mott Macdonald), Stantec and Holmes.

Scoring of each criterion was led by a specialist, with the results brought to the workshop for discussion. Richard Peterson and Bram Mulling from Stantec completed the scoring for Effects. Peter Brown from Holmes completed the scoring for Resilience. Fulton Hogan provided inputs to the cost estimate. As of the workshop, no input had been provided on Mana Whenua Values.

Commentary from the MCA workshop and definitions on scoring is included in Appendix C.

The agreed scores for each criterion from the MCA Workshop are shown in Figure 15. The overall score, out of 5, is a product of the agreed weighting and the score for each criterion.

	Mana Whenua Values	Effects		Resilience			Cost		Overall
		Natural Environment	Social & Property	Fault Rupture	River Morphology	Construction Programme	Capex	Opex	
Weight	20.0	10.0	10.0	4.0	12.0	4.0	30.0	10.0	100
Option 1 - Do minimum		2	4	1	1	1	5.0	1.0	2.40
Option 2 - Reinforce existing		2	4	1	2	5	2.3	2.9	2.05
Option 3 - Under - trenchless, 4m deep		5	4	3	5	4	2.5	5.0	3.04
Option 4 - Under - open trench, 4m deep		3	4	2	5	5	3.6	5.0	3.17
Option 5 - Bridge at existing site		5	3	2	4	3	1.7	4.2	2.42
Option 6 - Rail bridge		5	2	3	5	2	1.0	4.9	2.29

Figure 15 MCA Results

8.2.1 Mana Whenua Input

Wellington Water sought input from Rangitane ō Wairarapa and Ngāti Kahungunu as iwi with mana whenua status in the area.

Wellington Water had a meeting with Rangitane ō Wairarapa on 24 May 2022. Wellington Water presented the options to the iwi. Feedback received at the meeting is summarised as follows:

- It was questioned why Featherston was receiving water from the Waiohine catchment when there was plenty of water in the large Tauherenikau / Featherston catchments
- Concern was raised that some iwi members from Greytown may not be aware that their water supply was coming from Greytown
- Rangitane ō Wairarapa do not support a pipeline in the river (Option 1 and Option 2, as opposed to the other options that are under or above the river)
- Concern was raised over options under the river because the river cannot be controlled, and we do not know where and how much it may move

Following the meeting, Wellington Water agreed to share with Rangitane ō Wairarapa any information they hold on the decision to move away from a water source in Featherston to the Greytown supply from the Waiohine River. They have also agreed to share the findings from the geomorphology study undertaken by PDP.

Based on this information, the Mana Whenua Values criterion has been left un-scored while further input is sought from Ngāti Kahungunu.

8.2.2 Highest Scoring Option from MCA

The highest scoring option based on the scoring agreed at the MCA Workshop and initial Mana Whenua input is shown to be the option for installing a new pipe trenched under the river.

8.3 Sensitivity Analysis

A sensitivity analysis was undertaken following the MCA workshop to test how sensitive the highest scoring base case option was to different weighting of criteria.

Five sensitivity scenarios were undertaken, shown in Figure 16. These were:

1) Assuming a preference towards capital cost over operating cost or whole-of-life cost
2) Assuming a preference towards a whole-of-life cost over 100 years – net present value of capital cost plus maintenance for 100 years
3) Assuming a preference to exclude cost altogether
4) Assuming a preference towards effects
5) Assuming a preference towards resilience

		Sensitivity Testing					
Criteria	Sub-Criteria	Base	Capex Preference	Whole of Life Preference	Exclude Cost	Effects Preference	Resilience Preference
Cost	Capex	40	60	70	0	15	15
	Opex		10				
Resilience (including during-event and post-event recovery)	Fault Rupture	20	10	10	33.3	7.5	70
	River Morphology						
	Construction Programme						
Effects	Natural Environment	20	10	10	33.3	70	7.5
	Social and Property						
Mana Whenua Values	N/A	20	10	10	33.3	7.5	7.5
		100	100	100	100	100	100

Figure 16 Sensitivity Scenarios

Results from the sensitivity analysis are presented in Figure 17.

Summary	Baseline	Capex Preference	Whole of Life Preference	Exclude Cost	Effects Preference	Resilience Preference
Option 1 - Do minimum	2.40	3.50	3.59	1.33	2.63	1.38
Option 2 - Reinforce existing	2.05	2.20	1.24	1.80	2.67	2.29
Option 3 - Under - trenchless, 4m deep	3.04	2.90	2.96	2.97	4.04	3.98
Option 4 - Under - open trench, 4m deep	3.17	3.48	4.29	2.63	3.43	3.99
Option 5 - Bridge at existing site	2.42	2.21	1.42	2.47	3.50	3.12
Option 6 - Rail bridge	2.29	1.84	0.83	2.50	3.19	3.50

Figure 17 Sensitivity Analysis Results

From the sensitivity analysis the open trench option is highest scoring on whole-of-life cost and resilience preference basis. However, when considering capital cost alone, the do minimum approach is marginally higher scoring. When excluding cost or weighting the analysis towards effects, the trenchless solution becomes the highest scoring.

Commentary on Capex versus Whole of Life Preference

The 'do minimum' option scores well when considering capex cost alone because there is no associated capital build with 'do minimum'. However, the reality of this option is that there are high annual maintenance costs required to keep this option viable at a manageable level of risk. There is also an argument that the emergency repair costs recently incurred by Wellington Water should be included as part of the 'do minimum' costs, either as capex or opex in the first year. Including these costs as capex push 'do minimum' down the ranking when considering a high capex weighting.

A more complete consideration of costs is to include both the capex and opex costs in a more evenly weighted manner for the evaluation, as the baseline does and as the 'whole of life preference' does. When considering both of these approaches, the highest scoring option remains as the 'open trench' option. This suggests that placing a high weighting on capex alone, is not a valid approach. We can therefore revert to the baseline option as still being highest scoring.

Commentary on Excluding Cost

In the MCA Workshop, and throughout this process, SWDC have expressed concern over cost due to the small community that this pipe serves and the small rate-payer base. There is also no funding for this work in the current Long-Term Plan given the work was only recently identified as urgent. As such, money would need to be taken from other funded projects and re-allocated to this project. This has obvious implications when reporting to ratepayers in South Wairarapa. For this reason, excluding cost from the analysis in not considered a valid approach in this situation, and we can revert to the baseline option as still be considered the highest scoring option.

Commentary on Effects Preference

Analysis presented during the MCA Workshop by Richard Peterson and Bram Mulling suggests that there are not really any material differences between the open trench or trenchless options from an effects on social and property perspective. The difference arises between these two options when considering effects on the natural environment – open trenching requires work in the river and river diversion while the trenchless solution does not. However, given that the current repair works are being undertaken in the river with some temporary diversion, effects on the natural environment from undertaking works in the river are moderate, reasonably able to be controlled and consentable. The surrounding environment is not particularly sensitive or pristine. This suggests that placing a high weighting on effects, or choosing an option on a heavily weighted effects basis, is not a valid approach. We can therefore revert to the baseline option as still being highest scoring.

8.4 Highest Scoring Option

Following the MCA Workshop and subsequent sensitivity testing it can justifiably be concluded that the highest scoring option is to open trench a new pipe through the river. It is recommended that this be confirmed by Wellington Water and SWDC.

8.4.1 Considerations for Preliminary Design

During Preliminary Design, the following should be considered:

- Pipe material – considered to be PE at this stage as most likely to be the least-cost material and has good seismic resilience
- Installation process will likely include laying a concrete pipe across the river while the river diversion is managed then welding and sleeving the PE pipe in one go.
- Whether 4m installation depth could be reduced to reduce cost (excavation time, dewatering, risk of flooding the works, etc) and accept a reduced design life
- Alignment – upstream or downstream of existing pipe
- Abandonment / removal of the existing pipe
- Connection points to the existing pipe – currently assumed to be well outside the river corridor but could be shortened to reduce cost
- Water shut-down plan for watermain cut-over

9 Operations and Maintenance

There are not expected to be any operation or maintenance requirements associated with a below-ground pipe in the river.

Scheduled annual inspections should be made at the site during low flow to monitor river flow path and bed degradation over time. Intervention may be required towards the end of the pipe's life if degradation rates exceed those predicted.

10 Cost Estimate

Table 1 shows a summary of the Level 1 estimate including the base estimate, expected estimate and the 95 percentile estimate in accordance with the Wellington Water Cost Estimate Manual. For the full estimate, refer to Appendix D.

Table 1 Level 1 Cost Estimate Summary

Base Estimate	$1,295,066
Contingency	$454,026
Expected Estimate	$1,719,092
Funding Risk	$1,031,455
95% Estimate	$2,750,548

11 Safety in Design

The safety in design register is included in Appendix E. The main risks highlighted in the register are:

- Working in the vicinity of quickly rising river levels
- Trench inundation from rising river levels
- Trench collapse trapping people or tipping machinery

These risks could be eliminated by selecting a different installation method, but the preferred installation method has been chosen as open trench through the river.

These risks can be managed through a river diversion and having controls in place to alert workers to rising river levels. Regular monitoring should be undertaken during construction of rainfall in the upstream catchment.

Installing the pipe in a trench that does not require person-entry, or reduces time spent within the trench, should also be considered during design. This may require a higher-spec pipe material to be selected that can accommodate less compaction effort of the pipe bedding.

12 Risk Assessment

The project risk register is included in Appendix F. The main project risks highlighted the register are:

- The ability for SWDC to fund the project
- The consentability of the project
- The consent and construction programme
- Failure of the existing pipe
- Safety of working in a live river environment

13 Consultation and Approvals

The MCA workshop was attended by representatives from Wellington Water Customer Operations Group (John Baines), Network Engineering Team (John Duggan) and South Wairarapa District Council (Gary O'Meara).

Items such as Corridor Access Requests, planning assessment/consents, access agreements and reinstatement agreements will be determined during the next stages of design.

Input was sought from Greater Wellington Regional Council (GWRC) on likely consent requirements for works in the river. Hamish Smith from the Flood Protection team confirmed that GWRC would consider the impacts of the works on flood defence infrastructure and on other landowners, and the contractor's flood response methodology as part of their health and safety plan. Fulton Hogan confirmed that they have used similar methodologies for river works on previous projects in the Wellington Region, so obtaining consents and approval from GWRC should not be a low risk to the project.

14 Customer and Community

A draft communications plan is included in Appendix G.

15 Smart Investment and Value for Money

Refer Section 8.4.1 on opportunities to consider value for money during the next stage of design.

16 Procurement and Programme

The intention is to award this contract through Wellington Water's contractor panel. A contractor should be engaged during the next phase of delivery to support documentation preparation, such as an erosion and sediment control plan and a construction management plan, that may be required to

support the resource consent application. The selected contractor can then provide inputs into the Level 2 and above cost estimates.

Provisional dates from the Project Management Plan are updated as follows:

Milestone	Date from PMP	Revise Date
Investigation complete	July 2022	September 2022
Preliminary Design complete	September 2022	November 2022
Consent lodged	September 2022	January 2023
Detailed Design complete	February 2023	April 2023
Construction contract award	March 2023	May 2023
Construction complete	June 2022	March 2024*

* Construction of the highest scoring option should take 2-3 months. However, it requires a period of relatively dry weather to ensure the river is at its lowest flow. The window indicated in the programme is longer than required but it may be the case that construction cannot start until late spring / early summer 2023.

17 Conclusions and Recommendations

This report makes the followings recommendations:

- That this report be accepted as an accurate representation of the process that has been undertaken to complete an MCA and determine the highest scoring option for the Tauherenikau River crossing.
- That the open trench through the river option be adopted as the preferred solution and carried forward into preliminary design.
- That the additional value for money opportunities identified in this report be explore further during preliminary design.

18 References

- Little, Schermer, Van Dissen, Begg, Carne (2008). *Field Trip 5*. GNS Science, Lower Hutt
- *How do we know which fault is most likely to rupture next in Wellington? / Wellington Fault / Major Faults in New Zealand / Earthquakes / Science Topics / Learning / Home - GNS Science.* Last accessed 11/05/2022
- *Discount Rates (treasury.govt.nz)* last accessed 17 May 2022.

Appendix A – Geotechnical Desktop Assessment

Holmes Consulting

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Memorandum

To:	Linda Fairbrother		
Company:	Wellington Water Ltd		
From:	Ollie Van Rooyen		
Date	23 February 2022	Project No:	144308.53
Subject:	Tauherenikau River Pipeline Crossing – Geotechnical Desktop Study		

1 INTRODUCTION

Holmes Consulting has been commissioned by Wellington Water Ltd. to provide a geotechnical desktop assessment of a section of pipeline crossing over the Tauherenikau River feeding from Waiohine Water Treatment Plant (WTP) to Featherston.

The current river crossing has been exposed by riverbed degradation and is at risk of damage during a flooding event or further riverbed degradation. We understand short term repair work is to be carried out to secure the pipe temporally, but a long-term solution is to be assessed.

Stantec has performed a high-level option assessment for the Tauherenikau pipeline crossing, including several concept options. Three of these options were nominated to have a further assessment of their feasibility and are listed below;

1. Reinforcing the existing pipe within the current streambed;
2. Pipe ramming or other sub-excavation technique to install a new pipe underneath the riverbed from each of the riverbanks;
3. Putting a new pipe over the river, either on a new pipe bridge or attaching to the existing rail bridge south of the site.

The purpose of this memo is to provide a desktop geotechnical assessment for the pipe crossing and comment on the geotechnical hazards for each of the above options. We understand that this report will aid a multi-criteria risk assessment of the options listed above.

2 SITE LOCATION AND BACKGROUND INFORMATION

The site is located on a section of the Tauherenikau River approximately 5 ½ km North West from Featherston and 8 km South west from Greytown. The town of Featherston was originally supplied water from a small dam in Boar Bush Gully and crossed the Tauherenikau River. In 1975 the system was extended and the pipeline was installed beneath the beneath streambed at the Tauherenikau River crossing. In 1999 water quality and quantity issues were observed and a new pipeline was installed to Featherston from Greytown's water treatment plant on Waiohine Valley Rd in Woodside. We show the current configuration in Figure 1 below with the approximate site location.

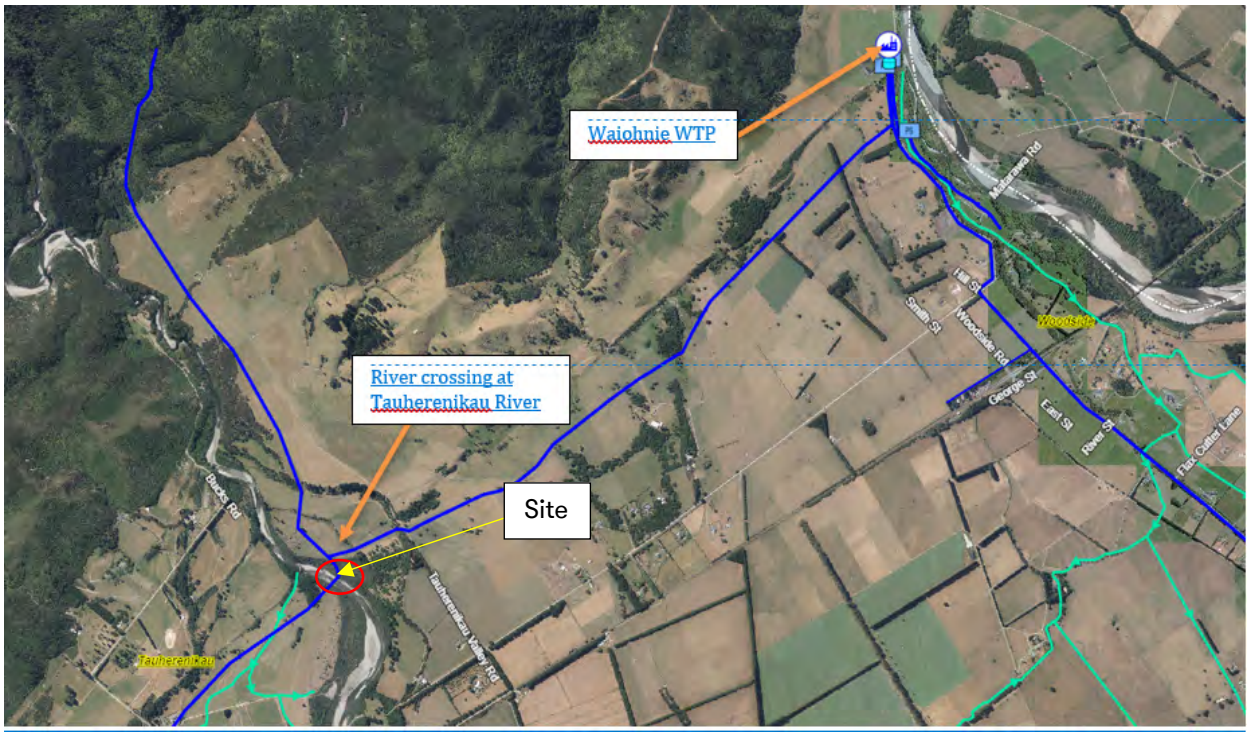


Figure 1 Site Plan

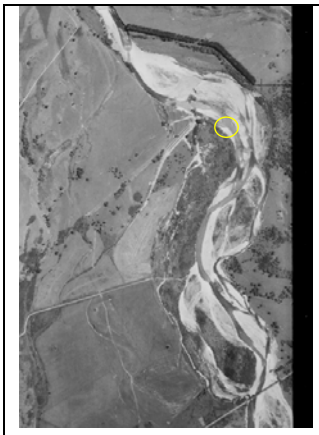
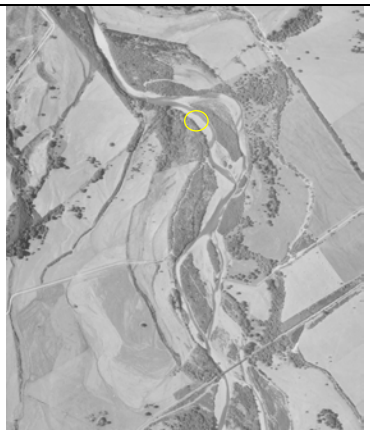
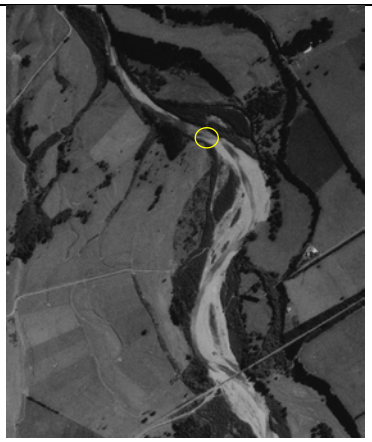
3 AREA WIDE GEOTECHNICAL DATA REVIEW

In preparation for this desktop assessment, we reviewed publicly available information relevant to the site. We summarise this information in the sections below.

3.1 Historical Aerial Photography

We reviewed historical aerial photographs from the website https://retrolens.co.nz/ dating back to 1941. The images are viewed under the context of identifying changes to the landform and land use at the site. We present selected images in Table 1 below and show the approximate location of the current river crossing in yellow on each image as a reference point in each of the images.

Table 1: Select aerial images. Location of the current crossing is highlighted in yellow.

 December 1941	 December 1961	 January 1974
 October 1979	 February 1996	 Current

- The aerial images show the land surrounding the site to be predominantly farmland with generally the same land use since our review of the first aerial image.
- The Tauherenikau River has exhibited braided river characteristics and the river course has changed several times over the period of the aerial photos. Braided environments tend to occur in rivers with high sediment loads and coarse grain sizes.
- The riverbank to the south of the current crossing appears to be relativity stable and only experience minor changes due to river course changes.
- The riverbank to the north of the current crossing has been subject to significant river channel changes, historically the river was present to the north and east away from the current alignment.
- The current river alignment appears to have fewer braided channels and is constrained within a single channel at the pipe crossing.

3.2 Regional Geology

The site is mapped by GNS Science as predominantly underlain by the Holocene river alluvial deposits (OIS1). These are typically well graded gravels and floodplain deposits derived from the Tararua Range to the west. Holocene can be a loose deposit as the deposit age is relatively young. Surrounding the OIS1 deposits is late Pleistocene river deposits (OIS2) which tend to be older than the Holocene deposits and interbedded with sand or silt underlying terraces. To the north-west of the site, basement sedimentary rocks are mapped.

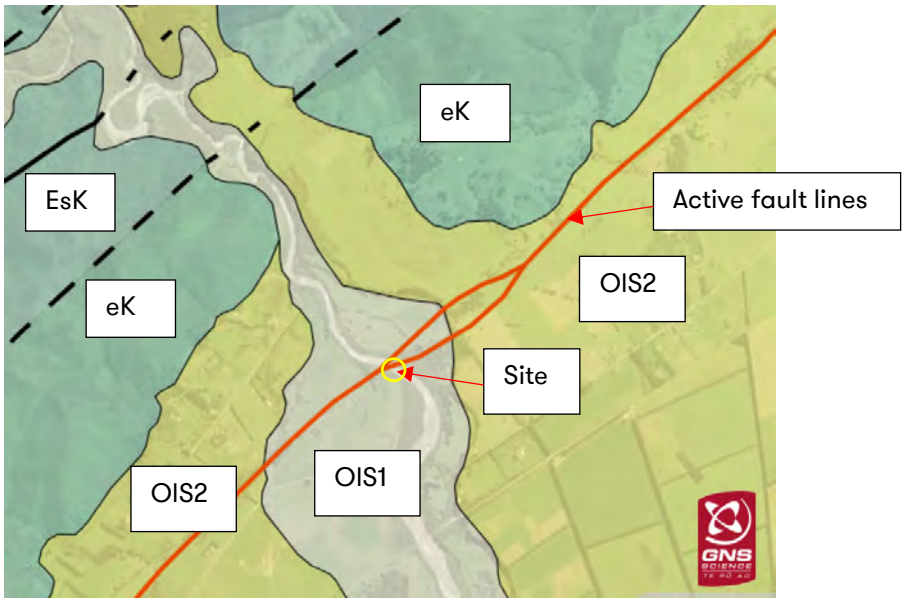


Figure 2: 1:250k Geology map GNS Science.

3.2.1 Depth to bedrock

An estimate of the depth to bedrock at the site was not found during our review, but it is expected to underly the alluvial deposits.

3.3 Seismicity

The Wairarapa Fault is mapped approximately 50m to the north of the site, and is expected to cross the existing pipeline at some location. It is a major NE-SW trending dip-slip fault capable of generating extreme earthquake shaking. The Wairarapa Fault is included in Table 3.6 of NZS 1170.5:2004 as a major fault requiring near fault factors when assessing structural design actions.

The Wairarapa Fault previously ruptured in 1855 with magnitude of 7.9 – 8.2 and it is recognised as one of the largest seismic events in modern New Zealand history [Rodgers and Little, 2006]. Based on previous studies, the event resulted average dextral slip of 15.5 m, with the recurrence interval of 1150-1200 years.

New Zealand Department of Scientific and Industrial Research initiated a detailed fault monitoring geodetic survey across the Wairarapa fault zone at Cross Creek, and many other faults traces. Survey data was measured over 5 years along with more recent GPS survey, indicating that no vertical or lateral creep is taking place along the Wairarapa Fault [Darby and Beavan, 2001].

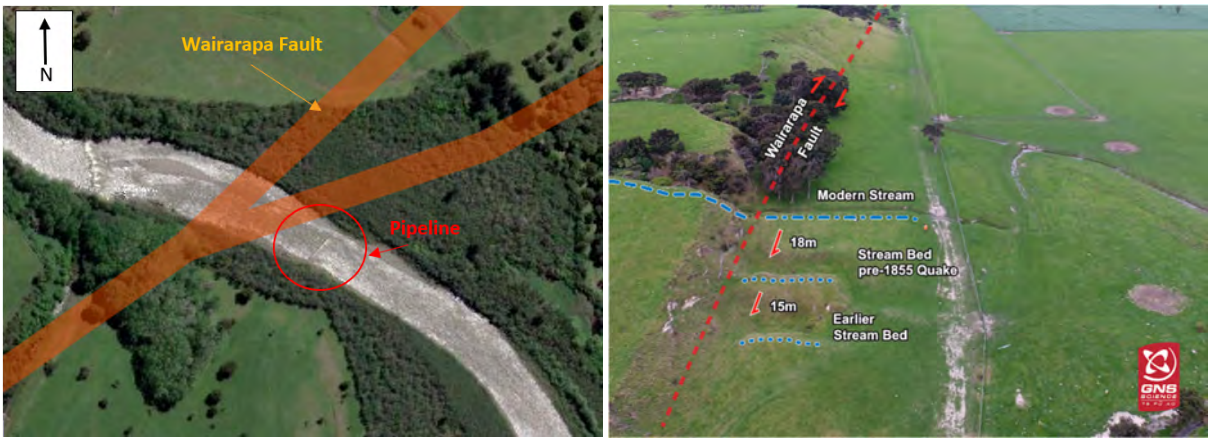


Figure 3 (left): Mapped location of the Wairarapa fault and the location of the pipeline
Figure 4 (right): GNS example of previous fault ruptures along the Wairarapa fault.

- An earthquake event is likely to cause significant ground shaking at the site due to its close proximity to the fault.
- If fault rupture occurs, it may displace by several metres (6-18m).
- It is to be noted that the recurrence interval of the Wairarapa Fault is estimated at 1200 years, and the last major rupture was 170 years ago.
- The GNS mapped location of the fault is shown in figure 4. The exact location of the fault is approximate and has not been confirmed at the site.

3.4 Liquefaction Hazards Maps

We reviewed the Wellington region liquefaction potential maps which outlines areas of liquefaction risk in the Wellington Region based on the QMaps series by GNS and other datasets. The site is classified in an area of low potential for liquefaction.

Figure 2: Liquefaction potential maps

- Some alluvial deposits below the groundwater table may have lenses of sand and silty sand that may be subject to liquefaction.
- Based on our experience of nearby sites, localised areas of liquefaction may be present. Widespread liquefaction is not expected.

3.5 Nearby Subsurface Information

We reviewed the New Zealand Geotechnical Database for nearby investigation information. Five logs were found nearby the site. We include these logs in Appendix A and summarise them in Table 2 below.

Table 2: Summary of NZGD explorations near the site.

ID	Type	By	Max Depth	Distance from Site	Comments from drillers description
BP33_0005	Borelog for well	Wairarapa Drilling Company Ltd	14 m	632m SSW	Drill date 14/04/2012 Very Large gravels and sand. Colour change at 4.60 m depth.
BP33_0004	Borelog for well	Wairarapa Drilling Company Ltd	6 m	596m SSW	Drill date unknown Gravels, some boulders to 500 mm to 3m depth. More clay below 3.1 m depth, gravels to 250mm
S26_0322	Borelog for well	Wairarapa Drilling Company Ltd	9 m	706m SSE	Drill Date 28/02/2000 Very large gravels. Greater water flow with depth below 5m.
S25_0321	Borelog for well	Wairarapa Drilling Company Ltd	8 m	594m SSE	Drill Date 11/02/1993 Very large gravels, increasing water flow with depth. Clay bound gravels at 6.1m no flow.
S26_0323	Borelog for well	Wairarapa Drilling Company Ltd	15 m	835m SW	Drill Date 04/07/2000 Large silted gravels, no flow.

4 NEARBY LEAK REPAIRS OF THE PIPELINE

We were provided site photos taken in early 2012 showing excavation within the northern river bank to repair a section of leaking pipeline. These photos show excavations several meters deep and exposed side slopes in the creek bank during the repair.

Table 3: Photos of previous repairs.

Excavation pit with exposed side slopes. Colour change can be seen several meters down and outlined in yellow.

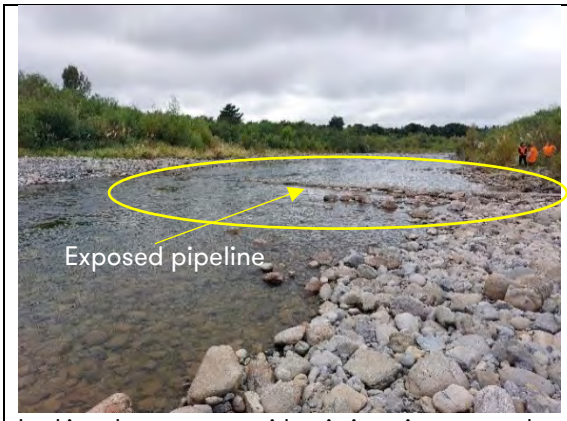
Large boulders and cobbles present within the subsurface

- The photos show a stratigraphy colour change consistent with the logs reviewed in our NZGD review.
- The photos show the type of plant and machinery that can successfully excavate into the alluvial deposits at the site (SK210LC 22 ton excavator and SH120 12 ton excavator).
- Boulders up to the internal size of the excavator bucket were observed.
- Dewatering is shown in the photos with two sump pumps. It is to be noted that the excavation depth below the river and distance away is unknown.

5 EXISTING SITE CONDITIONS

We visited the site on 8 March, 2022 to undertake a site walkover and observe current conditions. We present select photos of our site visit in Table 4 below.

Table 4: Site visit photos



Looking down stream with existing pipe exposed

Looking up stream from the pipe crossing, large boulders and cobbles observed within stream channel.

Large boulders typically 300mm to 800mm in size were observed along the stream bed.

Driven 200UB steel beams and railway irons were observed in the stream bed approximately 180m northwest from the pipe crossing at the diversion inlet.

- Fluvial and alluvial deposits were seen at the site. Boulders and cobbles up to 800mm were observed along both sides of the river.
- Driven steel beams and railway irons were observed in the stream bed at the upstream weir. The depth of embedment of these driven items is unknown, but it suggests driving may be possible to shallow depths.

6 ANTICIPATED GROUND CONDITIONS AT THE PIPE ALIGNMENT

There is limited site-specific information available. We present the sub-surface conditions for feasibility assessment considerations only.

We anticipate the subsurface conditions to be a variable amount of topsoil at each of the river banks (generally less than 1.0m bgl) consisting of soft silt, sandy silt, some organics over a well graded alluvium deposit. The upper alluvial deposit is likely to be a medium dense to dense silty gravel/sandy gravel/gravel with cobbles and boulders. At a depth of about 3 to 5 m bgl a colour change to brown is observed in the construction photos and previous logs near the site. It is expected that this lower layer is interbedded with lenses of silt and sand. We have no estimate of subsurface information below about 7m bgl. Frequent

boulders in the 0.3 to 0.8m range are to be expected for any excavations. Encountering boulders larger than 0.8m in excavations is still possible.

6.1 Groundwater

The groundwater level at the site is expected to be closely linked to the water elevation in the nearby river. Granular deposits can have a high conductivity for water flows if minimal fines are present.

It is suggested for planning purposes that the groundwater level be at a similar elevation to the current river level. Design water levels need to consider flood levels for any uplift or stability related cases below the water level. The current makeup of the alluvial deposits suggest seepage through the gravel may be possible but depending on the amount of fines in the gravel matrix, groundwater flows may be controlled. Significant seepage through clean granular lenses with minimal fines may occur. Permeability ranges of $k=1x10^{-2}$ to $1x10^{-5}$ m/s are likely in the gravels.

7 GEOHAZARD ASSESSMENT

We assessed geotechnical hazards at the site based on the information outlined above. This assessment is based on a desktop assessment and is intended to identify risks at a high-level for the feasibility of long-term solutions. Additional work may be required to further refine the geohazard risk in later design stages.

Table 5: Geotechnical Issues Identified

Geotechnical risk	Comment
High seismic shaking and fault movements.	• Due to the close proximity to the fault, high ground shaking is likely during a seismic event. • Fault displacement of several meters or more could occur during a major earthquake event. The exact location of the fault and possible rupture locations is unknown but anticipated to be close to the site. Fault rupture effects including ground displacements are likely to directly affect the site. • The probability of a fault rupture event during the design life is low.
Boulders and oversized items	• Due to the high energy dispositional environment at the site, large boulders and cobbles are present in the natural soil. Excavations would need to consider the removal of individual oversized items.
High groundwater	• The groundwater is likely to be linked to the river flow elevation. Groundwater is expected to be close to this elevation. Excavations below the groundwater are likely to be unstable and require support or batter slopes of 1:2 or shallower.
High groundwater flows in granular material	• Due to the granular nature of the alluvial deposits, layers of clean sand or gravel may have a high permeability and subject to significant groundwater flows below the groundwater table.
Liquefaction	• Liquefaction potential at the site is considered low, but localised areas of liquefiable deposits may be present in the alluvium. Widespread liquefaction is not expected.

In addition to these geotechnical risks, a hydraulic assessment of the river should be performed. The outcomes of the hydraulic assessment will likely impact some of geotechnical hazards and options. These are likely to include;

- Due to the nature of the riverbed and its gravel make up, significant scour depth, possibly in excess of 5m may be possible in the long term. A scour assessment is recommended to determine the scour depth and its impacts to the proposed options.
- Flood levels are to be considered for any stability or uplift cases. Flooding event during construction and what impacts this would have should be considered.
- Assessment of future river movements of the river channel should be considered for the location of permanent infrastructure such as bridge abutments.

8 COMMENTS ON PREFERRED OPTIONS

We understand the options to be considered are;

1. Reinforcing the existing pipe within the current streambed.
2. Pipe ramming or trenching to install a new pipe underneath the riverbed from each of the riverbanks.
3. New pipe over the river either by:
   3A – Putting a new pipe over the river on a new pipe bridge .
   3B – Rerouting the pipeline south and using an existing rail bridge south of the site to cross the river.

We understand that the pipe is suggested to achieve a 100-year design life. We comment on the associated geotechnical hazards identified above for each preferred option.

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Table 6: Preferred options

Proposed option	Comments	Risks	Likelihood#
General comment associated with all options	**High seismic ground shaking and fault rupture** • Seismic ground shaking could result in significant differential movement along the pipe alignment. Due to this, sections of new pipe should consider a flexible material (HDPE or alternative) to increase the performance of the pipeline during differential seismic movements. Flexible joints and couplings should also be considered. • The location of the fault is unknown and may rupture near or within the river crossing. Where the pipe crosses a fault rupture event, it is unlikely to withstand expected fault displacements and could cause considerable damage. Proposed options should consider the ease of repair if a fault rupture were to occur. **Liquefaction** • Localised areas of liquefaction may be present in the alluvium. Widespread liquefaction is not expected. The pipe may be subject to localised differential settlement if liquefaction were to occur.	Significant ground shaking occurring at the site within the design life of the structure Fault rupture occurs at the pipeline. Liquefaction causes differential settlement and damages pipeline.	Unlikely Rare If seismic event occurs – Unlikely
1 - Reinforcing the existing pipe within the current streambed	**High seismic ground shaking** • The existing pipe is not considered flexible. Encasing the pipe in concrete may reduce its performance during seismic movements. **Boulders and oversized material** • It is anticipated that significant erosion stabilisation works will be required such as rip rap or other techniques surrounding the existing pipe. Installation of stabilization works should consider the presence of boulders and oversized items. Driving piles or railway irons into dense material with oversized items may be difficult but it has been shown to be possible at upstream locations **Future Scour** • Following the conclusions from the hydrology assessment, ongoing scour may still occur in flooding events.	Reinforced pipe within river channel is damaged during a small to moderate seismic event. Difficulty excavating and installing stream protection works due to boulders and oversized material. Scour still occurs at depth or river changes course exposing the pipeline after reinforcing works complete.	If seismic event occurs – Possible Possible for excavations. Likely for driven elements Likely - dependent on type of protection work
2 -Constructing a new pipe underneath the riverbed **using pipe ramming or open trenching**	**Boulders and oversized material** • Boulders and the dense gravel matrix are likely to cause constructability issues for pipe ramming installation techniques. If this solution is to be pursued, early contractor involvement is recommended to ensure the pipe can be installed in material with frequent boulders. Examples of successful pipe jacking installation in similar material should be provided. Driving of steel piles was observed to be possible at up stream locations, although the embedment is unknown, it indicates a driving technique may be possible. • Depending on the outcomes of the river hydrology study, the depth required for pipe ramming underneath the river may be in the order of 10 meters. We have limited/no subsurface information at this depth. **High groundwater and groundwater intrusion** • Jacking pits are anticipated at either end of the crossing. If the base of these jacking pits is proposed below the groundwater surface, shoring and stabilization of the base may be required along with dewatering. The risk of pits being damaged during a flood event should also be considered. **Repair following a seismic event** • Since the pipe will be constructed at a significant depth below the riverbed, repair of damaged pipe sections may be extremely difficult or impossible following a seismic event in case it is a fault rupture event.	Contractor cannot install pipeline due to the presence of boulders and oversized material. Requiring the need to excavate and remove obstructions or relocate pipe ramming alignment. Predicted scour depth makes pipe ramming very deep/not practical. Jacking pit encounters groundwater issues requiring shoring, dewatering or stabilization. Flooding occurs during construction damaging jacking pit. Unable to repair pipeline following damage during a seismic event	Possible Possible Possible Possible rare
3A Putting a new pipe over the river, either on a new pipe bridge or 3B attaching to the rail bridge	**3A - New pipe bridge at the existing river crossing** Suggested bridge foundations may be large single mono pile to maximise resilience at each abutment or shallow pads to allow foundation slippage. Tiebacks for suspension elements could also be used. **High seismic ground shaking** • The new pipe bridge should be designed so that it has a high tolerance to seismic shaking and movement. **Repair following a seismic event** • Abutment foundation and bridge type should consider resilience for the possibility of fault rupture and repair following a seismic event even if it is not specially designed for. **Abutments** • Abutment locations should consider long term changes in river changes and the scour potential. **Maintenance** • Ongoing maintenance for bridge infrastructure should be considered over the asset lifecycle in the high energy environment	Large fault displacements. Foundation scour problems with piling into gravel with large boulders	Rare Possible Likely - especially in the upper alluvium
	3B – Rerouting pipeline and using existing rail bridge to cross river **Trenching of new pipeline** • Construction of the new pipeline using an open trench is feasible based on the installation of the previous pipeline. The chance of encountering oversized material likely but able to be excavated using conventional plant in an open trench. The depth of pipeline is assumed to be above the water table. • Other benefits and reliance of pipeline rerouting should be considered and future infrastructure planning. Property land issues should also be considered. **Use of existing bridge** • The existing rail bridge may be damaged following seismic event causing damage to the pipeline. • The deterioration, maintenance and remaining lifespan of the rail bridge should be considered. **Repair following a seismic event** • The pipeline is likely to be exposed attached to the bridge. Since the pipeline is exposed, testing for damage or leaks may be easier than other fully underground options.	Issues with ground conditions when trenching pipeline. Bridge is damaged during seismic movements or deteriorating condition damages pipeline Bridge owner does not approve attaching pipe to bridge. Property or land access issues with new pipeline	Possible/ unlikely Unlikely Possible

- (1) Almost Certain = is expected to occur, (2) Likely = will probably occur in most circumstances (3) Possible = could occur at sometime (4) Unlikely = Event hasn't occurred but it could in some circumstances only (5) Rare = Expectational circumstances only

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9 ADDITIONAL WORK FOR CONSIDERATION

The following additional work may be considered depending on which option(s) are selected to be perused further;

All options

- Review historic construction records or design information from the original pipeline (if available). This will further add to the available knowledge of the site.
- Risk matrix for risk, likelihood, and consequence for proposed geohazards and options.
- Review of geotechnical assumptions following hydrology/scour assessment. Our assumptions may change following the conclusions of this report.

Option 1 – Protect existing crossing

- Once a proposed stabilization concept in the streambed is determined, we should review the proposed concept for geotechnical hazards and applicability.

Option 2 – Constructing a new pipe under riverbed

- Early contractor involvement by a contractor to either trench or pipe ram should be used to assess feasibility of construction with boulders and oversized material. They may recommend additional site investigations or groundwater monitoring to confirm constructability.

Option 3A – Pipe bridge

- A geotechnical borehole at each abutment location. Other investigations may need to be considered depending on the bridge type.
- Early contractor involvement to confirm constructability of foundation options and bridge type.

Option 3B – Use existing rail bridge

- Test pits or other targeted geotechnical investigations along the new proposed alignment. This will confirm subsurface information along the new pipeline alignment.

10 LIMITATIONS

Findings presented as a part of this project are for the sole use of the Client in its evaluation of the subject properties. The findings are not intended for use by other parties and may not contain sufficient information for the purposes of other parties or other uses. The information contained in the memorandum is subject to the terms and conditions of our professional services engagement with Wellington Water Ltd

This report may only be relied upon by the Client and only in relation to the scope of services agreed between Holmes and the Client. This report may not be relied upon by any third party or for any other purpose without the express written agreement of Holmes.

Our professional services are performed using a degree of care and skill normally exercised, under similar circumstances, by reputable consultants practicing in this field at this time. No other warranty, expressed or implied, is made as to the professional advice presented in this report.

The recommendations in this report are based on the ground conditions indicated from published sources, site assessments and subsurface investigations described in this report based on accepted normal methods of site investigations. Only a limited amount of information has been collected to meet the specific financial and technical requirements of the Client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it should be appreciated that actual conditions could vary from the assumed model. This report is not to be reproduced either wholly or in part without our prior written permission.

Ollie Van Rooyen
SENIOR PROJECT ENGINEER
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Copies to:

Appendix B – Tauherenikau River Morphology Assessment

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memorandum

TO	Peter Brown	FROM	Ella Boam & Ramon Strong
	Holmes Consulting	DATE	2 June 2022
RE	Featherston Water Supply Pipeline Crossing of the Tauherenikau River		

1.0 Introduction

Holmes Consulting Limited have, on behalf of Wellington Water, asked PDP to provide advice around the minimum depth requirement for a replacement pipeline crossing of the Tauherenikau River, near Featherston. This advice is based on an assessment of river cross-section data obtained from Greater Wellington Regional Council and KiwiRail as well as an assessment of changes in morphology based on aerial photos.

2.0 Setting

The headwaters of the Tauherenikau catchment lie within the Tararua Ranges east of Marchant Ridge, characterised by steep-sided valley slopes. At the base of the ranges, the river enters the Wairarapa lowlands, with the grade of the river reducing as it flows south and then southwest before discharging into Lake Wairarapa. The composition of those lowlands is predominantly greywacke gravels – the weathered/ eroded rock mass from the Tararuas that is transported, deposited and progressively reworked by the main Tararua rivers, including the Tauherenikau.

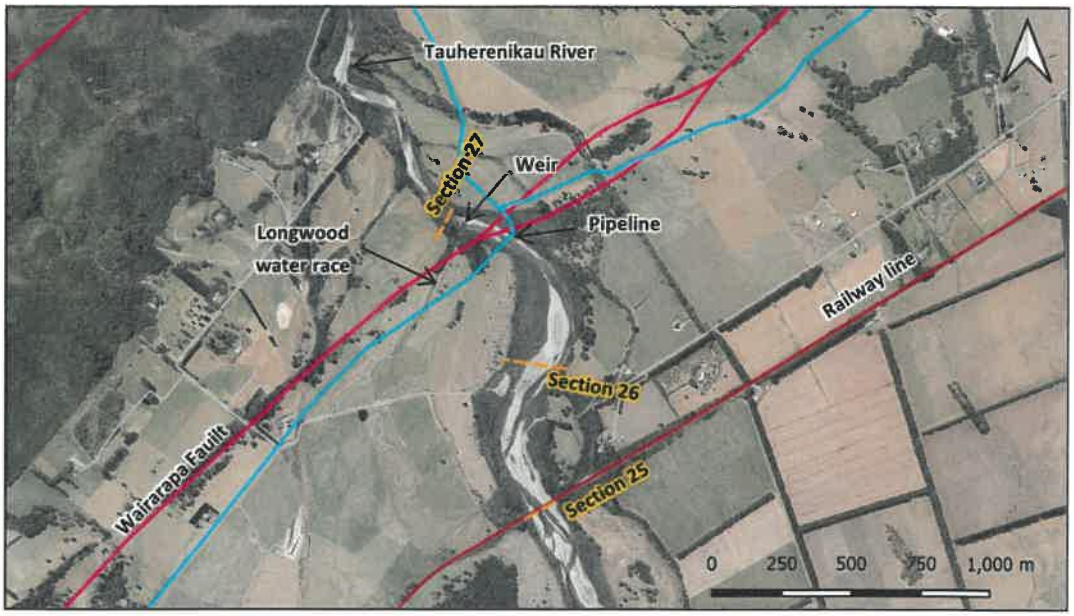

Figure 1: Location of the pipeline crossing

The Wairarapa lowlands are bound to the west by the active Wairarapa Fault. Slip along the fault is predominantly strike-slip (lateral), but its long-term dip-slip is responsible for the formation of the lowlands and the Tararua Ranges. As shown in Figure 1, the pipeline is mapped within the trace of the fault. The 1855 Wairarapa Earthquake led to 9 – 13 m lateral movement to the north on the western side of the fault, which was uplifted and tilted westward. Near Masterton, the vertical uplift was of the order of ~0.5 m (Hancox, 2015).

3.0 Geomorphic change

Changes in the form of this reach of the Tauherenikau River are easily observable from aerial photographs and repeat cross-section surveys. At a larger timescale this extends to the terrace faces observable as the river emerges from the ranges – the mix of fault-derived uplift and subsequent river downcutting combined with the episodic and mainly earthquake-induced, landslide-related peaks in gravel supply/deposition.

A sequence of aerial photographs is appended and show the changes in river form between 1941 and 2021. The short summary of those changes is that the river has greatly decreased in width and changed in form over that 80-year period. That's likely due to a combination of a decline in rates of supply of bedload from the catchment (the declining effects of the 1855 earthquake – the extensive landslides that event would have generated in the catchment), the likely over extraction of gravel from the lower reach and (potentially) some underlying longer scale trends.

There are two other notable observations from the aerial photos, the first being the weir upstream of pipeline crossing. We surmise that this has been placed in the river to maintain/ direct (with the decline in river bed levels) flow into the Longwood Water Race (Figure 1). We also deduce from the aerial photos that the pipeline became exposed in late 2015.

There are three riverbed cross section survey lines in the vicinity of the pipeline crossing - sections 25, 26 and 27 (Figure 1). Greater Wellington (GW) in 2018 undertook an assessment of the complete set of Tauherenikau cross sections over the period 1992 to 2017. For the reach of the river including the pipeline location, the mean bed level was calculated to have an average degradation rate of 20 mm/year.

In addition to this, we have obtained from KiwiRail the as-built drawings from the rail bridge crossing of the river (Bridge 49 Wairarapa Line), significantly extending the length of the cross-section data set (albeit a kilometre downstream of the pipeline crossing). This supports the conclusion that the bed level has undergone significant degradation since at least the 1940's – mean bed level calculations put this change at 2m over a 70-year period, giving a higher degradation rate than the GW analysis at just under 30mm/ year. Note that there is some uncertainty with this section profile (vertical and horizontal offsets) – its position overlaid on the more recent data set has required judgement on our part but we're generally confident of the fit.

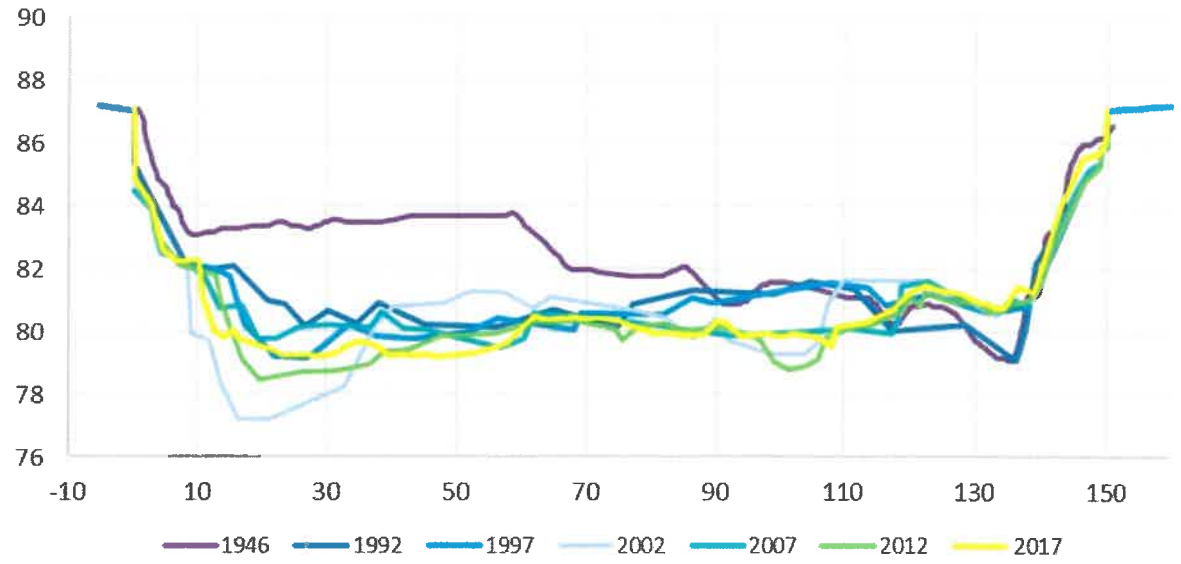

Figure 2: GWRC cross section data (1992 – 2017) and 1946 bed level survey at Section 25 (rail bridge). View is downstream.

4.0 Conclusions

The first point to note in recommending a crown level for a new pipeline are the inherent risks associated with extrapolating from historic datasets to predict future bed level trends. There are a range of factors that influence whether current trends will continue in the future - rates of gravel extraction, the frequency of large floods, earthquake or storm induced landslides increasing gravel bed loads.

That said, particularly given the GW 2018 analysis and report commentary (the clear signal that rates of extraction will be scaled back) and the likely impacts of climate change (extreme rainfall events becoming more frequent with an overall estimated 15% increase in rainfall (NIWA, 2017)), it's our view that using historic degradation rates is a reasonable basis (sufficiently but not overly conservative) for setting crown levels for the new pipeline.

It is worth noting that the pipeline crossing may also derive some benefit from being in the 'shadow' (upstream) of the Rail Bridge – depending on the nature of the bridge foundations it is conceivable that KiwiRail could at some point in the future construct a weir to limit further bed level reductions at the bridge. Note that this is a general comment and no discussion has been had with KiwiRail nor consideration given to what that level of exposure might be (if any).

Design Life	*Minimum Pipeline Crown Depth Below Riverbed Level (Thalweg at the crossing point)*
50 years	30mm/ year x 50 years = 1.5m + nominal bed scour allowance of 1m = 2.5m
100 years	30mm/ year x 100 years = 3m + nominal bed scour allowance of 1m = 4m

Table 1 – Recommended Minimum Pipeline Depths

Note that the thalweg is the lowest point in the cross-section. Note also the width of the active river bed at the crossing location in the 1940's – while the river has changed in form and the bed has narrowed since the 1940s there are equally conceivable (but not on the balance of probability likely within the lifetime of the pipe) scenarios where the bed widens again will increased bedload supply from the upper catchment.

As a final note (this may already be the case) we would encourage Wellington Water to take an interest in all gravel extraction consents applications, particularly those upstream of the State Highway 2 bridge. Arguably the base data has existed for some time suggesting consented extraction exceeded a sustainable yield, which on the face of it places some liability on GW.

5.0 Limitations

This memorandum has been prepared by Pattle Delamore Partners Limited (PDP) on the basis of information provided by Greater Wellington Regional Council and KiwiRail. PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the memorandum. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

This memorandum has been prepared by PDP on the specific instructions of Holmes Consulting Limited for the limited purposes described in the memorandum. PDP accepts no liability if the memorandum is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

Prepared by

E Boam

Ella Boam

Senior Hydrogeologist

Reviewed and Approved by

Ramon Strong

Technical Director

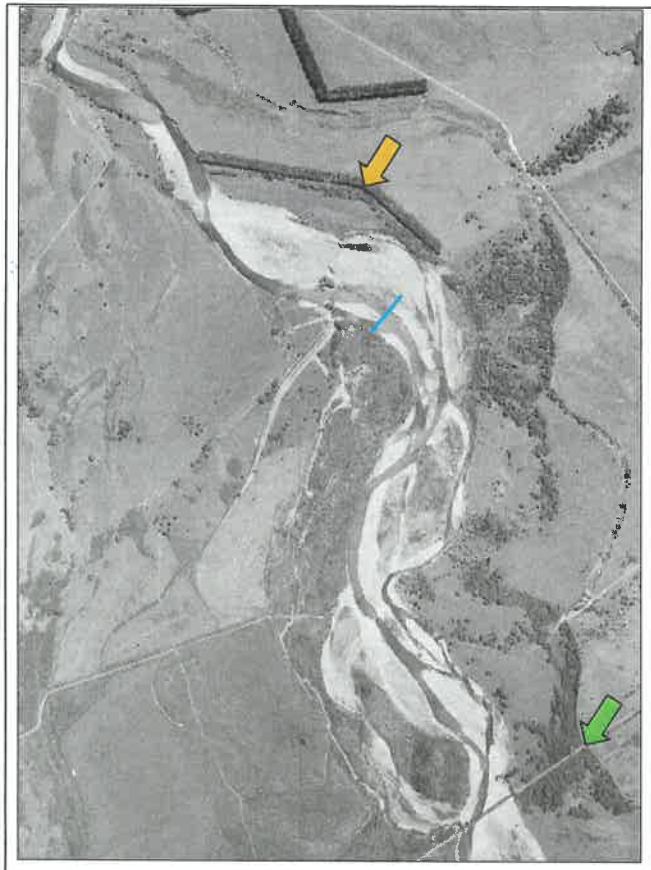

Figure 3: 1941

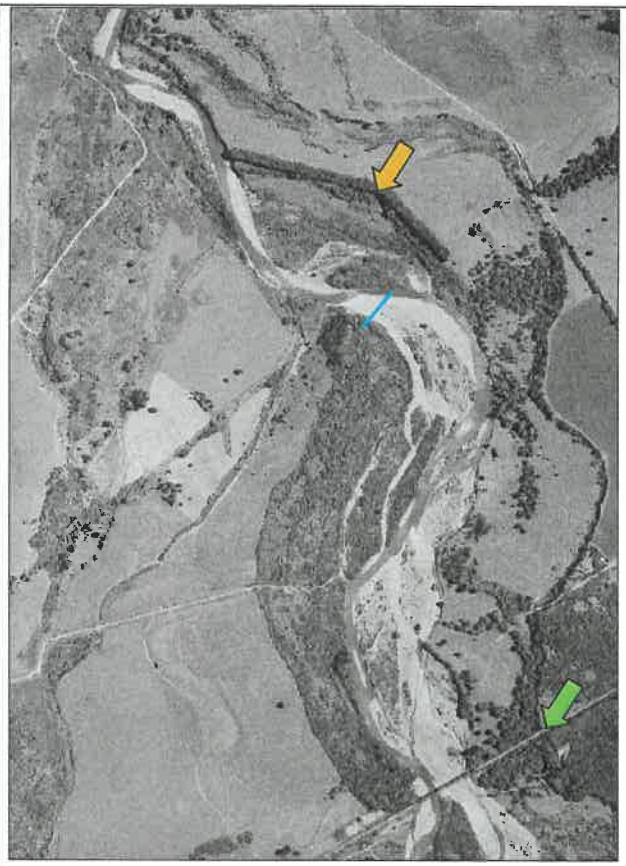

Figure 4: 1961

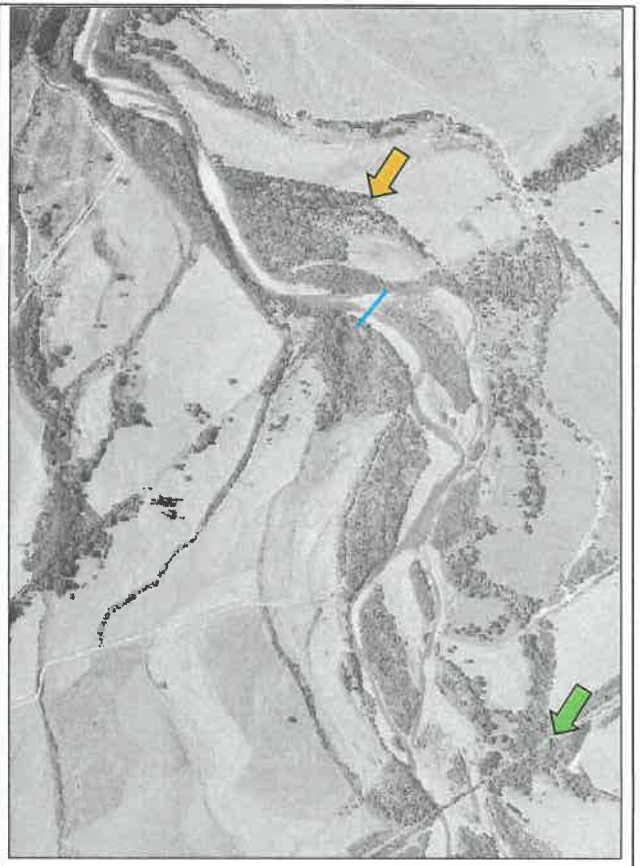

Figure 5: 1974 (Approximately 2-years before installation of pipeline)

160

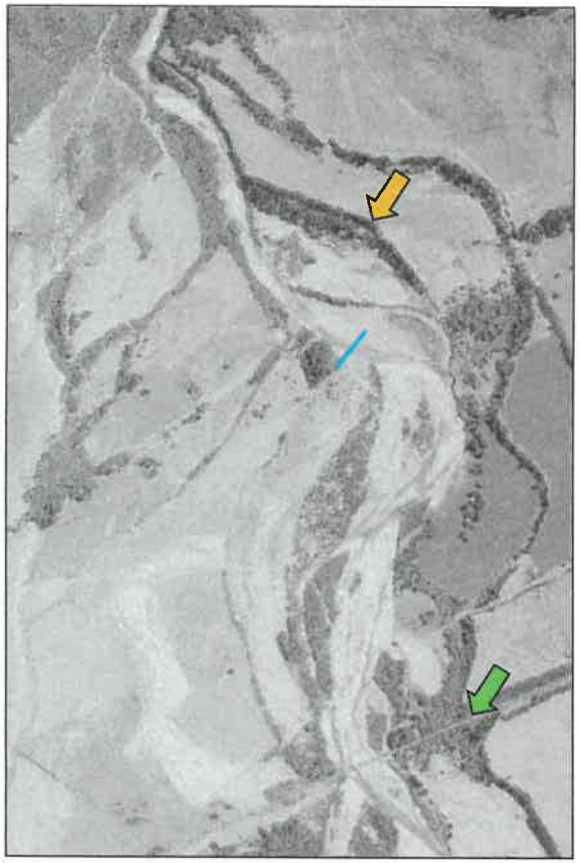

Figure 6: 1983

Figure 7: 1995

Figure 8: 2002

Figure 9: 2010

Figure 10: 2021

Appendix C – MCA Workshop Commentary

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Memorandum

To:	Linda Fairbrother		
Company:	Wellington Water		
From:	Paul Marsden		
Date	16 May 2022	Project No:	144308.53
Subject:	Tauherenikau Pipe Crossing - MCA Workshop Commentary		

Present

Gary Cullen, Linda Fairbrother - WWL Major Projects
Gary OM - Consultant SWDC
Richard Peterson – Planning Consultant Stantec
Bram Muller - Environmental Consultant Stantec
Ezekiel Hudspith - Dentons
Peter Evans - Mott MacDonald Peer reviewer
John Baines - WWL Operational 3 waters
Laurence Edwards - WWL Chef Advisor of Drinking Water
Peter Jackson - WWL Seconded to Network Engineering
Peter Brown, Paul Marsden - Holmes Consulting

River Morphology Results

Results from PDP river morphology study predict future degradation rates are similar to historic rates at 30mm/yr. They advised that a 4m depth of pipe achieved 100yr design life. The 10m deep trenchless option has been replaced with a 4m deep trenchless option.

MCA criteria

PJ - Raised that the whole project is aiming to provide resilience to the water supply, but resilience scoring is low comparable to others. PB response of considering this in the sensitivity study and that all options provide a significant upgrade to the current situation and the resilience scoring looks at factors beyond this primary aim.

LE - Considers construction programme to have too larger waiting. PE - if no immediate risk of failure, then construction programme becomes less important. WWL communicated that risk of failure does exist and could occur with 1 large river flow. It was decided that programme is useful information but consider lower weighting compared to other Resilience effects. Agreed to reduce the construction programme weighting

Cost Criteria

- Discussion around the inclusion of the cost of replacing the existing pipeline in the Do minimum and reinforce existing options. This is currently included within the 50yr operation costs. The effects of this cost could be tested by sensitivity analysis considering 10, 20 and 30 yr replacement of the existing pipe.

- Operation cost timeline (50yrs) was selected based on the design life of a new pipe bridge.
- Suggestion to carry out a NPV assessment of each option to make the life spans more comparable and reduce the theoretical nature of forecasting beyond 30yrs

MCA scoring

Manu Whenua - Yet to be scored. Not much commentary provided yet except expressing a strong wish to have a new source considered. The final concept report should contain discussion around the consideration of a new source and the issues associated with that.

Effects (Lead by RP)
Natural Environment considers in river effects and land effects, eg bridge foundations, for the options. Considers their consenting issues and consistency with the regional plan, which considered the Tauherenikau a significant river. Regional schedules call for avoiding works in the river and minimise effects if you must work in river. Regional Plan also aims to have no pipe within the river flow. Given the strength of the policies RP is recommending that if they are not consistent with the policy direction, they can only score Max 2.

- Do Minimum now - assumed consent required for the ongoing annual repair works and pipe remaining with the riverbed is not consistent with the regional plan. Therefore, score limited to 2. Works can be done with limited effect to habitat and fish passage. Disturbance each time refill is required. Score driven by policy-based limit. Potential for rock to be imported causing accumulation down river of new material.
- Reinforce existing - as above. Environment impacts higher than above. Concrete in river reduces fish passage. Score driven by policy-based limit. Annual replacement requirements kept scoring low
- Trenchless - Small scale consenting required for pipe removal. Limited impact on the riverbed, effects less than minor.
- Open trench - construction will have moderate effects on the riverbed. Construction works may not be considered to be aligned to plan, although the final state will be aligned with plan. This limited it to a 2. Potentially a conservative score but there could be push back on the construction stage. Collective decision made that 2 felt too conservative and punishing for a temporary in river effect. Should be considered as better than a permanent pipe in the riverbed and adjusted to score of 3
- Bridge at river site & Rail bridge - No works in the river except pipe removal. Assumed effects on vegetation can be avoided or offset. This would only be a potential issue upstream at the new bridge location as other surrounding vegetation is scrub with limited significance

The visual impact of new bridge was raised by GOM. This has currently not been included in the natural environment scoring. That stretch of river could only be seen by the adjacent landowners and recreationalists using the river for fisher etc. Decided to have no effect on the assigned scores.

Social and Property - Considers recreation effects such as fishing within the river and the impact on adjacent landowners. Last 2 options scored lower as the area of impact increased creating larger issues with surrounding landowners. The social impact (Recreation effects) is low for both.

There are no easements in place for the current pipeline. There have been issues with gaining access for work and repairs due to the adjacent landowners. This has not been scored into the current score. All scores dropped by 1 point to account for landowner impacts. Collectively it was agreed that “Having less than minor effects" felt too positive given the known issues of working with the landowners.

- Bridge at river site - Raises a potential risk that the landowners will want a bridge to allow river crossing and not just a pipe bridge.
- Rail bridge - 3 to account for difficulties working with Kiwirail and line closures.

Resilience (Lead by PB)

The definitions of scoring for resilience are as follows:

1. Offers no/low level resilience
2. Offers more than no/low but less than moderate resilience
3. Offers moderate level resilience
4. Offers more than moderate but less than high resilience
5. Offers high level resilience

Fault Rupture - Based on the understanding that lateral movement could be up to 15m. No pipeline will survive that therefore nothing has scored 5. Weighting to be considered

- Do Minimum now - at 1 due to unknow condition of older existing pipeline. Significant ground movement will be more likely to fail than a new pipe. At risk from smaller scale events
- Reinforce existing - As above with the acknowledgement that adding concrete around the pipe increases risk of failure at end of concrete section
- Trenchless - Adds a small amount of resilience with a spot repair through the sleeve. The sleeve may provide some protection to the water pipe and could be used to pass a new pipe through in a major event.
- Open trench - Would need to dig down and complete repair reducing the resilience. A carrier pipe could be included to reduce risk of damage to the water pipe.
- Bridge at river site - Flexible structure so lack of protection to the pipe. Risk the bridge itself could be heavily damaged depending on direction of lateral movement
- Rail bridge - Robust bridge of itself. Potential for it to fail in a large event and repair programme would be reliant on Kiwirail.

Wider discussion around fault rupture included

- Deeper pipes held up better in CHCH
- How much should fault rupture be considered for this new aspect as the full pipeline and treatment plant will be in poor condition. Agreed to reduce weighting for fault rupture criteria.
- Ability to repair the pipe from smaller scale events should also be included in this criterion

River morphology

- Rail bridge - pipeline stays away from the riverbank to reduce the risk of course changes being an issue.

Construction Programme – The provided scores were previously discussed with Fulton Hogan

Questions raised over the open trench option having the same timeframe as reinforcing the existing. The trenching would have to occur in two halves to allow for river diversion.

- Open trench - No discussion with Greater Wellington over what diversion they would require. Currently based on FH experience of the repair works to understand the requirements. Holmes to seek their advice. Concerns over significant delays.

Cost (Lead by PB)

The formula for scoring costs was as follows:

- 1 – Highest cost, 5 – Lowest cost, linear interpolation between 1 and 5 for other costs

Query over the comparison of reinforcement and the open trench. Feeling that the open trenching is under-estimated. Lead up to the river cost at $1000 seems too light. Dewatering solution not explicitly allowed for in the cost breakdown. Holmes to further consult with Fulton Hogan to gain further clarity on cost estimate. It was agreed that an independent review of the costing should be sort prior to the concept report being completed.

Sensitivity Scenarios

Scenarios to be considered were outlined with limited issue or discussion raised.

Further Discussion

Should a construction risk assessment be completed once an option is looking likely. e.g. A trenchless option poses the risk of getting stuck mid-way under the river. This would result in having to open trench the remaining length which requires a new consent.

Paul Marsden
PROJECT MANAGER
Holmes NZ LP

Copies to:

Stantec

Memo

To:	Peter Brown Holmes Consulting LP	From:	Richard Peterson Wellington
Project/File:	310103744	Date:	31 May 2022

Reference: Featherston water supply - Tauherenīkau River crossing

1 Introduction

Attachment A to this memo provides a preliminary assessment of the options to replace the existing water supply crossing of the Tauherenīkau River against the 'Natural Environment' and 'Social and Property' criterion.

The assessment takes into account feedback received at a multi-criteria assessment workshop on 16 May 2022.

This assessment has been undertaken by Bram Mulling (Principal Environmental Scientist) and Richard Peterson (Senior Principal Planner). Bram and Richard prepared the recent resource consent application for the short-term protection works of the existing crossing. As part of the preparation of the application, and subsequent implementation of its conditions, Bram visited the site of the existing crossing on four occasions.

2 The Natural Environment Criterion

In assessing options against the natural environment criterion potential adverse effects have been considered with respect to:

- Adverse effects on aquatic ecology from proposed works in the river bed, including construction works, works needed to maintain the option over time and the on-going impact of structures and other river bed modifications (e.g. rock rip rap)
- The potential for positive effects on aquatic ecology for those options that propose the removal of the existing pipe crossing from the river bed
- Adverse impacts on the natural environment from land based elements, such as impacts of trenching, associated dewatering and any removal of vegetation.

In addition, consideration has been given to the resource consent requirements associated with each option, and in particular whether these requirements present significant hurdles to the option as a result of anticipated opposition from stakeholders or due to the potential that the option will be determined to be inconsistent with key policies. Two key proposed Natural Resources Plan (pNRP) policies have been considered in this respect. The first is Policy P32 which relates to the management of adverse

effects on biodiversity, aquatic ecosystem health and mahinga kai. The second is Policy P102 which relates to the loss of extent and values of the beds of lakes and rivers, and natural wetlands. Both policies are set out in full in Attachment B to this memo. It is noted that an assumption has been made that all options involving structures in the bed of the river will be designed to ensure that fish passage is maintained. Therefore, it has been assumed that the options with be consistent with Policy P34 of the pNRP relating to fish passage.

In preparing this assessment values identified in the vicinity of the options in both the pNRP and Wairarapa Combined District Plan (District Plan) have been identified.

The District Plan zones the land in the vicinity of the options as Rural (primary production). The purpose of this zone is to provide for the core primary production uses of the district. The District Plan also includes district wide provisions, which among other things provide for network utilities such as water supply pipelines. In the vicinity of the options the District Plan identifies three planning overlays, being a Significant Water Body (the Tauherenīkau River), the Faultline Hazard Area layer and two designations (one the rail line and the other a water supply designation for SWDC).

The pNRP includes overlays relating to the Tauherenīkau River. These are:

- Schedule B – Ngā Taonga Nui a Kiwa for Rangitāne o Wairarapa and Ngāti Kahungunu as a tributary of the Ruamāhanga River
- Schedule D3 – Statutory acknowledgement for Rangitāne o Wairarapa and Rangitāne o Tamaki nui-ā-Rua
- Schedule F1 – Significant indigenous ecosystem for high macroinvertebrate community health, habitat for indigenous threatened/at risk fish species and habitat for six or more migratory indigenous fish species. Indigenous species recorded in the catchment are: common bully; common smelt; dwarf galaxias; giant bully; inanga; lamprey; longfin eel; redfin bully; shortfin eel and torrentfish
- Schedule H: Significant contact recreation freshwater body
- Schedule I: Important trout fishery river.

Schedule B and D3 are noted for information only and have not been taken into account in the assessment of the two criteria covered by this memo. It is assumed that these layers will be addressed under the ‘Mana Whenua Values’ criterion.

The Regional Policy Statement also has overlays relating to the Tauherenīkau River, being:

- Table 15, Appendix 1: A river with significant amenity and recreational values (fishing swimming, walking, picnicking and rafting)
- Table 16, Appendix 1: A river with significant indigenous ecosystems (high macroinvertebrate community health & habitat for six or more migratory indigenous fish species).

Scoring of the Natural Environment criterion has been based on the following 5-point scale:

5 Less than minor adverse to positive effects, consistent with relevant policy and consent (if required) unlikely to face opposition
4 Minor to less than moderate adverse effects and / or consistent with relevant policy, consent (if required) unlikely to face opposition
3 Moderate effects and / or consistent with relevant policy, consent (if required) unlikely to face more than minor opposition
2 More than moderate, less than significant adverse effects and / or inconsistent with relevant policy, consent (if required) likely to face more than minor opposition
1 Significant effects and inconsistent with relevant policy, consent (if required) likely to face more than minor opposition

3 Social and Property Criterion

The assessment of the social and property criterion has considered:

- Potential impacts on the recreation values of the Tauherenīkau River
- Potential property access and roading disruptions
- Impacts on other services and infrastructure during construction
- The number of property owners impacted by the option and the extent (area) of property impacted by the option.

The social effect / benefit related to the relative resilience of options has not been included in the assessment of options at this point at it has been assumed that this factor will be covered under the resilience criteria.

Scoring of the Social and Property criterion has been based on the following 5-point scale:

5 Less than minor adverse effects on recreation values, and few property owners impacted and small area of property impacted and disruption to access, roading or other services less than minor
4 Minor to less than moderate:
- adverse effects recreation values and / or
- number of property owners impacted and / or
- area of property impacted and / or
- disruption to access, roading or other services

3 Moderate:
- adverse effects recreation values and / or
- number of property owners impacted and / or
- area of property impacted and / or
- disruption to access, roading or other services

2 More than moderate, less than significant
- adverse effects recreation values and / or
- numbers of property owners impacted and / or
- area of property impacted and / or

- disruption to access, roading or other services

1 Significant

- adverse effects recreation values and / or
- numbers of property owners impacted and / or
- area of property impacted and / or
- disruption to access, roading or other services

Regards,

Stantec New Zealand

Richard Peterson
Senior Principal Planner
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Attachments:

Attachment A: Assessment of options
Attachment B: Key pNRP Policies

Attachment A: Assessment of the options

Option	Natural Environment considerations	Natural Environment score	Social and Property considerations	Social and Property score
Do nothing	River works • Resource consent was recently granted for the period until 2032 for maintenance and repairs to the existing Featherston water supply pipeline. A 10-year consent was granted in anticipation that an alternative long-term solution would be found. A further consent (Discretionary activity under R129) may be required to continue to maintain and if necessary, replace the existing pipeline over the 50-year horizon. However, it is possible that this could be a permitted activity under Rule R112 if it can be shown that the existing pipe is lawfully established, and that the maintenance / replacement works comply with the conditions of the rule. • If consent is required it is expected that this would at least be limited notified and, based on experience with the recent consent likely opposed by iwi, GWRC officers and Fish and Game. Noted that potential iwi opposition has not been taken into account in preliminary scoring, as it is assumed that this would be covered in the assessment of the 'Mana Whenua' criterion. • If consent is required, the proposal may be determined to be inconsistent Policy P32 in the pNRP. Careful assessment will also be needed with respect to Policy P102 as this requires the loss of extent and values of rivers to be avoided, unless there is a functional need[1] for the activity to be located in the river. As there are feasible alternatives, a functional need does not appear to apply in this instance. • Regular maintenance of the structure and rip rap would be required to ensure that the pipe remains protected and that fish passage is maintained. This would have regular but intermittent works in the bed of the river. The AEE included in the recent resource consent application concluded that adverse effects on aquatic ecology associated with the proposed repair and maintenance will be less than minor. • Considered that this option including regular maintenance and pipe replacement would have minor adverse effects on the river • The NES for Freshwater does not apply to an existing structure, including later alterations or extensions. Land based works • Assumed no changes to the existing land based elements of the water supply pipeline. No resource consent requirements. No adverse effects.	Criterion score: 2 Key drivers of score: • Expected opposition to consent • Inconsistent with policy P32 and to less extent P102	• Assumed less than minor recreation effects • Regular maintenance of the structure and rip rap would be required. This would require access over private property, but disruption to landowner less than minor • No additional disruption to services, access or roading • Two properties impacted (few), on previous projects negotiations with these landowners have been difficult	Criterion score: 4

[1] With respect to rivers, functional need is 'the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment'.

Reference: Featherston water supply - **Tauherenīkau** River crossing

Option	Natural Environment considerations	Natural Environment score	Social and Property considerations	Social and Property score
Reinforce existing pipe	River works • Would involve extending the concrete encasing and rock rip rap across the full length of the pipe crossing, installing sheet piles. Assumed rock rip rap would require on-going maintenance and potentially replacement following flood events. • Assumed resource consent would be required (Discretionary activity under R129), which based on experience with the recent consent is likely to be opposed by iwi and Fish and Game and may be determined by GWRC to be inconsistent with pNRP Policy P32. Also, similar potential inconsistency with P102 as above. • Effects on aquatic ecology from installation and intermittent maintenance works are expected to be minor to less than moderate, although there is a risk of moderate adverse effects as fish passage could be temporarily lost under this option if the rock rip rap is washed out. • The NES for Freshwater does not apply to an existing structure, including later alterations or extensions Land based works • Assumed no changes to the existing land-based elements of the water supply pipeline. No resource consent requirements. No adverse effects	Criterion score: 2 Key drivers of score: • Inconsistency with key pNRP policy • Expected opposition from stakeholders	• Assumed less than minor recreation effects • Regular maintenance of the structure and rip rap would be required. This would require access over private property, but disruption to landowner less than minor • No additional disruption to services, access or roading • Two properties impacted (few), on previous projects negotiations with these landowners have been difficult	Criterion score: 4
New pipe under river bed (pipe ram)	River works • Pipe construction would involve construction of pipe ramming pits either side of the river (assumed outside of the riverbed), but no direct disturbance of the river itself. Assumed material removed in the process of pipe ramming will be disposed of in a manner that does not impact on the river. • Assumed ramming of pipe beneath the riverbed can met permitted activity conditions under R117 of the pNRP. However, consent may be required for the removal of the existing pipe. • Requirements of the NES for Freshwater not considered to apply as the structure does not fall under the activities listed in clause 58 • Adverse effects of the construction works (including removal of existing pipe) are expected to be less than minor. Assumed pipe will not become exposed in the riverbed and does not impact ground water flow. Once the existing pipe is removed there will be benefits for the river. • Considered that this option would be consistent with P32 and P102. • Assumed limited, if any, on-going maintenance requirements and any effects on the river are less than minor. Assumed material flushed from the pipe will be discharged to land Land based works • Underground water supply pipework permitted activity under rule 21.1.24 (vii) and 21.1.26 • Tauherenīkau River is a significant waterbody in the District Plan. Earthworks associated with trenching within 25 m of the river would be a restricted discretionary activity (Rule 21.4.5). Effects on the river from land based works expected to be less than minor • Assumed earthworks for trenching will meet permitted activity rule R99 in the pNRP (i.e. less than 3,000 m2 per property). Assumed dewatering, if required, is permitted under Rule R140 pf pNRP. Effects of both activities less than minor	Criterion score: 5	• Assumed less than minor recreation effects, possibly benefit with the removal of the existing pipe • Less than minor disruption to landowners during trenching of land based elements, which are located away from key access routes and productive areas of farms • No disruption to services, access or roading • Two properties impacted (few), on previous projects negotiations with these landowners have been difficult	Criterion score: 4

Reference: Featherston water supply - **Tauherenīkau** River crossing

New pipe under river bed (open trench)	River works • Pipe construction would involve temporary diversions and open trenching, and ancillary discharge of sediment. Assumed appropriate sediment control measures and that fish passage will be maintained during the works • Requirements of the NES for Freshwater not considered to apply as the structure does not fall under the activities listed in clause 58 • While the magnitude of impact on the river is larger than options above, the effect is only temporary during construction as the pipe will not occupy the river bed. Therefore, the adverse effects of the construction works (including removal of the existing pipe) are expected to be moderate, given that they will be temporary. Once the existing pipe is removed from the river there will be benefits for the river. • Assumed that pipe ramming would not be determined to be inconsistent with P32 • For the purposes of determining consistency with Policy P102 it is assumed that temporary construction effects do not constitute a loss of extent or value and therefore that proposed works are consistent with this provision • There may be minor opposition from iwi and Fish and Game given the selection of the more intrusive construction method. • Assumed limited, if any, on-going maintenance requirements Land based works • Land based, underground water supply pipework permitted activity under rule 21.1.24 (vii) and 21.1.26 • Tauherenīkau River is a significant waterbody in the District Plan. Earthworks associated with trenching within 25 m of the river would be a restricted discretionary activity (Rule 21.4.5). Effects on the river from land based works expected to be less than minor • Assumed earthworks for trenching will meet permitted activity rule R99 in the pNRP (i.e. less than 3,000 m2 per property). Assumed dewatering, if required, is permitted under Rule R140 pf pNRP. Effects of both activities less than minor	Criterion score: 3 Key drivers of score: minor oppositions to the option from stakeholders	• Assumed less than minor recreation effects, possibly benefit with the removal of the existing pipe • Less than minor disruption to landowners during trenching of land based elements, which are located away from key access routes and productive areas of farms • No disruption to services, access or roading • Two properties impacted (few)), on previous projects negotiations with these landowners have been difficult	Preliminary criterion score: 4
New pipe on new swing bridge	River works • Assuming bridge does not require any part of the structure to be fixed in or on the river bed, then it is likely to meet the permitted activity rule R114, and have less than minor adverse effects on the river. This assumes that there will not need to be river bank protection works to protect the bridge foundations as the river moves over the 50 year horizon • Requirements of the NES for Freshwater are not considered to apply as the structure does not fall under the activities listed in clause 58 • Resource consent would be required for the removal of the existing pipe (Discretionary Activity under R129), however adverse effects during pipe removal are a considered to be less than minor, and once removed the option will have benefits for the river. • Consistency with Policies P32 and P102 achieved Land based works • Underground water supply pipework permitted activity under rule 21.1.24 (vii) and 21.1.26 • Above ground structures associated with the bridge meet the permitted activity requirement for the height ‘other buildings’ in the Rural Zone (max of 15m), however may trigger minor consent requirements depending on their location in relation to property boundaries • Tauherenīkau River is a significant waterbody in the District Plan. Earthworks associated with trenching within 25 m of the river would be a restricted discretionary activity (Rule 21.4.5). Effects on the river from land based works	Preliminary criterion score: 5	• Assumed no direct recreation impacts, possible benefit with the removal of the existing pipe, however some adverse visual impact from the new bridge (assumed at worst minor adverse effect) • Minor to less than moderate disruption to landowners during trenching of land based elements, located away from key access routes, but within productive areas of the farms • No impacts on services • 2 landowners impacted, minor to less than moderate extent of area impacted and some area of land will need to be purchased for the bridge	Preliminary criterion score: 4

Reference: Featherston water supply - **Tauherenīkau** River crossing

	expected to be less than minor. Assumed adverse effects on vegetation on the riparian margins less than minor (i.e. aren't sufficient to reduce score to a '4'). • Assumed earthworks for trenching will meet permitted activity rule R99 in the pNRP (i.e. less than 3,000 m2 per property). Assumed dewatering, if required, is permitted under Rule R140 pf pNRP. Effects of both activities less than minor			
New pipe on existing rail bridge	<u>River works</u> • Attachment of pipe to existing bridge assumed to be a permitted activity under Rule R112 of the pNRP • Requirements of the NES for Freshwater not considered to apply as the structure does not fall under the activities listed in clause 58 • Resource consent would be required for removal of the existing pipe (Discretionary Activity under R129), however adverse effects during pipe removal are a considered to be less than minor, and once removed the option may have benefits for the river. • Consistency with Policies P32 and P102 achieved <u>Land based works</u> • Underground water supply pipework permitted activity under rule 21.1.24 (vii) and 21.1.26 • Tauherenīkau River is a significant waterbody in the District Plan. Earthworks associated with trenching within 25 m of the river would be a restricted discretionary activity (Rule 21.4.5). Effects on the river from land based works expected to be less than minor. Assumed adverse effects on vegetation on the riparian margins less than minor (i.e. aren't sufficient to reduce score to a '4'). • Assumed earthworks for trenching will not meet the permitted activity rule R99 in the pNRP (i.e. less than 3,000 m2 <u>per property</u>). Assumed dewatering, if required, is permitted under Rule R140 pf pNRP. Effects of both activities less than minor	Preliminary criterion score: 5	• Assumed no recreation impacts, possible benefit with the removal of the existing pipe • Moderate disruption to landowners during trenching of land based elements, impacts on access routes and within productive areas of the farms • Assumed construction managed to avoid impact on rail services • 3 property owners impacted (including Kiwirail), moderate extent of area impacted • Works in the rail corridor and attaching pipe to rail bridge will require Kiwirail approval, including under section s176 of the RMA given the existing rail designation	Preliminary criterion score: 3 Key drivers of score: • Moderate disruption to landowners • Works in the rail corridor

Attachment B: Key pNRP Policies

Policy P32: Adverse effects on biodiversity, aquatic ecosystem health, and mahinga kai

Adverse effects on biodiversity, aquatic ecosystem health and mahinga kai shall be managed by:

(a) in the first instance, activities that risk causing adverse effects on the values of a Schedule F ecosystem or habitat, other than activities carried out in accordance with a wetland restoration management plan, shall avoid these ecosystems and habitats. If the ecosystem or habitat cannot be avoided, the adverse effects of activities shall be managed by (b) to (g) below.

(b) avoiding adverse effects where practicable, and

(c) where adverse effects cannot be avoided, minimising them where practicable, and

(d) where adverse effects cannot be minimised, they are remedied, except as provided for in (a) to (g), and

(e) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, biodiversity offsetting is provided where possible, and

(f) if biodiversity offsetting of more than minor residual adverse effects is not possible, biodiversity compensation is provided, and

(g) the activity itself is avoided if biodiversity compensation cannot be undertaken in a way that is appropriate as set out in Schedule G3, including Clause 2 of that Schedule. In relation to activities within the beds of lakes, rivers and natural wetlands, (e) to (g) only apply to activities which meet the exceptions in Policy P102.

A precautionary approach shall be used when assessing the potential for adverse effects on ecosystems and habitats with significant indigenous biodiversity values identified in Schedule F.

Policy P102: Loss of extent and values of the beds of lakes and rivers, and natural wetlands

The loss of extent and values of the beds of lakes and rivers and natural wetlands, including as a result of reclamation and drainage, is avoided except where:

(a) …

(b) in a river:

(i) there is a functional need for the activity in that location; and

(ii) …

(c) …

Appendix D – Level 1 Cost Estimate

Tauherenikau - 4m Open Trench

Project Name:	Tauherenikau River Crossing
Current Phase:	Develop
Base Date:	14/06/2022

Phase	Description	Base Estimate	Contingency	Total
Develop				
	Consultancy Fees	$ 125,000	$ -	$ 125,000
	Site Investigations	$ -	$ -	$ -
	Other Costs (Legal, Land, etc.)	$ 5,000	$ -	$ 5,000
	Total Project Development	$ 130,000	$ -	$ 130,000
Preliminary Design/Consenting				
	Consultancy Fees	$ 45,164	$ 18,066	$ 63,230
	Site Investigations	$ 25,000	$ 10,000	$ 35,000
	Consenting Fees, Community Engagement	$ 10,000	$ 4,000	$ 14,000
	Other Costs (Legal, Land, etc.)	$ 4,516	$ 1,807	$ 6,323
	Total Consenting	$ 84,680	$ 33,872	$ 118,552
Detailed Design				
	Consultancy Fees	$ 90,328	$ 36,131	$ 126,459
	Site Investigations	$ 10,000	$ 4,000	$ 14,000
	Other Costs (Legal, Land, etc.)	$ 4,516	$ 1,807	$ 6,323
	Total Detailed Design	$ 104,844	$ 41,938	$ 146,782
Procurement				
	Consultancy Fees	$ 18,066	$ 7,226	$ 25,292
	Other Costs (Legal, Land, etc.)	$ 9,033	$ 3,613	$ 12,646
	Total Procurement	$ 27,098	$ 10,839	$ 37,938
Construction				
	Consultancy Fees	$ 45,164	$ 18,066	$ 63,230
	Other Costs (Legal, Land, etc.)			$ -
	Physical Works			
	Environmental Compliance	$ 20,000	$ 8,000	$ 28,000
	Open Trench through river	$ 330,000	$ 132,000	$ 462,000
	Open trneching approach	$ 118,000	$ 47,200	$ 165,200
	Connections	$ 60,000	$ 24,000	$ 84,000
	Removal of existing	$ 46,200	$ 18,480	$ 64,680
			$ -	$ -
			$ -	$ -
	Other Construction Costs	$ -	$ -	$ -
	Risk			$ -
	SubTotal	$ 574,200	$ 229,680	
	On Site Overheads	$ 181,260	$ 72,504	$ 253,764
	Off Site O/H & Profit	$ 117,819	$ 47,128	$ 164,947
	Total Physical Works	$ 903,279	$ 349,312	$ 1,252,591
	Total Construction	$ 948,443	$ 367,377	$ 1,285,820
Base Estimate				
	Base Estimate	$ 1,295,066		
	Contingency	35%	$ 454,026	
	Expected Estimate			$ 1,719,092
95th Percentile Estimate				
	Funding Risk	60.0%		$ 1,031,455
	95th Percentile Estimate			**$ 2,750,548**

Notes: This estimate is exclusive of escalation and GST.

Approvals	Name	Signature	Date
Prepared by:			
Reviewed by:			
Approved by:			

Appendix E – Safety in Design Register

Safety in Design H&S Risk Assessment

Administration

Project Name	Tauherenikau	**Assessment Date**	12/05/2022	**Asset Type**	Water - Pipe	**Location / Site Name**	Tauherenikau River
Project No. (if applicable)	OPC101202	**Designer**	Peter Brown	**SID Process Step**	Initial H&S Risk Assessment (Step II)		

Wellington Water

Safety in Design Process Decisions

Opex: Technical Input Required? (Step III)	No
Design Meeting Required? (Step V)	No
Record decision reasoning for Step V:	Project is small scale and most people associated with the project are already familiar with the details.
More Detailed Assessment (e.g. Hazop) Required? (Step VIII)	No
Record decision reasoning for Step VIII :	Not at this stage. It is a pipeline project so no process flow workshop is needed

Safety in Design Stakeholders

Name	Peter Brown	**Role**	Designer
Name	Paul Marsden	**Role**	Project Manager
Name	Linda Fairbrother	**Role**	Project Manager
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	
Name		**Role**	

If additional stakeholders are required, select the row above and insert new row. Record Name and Role as per Safety in Design Process.

Supporting documentation

	Raw risk					Risk management								
Specific Asset Reference (if applicable)	Risk Source (Hazard)	Risk Description	Raw Consequence	Raw Likelihood	Raw Risk Rating	Control Measure	Control Type	Control Description	Control Justification (if not eliminated)	Control Owner	Residual Consequence	Residual Likelihood	Residual Risk Rating	Risk Owner
	Access/egress	Working in a trench / river that is at risk of sudden increases in flow	Substantial 100	Unlikely 3	High 300	Minimise	1. Isolate	Temporary diversion of river and early warning alarms if water begins to rise.	Could eliminate with trenchless solution but MCA preference is for open trench	Contractor	Substantial 100	Rare 1	Moderate 100	Contractor
	Commissioning	High pressure testing section of pipe under river leads to failure	Moderate 40	Highly Unlikely 2	Moderate 80	Minimise	1. Isolate	Have separations in place between people and the pipe when pressure testing	Not reasonably practicable to eliminate	Contractor	Moderate 40	Rare 1	Low 40	Contractor
	Communication	Possibility of limited cell reception	Moderate 40	Highly Unlikely 2	Moderate 80	Eliminate		Get a temporary repeater set up at site if required					N/A	Contractor
	Community / Access	Anglers or kayakers cross the site	Minor 10	Unlikely 3	Low 30	Minimise	2. Adminstration Control	Have warning signs upstream and downstream alerting river users to presence of site and works	Not reasonably practicable to eliminate	Contractor	Minor 10	Rare 1	Low 10	Contractor
	Confined Space	Working in a trench with risk of inundation from rising river water	Substantial 100	Unlikely 3	High 300	Eliminate		Excavate and backfill trench without people entering. Increase pipe pressure rating to take less compacted bedding					N/A	Designer
	Construction Method	Works required in river	Substantial 100	Unlikely 3	High 300	Minimise	1. Isolate	Contractor to write CMP and get agreement with GWRC	Could eliminate with trenchless solution but MCA preference is for open trench	Contractor	Substantial 100	Rare 1	Moderate 100	Contractor
	Excavation	Trench collapse trapping people or tipping machinery	Substantial 100	Highly Unlikely 2	High 200	Minimise	1. Isolate	Use trench shields if people are entering trench. Ideally undertake work without needing people to enter trench. Batter excavation to reduce risk of side wall collapse.	Not reasonably practicable to eliminate	Contractor	Substantial 100	Rare 1	Moderate 100	Contractor
	Extreme Weather	Quickly rising river levels	Substantial 100	Possible 4	Extreme 400	Minimise	1. Isolate	Divert river from worksite. Have early warning system in place for rising water.	Could eliminate with trenchless solution but MCA preference is for open trench	Contractor	Substantial 100	Highly Unlikely 2	High 200	Contractor
	Ground Conditions	Encountering large boulders that slow excavation progress	Minor 10	Possible 4	Low 40	Minimise	2. Adminstration Control	Factor in float to excavation programme to deal with risk	Not reasonably practicable to eliminate	Contractor	Minor 10	Unlikely 3	Low 30	Contractor
	Ground Water	Failure of dewatering pumps could result in inundation of trench	Moderate 40	Unlikely 3	Moderate 120	Minimise	1. Engineering Control	Have a standby pump available in case of failure	Not reasonably practicable to eliminate	Contractor	Moderate 40	Rare 1	Low 40	Contractor
	Location	Access to site through farm paddocks, potential interaction with farm animals	Minor 10	Possible 4	Low 40	Minimise	1. Isolate	Farmer to move stock from paddocks used for access	Not reasonably practicable to eliminate	Contractor	Minor 10	Rare 1	Low 10	Contractor
	Materials of Construction	Pipe material potentially at risk from being exposed in river	Moderate 40	Rare 1	Low 40	Minimise	1. Isolate	Consider pipe material selection in design. Consider sleeve.	Could eliminate with bridge solution but MCA preference is for open trench in river	Designer	Minor 10	Rare 1	Low 10	Asset Manager
	Natural Hazards	Severe ground shaking and liquefaction during seismic event	Major 70	Rare 1	Moderate 70	Minimise	2. Adminstration Control	Construction Management Plan to address seismic event and post event procedures	Not reasonably practicable to eliminate	Contractor	Major 70	Rare 1	Moderate 70	Contractor
	Operations - Scour	Pipe under river requires scour, scour chamber. Access in location prone to inundation in high river flow	Minor 10	Unlikely 3	Low 30	Minimise	1. Engineering Control	Operate scour during period of low river flow	Not reasonably practicable to eliminate	Asset Manager	Minor 10	Rare 1	Low 10	Asset Manager
	Polution / Spills	Diesel / oil from machinery entering river during construction	Moderate 40	Possible 4	Moderate 160	Minimise	1. Isolate	Divert river from worksite. Have spill kits on-site incase of leaks	Not reasonably practicable to eliminate	Contractor	Moderate 40	Rare 1	Low 40	Contractor
	Slips / Trips / Falls	River rocks / stones creates uneven surface to work on	Minor 10	Possible 4	Low 40	Minimise	1. Isolate	Use mats to create access ways to and from the site. Workers and those accessing site should have boots with ankle support.	Not reasonably practicable to eliminate	Contractor	Minor 10	Rare 1	Low 10	Contractor
	Working near Water	Potential for hypothermia if workers required to work in water for extended periods	Moderate 40	Highly Unlikely 2	Moderate 80	Eliminate		Divert river and dewater					N/A	Contractor
					N/A								N/A	
					N/A								N/A	
					N/A								N/A	
					N/A								N/A	
					N/A								N/A	
					N/A								N/A	

Appendix F – Project Risk Register

Risk Register

Project/Contract:	Tauherenikau River Crossing	Document Date:	
Project/Contract ID:	OPC 101202	Supplier Lead:	Paul Marsden / Holmes
WWL Lead:	Linda Fairbrother	RM Specialist:	- / -
		Risk Tolerance Threshold:	20

										Current Exposure Semi-Quantitative							Treatment Strategy	Residual (Target) Exposure Semi-Quantitative					
Rank	RID	Risk Title	Description/ Cause/ Consequence	Risk Owner	Risk Owning Org	Date Raised (xx/xx/xxxx)	Risk Status	Phase	Established Controls	Consq.	Likelihood	Risk Score	Cost ($M)	Delay (Months)	Likely Cost ($M)	Likely Delay (Months)	Individual actions to be recorded in the Actions Register (Tab 4)	Consq.	Likelihood	Likely Cost ($M)	Likely Delay (Months)	Risk Score	Commentary & Closure Statement
3	001	MCA criteria	Description: There is a threat that MCA process not suitable for subsequent consent process Cause: The cause of the threat is the possibilty of MCA process being swayed too heavily towards cost considerations Consequence: The consequence of the threat is increased difficulties in the resource consent process and delays	Peter Brown	Holmes	29/04/2022	Live - Parked	Optioneering	Legal review of criteria ahead of MCA workshop	High	Medium	19		2		2	Holmes to draft MCA criteria and get agreement from WWL and Dentons ahead of MCA workshop	Low	Low	0	1	6	MCA has been completed and overseen by legal and peer review
4	002	Funding availability - Design	Description: There is a threat that SWDC do not have funds to complete replacement design Cause: The cause of the threat is that this project has no LTP budget available and money will need to be re-prioristed from other projects Consequence: The consequence of the threat is that the design does not progress		SWDC	18/05/2022	Live - Treat	Optioneering		Medium	High	17		2		2	Funds for optioneering have been approved. WWL to stay engaged with SWDC to confirm how further design is to be undertaken	Medium	High			17	
1	003	Funding availability - Construction	Description: There is a threat that SWDC do not have funds to complete replacement construction Cause: The cause of the threat is that this project has no LTP budget available and money will need to be re-prioristed from other projects Consequence: The consequence of the threat is that the construction does not progress		SWDC	18/05/2022	Live - Treat	Optioneering		Very High	High	24		24		24	Design may progress while construction may be delayed until project can be funded through LTP.	Very High	High			24	
5	004	Consentability	Description: There is a threat that the preferred solution is difficult and/or expensive to consent Cause: The cause of the threat is largely due to environmental effects of works in the river Consequence: The consequence of the threat is consent is not granted or it has unreasonable conditions	Linda Fairbrother	WWL	18/05/2022	Live - Parked	Optioneering		High	Low	16		2		2	Consentability assessment required as part of optioneering and options fatally flawed based on not being consentable	High	Very Low			8	Consent assessment undertaken on options and none were flagged as being difficult to consent.
6	005	Programme	Description: There is a threat that the consenting and construction timeframes delay the implementation of a new or reinforced pipe Cause: The cause of the threat is the difficulty of consenting and the difficulty of construction Consequence: The consequence of the threat is delay to project programme	Linda Fairbrother	WWL	18/05/2022	Live - Treat	Optioneering	MCA process to score programme	Medium	Medium	15					MCA process has identified that preferred option should be readily consentable and have a quick construction programme	Medium	Low			11	Open trench option is consentable and has a short construction programme
2	006	Pipe failure	Description: There is a threat that the existing pipe could fail at any stage due to a high-flow river event washing out the recently completed reinforcing works and pipe Cause: The cause of the threat is the location of the pipe exposed within the river channel Consequence: The consequence of the threat is that the pipe is washed away and Featherston does not have a potable water supply. Water trucking would be required until a new pipe could be installed		SWDC / WWL	18/05/2022	Live - Treat	Optioneering	WWL COG have an emergency plan in place	Very High	Low	20						Very High	Low			20	
9	007	Landowners	Description: There is a threat that one of the landowners wants compensation and easements for the pipeline repair works and pipeline through their property Cause: The cause of the threat is the landowners not agreeing to the works Consequence: The consequence of the threat is delays to the programme while an agreement is negotiated		SWDC	18/05/2022	Live - Treat	Optioneering	WWL Comms team to engage with landowner once a preferred approach is identified and a timeframe on construction is established.	Medium	Low	11					WWL Comms team to prepare consulting strategy to approach landowners	Medium	Low			11	
10	008	Winter construction	Description: There is a threat that the constuction programme could be delayed by winter conditions Cause: The cause of the threat is that the current programme timeline involves constuction through winter to try complete the work in the shortest time frame. Consequence: The consequence of the threat is either an extended construction period or delayed construction start		SWDC	18/05/2022	Live - Parked	Optioneering		Low	Medium	10				2		Low	Medium			10	
6	009	Geotech conditions	Description: There is a threat that unknown deep ground conditons will impact construction works Cause: The cause of the threat is limited geotechnical investigation and knowledge of the deep (>4m) ground conditions Consequence: The consequence of the threat is delays to construction programme and altering construction method if problems arise			18/05/2022	Live - Parked	Optioneering	ECI engagement with Fulton Hogan and GP Friel on construction methods. Use of larger 800mm sleeve in all ramming options	Medium	Medium	15				4		Medium	Low		4	11	

Risk Register

Project/Contract:	Tauherenikau River Crossing
Project/Contract ID:	OPC 101202
WWL Lead:	Linda Fairbrother

Document Date:		
Supplier Lead:	Paul Marsden	Holmes
RM Specialist:	-	-
Risk Tolerance Threshold:	20	

										Current Exposure Semi-Quantitative							Treatment Strategy	Residual (Target) Exposure Semi-Quantitative					
Rank	RID	Risk Title	Description/ Cause/ Consequence	Risk Owner	Risk Owning Org	Date Raised (xx/xx/xxxx)	Risk Status	Phase	Established Controls	Consq.	Likelihood	Risk Score	Cost ($M)	Delay (Months)	Likely Cost ($M)	Likely Delay (Months)	Individual actions to be recorded in the Actions Register (Tab 4)	Consq.	Likelihood	Likely Cost ($M)	Likely Delay (Months)	Risk Score	Commentary & Closure Statement
	010	Iwi engagement	Description: There is a threat that the MCA process does not suitably reflect Manu Whenua values Cause: The cause of the threat is a lack of engagement with local Iwi groups during the options phase and MCA process Consequence: The consequence of the threat is increased difficulties in the resource consent process and delays	Linda Fairbrother	WWL	18/05/2022	Live - Treat	Optioneering	WWL to engage with local Iwi groups thoughout the optioneering phase to gain their input on option scoring.	Medium	Medium	15						Medium	Low			11	

Appendix G – Communications Plan

Tauherenikau River Pipe Crossing – Long term solution (Capex Project)

Communications Plan (interim until July 2022)

[Last updated: 20/05/22]

Communications plan – Approved by Vanessa MacFarlane (WWL Comms Manager) and Linda Fairbrother, Project Lead, Network Development and Delivery

Background

Wellington Water and the South Wairarapa District Council are in the process of assessing long-term solutions to the pipeline that crosses the Tauherenikau River. This pipeline transports water from the Waiohine Water Treatment Plant to the Featherston community, and due to geographic changes over time, the pipeline has become exposed – increasing the risk of further pipe damage and a loss of water supply to Featherston.

This pipeline has recently been repaired, however this is just an interim measure while long-term solutions are assessed and a preferred option chosen by council. The long-term goal is to repair or replace the existing pipe, to create a more resilient supply of water to the Featherston community.

The pipeline was first installed in 1975, and the river crossing replaced in 1999. However, in the subsequent years, due to a combination of downstream riverbed mining and the river path shifting, the bed of the river has dropped, exposing the Featherston water supply pipeline. In December 2021, as a result, a cracked gibault coupling was observed. It is likely that the pipe will continue to be undermined and exposed by river flows, leading to continued damage of the pipeline (as happened in 2021) and potential failure of the pipeline.

In addition, the pipeline is located close to the Wairarapa fault line. Fault rupture predictions from Geological and Nuclear Sciences (GNS) suggest the fault could move up to 15 metres laterally in a large event. In this case, the pipeline will most likely fail. However, designing and installing a pipeline to survive such an event would be very difficult and expensive.

Stantec undertook a short feasibility assessment for alternative pipe crossing options. This included reinforcing the existing pipe, putting a new pipe underneath the riverbed, and putting a new pipe over the river, either on a new pipe bridge or attaching to the rail bridge.

The assessment also highlighted that to achieve a 100-year design life, the new pipe would need to be in the order of four metres deep below the river, which increases the cost of construction considerably.

A shortlist of options will be presented to council to assess and review. A Multi-Criteria Analysis (MCA) will then systematically score and rank the shortlist options to identify a preferred option. The

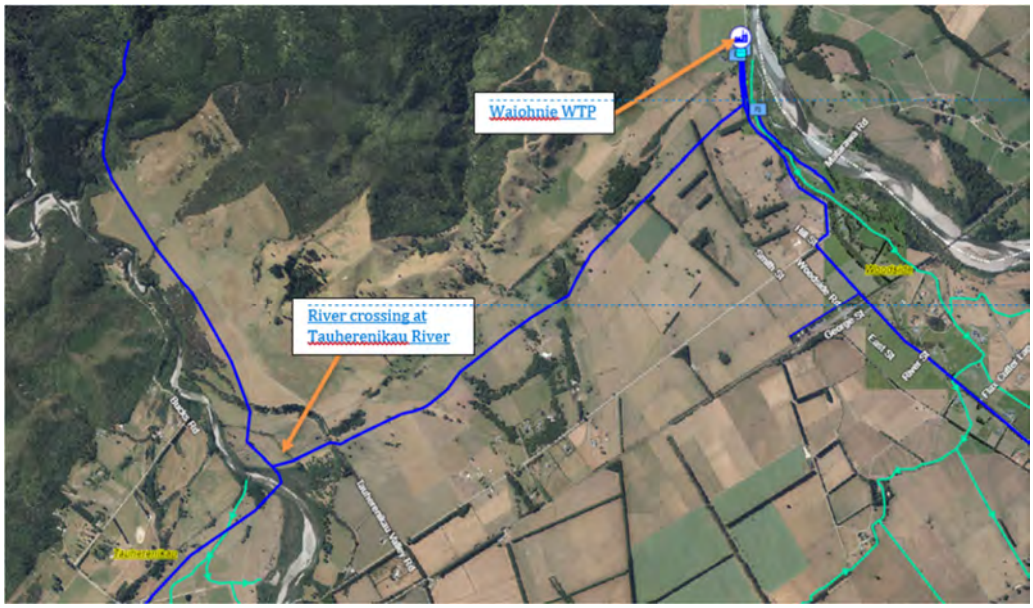
MCA should include elements of resilience, operational, financial, environmental and social/cultural impacts.

An Options Assessment report will then be presented to council, based on the outcomes and strategic advice coming out of the MCA.

The South Wairarapa District Council will then select a preferred option. At this point, preliminary design and consenting can begin. The preliminary design should provide sufficient information to inform the consent application.

In the meantime, Wellington Water Customer Operations Group have developed an operational response plan, in the event that this pipeline fails.

Here's the image of where the pipeline crosses the Tauherenikau River:



Objectives

- Ensure that council officers, elected officials, media, and wider community are aware of the project and any ongoing developments.
- Communicate the benefits that a long-term solution will bring, including important messages about water supply resilience, as well as managing earthquake risk and population growth.
- Raise awareness of the high-level project risk and cost considerations.
- Ensure our people are updated on project developments, and celebrate achievements and milestones with media, council and the public.
- Ensure early engagement with key stakeholders, including Mana Whenua, land stakeholders, Department of Conservation, Fish and Game, Greater Wellington Regional Council, Council Officers and Councillors, media and public.

Audiences

Audience	What do we want them to know / do / understand	Channels to reach them
Internal		
Wellington Water staff, contractors, and suppliers	• Awareness of the project – including benefits to the council and public	• Woogle • SLT connect • On Tap • Consultancy panel • Contractor panel • Our social media channels • Our website
External		
South Wairarapa District Council including Councillors	• Share project developments and updates – including key dates, milestones, and achievements	• Email updates • Our website • Social media • Direct liaison with council comms team – Sheil and Catherine • Monthly Webinar • 'Council Messages'
General public and media	• Understanding of high-level project benefits, risks and cost considerations	• Local media publications (i.e. Wairarapa Times-Age) • Public Forums (i.e. Assets and Services Committee) • Wellington Water (and SWDC) social media and website updates
Land and Iwi stakeholders (i.e. adjacent landowners, local Iwi)	• Communicate the project benefits to the community, need for a long-term solution • Communicate how we'll work with stakeholders to minimise impact where possible	• Direct contact via phone and email • Work with Alex Van Passen and RMA team regarding any requirement for strategic Iwi engagement
Greater Wellington Regional Council	• Communicate project intention and keep informed of important project developments	• Direct contact – phone and email initially • Engage with our RMA team/GWRC for consent related engagement
Fish and Game	• Communicate project intention and keep informed of important project developments	• Direct contact – phone and email initially
Department of Conservation	• Communicate project intention and keep informed of important project developments	• Direct contact – phone and email initially with their communications team

Key messaging

Overarching narrative/primary key messages:

What's your overarching story or primary messages that you would use every time you communicate?

- We're in the process of advising the South Wairarapa District Council on the long-term investment options for the pipeline that crosses the Tauherenikau Pipeline.
- The pipeline has become more exposed over time, due to geographic changes in the surrounding riverbed landscape. This significantly increases the risk of further damage to the pipeline which, in turn, increases the risk of water supply loss to the Featherston community.
- We recently repaired the pipeline, but this is only an interim measure to fix previous damage to the pipeline, while South Wairarapa District Council explores a long-term solution.
- Wellington Water (alongside our partners Stantec and Holmes Consulting) are providing a report outlining our recommended long-term solution to the issue for South Wairarapa District Council to assess.
- Options being considered include maintaining the status quo, reinforcing the existing pipe, a new pipe under the river, a new suspension bridge close to the existing crossing site, and a new pipe attached to the existing rail bridge.
- South Wairarapa District Council will then assess our recommended solution, after considering the strategic and planning advice provided by Wellington Water and our partners.
- Once a preferred option is chosen, the design and consenting work will begin.
- South Wairarapa District Council will receive an assessment of the options available by the end of June 2022 and are scheduled to make a decision on a preferred option by the end of July 2022, following the Assets and Services Committee meeting.

Strategic approach

- South Wairarapa, being mostly rural with an older demographic, is well suited to printed collateral such as brochures, letters etc. in local cafes, library and in the South Wairarapa District Council offices. Therefore, most our educational and promotional material will focus on printed collateral, rather than online material and updates.
- We will take a reactive approach to the local media until council confirms their preferred long-term solution by late July. Once the option is confirmed, we'll proactively provide updates to local media such as the Wairarapa Times-Age.
- Our proactive engagement with key external stakeholders (outlined in this communications plan) will increase significantly once a preferred option is selected. At this point, specific engagement activities will be added to the plan.

Social media

We will provide regular updates on our social media channels and the SWDC social media channels.

Digital

Keep the project page on our website updated regularly.

Risks and mitigation

Risks	Mitigation
Managing stakeholders with an interest in the river and surrounding land including Iwi and landowners	• Early liaison with land stakeholders, and Iwi to communicate project plans, benefits, risks and timelines.
A lack of 'buy-in' from stakeholders during a time of heightened interest in reform and the costs of this transition over the next two years.	• Importance of clearly communicating project benefits, and risks as well as cost considerations to key stakeholders including council and media.
General sentiment from stakeholders (i.e., media, public) around a lack of transparency about investment costs and considerations	• Important that we keep the media and public updated via proactive media stories and social media on key project deadlines and milestones achieved. • We should share information as soon as we can with public and media stakeholders around project decision-making.

Measurement

We will measure the effectiveness of our communications through a variety of mechanisms:

- Feedback from important stakeholders, including council, impacted landowners and Iwi as well as the wider public.
- Ultimately, success on the project including buy in from key stakeholders, and a successful project delivery, once a preferred long-term solution is approved by council.

Tactics and timing

Timing	Activity	Responsible	Status
Options Assessment stage			
May 2022	Proactive media pitch to the Wairarapa Times-Age outlining long-term solution timelines and general approach	Rory Milne – WW Comms	Complete
May 2022	Project website updated with the latest information on project developments	Rory Milne – WW Comms	To be completed – by end of May 2022
May 2022	Social media update to public on the plan to come up with a long-term solution to the Tauherenikau pipe repair	Rory Milne – WW Comms	To be completed by end of May 2022
May 2022	High-level update included in 'Council Messages' that goes out to Councillor stakeholders & also piece	Rory Milne – WW Comms	To be completed by May/June 2022

	included in Monthly Webinar with Councillors		
End of May 2022	Preferred option report presented to council outlining our recommended option for consideration.	Holmes Consulting/Stantec (Paul Marsden Leading)	Due to complete by middle of June 2022
End of July 2022	South Wairarapa District Council approves recommended long-term solution, following the Assets and Services Committee.	Wellington Water (Linda Fairbrother project lead), South Wairarapa District Council	On track – still to complete
End of July/August 2022	Once council decides on their preferred long-term solution, communications will add more detail regarding specific engagement activities with external stakeholders as outlined in comms plan.	Rory Milne – WW Comms to lead with support of Linda Fairbrother, RMA and key internal stakeholders	From July/August 2022
End of July/August 2022	Proactive media pitch regarding preferred solution – target: Wairarapa Times-Age, Stuff, other local publications *Dependency: Level and progress of engagement with Iwi and the Greater Wellington Regional Council.	Rory Milne – WW Comms	July/August 2022
End of July/August	Engage with other key council and public sector comms team to inform of project development (i.e. GWRC)	Rory Milne – WW Comms	July/August 2022
Project design and consenting			
2022/2023	Detailed design and consent	Holmes Consulting/Stantec (Paul Marsden Leading)	To be completed – estimated completed by 2023
2023/2024	Contract for delivery of engineering works award and work completed	Holmes Consulting/Stantec (Paul Marsden Leading)	Estimated to be completed by end of 2024

Key internal stakeholders

Name	Role/Function	Project responsibility
Laurence Edwards	Chief Advisor, Drinking Water	Project Sponsor Workshops Technical advice on complex issues that may need escalation
Adam Mattsen	Programme Lead SWDC	Programme Delivery Office stakeholder
Paul Marsden	Project Lead, Holmes Consulting	Project Manager

Dugall Wilson	Panel Lead, Stantec	Point of escalation for Stantec panel team
Gary Cullen	Manager, Major Projects, Wellington Water	Strategic project management
Linda Fairbrother	Project Lead, Wellington Water	Wellington Water lead, Strategic project management and oversight
Taiarahia Wharepapa and the wider RMA team	Advisor RMA Consents & Environment	Approach to Mana Whenua and local Iwi engagement
John Duggan	Principal Advisor Water	NET Stakeholder Design/technical queries Risk workshop During safety in design During design development
John Baines	Customer Operations Group	COG stakeholder (interface for operations and maintenance)
Rory Milne	Comms Lead	Communications planning, advice and implementation

Key external stakeholders

Stakeholder	High level engagement plan and key contacts
Greater Wellington Regional Council	Details on engagement activities to be added once a preferred long-term option is selected by council
Local Iwi and Mana Whenua	Details on engagement activities to be added once a preferred long-term option is selected by council
South Wairarapa District Council	Ongoing communications with communications team
Fish and Game	Details on engagement activities to be added once a preferred long-term option is selected by council
Department of Conservation	Details on engagement activities to be added once a preferred long-term option is selected by council
Adjoining landowners	Details on engagement activities to be added once a preferred long-term option is selected by council
Community and environmental interest groups	Details on engagement activities to be added once a preferred long-term option is selected by council

Tauherenikau Pipeline Crossing

Long term solutions

June 2022

Wellington Water

Our water, our future.

Tauherenikau River crossing – critical asset

DRAFT

Wellington Water

Why are we doing this project?

The current river crossing provides 100% of the water supply to Featherston. This has become exposed in the riverbed which has increased its susceptibility to failure.

Project Outcome?

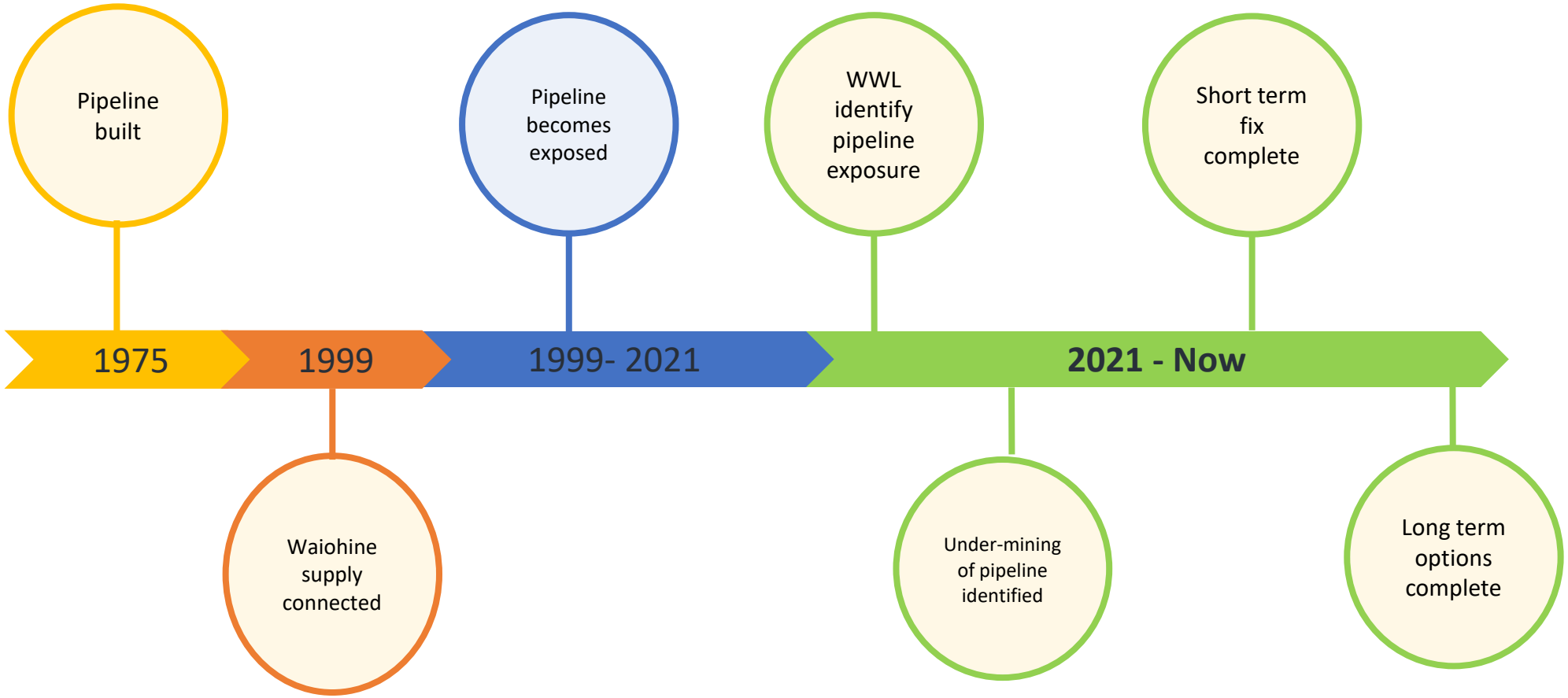
To provide a long-term solution for this critical asset

Our water, our future.

Pipeline history

DRAFT

Wellington Water



Our water, our future.

Short term (temporary) solution

DRAFT

- Work to repair leaking Gibault joint and place additional material around pipeline was completed in April 2022.
- The final cost of the works came in under the approved budget of $325,000.
- The pipeline remains in the riverbed which means there is a risk of washout of supporting material or an object striking and damaging the pipeline in a high flow event.

The risk

DRAFT

The temporary solution has an estimated lifetime of 1- 2 years.

The pipeline could fail at any time, risks of failure include:

- The repair fails again, pipeline **joints** are a weak point
- The pipeline is **struck** by a rock or other material in a high flow event
- The pipeline is **undermined** again, the pipeline could break without support
- Longer term – **corrosion** leads to deterioration of the wall thickness and the pipeline breaks

In February 2022 SWDC decided to undertake the short term solution and instructed Wellington Water to come back with options for a long term solution.

Long term options considered

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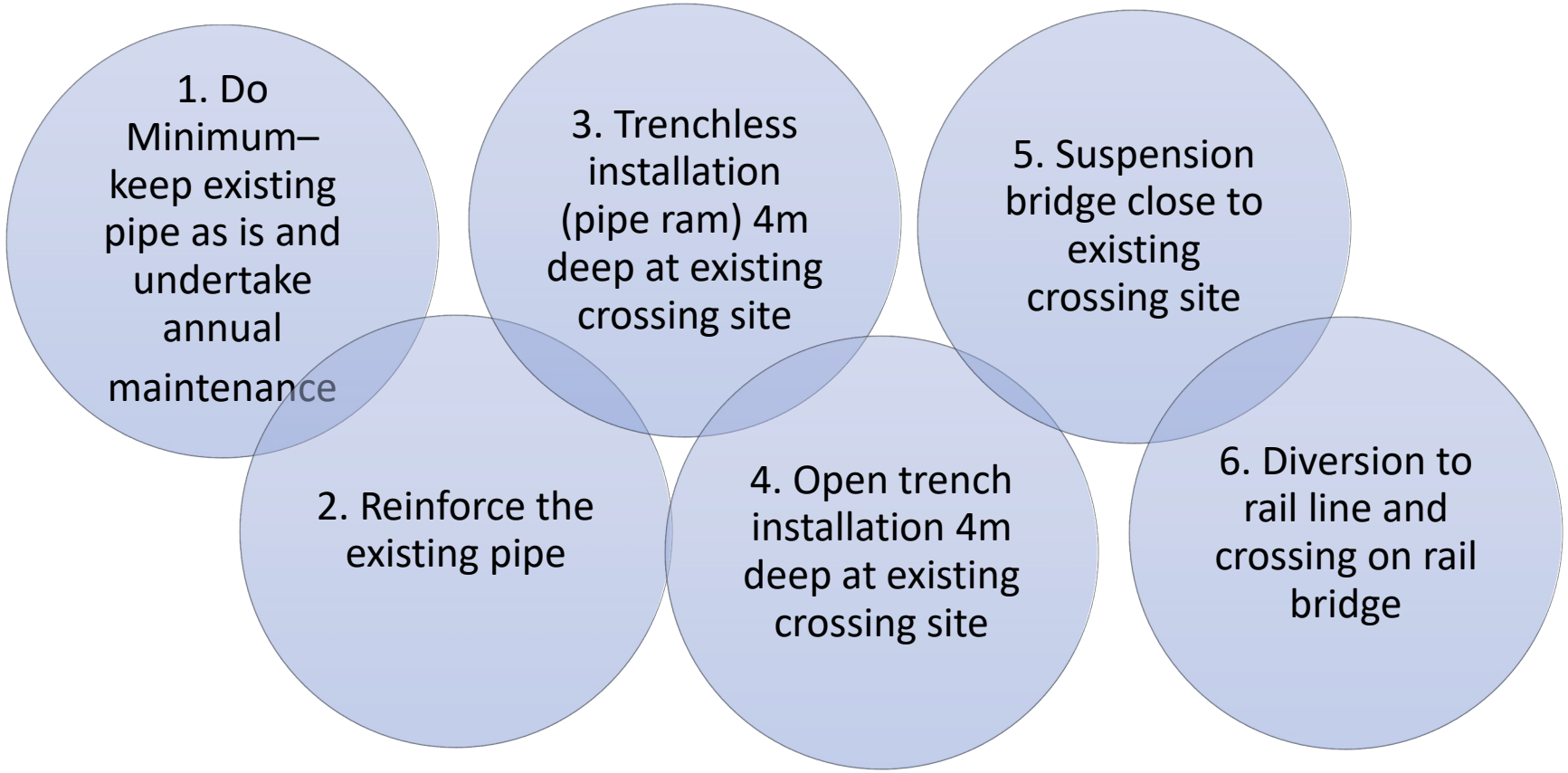
Wellington Water



Our water, our future.

Option 1 - Do Minimum

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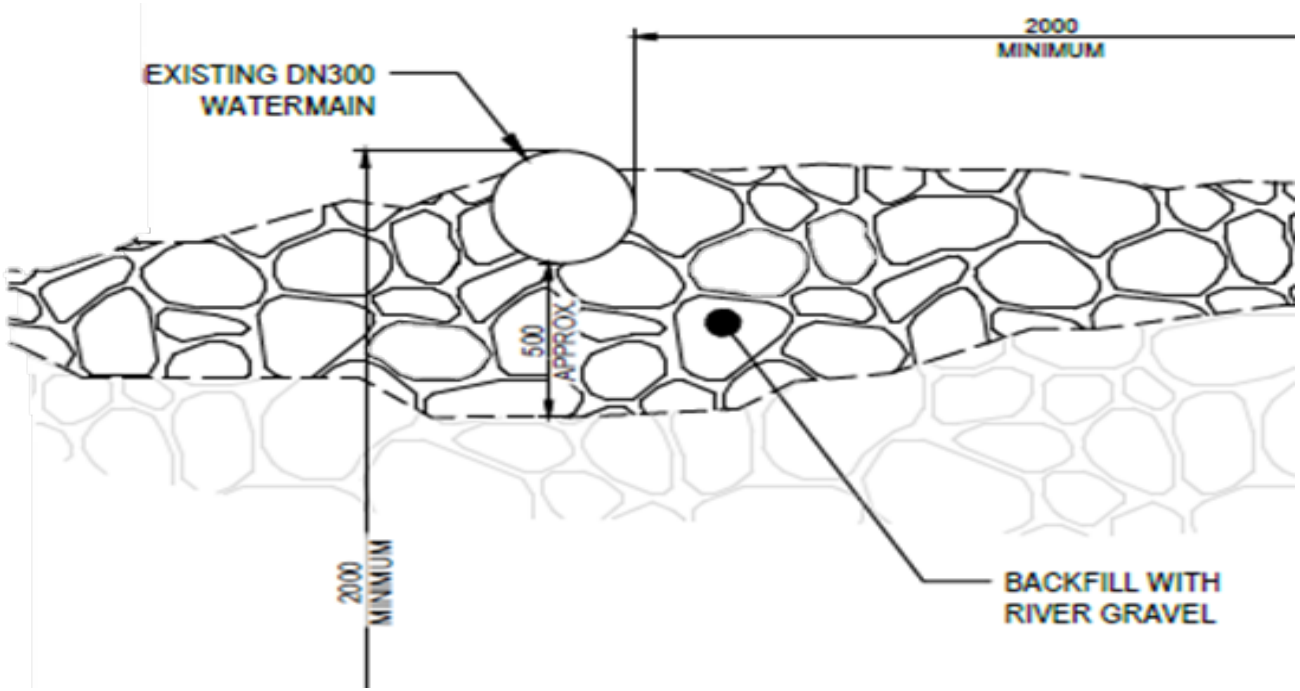
Wellington Water

- Maintain existing pipeline in its current condition
- Annual rock replacement required (assumed 30%)
- Pipe replacement likely required within 20-30 years



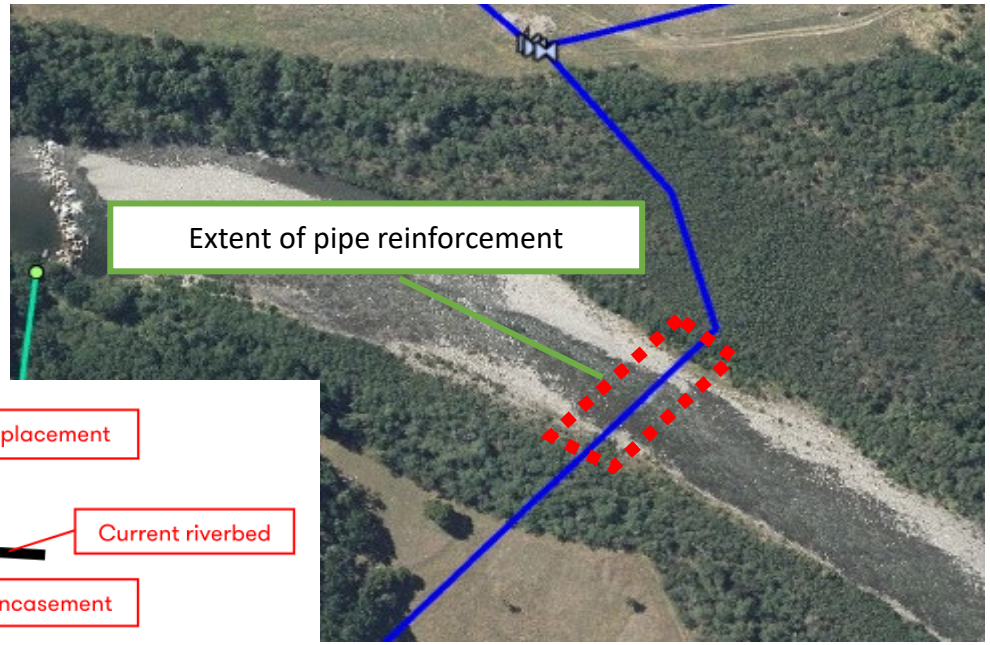
Risks	Benefits
Internal pipe condition is currently unknown	No capital investment required
Large river flow event could cause washout of remedial work exposing or damaging pipe	No effects associated with construction
Annual risk to environment with rock replacement	
High annual cost to maintain	
Offers no additional resilience to natural events	

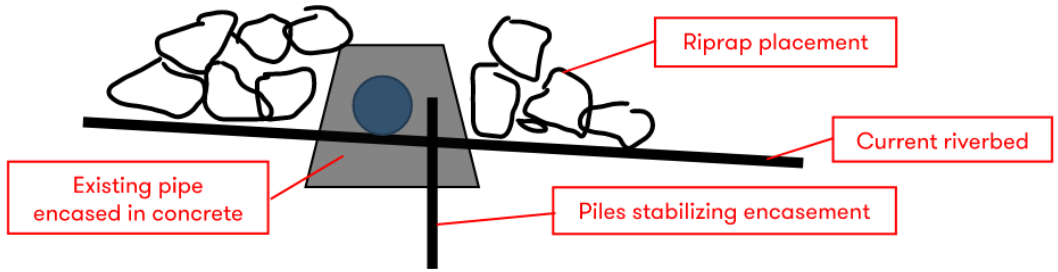
Option 2 - Reinforce Existing

DRAFT

Wellington Water

- Keep existing pipeline but provide additional protection with concrete encasement and stablisation piles
- Annual rock replacement required (assumed 15%)
- Pipe replacement likely required within 20-30 years



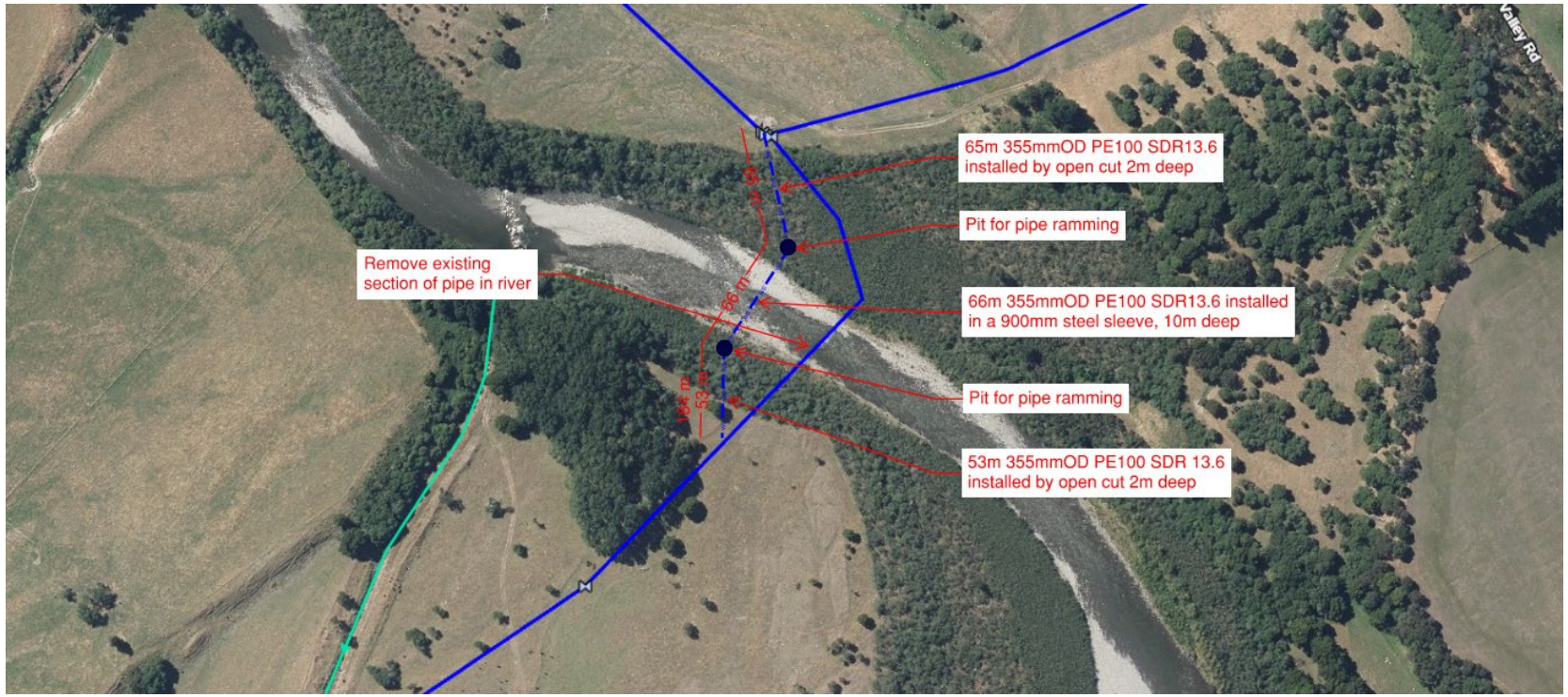


Risks	Benefits
Internal pipe condition is currently unknown	Provides some resilience to high river flow events and scour protection
Multiple large river flow event could cause washout of upstream or downstream armouring, putting the encasement at risk of damage	
Risk to environment from sediment mobilisation during construction	
High annual cost to maintain	
Annual risk to environment with rock replacement	

Option 3 – New pipe installed by pipe ramming method

DRAFT

- New pipe installed by pipe ramming at 4m depth.
- 100 year design life, no maintenance required



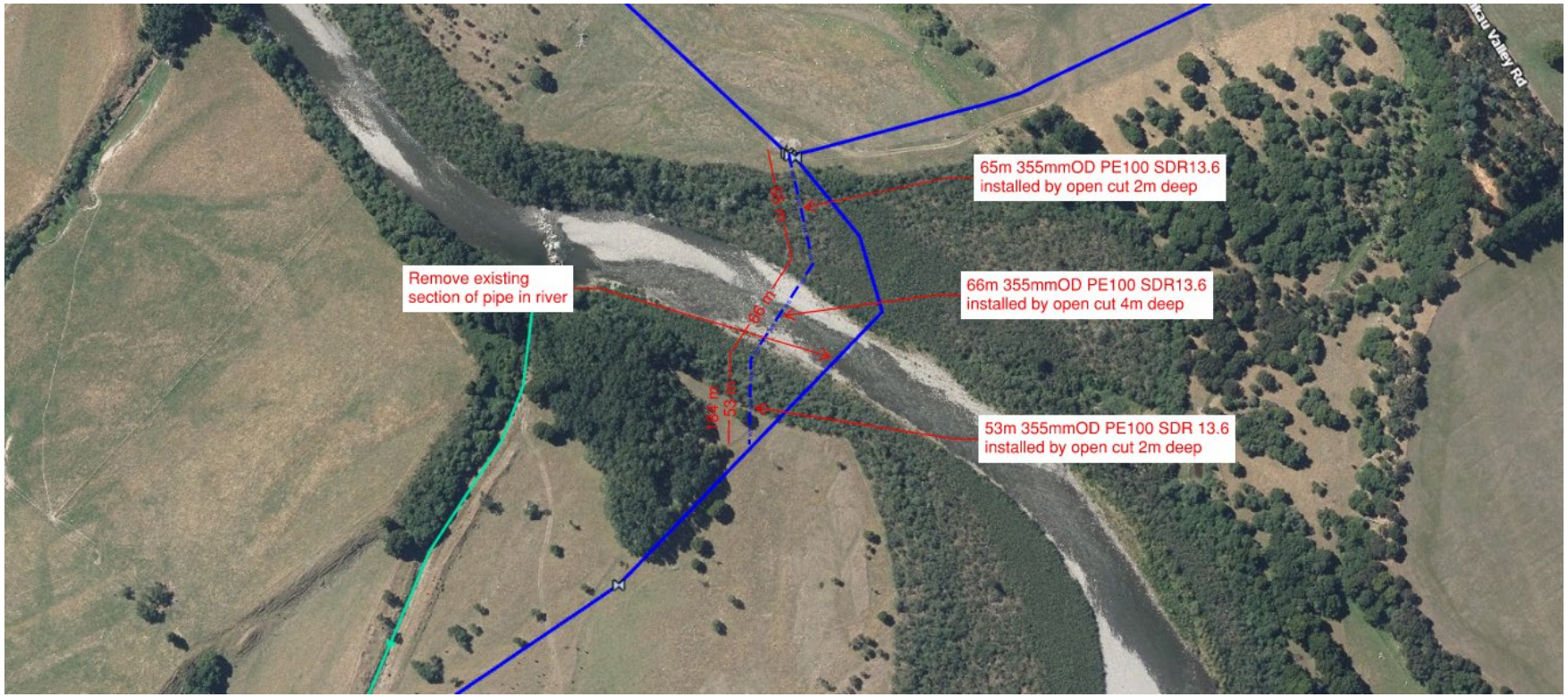
Risks	Benefits
There is evidence of some boulders up to 800mm below the ground surface at this location. The pipe ram could strike a boulder that cannot be passed resulting in an open trench in the river to complete the work – both would need to be consented	Provides added resilience to riverbed degradation.
	Can potentially achieve 100 year design life
	Does not require construction works in the river
	A pipe sleeve potentially provides better access after a seismic event to inspect / repair the pipe

Option 4 – New pipe installed by open trench

DRAFT

Wellington Water

- New pipe installed by open trench at 4m depth.
- 100 year design life, no maintenance required



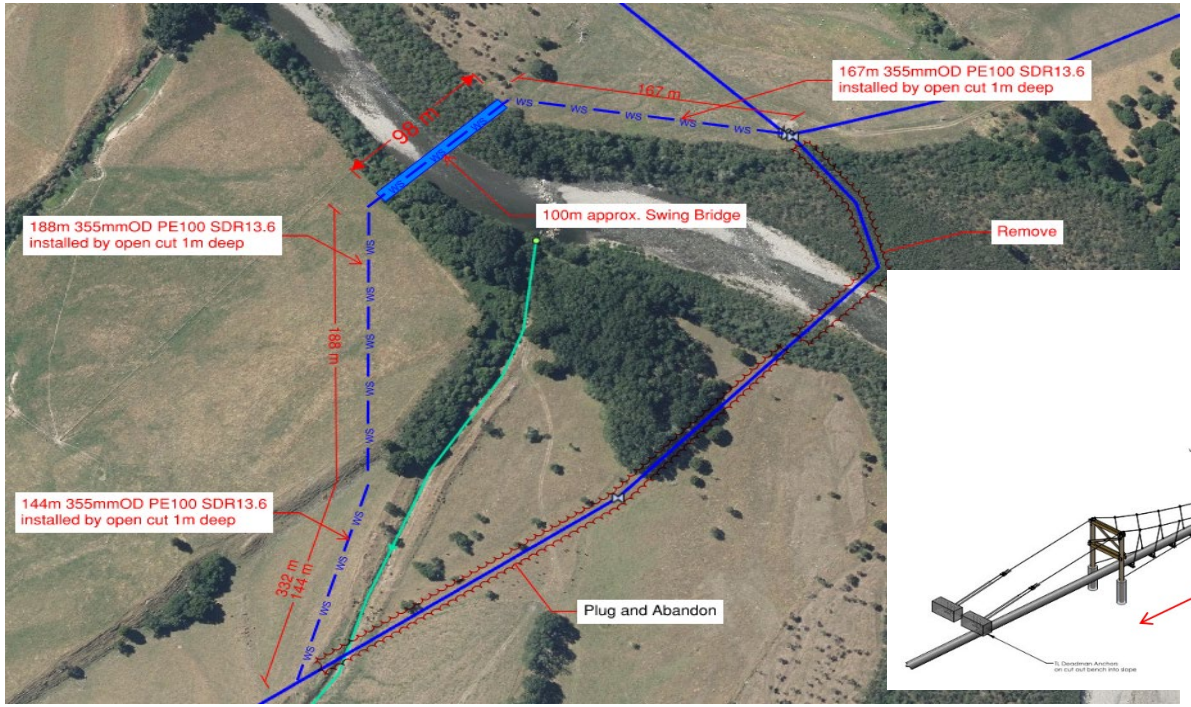
Risks	Benefits
Requires river diversion and likely impact on river environment	Provides added resilience to riverbed degradation.
Flooding during construction could have safety implications for working around an open trench	Can potentially achieve 100 year design life
	Relatively quick installation time and lower capital cost

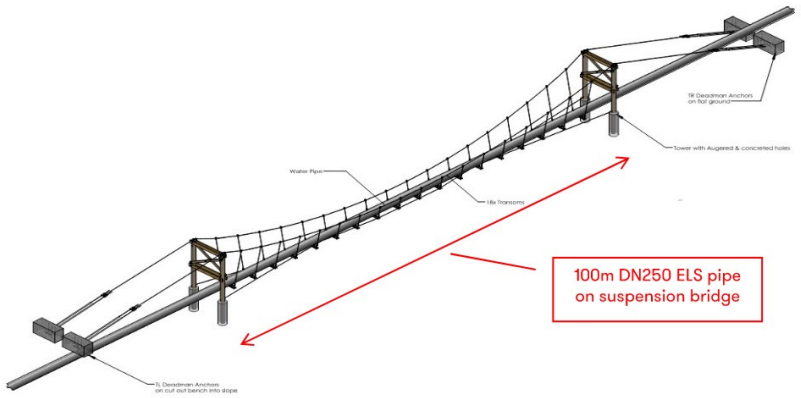
Option 5 – Bridge at existing site

DRAFT

Wellington Water

- New pipe installed on suspension swing bridge upstream of existing crossing and Water Race intake weir
- Annual bridge and pipeline inspections required
- ~500m additional pipeline required





Risks	Benefits
Requires additional crossing of Wairarapa faultine	Provides added resilience to river movement and scour
Lifespan of a wooden suspension bridge structure is anticipated at 50 year maximum	Does not require work in the river
Requires annual bridge and pipe inspections	
Lightweight structure so will move and flex to a high degree in a seismic event, which may put added pressure on pipe	

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Option 6 – Rail Bridge

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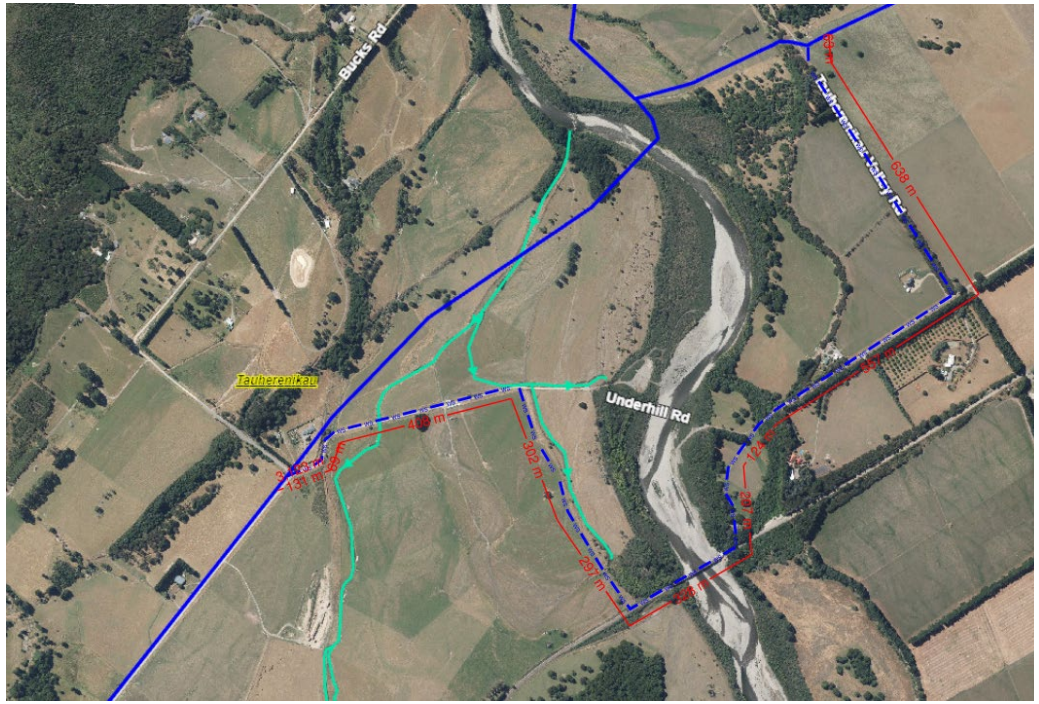
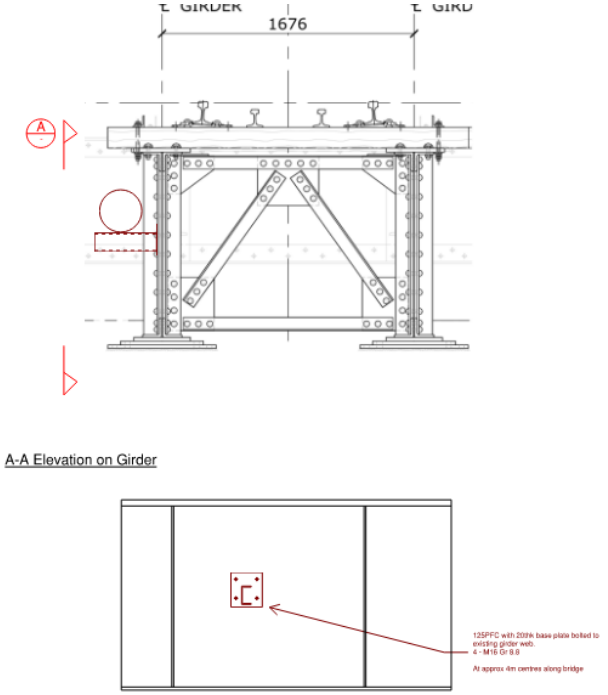
- New pipe installed on existing rail bridge downstream of existing crossing
- Annual bridge and pipeline inspections required
- ~1.3km additional pipeline required





Risks	Benefits
Requires annual bridge and pipe inspections on an asset not owned by SWDC.	Provides added resilience to river movement and scour
Access agreement may be required by Kiwirail	Does not require work in the river
Over 1.3km of extra pipe length compared to existing alignment, potentially increases risk of failure in seismic event.	Provides added resilience to fault rupture being on a structure that is further away from the fault
	Bridge structure is likely to be maintained by Kiwirail in reasonable condition for the foreseeable future.

Wellington Water cost estimating

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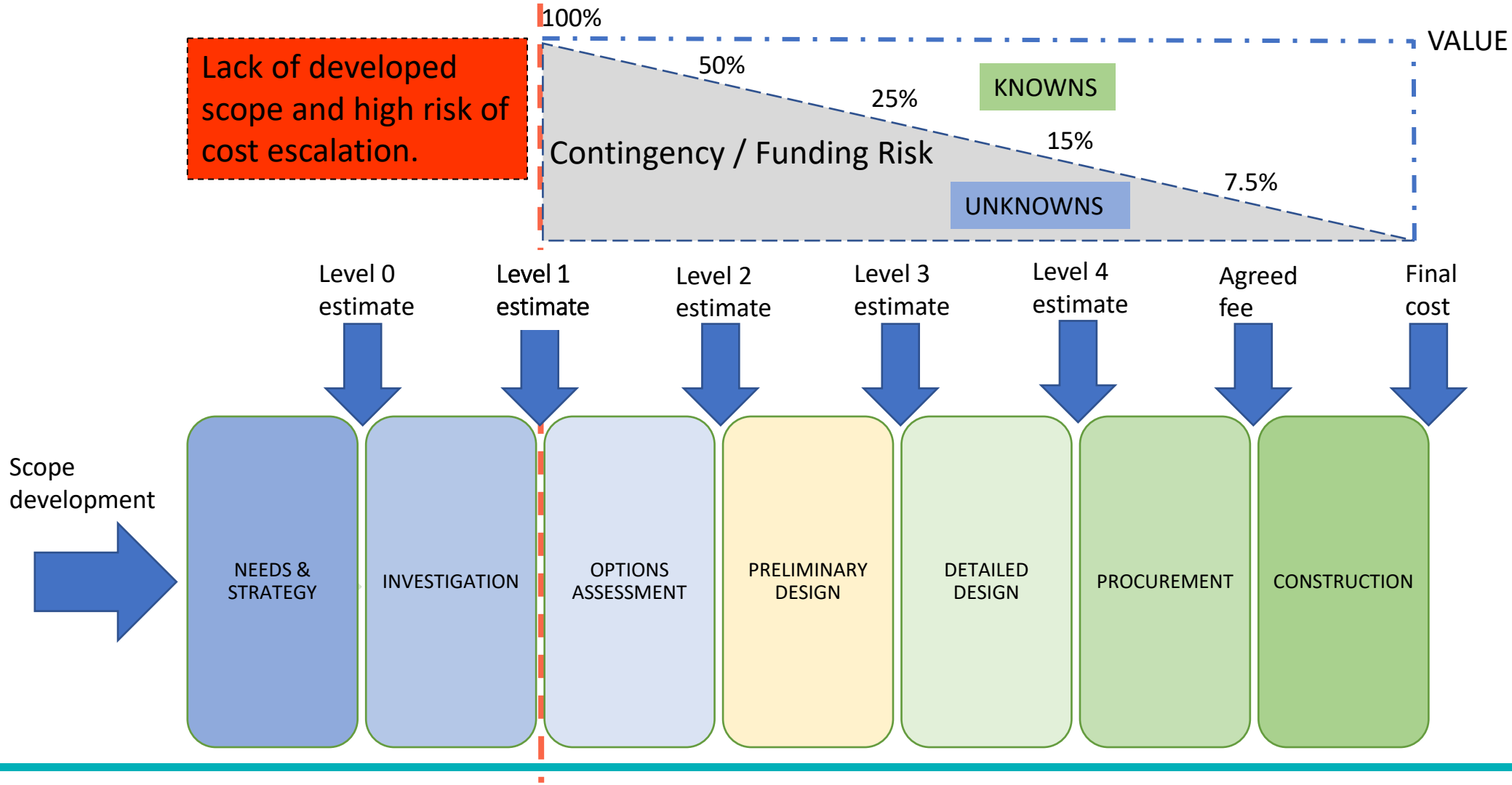

Estimate definitions

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Outside of estimating manual

Level 0

Sometimes estimates are requested prior to any investigation or feasibility work being carried out, and without any defined scope of works. These estimates fall outside any recommended procedures.

Multiple options -100% contingency

Level 1

Under the WWL procedures, these estimates apply to the Definition Phase. These estimates are based on:

- Risk Register outputs,
- No site investigations,
- Estimate land requirements,
- Estimated consent conditions,
- Possibility of scope change,
- A range of options that may be developed and delivered.

Single option – 50% contingency

Level 2

Under the WWL procedures, these estimates are prepared during the Development Phase. These estimates are based on:

- Risk Register outputs,
- Limited site investigations,
- Estimate land requirements,
- Estimated consent conditions,
- Possibility of scope change,

Outline design drawings with schedule of quantities

Level 1 Cost Estimates

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Options	Level 1 Capex estimate	Estimated maintenance [1]
1. Do minimum – keep existing pipe as is and undertake annual maintenance	$130,000	$3,080,000
2. Reinforce the existing pipe	$5,390,000	$1,620,000
3. Trenchless installation (pipe ram) 4m deep at existing crossing site	$4,930,000	$0
4. Open trench installation 4m deep at existing crossing site	$2,750,000	$0
5. Suspension bridge close to existing crossing site	$6,410,000	$630,000
6. Diversion to rail line and crossing on rail bridge	$7,900,000	$100,000

Cost estimates have been prepared for the purpose of comparison only

[1] *Estimated maintenance is based on 100 year design life net present value*

Things to consider

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What mana whenua have told us

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Rangitane o Wairarapa:

- Do not support options involving a pipeline in the river (1&2)
- Have concerns about how the river will move and the impact natural events could have
- Questioned why Featherston's water supply comes from the Greytown catchment
- Did not provide specific feedback on options under or over the river.

Ngati Kahungunu ki Wairarapa

- Have not been engaged on this project to date, we continue to seek their feedback

Consenting considerations

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Existing pipeline – Options 1&2

- A 10 year resource consent has been granted for maintenance and repair meaning Option 1 is consented until 2032.
- Option 2 is likely to require additional consent for the pipe stabilisation works in the river bed, this may be opposed by key stakeholders including Mana Whenua and Fish and Game.

Installing a new pipeline under river – Options 3&4

- These options may comply with permitted activities under R117 of pNRP.
- Although stakeholders may not support the short term affects during construction, there is benefit to the river with the removal of the existing pipe.

Removing existing pipeline – Options 3-6

- Resource Consent may be required to remove the existing pipeline from the river. Although stakeholders may not support the short term affects during removal, there is benefit to the river with the removal of the existing pipe.

Our assessment of the options

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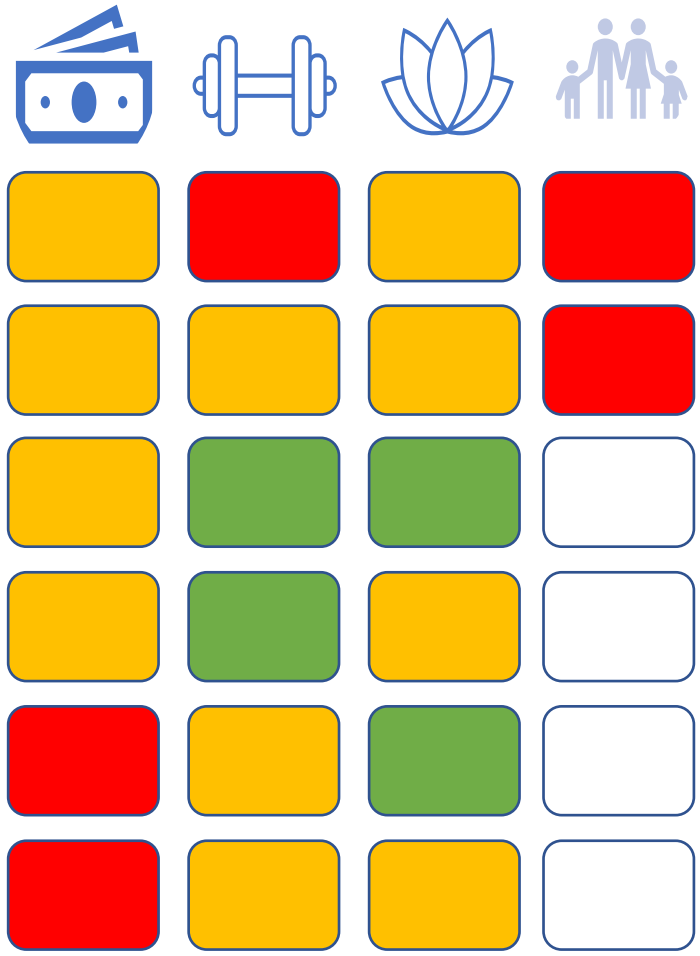
1. Do minimum – keep existing pipe as is and undertake annual maintenance
2. Reinforce the existing pipe
3. Trenchless installation (pipe ram) 4m deep at existing crossing site
4. Open trench installation 4m deep at existing crossing site
5. Suspension bridge close to existing crossing site
6. Diversion to rail line and crossing on rail bridge



Highest scoring option

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- A Multi Criteria Assessment workshop was held on 16 May 2022. This was attended by subject matter experts, SWDC representative and Wellington Water.
- The options were assessed against the criteria shown on the previous slides.
- The outcome of this process has identified that the highest scoring option is:

Option 4 – New pipe installed by open trench

- The highest scoring option has been endorsed by the Wellington Water Three Waters Decision Making Committee.

Recommendation

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There is no available funding in this LTP period to deliver this project.

For the short term we recommend Option 1 – Do Minimum, noting the risks that this option presents (see slide 5).

When funding is available, we recommend progressing Option 4 -New pipe installed by open trench.

- Developing the design for this option could be undertaken early if some funding became available. This could assist a response if the pipeline was to fail before the long-term solution is completed.

Appendix 5 – Featherston Water Treatment Plant Short Term Consent, Project Management Plan, June 2022

Project management plan

Council:	South Wairarapa District Council
Suburb(s):	Featherston
Project name:	Featherston Wastewater Treatment Plant Short Term Consent
Project code:	OPE1 00872
Start date:	24 May 2022
End date:	18 December 2023
Consultant organisation:	GHD

Our water, our future.

Document information

People involved

Activity	Title	Name	Electronic signature	Date
Prepared by	Project Manager	Steven Kelliher		27/06/2022
Reviewed by	Project Director	Mary O'Callahan		27/06/2022
Approved by	Wellington Water Major Projects Director			

Revision history

Date	Version number	Description of change
27/06/2020	1.0	Develop phase PMP
15/06/2022	2.0	Consent phase - First release to Wellington Water
27/06/2022	2.1	Update following WWL feedback

Wellington Water Approval of Consultancy Fee Allocation

PMP Version	Project Phase	Fee Estimate (ex gst)	Prov. Sums (ex gst)	Total Fee Approved (ex gst)	WWL Approval Name and Signature	Date
1.0	Develop	$542,303		$542,303		
2.1	Consent[1]	$817,648	$320,563	$1,138,211		
	Detailed design					
	Procure					
	Construct					
	Close out					
	Sub-Total	**$1,359,951**	**$320,563**	**$1,680,514**		

[1] Estimate excludes panel management fee

Wellington Water

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1 Purpose of the plan

The purpose of this project management plan is to describe the project, provide a comprehensive baseline of what has to be achieved by the project, how it will be achieved, who will be involved and how it will be managed. The plan also identifies key project risks and methodology to mitigate them. This plan follows from an earlier abandoned PMP, the project scope for this earlier PMP for reference is summarised in Appendix D.

For reference the original project brief is:

- Project Review Brief – Management of Featherston's Wastewater Disposal – 8 April 2020

This plan is a live document and is subject to change. It will be updated as the project progresses.

1 Introduction

1.1 Project location and layout

The Featherston wastewater treatment plant is located approximately 2km South of the Featherston township.

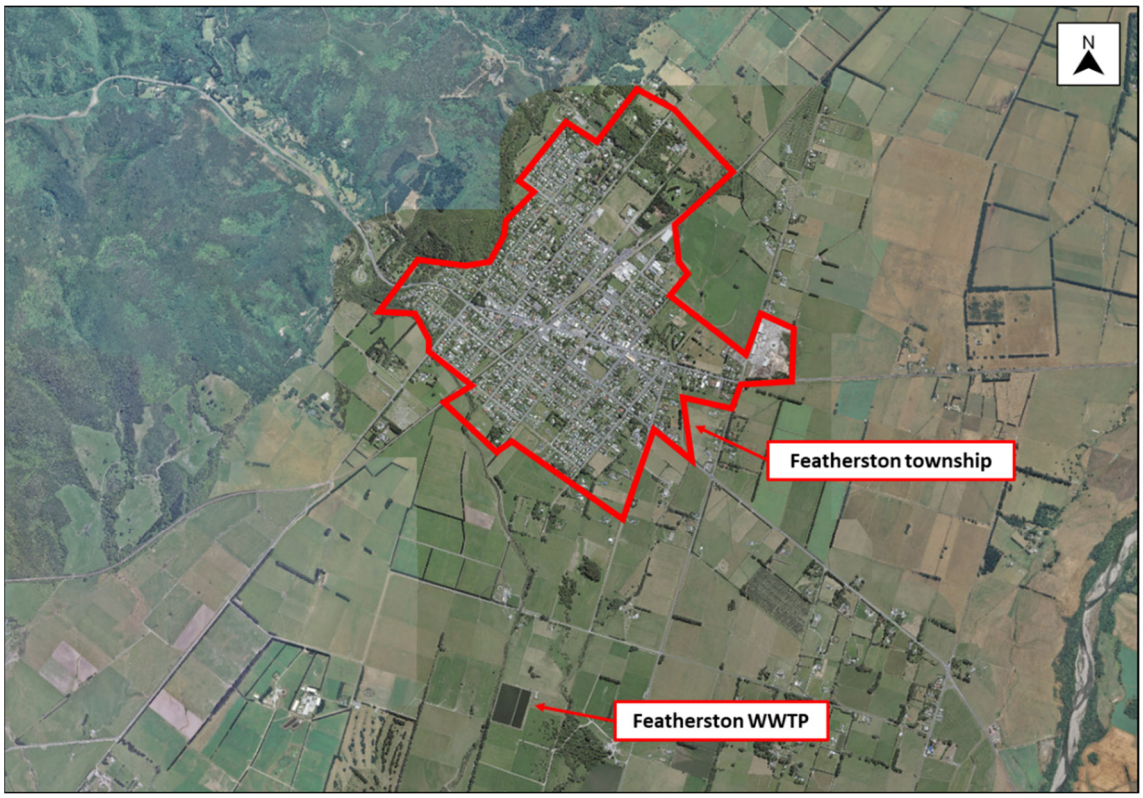


Figure 1 Featherston WWTP location plan

1.2 Project background

The Featherston wastewater treatment plant (WWTP) receives wastewater from the town of Featherston, which has a population of approximately 2,700 people. The plant was constructed in 1975 and was designed to service a population of 5,000 to 6,000 people.

The current resource consent application (WAR120294) to permit discharge of effluent to the environment is on hold, a Section 37 is in place until February 1, 2023.

In 2020, a new brief was developed with SWDC to re-fresh the project and take the lessons from the previous application to find an option that would be acceptable to all stakeholders. A multi-criteria assessment was undertaken consisting of four workshops with SWDC, WWL, Iwi, GWRC, key stakeholders (Regional Public Health, DOC, Fish & Game), to determine the preferred option to discharge/manage Featherston's wastewater. Throughout the process providing opportunities for the community to have their say.

The multi-criteria assessment (MCA) focussed on developing high level concept options and assessing the long list options against a range of assessment criteria and KPI's, to determine the preferred receiving environment (the short list). This process excluded developing or refining treatment plant upgrade options as it introduced permutations of options and would have reduced the efficiency of the process. As a result the MCA process completed the third workshop (long list to short list) where the process was then put on hold as SWDC had concerns about the affordability and consentability of the short-listed options. Subsequently, the mitigations to understand these concerns included:

1. An affordability assessment by SWDC, which re-confirmed the available budget of $17M, and determined an LTP debt cap of an additional $20M could be made available but would significantly increase rates to the community and compromise available three waters budget for other projects.
2. A peer review of the consentability rating presented at the workshops, in order to understand the potential consenting risks associated with the shortlist, focussing on the wastewater discharges.
3. Develop a design concept which included re-using or re-purposing existing plant where possible and prioritising elements to upgrade that would result in an upgrade concept that had a cost estimate under the $17M funding cap.

It is understood SWDC now have a better understanding of what the cost and potential outcome of this refined option will be, and are comfortable to proceed based on the LTP budget concept option presented in the memo "12531052-MEM_FWWTP LTP Budget Concept Memo_v3" (March 2022). The memo presented an upgrade of the existing treatment plant, utilising MBBR technology for primary treatment, upgrading of the inlet to install a screen, upgrade of the oxidation ponds to improve retention time, and upgrading of the outlet to construct a wetland before discharging to Donald's Creek.

WWL gave a briefing to SWDC in March 2022 to present the concept option and a delivery approach to seek a short term consent for the upgrade to the plant. This short term consent approach would include conducting field work and assessments to determine the suitability of a longer term option with land based discharges.

Meetings have been held with GWRC environmental regulation and Rangitane O Wairarapa in April and May 2022 to discuss the short term consent approach and progressing with the LTP budget concept option. Ongoing consultation with GWRC environmental regulation, Ngati Kahungunu and

Rangitane O Wairarapa and key stakeholders needs to progress to determine if any of the project partners or key stakeholders have any concerns with this short-term consenting approach.

1.2.1 History of consent applications

The resource consent granted in 2009 (WAR970080) permitted the discharge of treated wastewater from the Featherston WWTP into Donalds Creek. This consent expired in August 2012. A consent application (WAR120294) was lodged on 25 May 2012, to seek continuation of discharging of treated effluent into Donalds Creek.

The Section 42A officers report for WAR170229 noted that GWRC officers also held concerns that WAR120294 may not be able to meet Section 107 of the RMA in relation to discharge effects in receiving waters.

Around the same time that submissions were being considered, land known as the 'Hodder Farm' became available for purchase near the Featherston WWTP site, which SWDC decided to purchase. As a result of this new land, SWDC re-evaluated the proposal and chose to amend WAR120294 to include a discharge to land element.

GWRC considered the addition of a discharge to land element to application WAR120294 was altering the character of the proposal in such a way that it was most appropriate for SWDC to lodge a new application (see section 5.5.3 below). WAR120294 was placed 'on hold' under a Section 37 extension of time until a decision was made on the new application. This allowed SWDC to retain the ability to legally operate its existing wastewater operation (under WAR970080) under Section 124(2) of the RMA.

A new resource consent application WAR170229 was lodged with GWRC on 1 March 2017 by SWDC. This application sought to obtain long-term discharge permits for a term of 35 years, and to undertake a two-stage upgrade to the Featherston WWTP for an irrigation based land treatment scheme, including upgrades to the Featherston underground sewerage network.

The Section 42A report identified effects of discharges on macroinvertebrate communities in Donalds Creek, and noted there would be a conspicuous change in water clarity. The report stated there was uncertainty as to the effect of discharges to land on groundwater contamination of bores, and that there were potential effects on neighbouring properties from groundwater mounding.

In March 2020, the SWDC resolved to withdraw that application and work with Wellington Water (WWL) to lodge a new discharge consent application.

The 2012 application is currently on-hold under section 37 (extension of time limits) while SWDC and WWL determine the options for treatment and disposal of wastewater from the FWWTP. This extension of time has been granted until 1 February 2023.

1.3 Project summary

In summary the purpose of this Project is to:

- obtain resource consent for a wastewater disposal option l which minimises the public health harm and environmental effects associated with wastewater discharges.
- Achieving a short -term option that satisfies the statutory requirements of the RMA and that meets Government direction (central and regional) for enhancing the health of waterways.

2 Project description

2.1 Project scope

This version (2.0) of the Project Management Plan has been prepared to deliver the following scope of work to achieve RMA compliance of the Featherston wastewater treatment plant:

1. Prepare a short term consent application for continued wastewater discharge to Donalds Creek incorporating a range of operational and environmental enhancements to the wastewater treatment plant.
2. Undertake field investigations to determine the suitability of land based discharges and undertake a land-based disposal trial.
3. Develop a treatment plant design in accordance with the budget concept memo "12531052-MEM_FWWTP LTP Budget Concept Memo_v3" (March 2022) that fits within the affordability cap identified by SWDC.

2.2 Wellington Water service goals

Wellington Water service goals for this project are:

Primary		We minimise public health risks associated with wastewater and stormwater
Secondary		We manage the use of resources in a sustainable way
Secondary		We will enhance the health of our waterways and the ocean
Secondary		We ensure the impact of water services is for the good of the natural and built environment

2.3 Project objectives

The primary project objective is to determine the most effective option to manage the disposal of wastewater discharges from the Featherston WWTP.

2.4 Codes, specifications and other relevant documents

Codes, specifications, and other relevant documents for this project includes:

- Resource Management Act 1991 (RMA)
- Wellington Regional Policy Statement
- Wellington Regional Freshwater Plan
- Wellington Regional Discharges to Land Plan
- Wellington Regional Air Management Plan
- Proposed Natural Resources Plan
- Wairarapa Combined District Plan

- National Policy Statement for Freshwater Management 2020
- National Environmental Standards for Freshwater 2020
- Ruamahanga Whaitua Implementation Plan

For the concept design of the short-term consent option, the following standards will be taken into consideration:

- Regional Standard for Waters Services (May 2019)
- Regional Specification for Water Services (May 2019)
- National Code of Practice for Utility Operators Access to Transport Corridors (Nov 2011)
- Wellington Water H&S standards, policies and procedures

2.5 Project deliverables

- Communications Plan
- Receiving Environment Monitoring Plan (REMP)
- Short Term Consent application, inclusive of:
    - Assessment of Environmental Effects supported by:
        - WWTP process review/upgrade identification
        - Hydrogeological investigation
        - Water quality assessment
        - Ecological assessment
        - Cultural Impact Assessment(s)
- Basis of Design Report
- Concept Design Documentation, inclusive of:
    - Wetland concept design
    - General Arrangement drawings
    - Process flow diagram
    - Land disposal trial concept design
- Safety in Design register

2.6 Work breakdown structure

The work breakdown structure is shown below (Figure 2).
There are five main workstreams in that are discussed in this version of the PMP as shown in Level 2 of the WBS:

- Consent
- Communication
- Environment
- Treatment plant design
- Project management

Level 3 tasks are the summary tasks, Level 4 tasks are not shown in this WBS but are listed in the schedule and fee estimate in Appendix A and B.

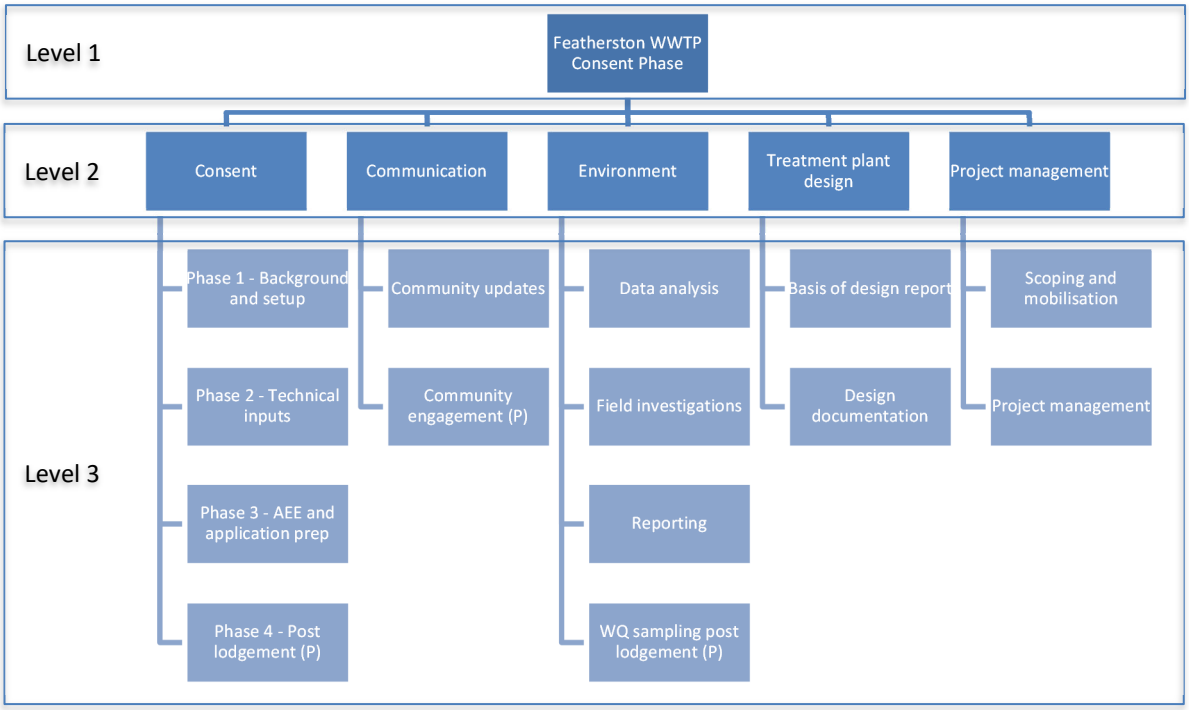


Figure 2: Work breakdown structure ('P' - provisional item) (Level 4 not shown)

2.7 Consultants Scope of Work

Below is a detailed description of the scope for each workstream.

The GHD scope of work as listed in this PMP will be delivered under the terms and conditions of the CCCS panel contract for the provision of consultancy services dated June 2016.

2.7.1 Environment

The environmental investigation will focus on three key areas:

- Continued discharge of treated wastewater to Donalds Creek
- Providing a basis for a subsurface land application trial, this to inform the longer term expansion of wastewater disposal to land.
- Support subsurface wetland design

The 2017 resource consent application proposed spray irrigation of wastewater to an adjacent land block and Hodder Farm as shown below. A preliminary review of land suitability (GHD, 2021) indicated that the land to the south and adjacent to the WWTP are unlikely to be suitable for year-round spray irrigation due to poorly drained soils and/or high groundwater table. As part of a short term consent, trialling of subsurface irrigation is proposed to determine a long term sustainable land application rate. This to inform the longer term expansion of wastewater disposal to land, and the ability to make best use of council owned land.

The site investigation for land disposal will focus on the land blocks to the east/northeast of the WWTP, with this area identified as an appropriate trial location.

Figure 2 Existing land parcels

The following outlines the environment scope of works

1. Data review - we will review the available environmental data and use this to confirm the scope of field investigation.
2. Field investigation – we will undertake field investigations to collect environmental data to inform the technical assessment. The field scope will be confirmed following the data review, however the following is envisaged:
    a. Sampling of surface water (5 locations, fortnightly for 12 weeks)
        i. Continued sampling of surface water throughout summer/low flow period (fortnightly for 24 weeks) (provisional)
    b. Soil sampling – allowance for 5 soil investigation locations.
    c. Soil analysis for soil health characteristics (allowance for 10 samples)
    d. Particle size distribution analysis – (allowance for 4 samples)
    e. Permeability testing (permeameter) – 10 tests (2 per location)
    f. Installation of a water level logger into a groundwater monitoring well
    g. Installation of flow monitoring equipment (telemetry) in Donalds Creek and an onsite weather station
    h. The following ecological and environmental parameters are considered beneficial to inform a baseline aquatic ecological monitoring package, which will be collected at site quarterly:
        i. Depth and flow profiles (to understand water quantity and habitat availability under different flow/volume scenarios)
        ii. Macrophyte (aquatic vegetation) densities
        iii. Periphyton/fungus cover and speciation
        iv. Chlorophyll a concentrations
        v. Macroinvertebrate community composition
        vi. Fish community
        vii. Freshwater mussel and fingernail clam presence, distribution, and densities

3. Reporting of results of field investigation (as part of technical assessment)
    a. Preparation of technical assessment of effects – to be included as an appendix to the resource consent application.

2.7.2 Communications

A communications plan will be developed to detail the communications strategy with the community after initial kick off meetings together with SWDC.

Consultation and engagement with project partners and key stakeholders will be undertaken as part of the consent preparation, via regular meetings and working groups established throughout delivery. The communications approach discussed in this workstream is specifically with regard to community engagement and key stakeholders not directly involved in the preparation of the consent application.

There are two approaches that will be assessed as listed below, with one approach developed in the comms plan:

1. Informing the community
    a. This would include a number of public updates through online and printed media, to provide visibility of the project and its progress, leading any interested parties to the project website for further information, comments or feedback.
2. Engagement with the community
    a. Engaging with the community would occur through structured forums such as drop in events, Q&A sessions, presentations, or establishing special interest groups. This would be a more intensive approach and would require more involvement from technical specialists.

2.7.3 Consent

GWRC expect an application to be lodged, submissions closed and a hearing date set by the Section 37 date (1 February 2023). Given this will not be achieved in the available time, the following steps are recommended to be taken:

- Consult Greater Wellington Regional Council (GWRC), iwi and stakeholders on the short-term concept, and establish support.
- Over the next 6 months, hold a series of hui with iwi, key stakeholders and SWDC, and have a series of pre-application meetings with GWRC to minimise the amount of any post lodgement work and associated delays as far as practicable. Due to the condensed timeframe, it is as imperative that these parties are directly involved in the development of the short-term consent proposal.

To prepare the consent application, the scope of work will be delivered in the following phases of work:

Phase 1: Background research / defining the scope of the short-term consent to be sought

Review available technical information. Pre application meeting with GWRC in regards to the appropriateness of limits, discharge parameters and expectations for technical assessments. Scope and briefs for further technical input.

Phase 2: Technical Inputs

This phase relates to the technical inputs required to support to the short-term consent process. The scope and briefs for the technical inputs will be determined through Phase 1. At the beginning of Phase 2, a further pre-application meeting will be held with GWRC to confirm the approach to technical inputs and get buy-in before proceeding.
The potential technical inputs needed for this AEE include:

a. WWTP process review/upgrade identification
b. Hydrogeological investigation
c. Water quality assessment
d. Ecological assessment

The focus of the short-term consent should be on a WWT process that will reduce effects on macroinvertebrates and improve visual clarity. Ammonia and sediment are the highest priority for removal. The short-term consent will need to address operational improvements, introduce new discharge parameters and limits in line with the NPS Freshwater national bottom lines and PNRP Objectives and Policies, and introduce environmental enhancements. The short-term treatment solution should also incorporate some of the features that will be used for whichever long-term solution is chosen. Adequate monitoring data to be collected over the next few years (within the duration of the short-term consent) and prior to the lodgement of a resource consent application for the long-term option, to gain a better understanding of whether the improvements and enhancements are effective at reducing environmental effects and to undertake operational and optimisation improvements and upgrades to the WWTP in order to maximise the treatment capability of the existing plant.

Phase 3: Assessment of Effects on the Environment preparation for the short-term consent

Phase 3 relates largely to the preparation of the Assessment of Effects on the Environment (AEE).
A further hui to discuss the operational refinements to the existing plant proposed for the 10 year short term consent period.
The short-term consent will need to describe how, in the short-term, improvements will be made to operability and performance of existing assets through general plant upgrades (inlet screening, provision of generator, pond upgrades) sufficient to achieve a consentable short-term solution.

A pre-application meeting with GWRC will also be undertaken as a follow up from the previous hui and to discuss any issues identified through the AEE preparation and technical / specialist investigations.

Phase 4: Lodgement, public notification and GWRC processing

Phase 4 involves lodgement of the short term consent application, public notification and processing of the application by GWRC.

A provisional sum has been estimated for this phase, and is expected to include:

Post lodgement of short term consent

Over the consent processing period (during summer months) collect adequate monitoring data in order gain an understanding of the extent to which water quality, clarity, and effects on aquatic life (on macroinvertebrate communities) from the discharge to water (Donalds Creek). Ongoing environmental monitoring will also enable an improved understanding of seasonality effects and effects on groundwater and soils (in relation to land discharge) and also help inform the future long-term discharge option.

2.7.4 Treatment plant design

A concept design memo has already been prepared with the purpose of determining a concept level cost estimate, the treatment plant design for the consent application will leverage this work and develop a suite of drawings to include in the application.

The treatment plant design will involve:

1. Complete a drone survey of the area to obtain the latest lidar information of the site
2. Site survey of the existing equipment and review as-built documentation with the intent of how it is to integrate with the concept design
3. Develop the process flow diagram, scope equipment and liaison with equipment suppliers for sizing
4. Wetland design, including liaison with ecologists and horticulturalists
5. Concept design of land based discharge systems
6. Development of a basis of design report
    a. This report gives a outline of the design parameters, assumptions and design scope, it will also include:
        i. Sludge management strategy
        ii. Package up the report from the MBBR trial
7. Concept design document
    a. Its assumed approximately 10 drawings will be prepared using the drone survey of the site location, inclusive of:
        i. Location plan
        ii. General arrangement drawing
        iii. Isometric drawing / Elevation drawing
        iv. Flow diagram (existing and upgraded)
        v. Detailed views of the proposed upgrades
8. During the development of these documents feedback received from consultation with project partners and key stakeholders
9. Revise cost estimate using newly requested estimates from suppliers (or checking with the supplier if existing estimates remain)
    a. Given current market conditions some suppliers may not choose to provide updated estimates, considerations for escalation will need to be applied in the estimate accordingly.
10. Once all drawings are drafted a Safety in Design workshop will be undertaken with Wellington Water and SWDC to review the safety risks of the proposed upgrade and suggested mitigations
11. A procurement plan will be developed based on this concept design for consultation with the Wellington Water procurement team and SWDC.
    a. If required procurement specialists from Resolve Group will be engaged to review the plan and provide advice.

To close out the concept design process the WWL design acceptance process will be completed, which will involve a peer review of the concept design. Once complete Gateway 2 will be completed.

2.7.5 Project management

To enable effective delivery of the project team will require timeline receipt of information and well planned meetings to enable technical teams to carry out their scope of work efficiently. Throughout this it will require clear project level communication to both the delivery team and the client, whilst actively managing risk.

The delivery programme presented is accelerated timeframe, it is feasible but includes a low level of float that needs to be managed with a high level of consideration.
The project management approach includes:

- Team briefings and setup of project administration (financial tracking, deliverable registers, risk register, programme, sub-contractor contracts)
- Client kick off meeting
- Fortnightly project team meetings for attendance by the following GHD team members, Roanna Purcaru, Helen Anderson, Ian Ho and from Latitude Dan Ormond, given the programme duration and the amount of workstreams involved fortnightly meetings are most appropriate. The project manager will chair progress meetings arrange minutes to be issued after all meetings.
- Project manager provisioned for 2 days per week, to coordinate resources, manage team communications, monitor team progress, weekly client meetings and reporting.
- Fortnightly steering group meetings, assumed 1 hour per meeting, for Mary O'Callahan to attend on behalf of GHD – it is assumed that WWL personnel will brief the steering group and the project governance group meetings.
- Monthly governance group meetings, assumed 1 hour per meeting, for May O'Callahan to attend on behalf of GHD - it is assumed that WWL personnel will brief the steering group and project governance group meetings.

2.7.6 Assumptions

The following list of assumptions are in regard to the consultants scope of work:

1. This PMP, cost estimate and consultants scope of work has been developed on the basis of delivering the project on behalf of Wellington Water. If the project team and delivery approach changes the PMP will no longer be valid and will require updating and re-submission.
2. GHD is not liable in respect of delay or disruption to the tasks in this variation directly or directly caused or contributed to by Covid-19, epidemic or pandemic. Any such delay or disruption shall be treated as a Variation (with corresponding, cost, change of resources and extension of time).
3. All rates used for these estimates are from FY2021-22, as work extends into the following financial year, the subsequent year's agreed rates will be applied.
4. All third party costs are passed through at cost
5. GHD to have involvement in SWDC update meetings, in an effort to streamline project communications
6. The design estimates are based on high level concept developed in LTP Budget Concept Memo (12531052-MEM_FWWTP LTP Budget Concept Memo_v3" (March 2022))
7. Allowance for one SiD workshop only, no allowance for HAZOP
8. The treatment plant design excludes development of solutions to address Inflow and Infiltration (I&I), projected realistic reductions based on network improvement are to be provided to the design team.
9. The GHD scope of work as listed in this PMP will be delivered under the terms and conditions of the CCCS panel contract for the provision of consultancy services dated June 2016.
10. Disbursements for travel are estimated at $10k, if additional travel is required above this estimate a variation will be submitted to re-estimate the remaining value
11. Estimates do not include allowance for procurement planning
12. Field investigation
    a. Our cost estimate also allows for service clearance prior to intrusive works, preparation of a health and safety plan, travel time and project management.

b. Site investigation areas are limited to the Hodder Farm land block to the east / northeast of the WWTP.
c. Monitoring wells previously installed by LEI are suitable for groundwater monitoring and sampling. If unsuitable for use, drilling costs and monitoring well installation will be addressed as a variation.
d. Telemetry costs to be confirmed following site visit by supplier (estimate only for installation costs)
e. Allowance as a provisional cost for additional surface water sampling over summer / low flow period (12 sampling rounds)

13. The Phase 4 Post lodgement cost estimate is Provisional Only and will require re-scoping following lodgement and notification of the short-term consent

2.8 Exclusions

The following exclusions have been made from the consultants scope of work during the consent phase:

1. No optioneering or option assessments will be completed as part of this scope of work. Only prioritisation of the elements identified in the concept design is allowed for.
2. Environmental monitoring once the short term consent is approved, it is expected that environmental monitoring will be a consent condition for transitioning to the longer term discharge solution (potentially land based). It is estimated that this could be approximately $150k per year.

2.9 Project constraints

Below are the following constraints:

- Affordability / council budget constraints
- Annual budget constraints
- Section 37 deadline
- Ability to gain GWRC, stakeholder and iwi feedback for short term consent concept
- Availability of iwi to resource a cultural impact assessment for the project within the tight programme – noting that separate assessments for each iwi may be necessary
- Limited ability to limit unreasonable section 92 (additional information) requests from GWRC and associated additional costs arising

2.10 Reference documents

The project Woogle page can be found here:
https://woogle.wellingtonwater.co.nz/project/8244/SitePages/Home.aspx

The key reference documents for this project are listed below and will be uploaded to the project Woogle page following its establishment:

- Project Review Brief – Management of Featherston's Wastewater Disposal – 8 April 2020
- Resource Consent Application FINAL, and accompanying Appendices (WAR170229)
- SWDC and submitter evidence for WAR170229
- Technical memos and reports from previous consultants for WAR170229

3 Project management

3.1 Project governance

The project governance for this project is shown on the figure below.

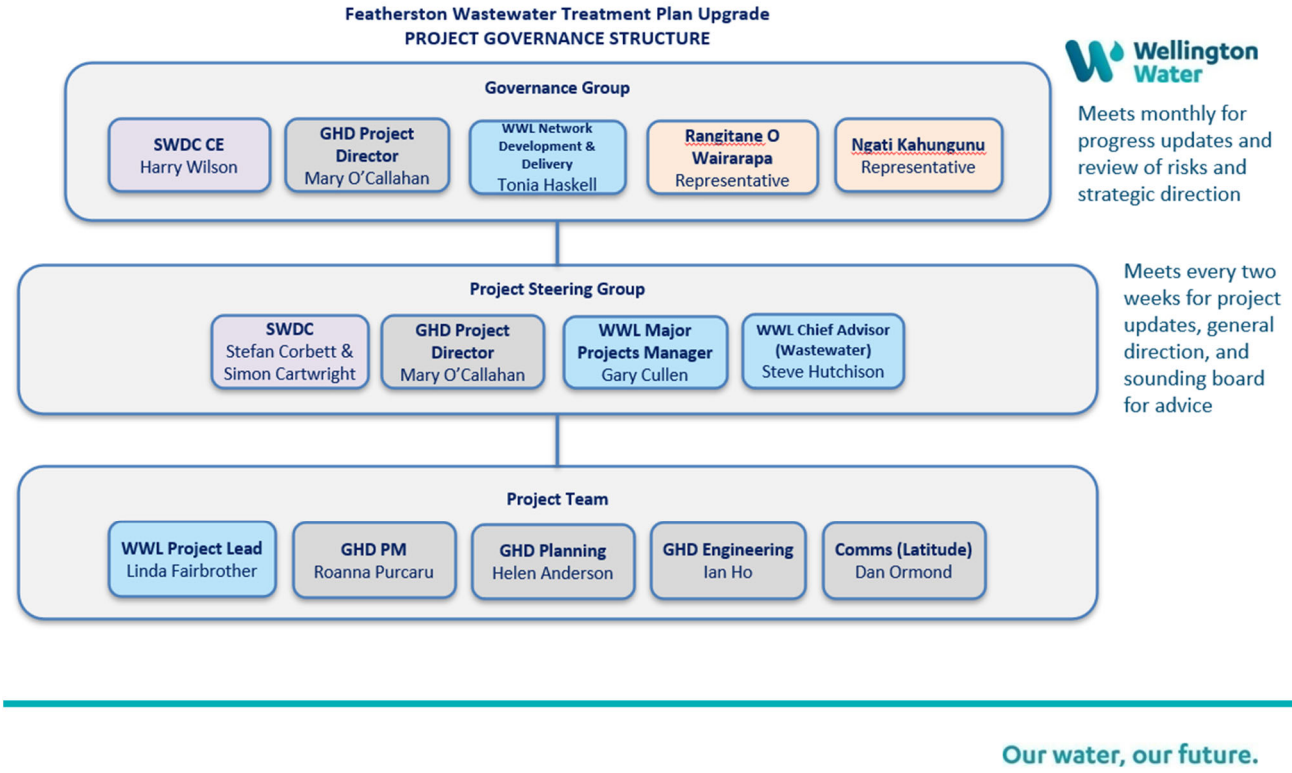


Figure 3 Project governance structure (as at 27-June-2022)

3.2 Roles and responsibilities

The project team and their area of responsibility is shown in the following table. Steering group (S) and project governance group (G) members are also highlighted.

Table 1: Roles and responsibilities

Role	Name	Responsibility	Position
CEO (SWDC)	Harry Wilson	Have oversight of the project and provide feedback on the clients needs and expectations.	G

Role	Name	Responsibility	Position
Client representative (SWDC)	Stefan Corbett	Have oversight of the project and provide feedback on the clients needs and expectations. Provide review and approvals of project deliverables (where required by SWDC) to the project team.	S
Independent Consultant (Southern Cross Consulting)	Simon Cartwright	Provide independent advice at steering group meetings.	S
Project Sponsor (Wellington Water)	Paul Gardiner	Provides a key role in initiation of the project and approving change.	
Project Lead (Wellington Water)	Linda Fairbrother	Provide oversight of the project, facilitate communication between the client, sponsor and project team. Escalate issues or change.	
Chief Advisor (Wellington Water)	Steve Hutchison	Escalation of issues or changes that will impact scope.	S
Manager, Major Projects (Wellington Water)	Gary Cullen	Provide oversight of the project, facilitate communication between the client, sponsor and project team. Escalate issues or change.	S
General Manager (NDD) (Wellington Water)	Tonia Haskell	Provide oversight of the project, facilitate communication between the client, sponsor and project team. Escalate issues or change.	G
Network Manager (Wellington Water)	Gillian Woodward	Provider operational input into the plant upgrades and priorities.	
Communications (Wellington Water)	Vanessa McFarlane	Sign off the comms plan and provide advice if any comms issues require escalation	
Planning Lead (Wellington Water)	Paul Gardiner	Review and input into the consent approach and application.	
Network Engineering Lead (Wellington Water)	Amy Smith	Technical support and input to design, involvement in Safety in Design.	

Role	Name	Responsibility	Position
Project Director (GHD)	Mary O'Callahan	Provide project oversight on behalf of GHD. Review and approve deliverables for release.	S / G
Project Manager (GHD)	Roanna Purcaru	Lead the GHD team in delivery of the option assessment. Be the main point of contact at GHD for Wellington Water.	
Planning Lead (GHD)	Helen Anderson	Provide Planning inputs and assessment through the consenting process	
Environmental Lead (GHD)	Anthony Kirk	Lead the review of recent environmental performance against the current and proposed benchmarks	
Process Lead (GHD)	Ian Ho	Lead the process and wastewater concept design and evaluation of options. Development of the high level cost estimates.	
Stakeholder engagement (Latitude)	Dan Ormond	Prepare the communication and engagement strategy and advise on communications with stakeholders.	
Legal Counsel (Buddle Findlay)	Frances Wedde	Review the consenting strategy and AEE, lead notified hearing process (phase 4)	

3.3 Project contacts register

The contact details for the project team are shown in the table below.

Table 2: Project contacts register

Name	Phone number	Email address
Mary O'Callahan **Project Director** (GHD)	021 101 3603	Mary.OCallahan@ghd.com
Roanna Purcaru **Project Manager** (GHD)	027 238 7429	Roanna.purcaru@ghd.com
Helen Anderson **Planning Lead** (GHD)	029 496 3768	Helen.anderson@ghd.com
Anthony Kirk **Environmental Lead** (GHD)	029 3551013	anthony.kirk@ghd.com
Ian Ho **Process Lead** (GHD)	027 343 9835	Ian.Ho@ghd.com

Name	Phone number	Email address
Dan Ormond **Stakeholder engagement Consultant** (Latitude)	027 251 9849	Dan@latitudesc.co.nz
Jeremy Garratt-Walker **Ecologist** (Boffa Miskell)	022 071 2301	Jeremy.Garrett-Walker@boffamiskell.co.nz
Frances Wedde **Legal Counsel** (Buddle Findlay)	021 870 357	Frances.Wedde@buddlefindlay.com

3.4 Change control

The project will follow the Wellington Water change control process.
Any significant issues or risks that arise, which could impact the project scope or budget will be flagged in an email as an early warning to the Wellington Water Project Director.
The cost change procedures are:

- Changes to consultancy fees will be documented on the Project Change Notice (PCN) forms and submitted to the Wellington Water project director for approval.
- Changes that require an increase in project budget over $100,000 or move construction by 1 month into the subsequent financial year will be documented on a Project Change Request (PCR) form, which will be sent to the Project Director for approval prior to proceeding.

3.5 Project delivery approach

Prepare a consent application and achieve lodgement in early 2023, in order to attempt to lodge the short-term consent application before the Section 37 deadline of 1 February 2023.

The approach is to prepare a consent application efficiently by maximising environmental and ecological monitoring over winter and spring, whilst engaging with and completing consultation with project partners and key stakeholders over the next 6 months.

The application will need to rely on the data from collected over winter and spring, with summer monitoring to be collected post lodgement (subject to approval by GWRC). Regular consultation with GWRC will be required to develop the application, and this will also require involvement from the GWRC technical specialists who will review the application.

GWRC have requested that if a short term consent is applied for that a pathway for a long term solution for discharging effluent to the environment must be presented in the application. To determine this pathway, in parallel with the development of the wetland a programme of field investigations will be undertaken to assess the suitability and feasibility of land based discharge systems.

The delivery approach will require all five workstreams to run concurrently, culminating in a draft Assessment of Environmental Effects (AEE) by September / October 2022, that will enable:

1. Preliminary legal review
2. Peer review of the basis of design
3. Consultation with project partners and key stakeholders to confirm the project team understanding of their feedback to date

Legal support will be provided by Buddle Findlay, they have a background on the project and understanding of all parties involved.

Between October 2022 and end of January 2023 there will be an iterative approach to update the AEE, address clarifications with stakeholders and GWRC Environmental regulation. This approach will assist in mitigating onerous additional information requests once the application is lodged.

The objective of the delivery approach is to achieve lodgement by end of January 2023 as stated in the letter and timeline sent to GWRC in June 2022.

4 Programme

A detailed programme is presented in Appendix A, and summarised below in Section 4.1. This is a live document and will be updated as the project progresses.

4.1 Key milestones

The following table sets out the key milestones and anticipated timing that SWDC intend to follow to achieve the lodgement of a new consent application by the end of 2022.

Milestone Name	Target Date
PMP approval	24/06/2022
Gateway 2 – Approval of preferred option	02/12/2022
Gateway 3A – Lodgement of consent application	23/01/2023
Gateway 3B – Consent approval	18/12/2023

5 Communication

A communications plan will be developed for this project after initial kick off meetings.
Once the communications plan is developed, it will be a live document and appended to this PMP.

5.1 Internal project communication and reporting

Monthly reporting will be completed using the major project report template.

Weekly meetings will be held with Wellington Water with minutes provided after each session.

Any communications to external stakeholders, client council, Iwi and GWRC will have the Wellington Water project lead copied in.

6 Procurement

6.1 Procurement strategy

A procurement strategy will be developed as part of the design workstream summarised in Section 2.7.4.

7 Financial

7.1 Cost estimate

The level 2 cost estimate is $17M, this was developed back from the available funding of the project. This cost estimate was calculated using the template in the Cost Estimation Manual.

This cost estimate is summarised in Table 3, full details are to be referred to in the LTP Budget Concept Memo (12531052-MEM_FWWTP LTP Budget Concept Memo_v3" (March 2022)).

The professional fees estimated for consenting, detailed design and procurement are based on percentages of the capital works value.

The scope and estimate prepared in this version of the PMP corresponds with the consenting phase estimates in Table 3.

Table 3: Budget concept cost estimate from March 2022

PROJECT ESTIMATE

Project Name:	Management of Featherston's Wastewater Disposal
Current Phase:	Concept Design - Level 2 Cost Estimate
Description:	FWWTP LTP Budget Concept - Priority Works Only

Phase	Description	Base Estimate	Contingency	Total
Development				
	Consultancy Fees	$ 412,288	$ 225,388	$ 637,676
	Site Investigations			$ -
	Other Costs (Legal, Land, etc.)			$ -
	Total Project Development	$ 412,288	$ 225,388	$ 637,676
Consenting				
	Consultancy Fees	$ 700,000	$ 140,000	$ 840,000
	Site Investigations	$ 430,000	$ 86,000	$ 516,000
	Consenting Fees, Community Engagement			$ -
	Other Costs (Legal, Land, etc.)		$ 500,000	$ 500,000
	Total Consenting	$ 1,130,000	$ 726,000	$ 1,856,000
Detailed Design				
	Consultancy Fees	$ 472,400	$ 94,480	$ 566,880
	Site Investigations	$ 150,000	$ 30,000	$ 180,000
	Other Costs (Legal, Land, etc.)			$ -
	Total Detailed Design	$ 622,400	$ 124,480	$ 746,880
Procurement				
	Consultancy Fees	$ 118,100	$ 23,620	$ 141,720
	Other Costs (Legal, Land, etc.)			$ -
	Total Procurement	$ 118,100	$ 23,620	$ 141,720
Construction				
	Contractor's Preliminary and General	$ 1,948,650	$ 389,730	$ 2,338,380
	Inlet Works	$ 554,000	$ 110,800	$ 664,800
	Odour Control	$ -	$ -	$ -
	Secondary Treatment - Pond Upgrades	$ 205,000	$ 61,000	$ 266,000
	Nitrification Plant	$ 3,399,000	$ 407,800	$ 3,806,800
	Tertiary Treatment	$ -	$ -	$ -
	Chemical Dosing	$ -	$ -	$ -
	Wetland and Stream Discharge	$ 542,000	$ 216,800	$ 758,800
	Land Irrigation	$ 800,000	$ -	$ 800,000
	Pond Desludging	$ -	$ -	$ -
	Site General	$ 405,000	$ 81,000	$ 486,000
	Subtotal Physical Works	$ 7,853,650	$ 1,267,130	$ 9,120,780
	Professional Costs During Construction	$ 345,250	$ 69,050	$ 414,300
	Total Construction	$ 8,198,900	$ 1,336,180	$ 9,535,080
Base Estimate				
	Base Estimate	$ 10,481,688		
	Contingency	23.2%	$ 2,435,668	
	Wellington Water Management Fee			$ 628,292
	Expected Estimate			$ 13,545,648
95th Percentile Estimate				
	Funding Risk			$ 3,681,089
	95th Percentile Estimate			**$ 17,226,737**
Notes:	This estimate is exclusive of escalation and GST.			

7.2 Cash flow

Annual cashflows are developed based on estimates and quotes received when preparing this PMP. The cashflow is developed using the project programme and forecasted at the summary task level as shown in Table 5.

Table 4: Annual budget estimates

Year	Estimate
FY2023	$1,493,771
FY2024	$559,872

Table 5: Summary of project costs (tasks highlighted in yellow paid by WWL directly, all other estimates are GHD professional fees, GHD sub-contractors and provisional sums)

ITEM	ESTIMATE
02 - CONSENT	
Communications	
Setup and coordination of community updates	$36,709
PROVISIONAL - setup and coordination of community engagement	$57,328
	$0
Consent	
Phase 1: Background research / defining the scope	$57,421
Phase 2: Technical Inputs (for short term consenting)	$84,596
Phase 3: AEE preparation for the short-term consent	$108,066
Phase 4: Lodgement, public notification and GWRC processing and Post Lodgement	$220,000
Buddle Findlay (phase 1 to 3 only)	$46,000
Mana whenua consultation fees	$10,000
CIA	$20,000
Peer review	$12,000
Buddle Findlay (phase 4 - post lodgement)	$160,000
GWRC consultation fees	$50,000
GWRC lodgement fees	$100,000
GWRC and Environmental Court hearing fees	$100,000
Environment	
Deliverable 1: Data analysis	$6,572
Deliverable 2: Field investigation	$131,169
Deliverable 3: Reporting	$28,379
Project Management	
Project Management	$317,846
Treatment plant design	
Deliverable 1: Basis of Design Report	$12,993
Deliverable 2: Concept Design Documentation	$86,053
CONTINGENCY	**$300,000**
Sub-total	**$1,945,131**
MANAGEMENT FEE (8%)	$155,610
Total (incl. management fee)	$2,100,742

The estimate for consenting costs excluding management fee is $1.93M which is 80k over the concept level estimate. The management fee for this phase of the project is $154k which corresponds with the 8% percentage for this portion of work used in the concept level estimate in Table 3.

7.3 Cost control review

Actual costs are reconciled at the end of each month and packaged in the monthly report. Consultancy costs are monitored fortnightly or at more regular intervals (as required) throughout delivery.

A task level tracking document will be utilised to established earned value and determine if there is a risk of deviating from the estimates in this PMP, or to assist manage change early. Together with the project programme these tools will be monitored by the project manager throughout delivery.

7.4 Consultancy Fee Estimate for current phase

The tables below sets out the GHD Fee estimate for approval under this version of the PMP, each table summarises the detailed fee estimates provided in Appendix B.

Table 6: Summary of the GHD consultancy fee estimate

SCHEDULED ITEMS	ESTIMATE
Communications	
Setup and coordination of community updates	$36,709
Consent	
Phase 1: Background research / defining the scope	$57,421
Phase 2: Technical Inputs (for short term consenting)	$84,596
Phase 3: AEE preparation for the short-term consent	$108,066
Environment	
Deliverable 1: Data analysis	$6,572
Deliverable 2: Field investigation	$95,645
Deliverable 3: Reporting	$20,668
Project Management	
Scoping consent phase	$39,205
Project Management	$259,721
General disbursements for travel	$10,000
Treatment plant design	
Deliverable 1: Basis of Design Report	$12,993
Deliverable 2: Concept Design Documentation	$86,053
Sub-total	**$817,648**

PROVISIONAL SUMS	
PROVISIONAL - setup and coordination of community engagement	$57,328
Phase 4: Lodgement, public notification and GWRC processing and Post Lodgement (PROVISIONAL)	$220,000
WQ sampling ongoing after consent submitted (provisional 6 months/12 trips) (PROVISIONAL)	$35,524
Interpretation of low flow monitoring and update reports (PROVISIONAL)	$7,711
Sub-total	**$320,563**

Total	**$1,138,211**

7.5 Contingency

A project level contingency of $300,000 up to consent lodgement is suggested based on the project risks if a 3 to 6 month delay occurred.
The contingency will need to be assessed for the post-lodgement phase, this will need to be completed closer to lodgement date.

8 Health and safety

Health and safety for this project will only be relevant to future phases beyond the consenting stage, for design, construction and operation stages once the preferred option is consented.

8.1 Health and safety objectives

The health and safety objectives for the project are:

- Compliance with the Health and Safety at Work Act 2015
- Compliance with the Health and Safety at Work Regulations 2016
- Comply with health and safety directives issued by Wellington Water
- Compliance with the Regional Specification and Standard for Water Services (December 2021)

8.2 GHD Health and safety requirements

To comply with GHD's HSE Management System Manual (GHD-MAN-HSE-01) the following mandatory HSE tasks are included:

- Setup, review and manage a project risk register throughout the delivery of the project
- JSEAs (HSE009) are developed for each site activity undertaken on the project, reviewed and approved by the project director or suitably skilled and experienced delegate before site based works commence and affected staff inducted in their requirements.
- HSE018 Site Inspections and HSE068 Job HSE Audits are conducted in accordance with the HSE015 Inspection and Monitoring Schedule for principal contractor and client's representative jobs
- HSE injuries, incidents, near misses or hazards are reported in IRIS and investigated in accordance with the 11.01.01 HSE Practice Management Procedure, this plan and any specific requirement of the client
- Implement a Safety in Design process to eliminate or reduce risks that arise during the life cycle of an asset.

- Project related HSE actions related to inspections, audits, HSE Plan Reviews, Incidents and hazards are completed within agreed timeframes and monitored in the GHD HSE database for ongoing suitability
- External suppliers engaged by GHD to undertake site work are appropriately reviewed prior to them commencing site work QA021, HSE046/HSE047 External Supplier Pre Work Reviews
- Undertake the HSE067 Management JSEA Site Review

These mandatory tasks make up the framework of the GHD Project HSE Plan, and are to be read and implemented in consultation with any separate management plans (e.g. environmental, security etc where applicable), Wellington Water or site specific health, safety and environment (HSE) requirements and other GHD-specific HSE Management System documentation including Hazard Guides.

8.3 GHD HSE roles and responsibilities

- Project Director: The project director is responsible for controlling the overall delivery of the HSE for this project management plan and ensuring compliance with GHD's HSE Management System requirements for the job. The project director will identify and provide resources for the Job.
- Project Manager: The job manager is responsible for the implementation of the HSE for this project management plan. The job manager may delegate site delivered roles and responsibilities to a "field supervisor", however remains overall responsibility for practical implementation of HSE on the job.
- Project team: The project team are responsible to conduct their activities in accordance with the specific HSE requirements of this project and supporting initiatives.

8.4 Safety in design

The project will follow the Wellington Water Safety in Design Process (HSP-26). During the design phase aspects relating to Health & Safety will be reviewed by designated technical specialists and operations team input. A safety in design register will be initiated at the end of the design phase, Safety in Design workshops will be carried out in future phases of the project.

Safety in design workshops will be held at the following points:

- During Preliminary Design to develop the initial SID register.
- During the Detailed Design Stage.
- Following contract award to include the contractor and review the work methodology and planning to confirm safety risks.

Following the construction phase, the SID register will be reviewed with Wellington Water to ensure operational and maintenance hazards relating to the project are captured and transferred prior to project closure.

The SID H&S risk assessment will be added to Appendix once complete. The SID H&S risk assessment is a living document and will be updated throughout the project.

8.5 Health and safety monitoring

There is no significant site work planned for this project. Any site visits such as to the Featherston WWTP will be monitored by the GHD Project Manager.

8.6 Health and safety reporting

We will report on health and safety performance as part of our monthly report, if there are any relevant updates to report.

9 Quality assurance system

9.1 Quality objectives

All deliverables will follow the requirements of the GHD Management System for Quality Control. This involves verifying deliverables and implementing checks and reviews in accordance with GHDs internal Quality Assurance procedures.

The key quality objectives for the project are:

- Technical - Identify and utilise key resources with relevant project experience
- Quality - Deliver reports that adhere to the GHD quality systems and review processes, utilise peer reviewers following the Wellington Water process
- Financial - Accurate cost estimating, forecasts and budget management
- Risk Management - Proactive management and early warning of risks, leverage legal reviews to assist guide the process

10 Environment

10.1 Environmental objectives

The key environmental objectives for the project are to:

- To identify the key environmental project risks on the site
- To consult with stakeholders to confirm their perception of environmental risk aligns with the project assessment.
- To assess the potential environmental impact of options and identify potential mitigation requirements.

10.2 Environmental monitoring and reporting

During environmental monitoring if there is any risks or major non-compliances noted they will be reported once identified.

We will report on environmental performance against objectives within our monthly report.

11 Risk

11.1 Risk management

In keeping with the consultancy panel approach, GHD will work closely alongside Wellington Water to manage the project and associated risks. A risk register will be developed, and will be a live document, updated following each key stage and any significant changes to project scope or risk profile.

The GHD Project Manager is responsible for managing project risk and ensuring risks and their mitigation is clearly communicated to Wellington Water. We will maintain a high level of communication with the Wellington Water Project Director and elevate issues or risks as required. The key project risks currently identified for this project are listed below.

11.2 Project risk register

At the time of this PMP preparation the top risks being managed are listed in Table 5

Table 7: Key risks

Key Risk	Control Measure
Risk of missing the Section 37 deadline of Feb 23	**Description:** There is a short amount of time to prepare the consent application and consult with key stakeholders before submission. This could cause in-effective consultation with project partners and key stakeholders. **Mitigation:** Agree the scope of work with SWDC and mobilise team to start consent preparation as soon as possible - in progress Setup regular working groups with key stakeholders to have regular input in the design and application. **Consequence:** Reputational risk, increased costs with re-work and ongoing meetings with stakeholders
Budget limitations / Affordability	**Description:** This project is a significant one for SWDC given its history so far in not obtaining consent for irrigation of treated wastewater to land, and the community not generally supportive of the proposal. The project influences a wide range of stakeholders in the region. There is the risk that local and national government influences and impacts the progress of the project through funding, public communication, stakeholder communication and pressure on the project team. **Mitigation:** Staging of options to be developed to support option selection - to be progressed during consent application preparation.

Key Risk	Control Measure
	Meetings with WWL operations and SWDC to determine the operational improvements and priorities of upgrades. **Consequence:** Delays (3 to 6 months) to lodging the consent to agree / prioritise upgrades
Objection to the consent application	**Description:** There is a risk that if partners, stakeholders or community have a significant objection to the project or specific detail of the project, then additional work may be required to understand and resolve these issues or alternatively resulting in a shorter term consent. **Mitigation:** Regular meetings and updates to stakeholders. Comms plan developed for the community engagement strategy. **Consequence:** Delays (3 to 6 months) and increased cost utilising technical specialists to address concerns.
Concerns with the consent approach / RMA changes	**Description:** The details of the short term consent approach need to be developed together with GWRC to maximise the amount of environmental data available over the 6 month period from commencing work to lodgement. **Mitigation:** Regular meetings with GWRC to determine the details of the consent approach. Legal input early in the consent development. Environment monitoring plan to be developed and discussed with GWRC technical specialists **Consequence:** Delays lodging the consent by 3 to 6 months to obtain summer and autumn seasonal data.
Level of Iwi engagement	**Description:** With the hiatus in progress and limited contact with project partners, there is uncertainty in the iwi position on the short term consent approach. **Mitigation:** Establish regular meetings early in the consent phase to obtain input in the design and consent application. **Consequence:** Delays (3 to 6 months) lodging the consent if effective consultation is not achieved.
Robustness of option assessment process	**Description:** The original option assessment phase did not concluded with the Multi Criteria Assessment (MCA) stopping after workshop 3. No option assessment has been completed for the design of the upgrades in the Short term consent. **Mitigation:** Monitor risk as design and consent preparation progresses. Some option assessments may need to be commented on or developed by the design team during the consent preparation.

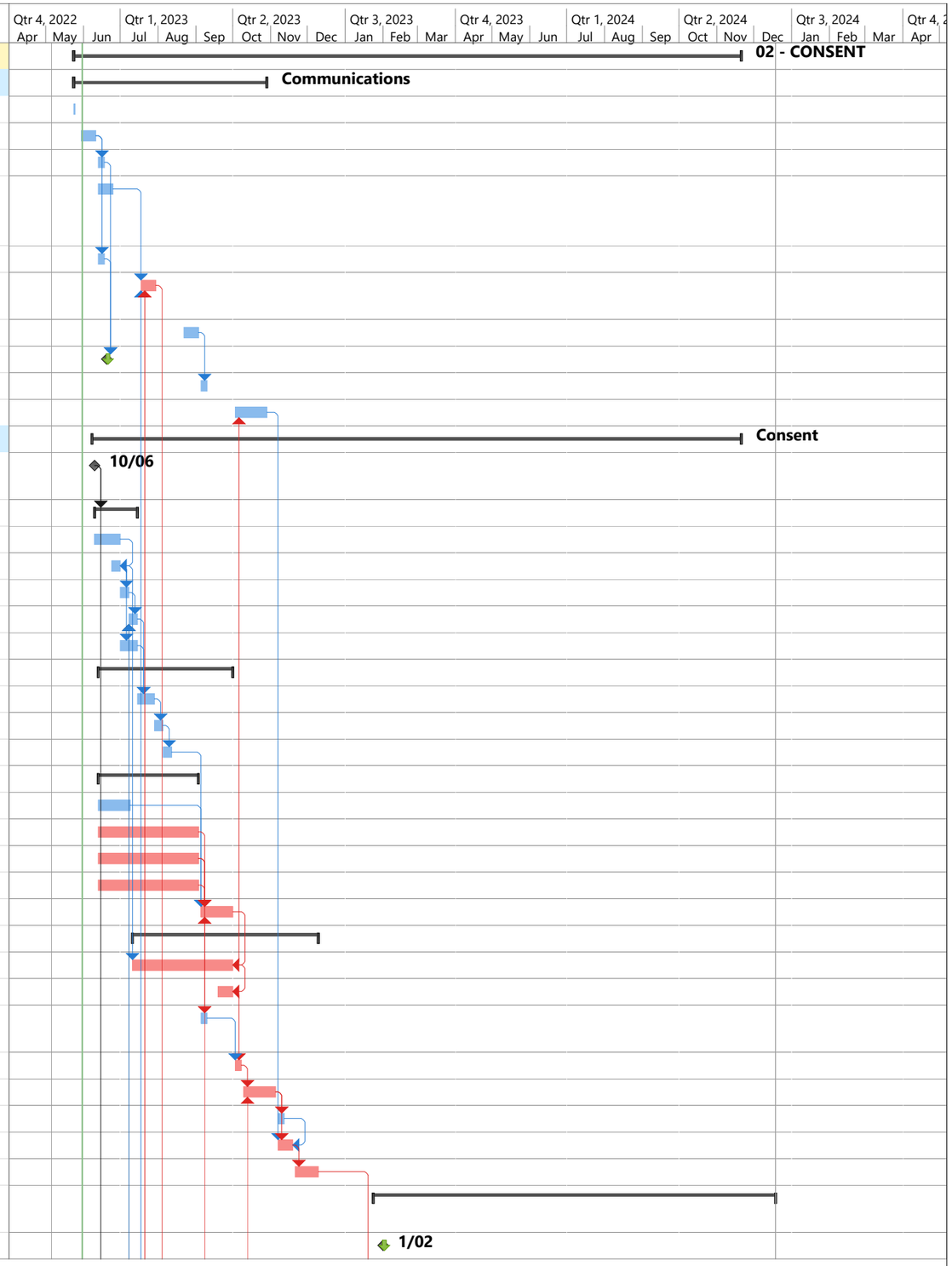
Key Risk	Control Measure
	Consequence: Delay to lodging resource consent or additional information requests after lodgement.

Other risks of note listed on the register include:

- Technical assessment expert availability, timing and any need for additional investigations / new issues – we have a drop dead lodgement but may then get more s92 requests and need time extensions
- Iwi and key stakeholder position and availability to engage
- Local government elections changing strategy / corporate intent changing

Appendix A: Programme

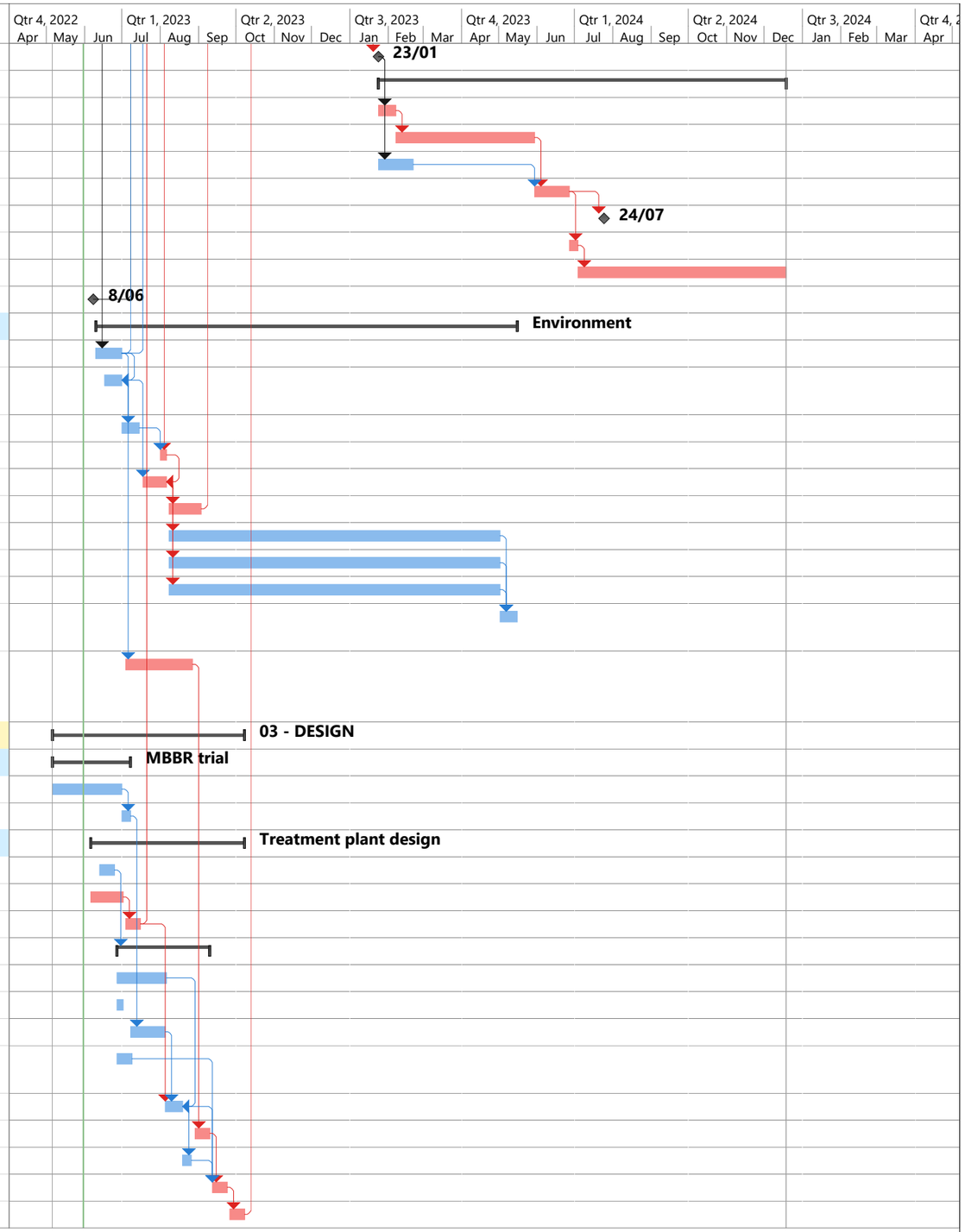
ID		WBS	Task Mode	% Complete	Task Name	Duration	Start	Finish
				0%	**02 - CONSENT**	**399d**		
				0%	**Communications**	**114d**		
63		40		0%	Progress meeting with Rangitane O Wairarapa	1 day	24 May '22	24 May '22
64		26		0%	Prepare the communications plan	2 wks	30 May '22	10 Jun '22
65		27		0%	Review and approval of plan	1 wk	13 Jun '22	17 Jun '22
66		28		0%	Prepare Project related communication material to support engagement with iwi and key stakeholders and the wider community	2 wks	13 Jun '22	24 Jun '22
67		29		0%	Update the Project Website	1 wk	13 Jun '22	17 Jun '22
68		30		0%	Hold meetings with iwi and key stakeholders to introduce the short-term consent process	2 wks	18 Jul '22	29 Jul '22
69		31		0%	Progress meetings with Iwi for preliminary design	2 wks	22 Aug '22	2 Sep '22
70		*32*		*0%*	~~*Community update 1 (Town meeting)*~~	~~*0 wks*~~	~~*20 Jun '22*~~	~~*20 Jun '22*~~
71		33		0%	Community update 2	1 wk	5 Sep '22	9 Sep '22
72		34		0%	Pre-lodgement meetings with stakeholders	4 wks	3 Oct '22	28 Oct '22
				0%	**Consent**	**388d**		
1		*39*		*0%*	*Approval of concept option, budget and responsibilities for delivery*	*0 days*	*10 Jun '22*	*10 Jun '22*
2		**1**		**0%**	**Phase 1: Background research / defining the scope**	**25 days**	**10 Jun '22**	**14 Jul '22**
3		1.1		0%	Review available technical information	3 wks	10 Jun '22	30 Jun '22
4		1.2		0%	Summary of consent approach	1 wk	24 Jun '22	30 Jun '22
5		1.3		0%	Legal review	1 wk	1 Jul '22	7 Jul '22
6		1.4		0%	Pre application meeting GWRC and SWDC	1 wk	8 Jul '22	14 Jul '22
7		1.5		0%	Scope and briefs for further technical input	2 wks	1 Jul '22	14 Jul '22
8		**2**		**0%**	**Phase 2: Technical Inputs**	**80 days**	**13 Jun '22**	**30 Sep '22**
9		2.1		0%	Mobilise technical specialists	2 wks	15 Jul '22	28 Jul '22
10		2.2		0%	Internal meeting	1 wk	29 Jul '22	4 Aug '22
11		2.3		0%	Pre-application meeting	1 wk	5 Aug '22	11 Aug '22
12		**2.4**		**0%**	**Technical assessments**	**60 days**	**13 Jun '22**	**2 Sep '22**
13		2.4.1		0%	WWTP process review/upgrade identification	1 mon	13 Jun '22	8 Jul '22
14		2.4.2		0%	Hydrogeological investigation	3 mons	13 Jun '22	2 Sep '22
15		2.4.3		0%	Water quality assessment	3 mons	13 Jun '22	2 Sep '22
16		2.4.4		0%	Ecological assessment	3 mons	13 Jun '22	2 Sep '22
17		2.5		0%	Review technical assessments / reports	1 mon	5 Sep '22	30 Sep '22
18		**3**		**0%**	**Phase 3: AEE preparation for the short-term consent**	**110 days**	**11 Jul '22**	**9 Dec '22**
19		3.1		0%	Preparation of draft AEE	3 mons	11 Jul '22	30 Sep '22
20		3.2		0%	Legal review	2 wks	19 Sep '22	30 Sep '22
21		3.3		0%	Hui to discuss the operational refinements to the existing plant	1 wk	5 Sep '22	9 Sep '22
22		3.4		0%	Pre-application meeting	1 wk	3 Oct '22	7 Oct '22
23		3.5		0%	Finalise draft AEE fo legal review	1 mon	10 Oct '22	4 Nov '22
24		3.6		0%	Legal review	1 wk	7 Nov '22	11 Nov '22
25		3.7		0%	Client review and comment	2 wks	7 Nov '22	18 Nov '22
26		3.8		0%	Final AEE review and update	3 wks	21 Nov '22	9 Dec '22
27		**4**		**0%**	**Phase 4: Lodgement, public notification and GWRC processing**	**235 days**	**23 Jan '23**	**18 Dec '23**
28		*4.1*		*0%*	*Section 37 date*	*0 days*	*1 Feb '23*	*1 Feb '23*



Project: Featherston_Consent p
Date: 31 May '22

Task	Project Summary	Manual Task	Start-only	Deadline	Manual Progress		
Split	Inactive Task	Duration-only	Finish-only	Critical			
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Critical Split			
Summary	Inactive Summary	Manual Summary	External Milestone	Progress			

ID	WBS	Task Mode	% Complete	Task Name	Duration	Start	Finish
29	*4.2*		*0%*	*Consent lodgement*	*0 days*	*23 Jan '23*	*23 Jan '23*
30	**4.3**		**0%**	**Consent processing**	**235 days**	**24 Jan '23**	**18 Dec '23**
31	4.3.1		0%	Completeness check	10 days	24 Jan '23	6 Feb '23
32	4.3.2		0%	PROVISIONAL: Further information request	4 mons	7 Feb '23	29 May '23
33	4.3.3		0%	Notification determination	20 days	24 Jan '23	20 Feb '23
34	4.3.4		0%	Submission period	20 days	30 May '23	26 Jun '23
35	*4.3.5*		*0%*	*Decision (no hearing)*	*0 days*	*24 Jul '23*	*24 Jul '23*
36	4.3.6		0%	Request for hearing	5 days	27 Jun '23	3 Jul '23
37	4.3.7		0%	PROVISIONAL: Hearing process	6 mons	4 Jul '23	18 Dec '23
51	*15*		*0%*	*Transition workshop*	*0 days*	*8 Jun '22*	*8 Jun '22*
			0%	**Environment**	**231d**		
52	16		0%	Develop REMP Implementation plan and survey scope	3 wks	10 Jun '22	30 Jun '22
53	17		0%	Site visits with survey suppliers (3 visits enviro, 2 visits influent)	2 wks	17 Jun '22	30 Jun '22
54	18		0%	Review of plan by WWL and GWRC	2 wks	1 Jul '22	14 Jul '22
55	19		0%	Updates to plan following client review	1 wk	1 Aug '22	5 Aug '22
56	20		0%	Mobilise suppliers for instrumentation setup	3 wks	18 Jul '22	5 Aug '22
57	37		0%	Initial data collection for assessments	1 mon	8 Aug '22	2 Sep '22
58	21		0%	Ecology surveys (quarterly - 2 visits)	9 mons	8 Aug '22	1 May '23
59	22		0%	Stream monitoring and lab analysis	9 mons	8 Aug '22	1 May '23
60	23		0%	Monthly data collection and processing (6 months)	9 mons	8 Aug '22	1 May '23
61	24		0%	Interpret information collated to date / technical review	2 wks	2 May '23	15 May '23
62	25		0%	Tests for groundwater discharge feasibility (hand augers, infiltration test, shallow piezos, collecting samples, modelling)	2 mons	4 Jul '22	26 Aug '22
			0%	**03 - DESIGN**	**111d**		
			0%	**MBBR trial**	**45d**		
73	35		0%	MBBR trial	2 mons	6 May '22	30 Jun '22
74	36		0%	Trial summary report	1 wk	1 Jul '22	7 Jul '22
			0%	**Treatment plant design**	**90d**		
38	5		0%	Development of basis of design report	2 wks	13 Jun '22	24 Jun '22
39	6		0%	Scope and survey existing assets (site sampling)	4 wks	6 Jun '22	1 Jul '22
40	38		0%	Draft general arrangement drawings	2 wks	4 Jul '22	15 Jul '22
41	**8**		**0%**	**Basis of design**	**55 days**	**27 Jun '22**	**9 Sep '22**
42	8.1		0%	Wetland concept design	6 wks	27 Jun '22	5 Aug '22
43	8.3		0%	Flow diagram	1 wk	27 Jun '22	1 Jul '22
44	8.5		0%	Process equipment sizing (incl. liaison with suppliers)	1 mon	8 Jul '22	4 Aug '22
45	8.6		0%	Sludge management strategy (incl. in basis of design report)	2 wks	27 Jun '22	8 Jul '22
46	8.7		0%	Final general arrangement drawings	2 wks	5 Aug '22	18 Aug '22
47	8.8		0%	Concept design of land based discharge solution	2 wks	29 Aug '22	9 Sep '22
48	9		0%	Safety in design workshop	1 wk	19 Aug '22	25 Aug '22
49	11		0%	Finalise basis of design report	2 wks	12 Sep '22	23 Sep '22
50	14		0%	Internal review	2 wks	26 Sep '22	7 Oct '22



Project: Featherston_Consent p
Date: 31 May '22

Task	Project Summary	Manual Task	Start-only	Deadline	Manual Progress		
Split	Inactive Task	Duration-only	Finish-only	Critical			
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Critical Split			
Summary	Inactive Summary	Manual Summary	External Milestone	Progress			

Appendix B: Consultancy Fee Estimate

ESTIMATE - SCOPE OF WORK

27 June 2022

Featherston WWTP - consent phase

Total number of work weeks, Hrs/Wk: 5 40

Grand Total: **$1,147,131**

						Displ																							Disbursements											
						Role / Name		Mary O'Callahan (Project director / Planning	(Project manager)	(Project coordinator)		Helen Anderson (Planning lead)	(Intermediate planner)	(Graduate planner)		Dusk Mains	Claire Eyberg	Anthony Kirk	Environmental scientist	Ian Ho (Process lead)	Alannah Clark (Water engineer)	Mike Mills (CAD lead)	Ray Tan (Digital Lead A5)	Electrical - Sesh (for power & SCADA	Cristo (PS & RM review)		TOTAL LABOUR		For Sub-cons enter "S/C" in unit	item	Ecology Boffa Miskell	Comms Latitude	Recon Site survey	Field equipment for enviro surveys			Travel		TOTAL DISB.	ESTIMATE TOTAL $
						Ctgy																								Unit	s/c	s/c	s/c	s/c			ea			
						Rate $		270	217	97		270	152	125		195	152	270	103	246	152	152	217	270	270		**Hrs**	**$ Value**	Desc.	Rate	1	1	1	1			1		**$ Value**	**Lab. + Disb.**
Act ID	**CA**	**WP**	**Activity Description**	**Start Date**	**Finish Date**	**Dur Days**	**0**	**199**	**1013**	**201**	**0**	**699**	**268**	**64**	**0**	**162**	**228**	**75**	**150**	**161**	**266**	**54**	**4**	**6**	**4**	**0**	**3555.2**	**$944,335**		$	**$70,000**	**$45,000**	**$18,000**	**$59,796**	**$0**	**$0**	**$10,000**	**$0**	**$202,796**	**$1,147,131**
			CHECK ON AVERAGE TOTAL NUMBER OF WORK DAYS PER WEEK =				0	4.99	25.3	5.02	0	17.5	6.7	1.6	0	4.06	5.7	1.88	3.75	4.03	6.66	1.35	0.1	0.15	0.1	0				Qty	70,000	45,000	18,000	59,796	0	0	10,000	0		
																											0	**$0**											**$0**	**$0**
1			**CONSENT**																																				$0	
2			**Communications**																									$49,037											$45,000	$94,037
3			Progress meeting with Rangitane O Wairarapa	24-May-22	24-May-22	1																					0	$0											$0	$0
4			Prepare the communications plan	30-May-22	10-Jun-22	10			2																		2	$433											$0	$433
5			Review and approval of plan	13-Jun-22	17-Jun-22	5						6															6	$1,622											$0	$1,622
6			Prepare Project related communication material to support engagement with iwi and key stakeholders and the wider community	13-Jun-22	24-Jun-22	10			24			24															48	$11,686											$0	$11,686
7			Update the Project Website	13-Jun-22	17-Jun-22	5			16																		16	$3,466											$0	$3,466
8			Progress meetings with Iwi for preliminary design (refer line 32)	22-Aug-22	02-Sep-22	10																					0	$0											$0	$0
9			Community update 1 (Town meeting)	20-Jun-22	20-Jun-22	1																					0	$0											$0	$0
10			Community update 2	05-Sep-22	09-Sep-22	5			8			8									4						20	$4,502											$0	$4,502
11			Pre-lodgement meetings with stakeholders (refer line17)	03-Oct-22	28-Oct-22	20																					0	$0											$0	$0
12			Setup and coordination of community updates	30-May-22	09-Dec-22	140																					0	$0				15000							$15,000	$15,000
13			PROVISIONAL - setup and coordination of community engagement	30-May-22	09-Dec-22	140			40			16	40					16		16							128	$27,328				30000							$30,000	$57,328
14						1																					0	$0											$0	$0
15			**Consent**																									$440,082											$30,000	$470,082
16			Approval of concept option, budget and responsibilities for delivery	10-Jun-22	10-Jun-22																						0	$0											$0	$0
17																											0	$0											$0	$0
18			**Phase 1: Background research / defining the scope**	10-Jun-22	14-Jul-22	27																					0	$0											$0	$0
19			Review available technical information	10-Jun-22	30-Jun-22	17						32	24														56	$12,293											$0	$12,293
20			Prepare consenting approach/strategy (short and long term consenting)	24-Jun-22	15-Jul-22	16		16				60															76	$20,543											$0	$20,543
21			Legal review of consenting strategy	01-Jul-22	07-Jul-22	7																					0	$0											$0	$0
22																											0	$0											$0	$0
23			**Engagement (Iwi and GWRC)**																								0	$0											$0	$0
24			Iwi engagement on consenting strategy and ongoing during AEE preparation (monthly meetings x 2 iwi)									32	32														64	$13,507											$0	$13,507
25			Pre application meeting (to discuss consent strategy) with GWRC and SWDC	08-Jul-22	14-Jul-22	7		8				8															16	$4,325											$0	$4,325
26			Ongoing monthly meetings with GWRC (to ldogement - february 2023)									16	16														32	$6,754											$0	$6,754
27																											0	$0											$0	$0
28			**Phase 2: Technical Inputs (for short term consenting)**	13-Jun-22	30-Sep-22	80																					0	$0											$0	$0
29			Scope and briefs for further technical input	01-Jul-22	14-Jul-22	12						40															40	$10,812											$0	$10,812
30			Workshop with tech team (1 day)	15-Jul-22	28-Jul-22	12			8			8	8					8		8	8						48	$10,458											$0	$10,458
31			Internal meeting (refer Line 41)	29-Jul-22	04-Aug-22	7																					0	$0											$0	$0
32			Pre-application meeting with GWRC to discuss technical inputs / REMP	05-Aug-22	11-Aug-22	7						8						8		8							24	$6,296											$0	$6,296
33			Technical assessments	13-Jun-22	02-Sep-22	60																					0	$0											$0	$0
34			WWTP process review/upgrade identification	13-Jun-22	08-Jul-22	20																					0	$0											$0	$0
35			Hydrogeological investigation	13-Jun-22	02-Sep-22	60																					0	$0											$0	$0
36			Water quality assessment	13-Jun-22	02-Sep-22	60																					0	$0											$0	$0
37			Ecological assessment	13-Jun-22	02-Sep-22	60																					0	$0			30000								$30,000	$30,000
38			Cultural Impact Assessment																								0	$0											$0	$0
39			Review technical assessments / reports / CIA	05-Sep-22	30-Sep-22	20						100															100	$27,030											$0	$27,030
40																											0	$0											$0	$0
41			**Phase 3: AEE preparation for the short-term consent**	11-Jul-22	09-Dec-22	110																					0	$0											$0	$0
42			Preparation of draft AEE	11-Jul-22	30-Sep-22	60		16				120	60	60													256	$53,339											$0	$53,339
43			Legal review	19-Sep-22	30-Sep-22	10																					0	$0											$0	$0
44			Update AEE following legal /client review	01-Oct-22	07-Oct-22	7						32															32	$8,650											$0	$8,650
45			Pre-application meeting with GWRC	03-Oct-22	07-Oct-22	5		8				12															20	$5,406											$0	$5,406
46			Finalise draft AEE for legal review	10-Oct-22	04-Nov-22	20		4				4	24														32	$5,806											$0	$5,806
47			Legal review	07-Nov-22	11-Nov-22	5																					0	$0											$0	$0
48			Client review and comment	07-Nov-22	18-Nov-22	10																					0	$0											$0	$0
49			Prepare Conditions (with Iwi and GWRC input), legal also input required									60	60					8		8							136	$29,460											$0	$29,460
50			Final AEE review and update	21-Nov-22	09-Dec-22	15		4				16															20	$5,406											$0	$5,406
51																											0	$0											$0	$0
52			**Phase 4: Lodgement, public notification and GWRC processing and Post Lodgement (PROVISIONAL)**	23-Jan-23	18-Dec-23	236																					0	$220,000											$0	$220,000
53			**Lodgement**																								0	$0											$0	$0
54			Compile and collate AEE for lodgement (disbursements - lodgement fee?)																								0	$0											$0	$0
55			Post lodgement engagement with stakeholders																								0	$0											$0	$0
56																											0	$0											$0	$0
57			**Response to s.92**																								0	$0											$0	$0
58			Manage s.92 response, specialist input, prepare s.92 response, legal and client review and update																								0	$0											$0	$0
59																											0	$0											$0	$0
60			**Submissions**																								0	$0											$0	$0
61			Review submisisons, prepare summary, triage submissions																								0	$0											$0	$0
62			Workshop submisison responses with tech team (1/2 day)																								0	$0											$0	$0
63			Submitter meetings, submisison resolution																								0	$0											$0	$0
64			Submitter resolution - update conditions (tech team input required)																								0	$0											$0	$0
65																											0	$0											$0	$0
66			**Hearing Preparation**																								0	$0											$0	$0
67			Legal Case stagegy and client liaison																								0	$0											$0	$0
68			Workshop - expert briefing																								0	$0											$0	$0
69																											0	$0											$0	$0
70			**Preparation of evidence**																								0	$0											$0	$0
71			Evidence preparation (planning and tech experts)																								0	$0											$0	$0
72			Review of evidence - Tech team review of each others evidence																								0	$0											$0	$0
73			Update following client and legal review																								0	$0											$0	$0
74			Review submitter evidence																								0	$0											$0	$0
75			Prepare rebuttal evidence																								0	$0											$0	$0
76			Respond to client / legal review																								0	$0											$0	$0
77			Client/Legal discussion - EIC and rebuttal																								0	$0											$0	$0
78																											0	$0											$0	$0
79			**Witness / expert conferencing**																								0	$0											$0	$0

80			Prepare for and attend conferencing																								0	$0										$0	$0
81																											0	$0										$0	$0
82			**Hearing Process and Review Council Decision**																								0	$0										$0	$0
83			Hearing attendance (assume 3 day hearing)																								0	$0										$0	$0
84			Support to legal during hearing process																								0	$0										$0	$0
85			Closing submissions and final conditions																								0	$0										$0	$0
86			Post hearing client / legal liaison																								0	$0										$0	$0
87			Decision review																								0	$0										$0	$0
88																											0	$0										$0	$0
89						1																					0	$0										$0	$0
90			**Environment**																									$76,324										$89,796	$166,120
91			**Deliverable 1: Data analysis**			1																					0	$0										$0	$0
92			Data review and prepare REMP			1										24		7									31	$6,572										$0	$6,572
93						1																					0	$0										$0	$0
94			**Deliverable 2: Field investigation**			1																					0	$0										$0	$0
95			Prep and equipment			1										2	8		4								14	$2,014										$0	$2,014
96			Initial field investigation and dispatch samples			1										8	26	4	22								60	$8,843										$0	$8,843
97			WQ sampling and dispatch samples (6 trips)			1											40		40								80	$10,172										$0	$10,172
98			Telemetry			1																					0	$0										$0	$0
99			Ecology field surveys and reporting			1																					0	$0		30000								$30,000	$30,000
100			WQ sampling and field equipment			1																					0	$0					44616					$44,616	$44,616
101			WQ sampling ongoing after consent submitted (provisional 6 months/12 trips) (PROVISIONAL)			1											80		80								160	$20,344					15180					$15,180	$35,524
102						1																					0	$0										$0	$0
103			**Deliverable 3: Reporting**			1																					0	$0										$0	$0
104			Factual reporting			1										4	30	4									38	$6,415										$0	$6,415
105			Interface with process team/meetings			1										4		4									8	$1,861										$0	$1,861
106			Tech assessment			1										40	16	8									64	$12,391										$0	$12,391
107			Interpretation of low flow monitoring and update reports (PROVISIONAL)			1										16	16	8									40	$7,711										$0	$7,711
108						1																					0	$0										$0	$0
109						1																					0	$0										$0	$0
110			**Project Management**																									$307,846										$10,000	$317,846
111			Scoping consent phase	20-May-22	13-Jun-22	19		8	60			16				8	8			4	8						112	$24,458										$0	$24,458
112			Monthly reporting (June) and progress meeting			1		2	12			1															15	$3,410										$0	$3,410
113			Prepare letter and programme for GWRC, attend meeting with GWRC			1		4	16			24									2						46	$11,338										$0	$11,338
114			Team briefing and setup of project administration	01-Jun-22	16-Jun-22	12		2	24	16		8	4	4		8	4		4	8	4						86	$15,721										$0	$15,721
115			Client kick off meeting			1		2	2			2				2				2							10	$2,397										$0	$2,397
116			Monthly reporting, reconcile project costs, update forecast, update server and coordination of information Assumed 16 hours per week for PM, 1 hour per week for the PD, 4 hours per month for the Assistant PM	13-Jun-22	01-May-23	231		46.2	739	46.2																	831.6	$177,098										$0	$177,098
117			Weekly project management document updates and coordination of information Reviewing project financials each week and document management on woogle 2 hours per week for APM	13-Jun-22	01-May-23	231				92.4																	92.4	$9,000										$0	$9,000
118			Team meetings (fortnightly)	13-Jun-22	01-May-23	231		46.2	46.2	46.2		46.2				46.2					46.2						277.2	$55,505										$0	$55,505
119			General disbursements for travel			1																					0	$0								10000		$10,000	$10,000
120			Fortnightly steering group meetings (1 hour per session)	01-Jul-22	01-May-23	219		22																			22	$5,947										$0	$5,947
121			Monthly governance meetings (1 hour per session)	01-Jul-22	01-May-23	219		11																			11	$2,973										$0	$2,973
122						1																					0	$0										$0	$0
123						1																					0	$0										$0	$0
124						1																					0	$0										$0	$0
125						1																					0	$0										$0	$0
126			**DESIGN**																																				
127			**Treatment plant design**																									$71,046										$28,000	$99,046
128			**Deliverable 1: Basis of Design Report**			1																					0	$0										$0	$0
129			Development of basis of design report	13-Jun-22	24-Jun-22	10														4	40						44	$7,058										$0	$7,058
130			Sludge management strategy (incl. in basis of design report)	27-Jun-22	08-Jul-22	10														2	4						6	$1,100										$0	$1,100
131			Review of MBBR trial outcomes / reporting	04-Jul-22	15-Jul-22	10														1	6						7	$1,157										$0	$1,157
132			Finalise basis of design report	12-Sep-22	23-Sep-22	10														4	8						12	$2,200										$0	$2,200
133			Internal review	26-Sep-22	07-Oct-22	10														6							6	$1,478										$0	$1,478
134						1																					0	$0										$0	$0
135			**Deliverable 2: Concept Design Documentation**			1																					0	$0										$0	$0
136			Scope and survey existing assets - PLACEHOLDER	06-Jun-22	01-Jul-22	20														1		4	4				9	$1,722				18000						$18,000	$19,722
137			Draft general arrangement drawings 10 drawings estimated	04-Jul-22	15-Jul-22	10														2	10	32					44	$6,868										$0	$6,868
138			Wetland concept design - PLACEHOLDER	27-Jun-22	05-Aug-22	30														40							40	$9,856										$0	$9,856
139			Ecology input to wetland design - PLACEHOLDER	27-Jun-22	05-Aug-22	30																					0	$0		10000								$10,000	$10,000
140			Process Flow Diagram	27-Jun-22	01-Jul-22	5														1	6	2					9	$1,461										$0	$1,461
141			Process equipment sizing (incl. liaison with suppliers)	08-Jul-22	04-Aug-22	22														6	16						22	$3,907										$0	$3,907
142			Final general arrangement drawings 10 drawings estimated	05-Aug-22	18-Aug-22	12														4	24	16		6	4		54	$9,759										$0	$9,759
143			Concept design of land based discharge solution	29-Aug-22	09-Sep-22	10														6	20						26	$4,514										$0	$4,514
144			Safety in design workshop	19-Aug-22	25-Aug-22	7														2	8						10	$1,707										$0	$1,707
145			Cost estimate update	19-Aug-22	26-Sep-22	29														8	16						24	$4,400										$0	$4,400
146			Internal review	26-Sep-22	07-Oct-22	10														4	8						12	$2,200										$0	$2,200
147						1																					0	$0										$0	$0
148			**Other Items**			1																					0	$0										$0	$0
149			Procurement plan report (incl. 1 meeting with WWL/SWDC and 1 update)	18-Aug-22	07-Oct-22	37			16											2	16						34	$6,387										$0	$6,387
150			Internal meetings (fortnightly)	13-Jun-22	07-Oct-22	85														8	8						16	$3,186										$0	$3,186
151			Interface with environmental team	13-Jun-22	07-Oct-22	85														6	4						10	$2,086										$0	$2,086
152						1																					0	$0										$0	$0
STOP						1																					0	$0										$0	$0
							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0													

Labour Costs				$944,335
Other Costs (S/C + Disbursements)				$202,796
S/C Uplift	%	0%	######	$0
Disbursements Uplift	%	0%	$10,000	$0
Estimate TOTAL (excluding GST)				**$1,147,131**

Appendix C: Risk Register

Risk Register

Project/Contract:	FSTN WWTP Consent
Project/Contract ID:	OPC100872
WWL Lead:	Linda Fairbrother

Document Date:	10 August 2021	
Supplier Lead:	Steven Kelliher	GHD
RM Specialist:	[Enter data in '2 Project Information New']	[Enter data in '2 Project Information New']
Risk Tolerance Threshold:	Low	

Highest 10% risks

										Current Exposure Semi-Quantitative				Treatment Strategy	Residual (Target) Exposure Semi-Quantitative					
Rank	RID	Risk Title	Description/ Cause/ Consequence	Risk Owner	Risk Owning Org	Date Raised (xx/xx/xxxx)	Risk Status	Phase	Established Controls	Consq.	Likelihood	Risk Score	Individual actions to be recorded in the Actions Register (Tab 4)	Consq.	Likelihood	Likely Cost ($M)	Likely Delay (Months)	Risk Score	Commentary & Closure Statement
	1	Cost estimation	Inaccurate cost estimates could result in insufficient funding approvals.	Project Manager	GHD	10/08/2021	Live - Treat	Procurement	Develop the preferred solution to a point where a level 2 estimate can be prepared, undertake a peer review of the estimates. Bond CM to be involved in cost reviews.	High	Medium	19	Involve an independent cost estimator such as Bond CM or Alta	Medium	Low	10		11	
	2	Local and national government influences	The project influences a wide range of stakeholders in the region. There is the risk that local and national government influences and impacts the progress of the project through funding, public communication, stakeholder communication and pressure on the project team. The specific risks relating to this need to be identified and reviewed over the project lifecycle.	Project Manager	GHD	10/08/2021	Live - Treat	Optioneering	Legal review of the MCA process and communications plan. Also include project sponsor and comms lead at WWL to review the comms plan. Break into Local, national, policy, regulatory	High	Medium	19	Stakeholder register to be updated regularly, SWDC to support the engagement and messaging. SWDC to review public communications.	Medium	Low		6	11	
	3	Consent authority engagement is not forthcoming	If consenting authorities are not engaged effectively at the start of the project it may require rework and delays to the option assessment process.	Project Manager	GHD	10/08/2021	Live - Treat	Optioneering	GWRC is informed and kept up to date abut progress with the project to demonstrate actions are underway to address and better manage wastewater overflows.	Medium	Low	11	Monthly meetings and email updates to be sent.	Medium	Very Low		3	4	
	4	Objection on the shortlist or preferred option by key stakeholders	There is a risk that if partners or stakeholders have a significant objection to the project or specific detail of the project, then additional work may be required to understand and resolve these issues or alternatively resulting in a shorter term consent.	Project Manager	GHD	10/08/2021	Live - Treat	Design Development	Comms plan and process to be legally reviewed and all identified stakeholders contacted early before workshops to ensure they are correct and available. Increase the comms and focused audiences	Very High	High	24	Planned updates to be provided to all stakeholders. Regular update emails to key stakeholders.	High	Low		9	16	
	5	Integration of this project's public engagement with other WWL and SWDC projects	If there are scheduling conflicts or cross communication about this project is could reduce the effectiveness of the option selection process.	Project Manager	GHD	10/08/2021	Live - Treat	Construction	Wellington water to have oversight of the project amongst all other programmes of work	Medium	Medium	15	Obtain dates for SWDC public engagements and integrate into programme - such as the LTP engagement.	Medium	Low		3	11	
	6	Key stakeholder capability and capacity to effectively engage	If all stakeholders are not at the relevant workshops then the effectiveness of the option selection could be reduced.	Project Manager	GHD	10/08/2021	Live - Treat	Optioneering	Early communication with all stakeholders	Medium	Medium	15	Follow meetings with Iwi. Turnout to meetings has been positive. Individual stakeholder plans can be developed if required.	Medium	Low		3	11	
	7	Scope not clearly defined	If the definition workshop is not carried out effectively then it will compromise the outcome of the option selection, and may require rework	Project Manager	GHD	10/08/2021	Live - Treat	Optioneering	Legal review and clear guidelines for the setup of the definition workshop. Contact all stakeholders early and provide clear project information.	Low	Medium	10	The criteria for assessment will evolve but the MCA lead should maintain focus on the kay outcomes. Legal counsel involved at the right times	Very Low	Low		1	3	
	8	~~Inaccuracy of existing and historic information~~	~~If there are gaps in the information received or inaccuracies then it can compromise the options developed.~~	~~Project Manager~~	~~GHD~~	~~11/08/2021~~	~~Closed~~	~~Optioneering~~	~~Perform a desktop review of all existing information and engage all stakeholders in the long list development.~~	~~Medium~~	~~Medium~~	~~15~~	~~Highlighted need for some desktop reviews.~~	~~Medium~~	~~Low~~		3	11	
	9	Concerns amongst community about financial impacts	Community and ratepayer concerns about project cost given the amount already spent to date on this project by SWDC, reputational risk and additional costs to address concerns.	Project Manager	GHD	10/08/2021	Live - Treat	Optioneering	Ongoing liaison with SWDC to review shortlist and costs before releasing to the community.	Medium	Medium	15	Review costs with WWL and SWDC and determine a suitable method for presenting them for comparison purposes. Review forecasted costs against available budgets to determine delivery strategies / staging.	Medium	Low	0.005	3	11	
	10	Availability of key resources and effective stakeholder input	Personnel resourcing is not able to be provided to the level required	Project Manager	GHD	10/08/2021	Live - Treat	Detailed Design	Incorporate technical specialists in the planning stage of the project. Use team briefing sheets to create clarity in the scope of work.	Medium	High	17	Providing lead in times before re-mobilising and updating the programme to show when information is to be released to key stakeholders for effective feedback.	Medium	Medium		3	15	
	11	Resource consent application proceeds through public notification process	A notified consent will increase the programme duration and increase the project costs significantly.	Planning Lead	GHD	10/08/2021	Live - Treat	Construction	Legal reviews and a detailed comms plan is required to minimise or mitigate this risk.	Medium	High	17	Prepare a consent strategy and review with Buddle Findlay and WWL	Medium	Low		3	11	
	12	A large number of submissions are received which are against the preferred option, or stakeholder not in favour of the preferred option	A large number of submissions will increase the programme duration and increase the project costs significantly.	Project Manager	GHD	10/08/2021	Live - Treat	Design Development	Legal reviews and a detailed comms plan is required to minimise or mitigate this risk. Experienced workshop facilitators involved.	Medium	High	17	Effective community engagement and use of project website, the community needs to be onboard with the process and the option selection.	Medium	Medium		3	15	
	13a	Local councillor influences	Local councillor influences external to the project plan, may cause change or delays during delivery. SWDC placing requests for information or requiring reviews during delivery of the project, this will impact programme	Project Lead	WWL	10/08/2021	Live - Treat	Optioneering	Provide updates at stage gates in the project, via the Assets & Services committee	Medium	Medium	15	Meetings with Councillors to be arranged as required. Papers to be prepared to SWDC quarterly to provide an update to Councillors.	Medium	Low		3	11	
	13b	Local council officer influences	SWDC placing requests for information or requiring reviews during delivery of the project, this will impact programme	Project Lead	WWL	10/08/2021	Live - Treat	Optioneering	Include relevant members of SWDC in workshops, provide updates at stage gates in the project.	Medium	Medium	15	Fortnightly meetings with SWDC. Collaborative approach for community engagement, whereby endorsement for engagement is sought from SWDC before any public releases	Medium	Low		3	11	
	14	Regulatory changes	Changes in regulations may impact the criteria to which options are assessed.	Planning Lead	GHD	10/08/2021	Live - Treat	Optioneering	Any potential changes are to be flagged as risks during the option assessment process	Medium	High	17	Legal review throughout the MCA process	Medium	Medium		1	15	
	15	Community expectations for treatment	As the community has been through a similar process in the past, they are keen to dive into more detail and requesting additional work to be fast-tracked.	Design Manager	GHD	10/08/2021	Live - Treat	Optioneering	A treatment technology workshop is to be carried out to pool WWL, GHD and Veolia knowledge together and display the outputs to the community.	Medium	Medium	15	Review comms plan for engaging with the community and receiving feedback. Options to be developed at concept and prelim design stages.	Medium	Low	0.005	3	11	
	16	Councillors pre-determine consultation on options by having a clear preference	Councillors are aware of the previous work and have an indication of their preferred option, this could be conveyed to community and set pre-determined opinions.	Project Manager	GHD	10/08/2021	Live - Treat	Optioneering	More regular updates are required with Councillors to hear their feedback and to mitigate their concerns as they arise.	Medium	Medium	15	This may require additional work to address queries, however this would be the same as with addressing community queries via the website.	Medium	Low		3	11	
	17	Conflict of interests	Potentially Councillors or other key stakeholders own property near potential land discharge locations which may have internal influences on SWDC decision making.	Project Lead	WWL	10/08/2021	Live - Treat	Optioneering	Can a conflict be confirmed, legal advice to be sought.	Medium	Medium	15	Review by Buddle Findlay. And reminder/disclaimer updates provided at A&S meetings.	Low	Medium		3	10	
	18	Level of Iwi engagement	Level of Iwi engagement during delivery may cause delays or changes. At present an overarching Iwi agreement is not in place with WWL.	Project Manager	GHD	10/08/2021	Live - Treat	Consent	Progress meetings to review content in more detail. Arrange introductions at board level between WWL and Iwi	Medium	Medium	15	Reviews by Buddle Findlay, and regular updates by WWL. Pre/post workshop engagement. Buddle Findlay to support with examples from previous projects to communicate options and seek feedback.	Medium	Medium		3	15	
	19	Budget limitations / Affordability	The council has a limited budget as a placeholder for this project, and could change the delivery or effectiveness of the outcome.	Project Lead	WWL	10/08/2021	Live - Treat	Design Development	Regular engagement with SWDC and understand if staging strategies will impact options.	High	High	21	Staging of options to be developed to support option selection - to be progressed during consent application preparation. Meetings with WWL operations and SWDC to determine the operational improvements and priorities of upgrades.	High	High		6	21	
	20	Changes to RMA	Delays to programme and furture consenting considerations that may impact option selection	Planning Lead	GHD	10/08/2021	Live - Treat	Consent	Regular engagement with SWDC to close out queries and obtain approval to progress the project.	High	High	21	Regular meetings with GWRC to determine the details of the consent approach. Legal input early in the consent development. Environment monitoring plan to be developed and discussed with GWRC technical specialists	Medium	Medium			15	
	21	Risk of missing the Section 37 deadline of Feb 23	Delays progressing the MCA to determine the preferred option will delay the consent phase and result in enforcements from GWRC for operating without a valid consent	Project Manager	GHD	13/09/2021	Closed	Optioneering	Regular engagement with SWDC to close out queries and obtain approval to progress the project.	High	High	21	- Setup regular meetings with SWDC - Progress early environmental monitoring to mitigate delays - Regular engagement with GWRC to develop consent strategy	High	Medium			19	MCA process has been abandond to select an option based on affordability
	22	Currency of the feedback from stakeholders	Risk of re-visiting MCA if stakeholders change, work to date may diminish based length of time to complete.	Project Manager	GHD	8/12/2021	Live - Treat	Consent	Maintain regular communication and provide updates to key stakeholders involved in the MCA.	Medium	Medium	15	- Maintain regular communication with stakeholders and understand if there are any changing resources and priorities. - Ensure all engagement is minuted clearly - Mitigate delay between completing the MCA and starting consent preparation	Medium	Low			11	
	23	Risk of missing the Section 37 deadline of Feb 23	There is a short amount of time to prepare the consent application and consult with key stakeholders before submission. This is cause by not obtaining endorsement to proceed with the project.	Project lead	WWL	5/05/2022	Live - Treat	Consent	Escalate issue with SWDC and collaborate on defining decision making criteria to proceed.	High	Medium	19	Agree the scope of work with SWDC and mobilise team to start consent preparation as soon as possible - in progress Setup regular working groups with key stakeholders to have regular input in the design and application.	High	Low			16	
	24	Robustness of option assessment process	The original option assessment phase did not concluded with the Multi Criteria Assessment (MCA) stopping after workshop 3. No option assessment has been completed for the design of the upgrades in the Short term consent.	Planning Lead	WWL	14/06/2022	Live - Treat	Consent	Monitor risk as design and consent preparation progresses. Some option assessments may need to be commented on or developed by the design team during the consent preparation.	Medium	Medium	15	Monitor risk, mitigation to be developed					0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0						0	
												0				$10.01M	65 months		

Risk Status	
Count populated rows	25
Draft	0
Live - Treat	23
Live - Parked	0
Impacted	0
Closed	2
Rejected	0
Blank	12

Current Risk Score	
Extreme	4
High	19
Moderate	2
Low	0
Zero	12
TOTAL	**37**

Residual Risk Score			
Extreme			1
High			8
Moderate			13
Low			2
Zero			12
TOTAL			**36**

ROADING AND AMENITIES OFFICERS' REPORT

This report was presented to the Assets and Services Committee on 13 July 2022.

7. Group Manager Commentary

COVID continues to affect the delivery of programmed outcomes. Fulton Hogan has 9 staff absent from their Masterton depot this week, and Carterton District Council was forced to close its offices due to the ill health of staff. Supply delays are frustrating the timely delivery of projects and price increases are affecting pricing.

The response to the landslide at Hinekura Road has dominated the time of the roading team, as we plan for a new alignment of the road, make improvements to the alternative route via Admiral Hill, explore funding options, and respond to community requests.

The roading team was within 1% of their budget target of $4m in what has been a busy and challenging financial year.

8. SWDC Roading Report

8.1 Supply Implications

Supply and delivery implications are not only impacted by Covid but also the growth in the construction sector. The growth is creating a demand in competition for all products driving supply chain delays and increased costs, there is no sign that this demand for products is going to abate. Covid 19 absenteeism is also impacting on delivery outputs and cashflow delays.

8.2 Hinekura Road

Following the landslide in June, initial response was initiated on Moeraki, Ngakonui and Wainuioru Roads, works included:

- Maintenance metaling
- Vegetation control
- Daylighting for visibility improvements

An initial funding request has been approved by Waka Kotahi for emergency works for $200,000 ($100,000 for both 2021/22 and 2022/23 years). This funding has allowed for initial response to the landslide and for ongoing investigation and testing for the proposed realignment.

8.3 Emergency Works

Throughout the financial year there were three climatic events which activated a funding request to Waka Kotahi for additional funding under emergency works. The requests have been approved in full. They cover immediate and initial response and reinstatement back to conditions prior to the event. The reinstatement requests are to be funded in 2022/2023 year.

A) A storm event in February 2002 damaged the local road network and triggered a request based on the initial cost of $150,000 for 2021/2022 year which $144,277 has been spent and a reinstatement cost of $172,179 requested for 2022/23 financial year.
B) A coastal swell event in April 2002 damaged Cape Palliser Road coastal protection infrastructure and triggered a request based on the initial cost of $84,010 for 2021/2022 year which $81,854 has been spent and a reinstatement cost of $771,562 requested for 2022/23 financial year.

C) A second Coastal swell event in May 2002 again damaged Cape Palliser Road coastal protection and roading and drainage infrastructure and triggered a request based on the initial cost of $24,240 for 2021/2022 year which $18,109 has been spent and a reinstatement cost of $334,134 requested for 2022/23 financial year.

8.4 Outputs

The report covers the period of works completed up to the end of June 2022, being 100% of the 2021/2022 financial year. The percentages shown below are based on works completed to date on Waka Kotahi financially assisted annual budget. Works in several maintenance categories are seasonal so the spend will reflect this variance.
A brief commentary describing key achievements during June 2022 noting key completed works are noted under each work category below.

8.4.1. OPEX

- Sealed Road Pavement Maintenance spend is 94% on Local Roads and 121% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

  192.543 of sealed roads inspected and faults loaded into RAMM
  24 sealed potholes were identified.

- Unsealed Road Pavement Maintenance spend is 102% on Local Roads and 129% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

- 67.191 km of unsealed roads inspected, and faults loaded into RAMM
  109.323km of unsealed roads graded

- Drainage Maintenance spend is 91% on Local Roads and 172% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.
  98 culverts were inspected
  77.51km of streets mechanically swept
  318.214 km of rural roadside drains sprayed

- Structural Maintenance spend is 131% on Local Roads and 21% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

  20 bridges were inspected.
  Rip Rap rock is currently being delivered to Cape Palliser Road for strengthening of existing rock revetments

- Environmental Maintenance spend is 98% on Local Roads and 92% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

  497.252km of rural berms mowed
  314.996km of roadside furniture sprayed

- Minor Events spend is 135% on Local Roads and 250% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

  Expenditure is due to response to weather events in the year to date. If further budget is required, it will be reallocated from other Maintenance cost codes.
  An additional funding request has been Made to Waka Kotahi under emergency works and has yet to be approved

- Traffic Services spend is 10% on Local Roads and 153% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.
  Annual remark of roadmaking has been completed.

- Cycle Path Maintenance spend is 5% on Local Roads in relation to Waka Kotahi annual budgets allocation.

  Spraying and mowing adjacent to the Western Lake Road Cycle path have been completed from Environmental Maintenance budget.

- Footpath Maintenance spend is 92% on Local Roads in relation to Waka Kotahi annual budgets allocation.
  Works have been completed allowing focus to shift to renewals in the new year.

- Rail Level Crossing Warning Device Maintenance spend is 155% on Local Roads in relation to Waka Kotahi annual budgets allocation.
  Direct cost from KiwiRail. Over budget due to lightning strike at Woodside lights

- Network and asset management spend is 98% on Local Roads and 105% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.
  Four traffic counters were installed and count data added to RAMM.
  General and Engineers Bridge inspection have been completed by WSP consultants and reports are being developed.

8.4.2. CAPEX

- Unsealed Road Metaling spend is 86% on Local Roads and 132% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.
  2419.2 m3 of maintenance metal applied

- Sealed Road Resurfacing spend is 105% on Local Roads and 91% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.
  Works were completed by early February and design is impacted by the short supply of various grades of sealing chip.

  Special Purpose Road resealing is complete with remarking now claimed.

- Drainage Renewals spend is 101% on Local Roads and 135% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

- Pavement Rehabilitation spend is 94% on Local Roads in relation to Waka Kotahi annual budgets allocation.

  Western Lake Road sites have been completed and outputs have been reduced due to budget constraints

- Traffic Service spend is 98% on Local Roads and 19% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

- Structural components renewals spend is 33% on Local Roads and 0% on Special Purpose Road in relation to Waka Kotahi annual budgets allocation.

- Footpath Renewals spend is 103% on Local Roads in relation to Waka Kotahi annual budgets allocation.

Fox, Revans and Bell Streets in Featherston concrete renewals have been completed and Revan Street from Railway line to Royal Hotel is outstanding which will be Asphalt and carried over to next year.

8.4.3. Footpath and Kerb and Channel extensions

Works have commenced in Greytown along Wood and Massey Streets with positive feedback form residents. The Wood Street extension provides connectivity to the Hewson Lane development and safe walking access to a Bus Stop. Massey street provides connectivity between McMaster and Jellicoe Street and walking access to a bus stop on Massey Street, also the opportunity was taken to narrow an over width street to current design standards.

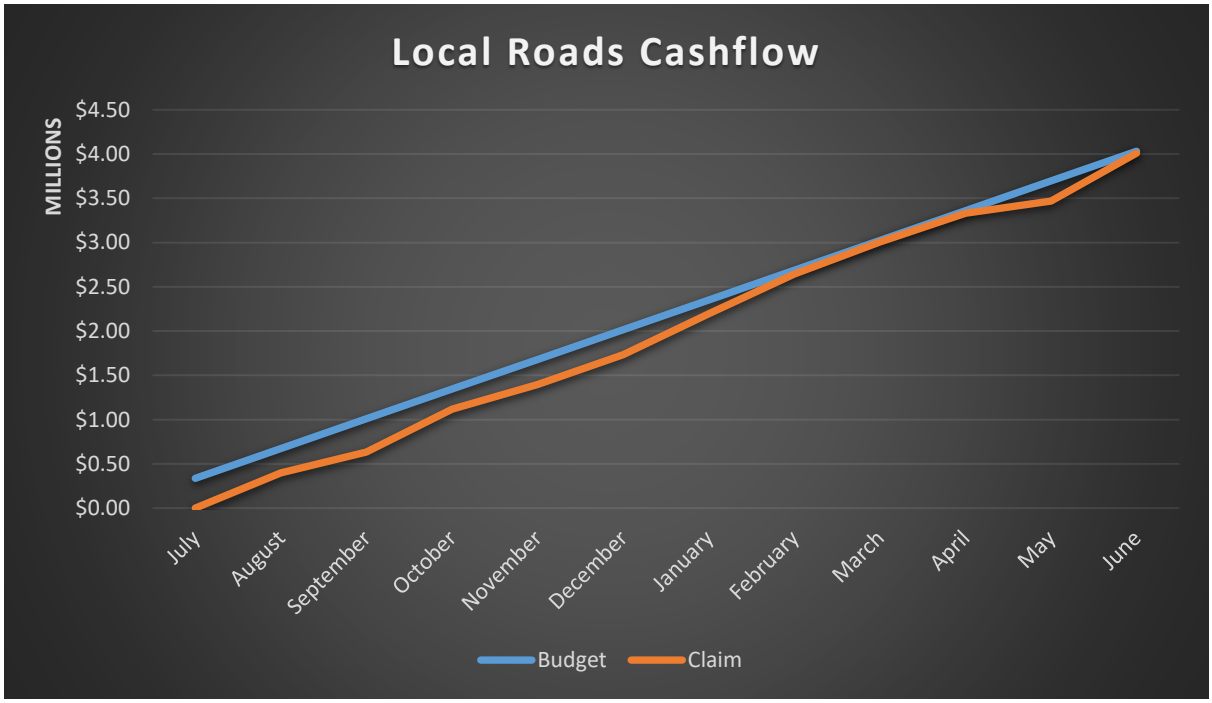
Kerb and Channel was extended on Watt Street Featherston from Harrison St to Churchill Crescent, contributions for kerb and channel extension had previously been taken as part of a subdivision consent as road stormwater had run into the subdivided property.

Works underway to extend footpaths and kerb and channel in Wallace Street Featherston and Regent Street Martinborough.

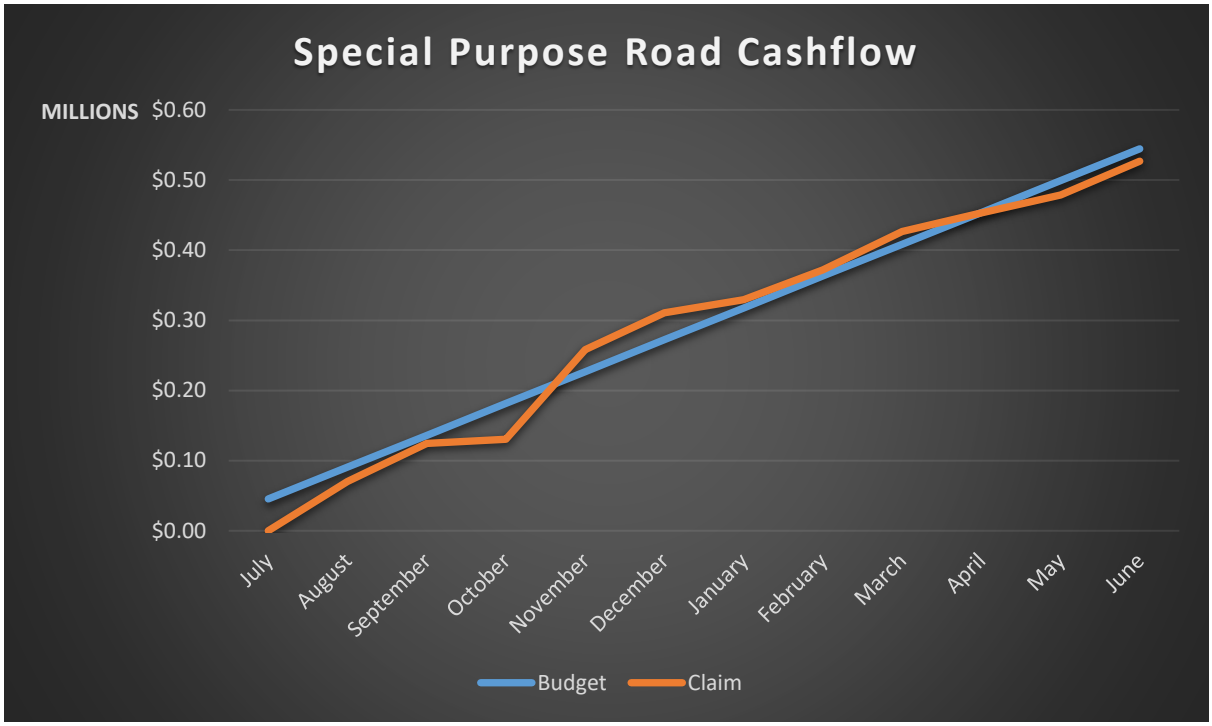
Bidwills Cutting Footpath extension is programmed for July to coincide with the school holidays.

8.5 Tracking summary of OPEX and CAPEX to 30 June 2022

Approved Waka Kotahi Budget $4,032,000 year to date spend $4,010,432 =**99.5%**

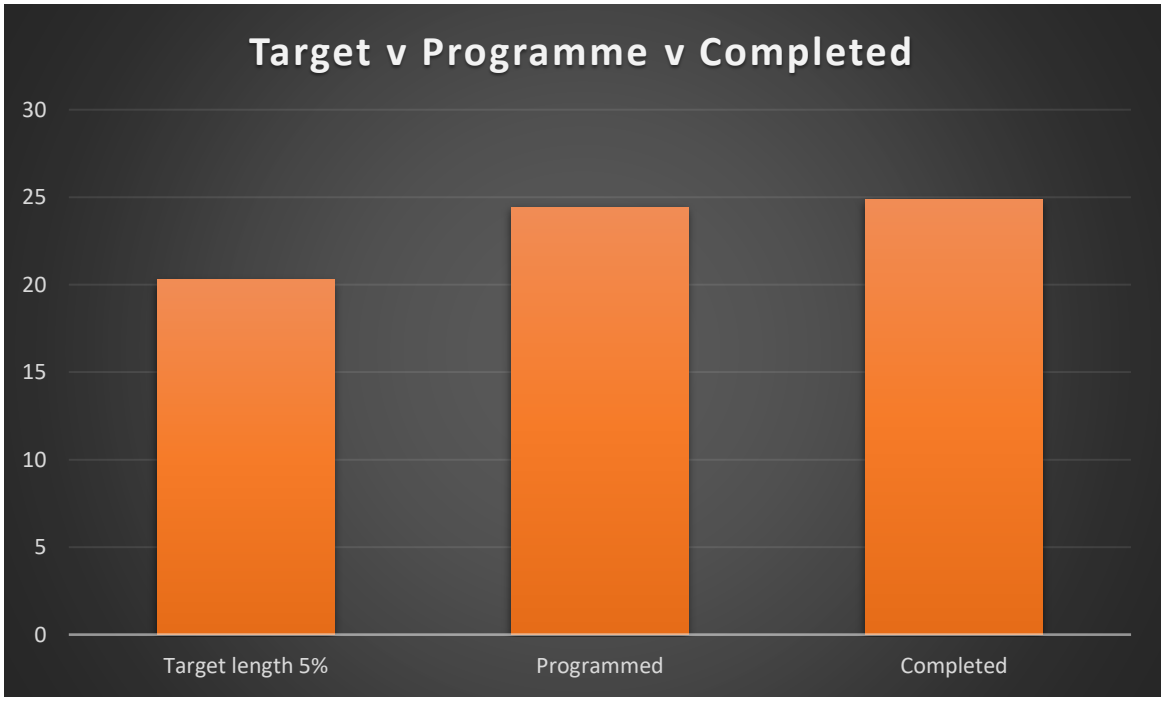


Approved Waka Kotahi Budget $544,500 year to date spend $526,582 =**96.7%**

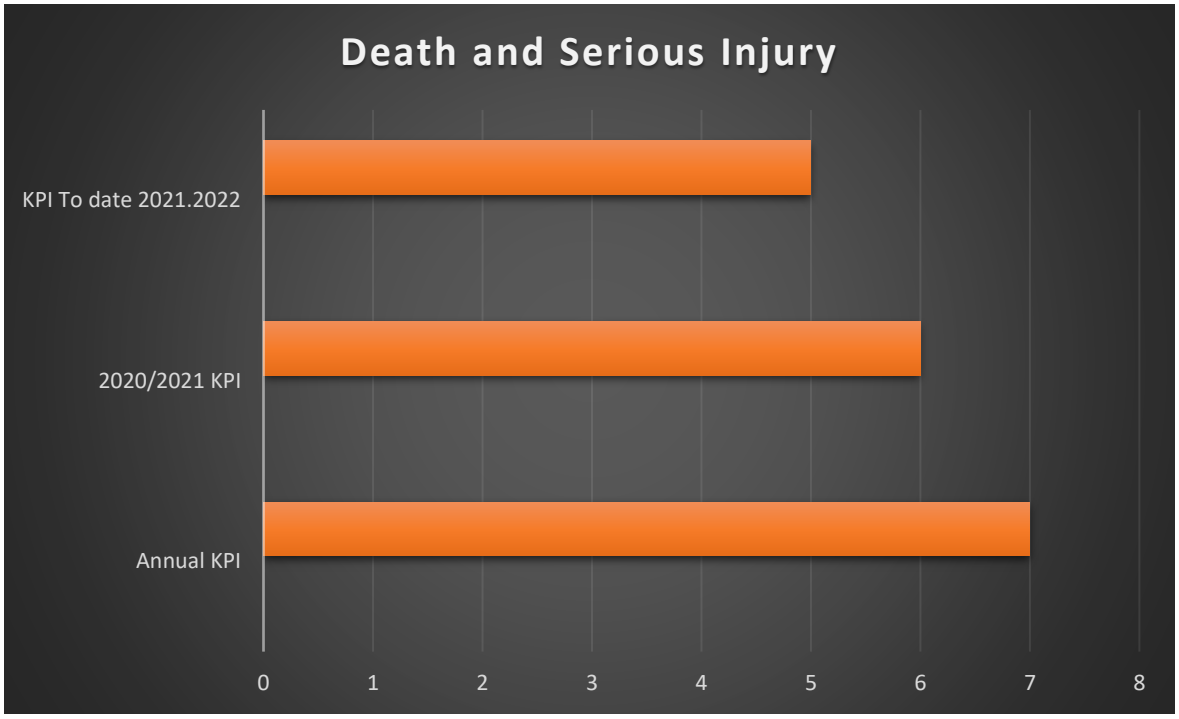


8.6 Key Performance Indicators (Year to date reporting)

- 5% of sealed roads are resealed each year subject to availability of NZTA subsidy
- Length of sealed network 405.7 km 5% equates to 20.3 km. 24.89 km complete.

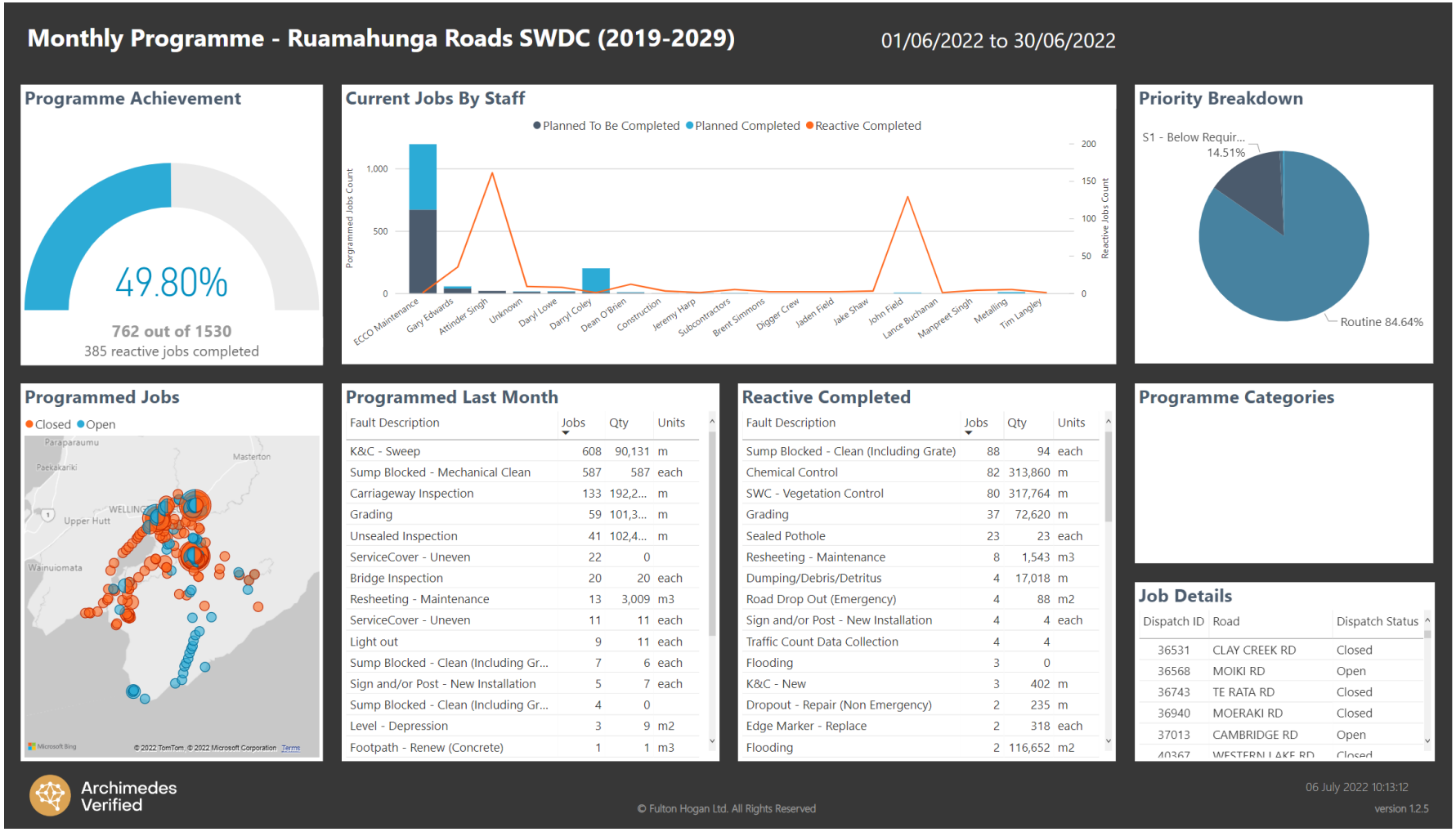


- Change in number of fatalities and serious injury crashes on the local road network from previous year. Performance target is < 7.
- The data below has been extracted for Waka Kotahi Crash Analysis System. Generally, there a time lag from the accident to data being uploaded to the system.


Death and Serious Injury
KPI To date 2021.2022
2020/2021 KPI
Annual KPI
0
1
2
3
4
5
6
7
8

8.7 Fulton Hogan Monthly reporting on Ruamahanaga Roads Contract

8.7.1. Achievement Dashboard



Fault Description	Jobs	Qty	Units
K&C - Sweep	608	90,131	m
Sump Blocked - Mechanical Clean	587	587	each
Carriageway Inspection	133	192,2...	m
Grading	59	101,3...	m
Unsealed Inspection	41	102,4...	m
ServiceCover - Uneven	22	0	
Bridge Inspection	20	20	each
Resheeting - Maintenance	13	3,009	m3
ServiceCover - Uneven	11	11	each
Light out	9	11	each
Sump Blocked - Clean (Including Gr...	7	6	each
Sign and/or Post - New Installation	5	7	each
Sump Blocked - Clean (Including Gr...	4	0	
Level - Depression	3	9	m2
Footpath - Renew (Concrete)	1	1	m3

Fault Description	Jobs	Qty	Units
Sump Blocked - Clean (Including Grate)	88	94	each
Chemical Control	82	313,860	m
SWC - Vegetation Control	80	317,764	m
Grading	37	72,620	m
Sealed Pothole	23	23	each
Resheeting - Maintenance	8	1,543	m3
Dumping/Debris/Detritus	4	17,018	m
Road Drop Out (Emergency)	4	88	m2
Sign and/or Post - New Installation	4	4	each
Traffic Count Data Collection	4	4	
Flooding	3	0	
K&C - New	3	402	m
Dropout - Repair (Non Emergency)	2	235	m
Edge Marker - Replace	2	318	each
Flooding	2	116,652	m2

Dispatch ID	Road	Dispatch Status
36531	CLAY CREEK RD	Closed
36568	MOIKI RD	Open
36743	TE RATA RD	Closed
36940	MOERAKI RD	Closed
37013	CAMBRIDGE RD	Open
40367	WESTERN LAKE RD	Closed

8.8 Waka Kotahi Communities at risk registrar

The Communities at Risk Register has been developed by the Transport Agency to identify communities of road users that are over-represented in terms of road safety risk. The register highlights personal risk to road users by ranking communities by local authority area based on areas of concern.

8.8.1. Collective Risk (or Crash Density)

Collective Risk is a measure of the total number of fatal and serious injury crashes per kilometre over a section of road, as described in the equation below. (Collective Risk can also be described as the Crash Density).

$$\text{Collective Risk} = \frac{\text{(Fatal crashes + serious injury crashes) / number of years of data}}{\text{Length of road section (excl urban sections)}}$$

Collective Risk highlights which road links have a high number of fatal and serious crashes on them – which can be used to help determine where the greatest road safety gains can be made from investment in engineering. Collective risk is perhaps of most interest to the road controlling authorities as this highlights where infrastructure improvements are most likely to be cost effective. It is also of interest to NZ Police from an enforcement perspective.

Because Collective Risk is measured in terms of the number of crashes per kilometre, you would generally expect that those with higher traffic volumes would have a higher Collective Risk. However, all risk cannot be eliminated through infrastructure improvements alone. The driver or rider must always share responsibility for a safe road system. The Risk Maps strengthen the connection between infrastructure and personal responsibility by highlighting sections of road where safety improvements are warranted, but also where drivers and riders may need to take extra care to minimise their risk.

8.8.2. Personal Risk (or Crash Rate)

Personal Risk is a measure of the danger to each individual using the state highway being assessed, as described in the equation below:

$$\text{Personal Risk} = \frac{\text{(Fatal crashes + serious injury crashes) / number of years of data}}{\text{Distance travelled / number of years of data}}$$

Unlike Collective Risk, Personal Risk takes into account the traffic volumes on each section of state highway. Personal Risk shows the likelihood of a driver or rider, on average, being involved in a fatal or serious road crash on a particular stretch of road. Personal Risk is of most interest to the public, as it shows the risk to road users, as individuals. A risk aware driver or rider will be better informed and more able to modify their behaviour to respond to the conditions. Personal Risk is typically higher in more difficult terrain where traffic volumes and road standards are often lower. In many cases infrastructure improvements on these roads are unlikely to be cost effective and other Safe System interventions such as safer road use and safe speeds need to be explored.

All deaths and serious casualties

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
13	Wairoa District		16
11	Gisborne District		49
11	Waitomo District		26
10	Kaipara District		35
10	Ōtorohanga District		14
10	Far North District		85
9	Masterton District		19
9	South Waikato District		37
9	Buller District		17
9	Whanganui District	1 STDEV	28
8	Ōpōtiki District		13
8	Stratford District		11
8	Tararua District		24
8	South Taranaki District		28
8	Horowhenua District	0.5 STDEV	32
8	Taupo District		51
7	Auckland Rural South		66
7	Whakatane District		33
7	New Plymouth District		51
7	Auckland Rural North		77
7	Hastings District		65
7	Westland District		16
7	Dunedin City		72
7	Tasman District		43
7	South Wairarapa District		10
7	Matamata-Piako District		51
7	Manawatu District		33
7	Palmerston North City		37
7	Invercargill City		28
7	Gore District		11
7	Whangarei District		70
7	Rotorua District		52
7	Southland District	MEAN	52
7	Waitaki District		28
7	Nelson City		28
6	Rangitikei District		23
6	Western Bay Of Plenty District		52
6	Clutha District		24
6	Waimate District		11
6	Ruapehu District		15
6	Carterton District		6
6	Hurunui District		24
6	Marlborough District		31
6	Hauraki District		27
6	Central Hawkes Bay District		13
6	Thames-Coromandel District		24
6	Waikato District		92
6	Wellington City		73
6	Grey District		10
5	Napier City		26
5	Central Otago District		24
5	Mackenzie District		11
5	Upper Hutt City		16
5	Kawerau District		1
5	Hamilton City		60
5	Waipa District		38
5	Kapiti Coast District		26
5	Timaru District		28
5	Christchurch City		138
5	Selwyn District		51
5	Hutt City		36
5	Waimakariri District		31
5	Auckland Urban South		177
5	Auckland Urban West		53
5	Porirua City		25
4	Queenstown-Lakes District		29
4	Tauranga City		47
4	Ashburton District		22
4	Kaikoura District		5
4	Auckland Urban Central		188
2	Auckland Urban North		86
	Auckland Gulf Islands		5
	Chatham Islands Council		1

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
9	NORTHLAND	190
5	AUCKLAND	652
7	WAIKATO	420
6	BAY OF PLENTY	197
8	TARANAKI	91
7	MANAWATŪ-WHANGANUI	193
11	GISBORNE	49
8	HAWKE'S BAY	120
6	WELLINGTON	211
6	TASMAN NELSON MARLBOROUGH	101
7	WEST COAST	42
5	CANTERBURY	340
6	OTAGO	177
7	SOUTHLAND	92
6	NATIONAL	2,876

Young drivers (of light vehicles aged 16-24yrs)

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
35	Kaipara District		11
23	Whanganui District		9
22	Buller District		3
22	Far North District		23
21	Gore District		4
20	Ōtorohanga District		4
20	Horowhenua District		9
20	Central Otago District	1 STDEV	8
19	Tararua District		7
19	Southland District		18
18	Taupo District		15
18	Clutha District		9
18	Invercargill City		10
18	Ōpōtiki District		3
18	Masterton District		4
18	Waitaki District		8
18	Hauraki District		9
17	Stratford District		3
17	New Plymouth District		15
17	Westland District	0.5 STDEV	3
16	Manawatu District		10
16	Western Bay Of Plenty District		15
16	Central Hawkes Bay District		4
16	Whakatane District		9
16	Auckland Rural South		19
16	Thames-Coromandel District		6
15	Waitomo District		6
15	Kapiti Coast District		9
15	Whangarei District		19
15	Auckland Rural North		20
15	Gisborne District		9
15	Waimate District		3
15	Dunedin City		22
14	South Waikato District		8
14	Tasman District		10
14	Rotorua District	MEAN	16
14	Wairoa District		2
14	Hastings District		17
14	Rangitikei District		6
14	Palmerston North City		12
14	South Taranaki District		6
13	Timaru District		9
13	Nelson City		6
13	Napier City		8
12	Carterton District		2
12	Matamata-Piako District		12
12	Hurunui District		5
12	Waipa District		11
12	Ruapehu District		4
12	Waikato District		25
11	South Wairarapa District		1
11	Christchurch City		43
10	Auckland Urban West		16
10	Hamilton City		19
10	Queenstown-Lakes District		6
10	Upper Hutt City		4
10	Marlborough District		5
10	Auckland Urban South		33
10	Ashburton District		6
9	Porirua City		7
9	Waimakariri District		7
9	Hutt City		8
9	Wellington City		15
8	Grey District		2
7	Selwyn District		10
7	Auckland Urban Central		45
6	Tauranga City		10
6	Auckland Urban North		25
4	Mackenzie District		1
0	Kaikoura District		0
0	Kawerau District		0
	Auckland Gulf Islands		0
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
24	NORTHLAND	53
11	AUCKLAND	179
15	WAIKATO	113
12	BAY OF PLENTY	52
16	TARANAKI	24
17	MANAWATŪ-WHANGANUI	56
15	GISBORNE	9
14	HAWKE'S BAY	31
12	WELLINGTON	50
12	TASMAN NELSON MARLBOROUGH	21
16	WEST COAST	8
9	CANTERBURY	84
16	OTAGO	54
19	SOUTHLAND	33
12	NATIONAL	768

Alcohol and/or drugs

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
4	Ōtorohanga District		5
3	Gisborne District		11
3	Kaipara District		9
3	Far North District		23
3	Waitomo District		6
2	Wairoa District		3
2	Horowhenua District		7
2	Masterton District		4
2	South Taranaki District		6
2	Waimate District	1 STDEV	3
2	Taupo District		12
2	Stratford District		2
2	Hauraki District		7
2	Western Bay Of Plenty District		13
2	Whakatane District		7
2	Whangarei District	0.5 STDEV	15
2	Manawatu District		7
2	Buller District		3
1	New Plymouth District		10
1	Tararua District		4
1	Auckland Rural South		13
1	Invercargill City		6
1	Auckland Rural North		15
1	Ōpōtiki District		2
1	Palmerston North City		7
1	Whanganui District		4
1	Dunedin City		13
1	South Waikato District	MEAN	5
1	Rotorua District		9
1	Southland District		9
1	Grey District		2
1	Rangitikei District		4
1	Marlborough District		6
1	Tasman District		7
1	Westland District		2
1	Waimakariri District		7
1	Waitaki District		4
1	Central Otago District		4
1	Matamata-Piako District		7
1	Hastings District		9
1	Auckland Urban South		37
1	Auckland Urban West		11
1	Waikato District		16
1	Hurunui District		4
1	Thames-Coromandel District		4
1	Napier City		4
1	Timaru District		5
1	Nelson City		4
1	Hutt City		6
1	Christchurch City		27
1	Selwyn District		8
1	Porirua City		4
1	Waipa District		6
1	Mackenzie District		2
1	Upper Hutt City		2
1	Kawerau District		0
1	South Wairarapa District		1
1	Kapiti Coast District		3
1	Hamilton City		8
1	Auckland Urban Central		31
1	Central Hawkes Bay District		2
1	Wellington City		8
1	Queenstown-Lakes District		4
1	Clutha District		2
1	Ruapehu District		1
1	Carterton District		1
1	Ashburton District		3
0	Auckland Urban North		14
0	Tauranga City		5
0	Kaikoura District		0
0	Gore District		0
	Auckland Gulf Islands		1
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
2	NORTHLAND	47
1	AUCKLAND	123
2	WAIKATO	75
1	BAY OF PLENTY	36
2	TARANAKI	18
1	MANAWATŪ-WHANGANUI	35
3	GISBORNE	11
1	HAWKE'S BAY	18
1	WELLINGTON	30
1	TASMAN NELSON MARLBOROUGH	17
1	WEST COAST	7
1	CANTERBURY	59
1	OTAGO	27
1	SOUTHLAND	15
1	NATIONAL	319

Speed (too fast for the conditions)

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
4	Gisborne District		18
4	Masterton District		7
3	Far North District		28
3	Buller District		6
3	Wairoa District		4
3	Waitomo District		7
3	Whanganui District		9
3	South Waikato District		11
3	Kaipara District		10
2	Whakatane District		11
2	Westland District	1 STDEV	5
2	Ōpōtiki District		3
2	South Taranaki District		7
2	Taupo District		14
2	Ōtorohanga District		3
2	Palmerston North City	0.5 STDEV	11
2	Whangarei District		19
2	Stratford District		2
2	Gore District		3
2	Horowhenua District		7
2	Carterton District		2
2	Auckland Rural South		16
2	Hauraki District		8
2	Western Bay Of Plenty District		13
2	Nelson City		7
2	Rotorua District		13
2	Hastings District		15
2	Mackenzie District		3
2	Kawerau District	MEAN	0
2	Tasman District		10
2	New Plymouth District		11
2	Matamata-Piako District		10
1	Auckland Rural North		16
1	Hutt City		11
1	Waipa District		11
1	Hurunui District		7
1	Central Otago District		6
1	Auckland Urban West		15
1	Auckland Urban South		31
1	Tararua District		4
1	Manawatu District		6
1	Dunedin City		12
1	Waikato District		22
1	Invercargill City		5
1	Thames-Coromandel District		5
1	Waimate District		2
1	South Wairarapa District		2
1	Southland District		10
1	Porirua City		7
1	Central Hawkes Bay District		2
1	Napier City		6
1	Clutha District		4
1	Rangitikei District		4
1	Waitaki District		5
1	Upper Hutt City		3
1	Christchurch City		32
1	Queenstown-Lakes District		7
1	Ruapehu District		3
1	Grey District		2
1	Hamilton City		12
1	Wellington City		13
1	Marlborough District		5
1	Timaru District		5
1	Ashburton District		5
1	Tauranga City		10
1	Kapiti Coast District		4
1	Selwyn District		6
1	Auckland Urban Central		32
1	Waimakariri District		4
0	Auckland Urban North		17
0	Kaikoura District		1
	Auckland Gulf Islands		1
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
3	NORTHLAND	57
1	AUCKLAND	149
2	WAIKATO	103
2	BAY OF PLENTY	51
2	TARANAKI	20
2	MANAWATŪ-WHANGANUI	44
4	GISBORNE	18
2	HAWKE'S BAY	27
2	WELLINGTON	49
1	TASMAN NELSON MARLBOROUGH	22
2	WEST COAST	13
1	CANTERBURY	65
1	OTAGO	35
1	SOUTHLAND	18
1	NATIONAL	672

Urban intersections

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
8	Wairoa District		2
7	Ōpōtiki District		1
7	Waimate District		1
6	Waitomo District		1
6	Waitaki District		4
5	Horowhenua District		4
5	Buller District		2
5	Ruapehu District		1
5	Invercargill City		12
5	Stratford District	1 STDEV	1
4	Whanganui District		7
4	Dunedin City		22
4	Tararua District		2
4	New Plymouth District		11
4	Matamata-Piako District		4
4	Gisborne District	0.5 STDEV	6
3	Wellington City		26
3	Manawatu District		2
3	Hastings District		10
3	South Taranaki District		3
3	Hauraki District		2
3	South Waikato District		2
3	Marlborough District		4
3	Waikato District		7
3	Christchurch City		74
3	Palmerston North City		10
3	Auckland Urban South		67
3	Waipa District		5
3	Far North District		4
3	Kaipara District	MEAN	2
3	Carterton District		1
3	Napier City		8
3	Rotorua District		9
3	Hutt City		12
3	Nelson City		8
3	Rangitikei District		1
3	Whangarei District		10
2	Taupo District		3
2	Tasman District		3
2	Gore District		1
2	Grey District		1
2	Kawerau District		0
2	Auckland Urban Central		71
2	Auckland Rural North		3
2	Central Otago District		1
2	Hamilton City		19
2	Upper Hutt City		3
2	Masterton District		2
2	Tauranga City		14
2	Kapiti Coast District		4
2	Whakatane District		2
2	Auckland Rural South		4
2	Auckland Urban West		15
2	Westland District		0
2	Ashburton District		2
2	Selwyn District		3
2	South Wairarapa District		0
2	Timaru District		3
1	Thames-Coromandel District		2
1	Queenstown-Lakes District		3
1	Ōtorohanga District		0
1	Porirua City		3
1	Waimakariri District		2
1	Auckland Urban North		25
1	Western Bay Of Plenty District		1
1	Southland District		0
1	Central Hawkes Bay District		0
0	Cluths District		0
0	Hurunui District		0
0	Kaikoura District		0
0	Mackenzie District		0
	Auckland Gulf Islands		1
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
3	NORTHLAND	16
2	AUCKLAND	187
3	WAIKATO	45
3	BAY OF PLENTY	28
4	TARANAKI	15
4	MANAWATŪ-WHANGANUI	27
4	GISBORNE	6
4	HAWKE'S BAY	20
2	WELLINGTON	51
3	TASMAN NELSON MARLBOROUGH	15
3	WEST COAST	3
2	CANTERBURY	85
3	OTAGO	30
3	SOUTHLAND	13
2	NATIONAL	342

Rural intersections

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
3	Palmerston North City		5
3	Hamilton City		6
2	Selwyn District		20
2	Central Hawkes Bay District		5
2	Invercargill City		3
2	Manawatu District		9
2	Carterton District		2
2	Auckland Rural South		13
2	Waimakariri District		9
2	Timaru District		6
2	Upper Hutt City		3
2	South Waikato District		6
2	Matamata-Piako District	1 STDEV	10
1	New Plymouth District		6
1	South Taranaki District		3
1	Tararua District	0.5 STDEV	3
1	Waitaki District		5
1	Horowhenua District		4
1	Auckland Rural North		11
1	Whakatane District		4
1	Hutt City		3
1	Southland District		8
1	Nelson City		1
1	Ashburton District		4
1	Stratford District		1
1	Clutha District		3
1	Hastings District		6
1	Tasman District	MEAN	4
1	Western Bay Of Plenty District		7
1	Waimate District		2
1	Waipa District		5
1	Whanganui District		1
1	Kapiti Coast District		3
1	Waikato District		13
1	Hurunui District		3
1	Far North District		7
1	Christchurch City		6
1	Ōtorohanga District		1
1	Masterton District		1
1	Whangarei District		5
1	Rotorua District		4
1	South Wairarapa District		1
1	Thames-Coromandel District		2
1	Marlborough District		3
1	Ōpōtiki District		1
1	Gisborne District		2
1	Dunedin City		3
1	Central Otago District		3
1	Napier City		1
1	Taupo District		3
1	Hauraki District		2
1	Rangitikei District		2
1	Kaipara District		1
1	Queenstown-Lakes District		3
1	Gore District		1
1	Porirua City		2
0	Ruapehu District		1
0	Waitomo District		1
0	Mackenzie District		1
0	Westland District		1
0	Wellington City		1
0	Tauranga City		1
0	Wairoa District		0
0	Auckland Urban North		3
0	Kaikoura District		0
0	Auckland Urban West		1
0	Auckland Urban South		4
0	Grey District		0
0	Buller District		0
0	Auckland Urban Central		1
0	Kawerau District		0
	Auckland Gulf Islands		0
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
1	NORTHLAND	13
1	AUCKLAND	32
1	WAIKATO	51
1	BAY OF PLENTY	17
1	TARANAKI	10
1	MANAWATŪ-WHANGANUI	25
1	GISBORNE	2
1	HAWKE'S BAY	12
1	WELLINGTON	16
1	TASMAN NELSON MARLBOROUGH	8
0	WEST COAST	1
1	CANTERBURY	30
1	OTAGO	17
1	SOUTHLAND	12
1	NATIONAL	265

All intersections

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
4	Invercargill City		15
3	Palmerston North City		15
3	Whanganui District		8
3	Dunedin City		25
2	Christchurch City		79
2	New Plymouth District		17
2	Hamilton City		26
2	Selwyn District		22
2	Manawatu District		11
2	Carterton District	1 STDEV	2
2	Horowhenua District		8
2	Nelson City		10
2	Waitaki District		9
2	Wellington City		28
2	Hutt City		15
2	Central Hawkes Bay District		5
2	Napier City		9
2	Matamata-Piako District		15
2	South Waikato District		8
2	Gisborne District		8
2	Upper Hutt City		6
2	Stratford District		2
2	Auckland Rural South	0.5 STDEV	17
2	Auckland Urban South		71
2	South Taranaki District		6
2	Hastings District		16
2	Tararua District		5
2	Waimakariri District		11
2	Timaru District		9
2	Kawerau District		0
2	Rotorua District		13
1	Wairoa District	MEAN	2
1	Ōpōtiki District		2
1	Auckland Urban Central		72
1	Whangarei District		15
1	Waimate District		3
1	Masterton District		3
1	Auckland Rural North		15
1	Whakatane District		6
1	Waipa District		10
1	Auckland Urban West		16
1	Tauranga City		16
1	Marlborough District		7
1	Kapiti Coast District		7
1	Tasman District		7
1	Far North District		11
1	Waikato District		20
1	Ashburton District		6
1	Southland District		8
1	Gore District		2
1	Kaipara District		3
1	Buller District		2
1	Western Bay Of Plenty District		8
1	Thames-Coromandel District		4
1	Waitomo District		2
1	Hauraki District		4
1	Grey District		2
1	Taupo District		6
1	South Wairarapa District		1
1	Ōtorohanga District		1
1	Porirua City		5
1	Clutha District		3
1	Central Otago District		4
1	Queenstown-Lakes District		6
1	Hurunui District		3
1	Auckland Urban North		28
1	Rangitikei District		3
1	Ruapehu District		2
0	Westland District		1
0	Mackenzie District		1
0	Kaikoura District		0
	Auckland Gulf Islands		1
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
1	NORTHLAND	29
1	AUCKLAND	219
1	WAIKATO	96
1	BAY OF PLENTY	45
2	TARANAKI	25
2	MANAWATŪ-WHANGANUI	52
2	GISBORNE	8
2	HAWKE'S BAY	32
2	WELLINGTON	66
2	TASMAN NELSON MARLBOROUGH	24
1	WEST COAST	5
1	CANTERBURY	134
1	OTAGO	47
2	SOUTHLAND	25
2	NATIONAL	808

Rural road loss of control and/or head-on (speed zones >70km/hr)

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
12	Wairoa District		13
12	Gisborne District		29
9	Waitomo District		19
8	Kaipara District		22
8	Ōtorohanga District		9
7	Stratford District		7
7	Buller District		12
7	Masterton District		8
7	Far North District		34
7	South Waikato District	1 STDEV	23
7	Whanganui District		10
7	Gore District		8
6	Westland District		13
6	Taupo District		35
6	Tararua District		15
6	South Wairarapa District		7
6	Whakatane District		19
6	Clutha District		19
6	Auckland Rural South	0.5 STDEV	39
6	South Taranaki District		14
5	Whangarei District		34
5	Auckland Rural North		47
5	Hastings District		32
5	Horowhenua District		15
5	Rotorua District		22
5	Ōpōtiki District		7
5	Tasman District		23
5	Southland District		35
5	Thames-Coromandel District		13
5	Hurunui District		17
5	Matamata-Piako District		27
4	Ruapehu District	MEAN	11
4	Waitaki District		15
4	Rangitikei District		15
4	Waimate District		7
4	Mackenzie District		8
4	Central Otago District		17
4	Timaru District		15
4	New Plymouth District		17
4	Nelson City		5
4	Manawatu District		17
4	Western Bay Of Plenty District		29
4	Grey District		5
4	Hauraki District		16
4	Palmerston North City		6
4	Central Hawkes Bay District		7
4	Waipa District		21
4	Dunedin City		18
4	Invercargill City		5
4	Marlborough District		14
3	Waikato District		46
3	Hamilton City		7
3	Kaikoura District		3
3	Napier City		4
3	Waimakariri District		14
3	Carterton District		2
3	Selwyn District		23
3	Kapiti Coast District		8
3	Queenstown-Lakes District		12
2	Ashburton District		11
2	Upper Hutt City		4
2	Christchurch City		15
1	Hutt City		4
1	Auckland Urban West		4
1	Tauranga City		5
1	Porirua City		3
1	Wellington City		5
1	Auckland Urban South		12
1	Auckland Urban North		8
0	Auckland Urban Central		7
0	Kawerau District		0
	Auckland Gulf Islands		1
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
7	NORTHLAND	110
2	AUCKLAND	117
5	WAIKATO	217
3	BAY OF PLENTY	83
6	TARANAKI	39
5	MANAWATŪ-WHANGANUI	89
12	GISBORNE	29
6	HAWKE'S BAY	56
3	WELLINGTON	40
4	TASMAN NELSON MARLBOROUGH	42
6	WEST COAST	29
3	CANTERBURY	114
4	OTAGO	81
5	SOUTHLAND	49
4	NATIONAL	1,094

Motorcyclist involved

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
286	Wairoa District		3
279	South Wairarapa District		4
244	Stratford District		3
226	Buller District		4
221	Kaipara District		7
215	Ōtorohanga District		3
213	Tararua District		6
200	Westland District		4
193	Waitomo District		4
192	Masterton District		4
184	Auckland Rural North	1 STDEV	19
165	Grey District		3
158	Far North District		14
156	Tasman District		9
154	Nelson City		7
152	Thames-Coromandel District		7
152	Whanganui District		5
148	Rotorua District	0.5 STDEV	11
147	Whakatane District		6
146	Marlborough District		8
144	Auckland Rural South		13
144	Hastings District		13
143	Gisborne District		6
142	Wellington City		18
138	Ōpōtiki District		2
131	Hauraki District		6
131	South Taranaki District		4
129	Manawatu District		6
127	Palmerston North City		7
122	Upper Hutt City		4
118	Invercargill City	MEAN	5
118	New Plymouth District		9
112	Whangarei District		12
111	Tauranga City		13
107	Porirua City		6
107	Waikato District		17
101	Taupo District		7
100	Rangitikei District		4
100	Waimate District		2
98	Central Otago District		4
96	Christchurch City		30
96	Auckland Urban Central		48
95	Hutt City		6
95	South Waikato District		4
94	Dunedin City		9
91	Kapiti Coast District		4
90	Auckland Urban West		11
88	Matamata-Piako District		6
87	Waitaki District		4
87	Hamilton City		10
84	Hurunui District		4
82	Waipa District		6
82	Auckland Urban South		30
80	Horowhenua District		3
79	Napier City		4
77	Timaru District		4
75	Southland District		6
73	Queenstown-Lakes District		5
68	Waimakariri District		5
67	Selwyn District		7
63	Central Hawkes Bay District		2
62	Western Bay Of Plenty District		5
58	Ruapehu District		1
57	Gore District		1
50	Auckland Urban North		18
50	Mackenzie District		1
48	Kaikoura District		1
47	Clutha District		2
46	Ashburton District		3
43	Carterton District		0
0	Kawerau District		0
	Auckland Gulf Islands		2
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
164	NORTHLAND	33
108	AUCKLAND	141
125	WAIKATO	70
101	BAY OF PLENTY	37
164	TARANAKI	16
122	MANAWATŪ-WHANGANUI	32
143	GISBORNE	6
143	HAWKE'S BAY	22
134	WELLINGTON	47
152	TASMAN NELSON MARLBOROUGH	24
197	WEST COAST	11
71	CANTERBURY	55
80	OTAGO	25
83	SOUTHLAND	12
105	NATIONAL	531

Cyclist involved

2021 Register

PERSONAL RISK DSI/Mhrs	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
20	New Plymouth District		4
17	Invercargill City		2
17	Napier City		3
17	Southland District		1
16	Stratford District		0
16	Kaipara District		1
15	Whangarei District		2
14	Hastings District		4
13	Far North District		2
13	South Waikato District		1
12	Auckland Urban Central		25
12	Tauranga City	1 STDEV	7
11	Whanganui District		3
11	Ōpōtiki District		0
11	South Taranaki District		1
10	Queenstown-Lakes District		3
10	Waipa District		2
9	Dunedin City		7
9	Waitaki District	0.5 STDEV	1
9	Wellington City		17
8	Hamilton City		6
8	Gore District		0
7	Carterton District		1
7	Matamata-Piako District		1
7	Palmerston North City		3
7	Christchurch City		28
7	Auckland Urban North		10
7	Westland District		1
7	Grey District		1
7	Taupo District	MEAN	1
7	Rotorua District		2
6	Buller District		0
6	Auckland Urban West		5
6	Whakatane District		1
6	South Wairarapa District		1
6	Mackenzie District		0
6	Western Bay Of Plenty District		1
5	Waimate District		0
5	Tararua District		0
5	Kapiti Coast District		2
5	Waikato District		2
5	Horowhenua District		1
4	Timaru District		2
4	Nelson City		5
4	Hauraki District		0
4	Auckland Rural North		1
4	Hutt City		3
3	Auckland Urban South		7
3	Masterton District		1
3	Central Otago District		0
3	Auckland Rural South		1
3	Waitomo District		0
3	Selwyn District		2
3	Thames-Coromandel District		0
3	Kaikoura District		0
3	Central Hawkes Bay District		0
3	Marlborough District		3
3	Gisborne District		3
2	Porirua City		1
2	Waimakariri District		2
2	Manawatu District		0
2	Tasman District		3
2	Clutha District		0
1	Hurunui District		0
1	Ashburton District		1
1	Upper Hutt City		0
0	Kawerau District		0
0	Ōtorohanga District		0
0	Rangitikei District		0
0	Ruapehu District		0
0	Wairoa District		0
	Auckland Gulf Islands		1
	Chatham Islands Council		0

PERSONAL RISK DSI/Mhrs	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
15	NORTHLAND	4
6	AUCKLAND	49
6	WAIKATO	15
7	BAY OF PLENTY	12
16	TARANAKI	6
4	MANAWATŪ-WHANGANUI	7
3	GISBORNE	3
9	HAWKE'S BAY	7
5	WELLINGTON	26
3	TASMAN NELSON MARLBOROUGH	10
7	WEST COAST	2
4	CANTERBURY	36
7	OTAGO	11
14	SOUTHLAND	3
6	NATIONAL	192

Pedestrian involved

2021 Register

PERSONAL RISK DSI/Mhrs	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
11	Ōpōtiki District		2
6	Whakatane District		4
5	Mackenzie District		1
5	Whangarei District		8
5	Stratford District		1
5	Hauraki District		2
5	Gore District		1
5	Far North District		5
5	Wairoa District		1
4	Waitomo District		1
4	Western Bay Of Plenty District	1 STDEV	4
4	South Waikato District		2
4	Rotorua District		5
4	Hamilton City		13
4	Whanganui District		4
4	Waikato District	0.5 STDEV	6
3	Thames-Coromandel District		2
3	Waitaki District		3
3	Dunedin City		15
3	New Plymouth District		5
3	Tauranga City		8
3	Hastings District		5
3	Horowhenua District		3
3	Kaikoura District		0
3	Matamata-Piako District		3
3	Napier City		3
3	Ōtorohanga District		1
3	Tararua District		1
3	Kaipara District		1
3	Palmerston North City		6
3	Southland District		2
2	Auckland Urban Central	MEAN	43
2	Invercargill City		2
2	Taupo District		2
2	Queenstown-Lakes District		4
2	Christchurch City		25
2	Gisborne District		5
2	South Taranaki District		1
2	Grey District		1
2	Rangitikei District		1
2	Auckland Urban South		34
2	Buller District		0
2	Nelson City		4
2	Carterton District		1
2	Masterton District		3
2	Auckland Urban West		11
2	Central Hawkes Bay District		0
2	Manawatu District		1
2	Auckland Urban North		19
2	Ruapehu District		0
1	Waipa District		2
1	Marlborough District		3
1	Clutha District		1
1	Wellington City		16
1	Auckland Rural South		3
1	Upper Hutt City		3
1	Tasman District		2
1	Waimate District		0
1	Waimakariri District		2
1	Selwyn District		2
1	Timaru District		1
1	Auckland Rural North		2
1	Kapiti Coast District		3
1	Hutt City		6
1	Westland District		0
1	Porirua City		2
0	Hurunui District		0
0	Central Otago District		0
0	Ashburton District		1
0	Kawerau District		0
0	South Wairarapa District		0
	Auckland Gulf Islands		0
	Chatham Islands Council		0

PERSONAL RISK DSI/Mhrs	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
4	NORTHLAND	14
2	AUCKLAND	112
3	WAIKATO	34
5	BAY OF PLENTY	23
3	TARANAKI	7
2	MANAWATŪ-WHANGANUI	17
2	GISBORNE	5
3	HAWKE'S BAY	9
1	WELLINGTON	35
1	TASMAN NELSON MARLBOROUGH	9
1	WEST COAST	1
2	CANTERBURY	32
2	OTAGO	22
3	SOUTHLAND	5
2	NATIONAL	326

Distraction (crash factor: attention diverted)

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
1	Ōpōtiki District		2
1	Whakatane District		4
1	Buller District		2
1	Hauraki District		4
1	Westland District		2
1	South Taranaki District		3
1	Central Otago District		3
1	New Plymouth District	1 STDEV	5
1	Nelson City		3
1	Manawatu District		3
1	Stratford District		1
1	Carterton District		1
1	Marlborough District		3
1	Taupo District		4
1	Waitaki District		2
1	Invercargill City		2
1	Mackenzie District	0.5 STDEV	1
1	Waikato District		9
1	South Wairarapa District		1
1	Hastings District		5
1	Far North District		4
1	Masterton District		1
0	Whanganui District		2
0	Ruapehu District		1
0	Dunedin City		5
0	Waimakariri District		3
0	Whangarei District		5
0	Waitomo District		1
0	Palmerston North City		3
0	Rotorua District		4
0	Gisborne District	MEAN	2
0	Auckland Rural South		4
0	Central Hawkes Bay District		1
0	Kaipara District		1
0	Waipa District		3
0	Porirua City		2
0	Selwyn District		4
0	Horowhenua District		2
0	Tasman District		3
0	Christchurch City		14
0	Matamata-Piako District		3
0	Western Bay Of Plenty District		4
0	Rangitikei District		2
0	Timaru District		2
0	Wellington City		5
0	Napier City		2
0	Ashburton District		2
0	South Waikato District		1
0	Tauranga City		4
0	Grey District		1
0	Auckland Rural North		4
0	Auckland Urban South		14
0	Clutha District		2
0	Hutt City		2
0	Waimate District		1
0	Gore District		1
0	Kapiti Coast District		2
0	Auckland Urban West		4
0	Upper Hutt City		1
0	Tararua District		1
0	Southland District		3
0	Thames-Coromandel District		1
0	Hamilton City		3
0	Kaikoura District		0
0	Auckland Urban Central		13
0	Hurunui District		1
0	Auckland Urban North		7
0	Queenstown-Lakes District		1
0	Wairoa District		0
0	Ōtorohanga District		0
0	Kawerau District		0
	Auckland Gulf Islands		0
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
0	NORTHLAND	11
0	AUCKLAND	46
0	WAIKATO	30
1	BAY OF PLENTY	18
1	TARANAKI	8
0	MANAWATŪ-WHANGANUI	13
0	GISBORNE	2
0	HAWKE'S BAY	8
0	WELLINGTON	15
1	TASMAN NELSON MARLBOROUGH	9
1	WEST COAST	4
0	CANTERBURY	28
0	OTAGO	13
0	SOUTHLAND	6
0	NATIONAL	211

Fatigue

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
2	Waitomo District		4
2	Kaikoura District		2
2	Wairoa District		2
1	Taupo District		7
1	South Wairarapa District		1
1	Ōtorohanga District		1
1	South Waikato District		4
1	Hurunui District		4
1	Gisborne District	1 STDEV	4
1	Buller District		2
1	Rotorua District		6
1	Kaipara District		3
1	Westland District		2
1	Tasman District		4
1	Tararua District	0.5 STDEV	2
1	Waipa District		5
1	Matamata-Piako District		5
1	Far North District		5
1	Whangarei District		6
1	Waimate District		1
1	Rangitikei District		2
1	Southland District		5
1	Hastings District		5
1	Whanganui District		2
1	Auckland Rural North		6
1	Waikato District		10
1	Waitaki District		2
1	Masterton District		1
1	Western Bay Of Plenty District		5
0	Thames-Coromandel District	MEAN	2
0	Manawatu District		3
0	Ashburton District		3
0	Grey District		1
0	Central Hawkes Bay District		1
0	Ruapehu District		1
0	Stratford District		1
0	Gore District		1
0	Whakatane District		2
0	Hauraki District		2
0	Clutha District		1
0	Central Otago District		1
0	Invercargill City		2
0	Napier City		2
0	South Taranaki District		1
0	Dunedin City		3
0	Timaru District		1
0	Porirua City		2
0	Waimakariri District		2
0	Marlborough District		1
0	Kapiti Coast District		2
0	Nelson City		1
0	New Plymouth District		2
0	Hutt City		2
0	Selwyn District		2
0	Queenstown-Lakes District		1
0	Palmerston North City		1
0	Auckland Rural South		2
0	Horowhenua District		1
0	Ōpōtiki District		0
0	Auckland Urban South		6
0	Mackenzie District		0
0	Christchurch City		4
0	Auckland Urban West		1
0	Auckland Urban Central		5
0	Tauranga City		1
0	Hamilton City		1
0	Upper Hutt City		0
0	Wellington City		1
0	Auckland Urban North		2
0	Carterton District		0
0	Kawerau District		0
	Auckland Gulf Islands		0
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
1	NORTHLAND	14
0	AUCKLAND	22
1	WAIKATO	41
0	BAY OF PLENTY	14
0	TARANAKI	3
0	MANAWATŪ-WHANGANUI	12
1	GISBORNE	4
1	HAWKE'S BAY	10
0	WELLINGTON	8
0	TASMAN NELSON MARLBOROUGH	7
1	WEST COAST	4
1	CANTERBURY	18
0	OTAGO	10
0	SOUTHLAND	7
0	NATIONAL	174

Older road users (those aged 75yrs and older)

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI
18	Mackenzie District		2
16	Nelson City		6
16	Kawerau District		0
15	Gisborne District		4
15	Invercargill City		5
15	Carterton District		1
15	Masterton District		3
14	Upper Hutt City		3
14	Ōpōtiki District		1
13	South Taranaki District		3
13	Ōtorohanga District		1
12	Napier City	1 STDEV	5
12	Westland District		2
11	Waitomo District		2
11	Selwyn District		4
11	Auckland Rural North		7
11	Hamilton City		6
10	South Waikato District		3
10	Horowhenua District	0.5 STDEV	5
10	Kapiti Coast District		6
10	Dunedin City		7
9	Far North District		6
9	Ruapehu District		1
9	Kaipara District		3
9	Waitaki District		4
8	Christchurch City		18
8	Whangarei District		7
8	Tasman District	MEAN	4
8	Whanganui District		3
8	Western Bay Of Plenty District		6
8	Waimate District		2
8	Hutt City		3
8	Stratford District		1
8	Hauraki District		3
8	Manawatu District		3
7	Waikato District		5
7	Tauranga City		7
7	Waimakariri District		4
7	Grey District		1
7	Wellington City		4
7	New Plymouth District		4
7	Ashburton District		3
7	Southland District		3
7	Tararua District		2
7	Buller District		1
6	Central Hawkes Bay District		1
6	Auckland Urban West		3
6	Queenstown-Lakes District		1
6	Matamata-Piako District		4
6	Waipa District		4
6	Auckland Urban Central		15
6	Auckland Rural South		3
6	Hastings District		4
6	Palmerston North City		3
6	Central Otago District		2
6	Wairoa District		0
5	Rotorua District		2
5	Whakatane District		2
5	Auckland Urban South		8
5	Hurunui District		2
5	Auckland Urban North		11
5	Thames-Coromandel District		2
4	Marlborough District		2
4	South Wairarapa District		1
4	Gore District		1
4	Timaru District		2
4	Porirua City		1
4	Taupo District		2
3	Clutha District		1
3	Rangitikei District		1
1	Kaikoura District		0
	Auckland Gulf Islands		0
	Chatham Islands Council		0

PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
9	NORTHLAND	15
7	AUCKLAND	48
8	WAIKATO	32
9	BAY OF PLENTY	19
9	TARANAKI	7
7	MANAWATŪ-WHANGANUI	17
15	GISBORNE	4
7	HAWKE'S BAY	10
10	WELLINGTON	22
10	TASMAN NELSON MARLBOROUGH	12
8	WEST COAST	4
8	CANTERBURY	36
7	OTAGO	16
9	SOUTHLAND	8
7	NATIONAL	251

Restraints (seatbelt not worn)

2021 Register

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI	PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RISK 5yr AVG DSI
2	Wairoa District		2	1	NORTHLAND	25
2	Far North District		14	0	AUCKLAND	44
2	Gisborne District		7	1	WAIKATO	39
1	Tararua District		4	1	BAY OF PLENTY	16
1	Kaipara District		4	1	TARANAKI	9
1	Masterton District		3	1	MANAWATŪ-WHANGANUI	18
1	Ōtorohanga District		2	2	GISBORNE	7
1	Taupo District		8	1	HAWKE'S BAY	12
1	South Waikato District		5	0	WELLINGTON	14
1	Waimate District	1 STDEV	2	0	TASMAN NELSON MARLBOROUGH	7
1	Whakatane District		4	1	WEST COAST	3
1	South Taranaki District		3	1	CANTERBURY	28
1	Waitomo District		2	1	OTAGO	14
1	Horowhenua District		4	1	SOUTHLAND	8
1	Auckland Rural South		8			
1	Kaikoura District	0.5 STDEV	1	1	NATIONAL	243
1	Buller District		1			
1	Ruapehu District		2			
1	Waitaki District		3			
1	Carterton District		1			
1	Central Otago District		3			
1	Gore District		1			
1	Tasman District		4			
1	Hastings District		6			
1	New Plymouth District		5			
1	Stratford District		1			
1	Rangitikei District		2			
1	Ōpōtiki District		1			
1	Whangarei District	MEAN	6			
1	Southland District		5			
1	Manawatu District		3			
1	Kawerau District		0			
1	Western Bay Of Plenty District		5			
1	Rotorua District		4			
1	Waikato District		9			
1	Mackenzie District		1			
1	Whanganui District		2			
1	Auckland Rural North		6			
1	Palmerston North City		3			
1	Ashburton District		3			
1	Waipa District		3			
0	Waimakariri District		3			
0	Dunedin City		5			
0	Hutt City		3			
0	Invercargill City		2			
0	Westland District		1			
0	Thames-Coromandel District		2			
0	Napier City		2			
0	Clutha District		2			
0	Hauraki District		2			
0	Central Hawkes Bay District		1			
0	Matamata-Piako District		3			
0	Timaru District		2			
0	Selwyn District		4			
0	Auckland Urban South		13			
0	Kapiti Coast District		2			
0	Christchurch City		10			
0	Hurunui District		1			
0	Auckland Urban West		4			
0	Upper Hutt City		1			
0	Grey District		0			
0	Wellington City		4			
0	Marlborough District		1			
0	Hamilton City		3			
0	South Wairarapa District		0			
0	Nelson City		1			
0	Auckland Urban Central		9			
0	Queenstown-Lakes District		1			
0	Tauranga City		2			
0	Porirua City		1			
0	Auckland Urban North		3			
	Auckland Gulf Islands		1			
	Chatham Islands Council		0			

9. Amenities

Reporting from the amenities team for this period is abbreviated due to staff absences/vacancies.

9.1 Housing for Seniors

We have had two tenants transfer to other SWDC units as more suited. Sadly, we had a death recently in one of the Cecily Martin flats and this unit is currently being assessed for maintenance work. Another tenant from Featherston will be transferring to Martinborough mid-July.

9.2 Pain Farm and Cottage

Both properties are well maintained by the occupants. The grounds are cared for by our contractor and are in good order.

9.3 Other Projects

- **Wheels Park Greytown:** RFP went out on Friday 1st July to Five Companies that had expressed an interest in the project. Closes 1st August.
- **Greytown pavilion upgrade:** The pavilion is going to be delayed for 18 months due to the uncertainty of building costs currently. With building material continuously rising it was agreed that this will be placed on hold. Part of the project was to upgrade the changing rooms in the swimming pool to include showers and more toilets so that when the pavilion was started changing rooms were still available. This project will still go ahead, and the council will use CAPEX to cover most of the costs once we see the quote. Again, this will be determined by cost in this changing economy.
- **Featherston Skatepark:** After several delays, this is now scheduled to go ahead after the July school holidays.

9.4 Cemeteries

Cemetery activity and burials have been steady.

Purchases of burial plots/niches 01/06/2022 to 30/06/2022

	Greytown	Featherston	Martinborough
Niche		1	
In-ground ashes Beam	1		1
Burial plot	3		
Services area			
Total	**4**	**1**	**1**

Ashes interments/burials 01/06/2022 to 30/6/2022

	Greytown	Featherston	Martinborough
Burial	1		
Ashes in-ground			1
Ashes wall	1		
Services Area			
Disinterment			

Total	**2**		**1**

9.5 Swimming Pools

Swimming pools are closed and are undergoing repairs and maintenance. Pools will reopen last week of November 2022.

9.6 Waste Management

9.6.1. Transfer Stations

All stations are tidy. Still waiting on Eftpos integration, this has been approved, waiting on Earthcare/SWDC Finance confirmations.

Battery recycling – Carterton and Masterton are trialling battery recycling boxes at supermarkets, if goes well should be rolled out in South Wairarapa.

New signs are available with Te Reo and English for recycling stations. Cost to be advised.

9.6.2. Martinborough

A large amount of waste taken to landfills could be recycled or reused, and the recycling area at the transfer station gets a lot of contamination. One option could be new more prominent signage advising what is allowed.

The stockpile of metal is being cleared, and options being discussed are whether to use containers to collect metal as they have in Featherston.

Netting and back plates in need of major repair, insurance claim being processed by Masterton Council.

9.6.3. Coastal

Recycling pods are working well. Though the issue with homeowners filling bins with household items continues. Earthcare recently did a day in the area educating on proper disposal of household rubbish.

The information below is for May 2022, Totals from kerbside collections and transfer stations in the Wairarapa.

Glass	Recycling	Yellow Bags	Total bag weight to landfill
53,6400KG	44,470KG	4073	28,530KG

9.6.4. Kerbside collections

100% of the recycling is being processed locally. Overall contamination levels are gradually reducing. Glass jars and bottles were collected but a large number have lids, lids are not recycled at Masterton yet.

Contact Officer: Stefan Corbett Group Manager, Partnership and Operations

Reviewed by: Harry Wilson, CEO

GREYTOWN COMMUNITY BOARD

3 AUGUST 2022

AGENDA ITEM 10.3

INCOME AND EXPENDITURE REPORT

Purpose of Report

To present the Community Board with the most recent Income and Expenditure Statements.

Recommendations

Officers recommend that the Community Board:

1. *Receive the Income and Expenditure Statement for the period ending 30 June 22.*

1. Executive Summary

An Income and Expenditure Statement for the period ending 30 June 22 in Appendix 1.

2. Appendices

Appendix 1 – Income and Expenditure Statement for the period ending 30 June 22.

Prepared By: Hayley McDonald, Assistant Accountant
Reviewed By: Charly Clarke, Finance Manager

Appendix 1 – Income and Expenditure Statement for Period Ending 30 June 2022

Greytown Community Board

Income & Expenditure for the Period Ended 30 Jun 2022

Personnel & Operating Costs

Budget

Members' salaries	26,680.00
Mileage reimbursements	1,000.00
Operating expenses	7,000.00
Total Personnel & Operating Costs Budget 2021-2022	**34,680.00**

Expenses

Personnel Costs	
Members' Salaries	31,850.91
Mileage reimbursements	-
Total Personnel Costs to 30 Jun 2022	**31,850.91**
Operating Expenses	
Honorarium payment to student rep ($50 per meeting)	200.00
Local Government Community Board Levy	275.00
He Putiputi Lim Flowers to S Fines	69.57
Total Operating Expenses to 30 Jun 2022	**544.57**

Committed funds

Resolution date		Original commitment	Spent to date	Remaining commitment
	Members' Salaries	26,680.00	31,850.91	(5,170.91)
	Mileage reimbursements	1,000.00	-	1,000.00
	Honorarium payment to student rep ($50 per meeting)	400.00	200.00	200.00
				-
	Total Commitments			**(3,970.91)**

TOTAL OPERATING EXPENSE BUDGET AVAILABLE* **6,255.43**

* remaining budget for personnel and operating expenses does not carry over into subsequent financial years

Grants

Income

Annual Plan 2020-21 grant allocation	4,500.00
Other miscellaneous income	-
Total Income for 2021-2022	**4,500.00**

LESS: Grants paid out

Aug-21	Rosa Hassall	Outward Bound course (if not funded by Mayors' Taskforce for Jobs)	500.00	500.00
Dec-21	Greytown Swim Club	Starters equipment	765.00	765.00
Feb-22	Greytown Senior Football Club	Coaching Course	1,000.00	1,000.00
Mar-22	Cobblestone Trust	Cobblestone 50th Anniversary	1,000.00	1,000.00
Jun-22	Wairarapa Mathematics Association	Annual maths competition 2021-22	300.00	300.00
	Total Grants paid out to 30 Jun 2022			**3,565.00**

LESS: Committed Funds

Resolution date			Original commitment	Spent to date	Remaining commitment
22/11/2017	Promotion and support of the hub and civil defence initiatives		1,000.00	93.24	906.76
19/02/2020	Greytown Info Centre	Admin costs	50.00		50.00
04/08/2021	G Jones - Catalyst	Shortfall for Flag Artwork	60.00		60.00
04/08/2021	Grand Illusions		400.00		400.00
	Total Commitments				**1,416.76**

PLUS: Balance Carried forward from previous year **5,261.88**

TOTAL GRANTS FUNDS AVAILABLE **4,780.12**

Greytown Community Board

Beautification Fund for the Period Ended 30 Jun 2022

Income

	Annual Plan 2021-2022 allocation		11,000.00
	Transfer to General Grants		(4,000.00)
21/10/2020	Donation from community member for maintenance of barrels through to August 2021		2,500.00
Total Income 2021-2022			**9,500.00**

Beautification grants - operating

Jul-21	Greytown Trails Trust	Promotion & maintenance of the rail trail	1,000.00
Aug-21		11 Flags for Main St	930.50
Oct-21	S Ford	Maintenance of Main St flower barrels	2,500.00
Nov-21	Grand Illusions	Town centre lighting Mid Winter	400.00
Dec-21	Greytown Menz Shed	Planter box donation	260.87
Dec-21	Greytown Cemetery	Trees & watering system in cemetery	7,000.00
Jan-22	Greytown pool	Mural Paintings for Greytown Pool	1,380.00
Feb-22	Satelite Design	Papawai Sign	1,050.00
Jun-22	Friends of O'Connors Bush	Dog Park Planting	1,000.00
Jun-22	Friends of Cobblestones	Prunning Trees at Musuem	1,000.00
Jun-22	St Luke's Anglican Church	Gum Tree costs	2,000.00
Total Beautification grants - operating to 30 Jun 2022			**18,521.37**

Beautification grants - capital

Apr-22	A.E Tilley Ltd	3 x recycling bins	5,322.00
May-22	Ezeco Ltd	Dog Poo Bin	1,521.50
May-22	R & S Contracting	Installation of Doo poo bin	252.11
Total Beautification grants - capital to 30 Jun 2022			**7,095.61**

LESS: Committed Funds

Resolution date			Original commitment	Spent to date	Remaining commitment
28/08/2019	Papawai Marae/Papawai Cemetery	Design, printing & installation signs at	4,000.00	300.00	3,700.00
28/10/2020	Pae tū Mōkai o Tauira	Pre-purchase of native plants (subject to acceptance of this offer)	500.00		500.00
17/02/2020	Greytown Menz Shed	Donation for erecting and taking down flags	300.00		300.00
24/11/2021		Two new dog bins in Greytown	3,000.00	1,773.61	1,226.39
16/02/2022	Urupa and Papawai Marae	additional cost for Signage	5,000.00	1,050.00	3,950.00
16/02/2022	Stella Bull Park	Recycling Bins	5,500.00	5,322.00	178.00
30/03/2022	Greytown Pool	Second set of three Murals	2,000.00		2,000.00
30/03/2022	Soldier Memorial Park	Lions to Paint Polls	200.00		200.00
30/03/2022	Main St Barrels	Replace One tree	80.00		80.00
22/06/2022	Corner of Jellicoe & Massey st	Dog poo bin replacement	1,500.00		1,500.00
					-
Total Commitments					**13,634.39**

PLUS: Balance Carried forward from previous year	**44,810.57**
TOTAL BEAUTIFICATION FUNDS AVAILABLE	**15,059.20**

GREYTOWN COMMUNITY BOARD

3 AUGUST 2022

AGENDA ITEM 10.4

ACTION ITEMS REPORT

Purpose of Report

To present the Community Board with updates on actions and resolutions.

Recommendations

Officers recommend that the Community Board:

1. Receive the Action Items Report.

1. Executive Summary

Action items from recent meetings are presented to the Community Board for information. The Chair may ask Council officers for comment and all members may ask Council officers for clarification and information through the Chair.

If the action has been completed between meetings it will be shown as 'actioned' for one meeting and then will be remain in a master register but no longer reported on.

2. Appendices

Appendix 1 – Action Items to 27 July 2022

Contact Officer: Kaitlyn Carmichael, Committee Advisor
Reviewed By: Amanda Bradley, General Manager, Policy & Governance

Appendix 1 – Action Items to 27 June 2022

Number	Raised Date	Action Type	Responsible Manager	Action or Task details	Status	Notes
537	28-Oct-20	Action	GCB	Reconsider the design of new Welcome to Greytown signs following consultation on the 2021-2031 Long Term Plan	Parked	9/6/21: To remain parked until the Long Term Plan is adopted as the LTP may include budget for place assessment of the three towns, including entrances. 4/8/21: To remain parked as the Board would be collaborating on signs to consolidate branding across the district.
173	11-May-22	Action	Mayor Beijen	To investigate light bulbs for use on Main Street lights, that are dark sky compatible and maintain the original heritage image, Mayor Beijen.	Open	
273	22-June-22	Resolution	K Ashford	GCB RESOLVED (GCB 2022/33) to grant $1,500 to place a dog poo bin on the corner of Jellicoe and Massey Street in Greytown, to be funded through the beautification fund. (Moved Rainford/Seconded Cr Plimmer) Carried	Actioned	28/06/22: Bin has been ordered.
276	22-June-22	Resolution	K Ashford	GCB RESOLVED (GCB 2022/36) to remove the $2000 for the 2021 Christmas in the Park event from the committed funds. (Moved Gray/Seconded Baker) Carried	Actioned	
278	22-June-22	Action	S Corbett	Request an update on the removal of the two flags in central Greytown which are not on the flag track system.	Open	28/06/22: These flags belong to the previous Greytown Community Board - they paid for and had them installed, so it is their responsibility to remove them. TMP is about 2,000$ as it is the main highway and hiab required.
279	22-June-22	Action	S Corbett	Request an update on the progress of the pavilion project at Soldiers Memorial Park.	Actioned	26/07/22: The build is delayed 6-12 months because of escalating costs and unavailability of materials.

SOUTH WAIRARAPA DISTRICT COUNCIL

3 AUGUST 2022

AGENDA ITEM 10.5

GREYTOWN COMMUNITY BOARD – PEONY DRIVE ROAD NAMING

Purpose of Report

To inform members of the Greytown Community Board about the naming of Peony Drive and advise what is required to apply to change the suffix.

Recommendations

Officers recommend that the Council:

1. Receive the 'Peony Drive Road Naming by Greytown Community Board' Report.

1. Executive Summary

To outline how Peony Drive was named and set out a process for persons to apply change the road name suffix.

2. Background

Planning Staff took a paper to the Greytown Community Board meeting on the 16th of September 2020 seeking approval to name the road. Community Board approval was required as the name Peony is not on the list of pre-approved road names. Despite the recommendation of staff to name the road Peony Place, the decision by the Community Board was to support the developer's recommendation, Peony Drive. The reasons for the staff recommendations are set out in the item attached – Appendix 1, along with the confirmed minutes from that meeting – Appendix 2. Also attached is Council's Road Naming Policy**–** Appendix 3.

3. Discussion

Section 4.4 of the South Wairarapa Road Naming Policy sets out the reasons for and process of changing a road name. On the face of it, none seem to apply to this situation. Of note is the requirement for the approval of a significant majority of owners of lots in Peony Drive, and a new road sign made at the cost of the party requesting the change. Each individual would be responsible for changing their own mailing address for utility bills and such like. If the change was to be approved, Staff

will advise emergency services and QV on the updated road name. A further report would be required and approved by the Community Board.

3.1 Legal Implications

N/A

3.2 Financial Considerations

At this time, staff time spent is not recoverable. Therefore, the process, excluding any new sign, would be funded by the ratepayer from existing budgets.

4. Appendices

Appendix 1 – 180045 – Road Name Report to GCB 20072020

Appendix 2 – Greytown Community Board Minutes – 16 September 2020

Appendix 3 – South Wairarapa District Council Road Naming Policy

Contact Officer: James R. Witham, Planning Manager
Reviewed By: Russell O'Leary, Group Manager Planning and Environment

Appendix 1 – 180045 – Road Name Report to GCB 20072020

SOUTH WAIRARAPA DISTRICT COUNCIL

23 JULY 2020

NAMING OF A NEW ROAD, AT 104A WEST STREET, IN GREYTOWN

Purpose of Report

To inform the Greytown Community Board of the proposed new name "Peony Drive" for a road vested in Council to access a subdivision by *Westec Developments Ltd.*

Recommendations

Officers recommend that the Greytown Community Board:

1. *Receive the proposed naming of the proposed road on Lot 101 at 104A West Street Greytown.*
2. *Approve the proposed naming of the proposed road on Lot 101 at 104A West Street Greytown.*

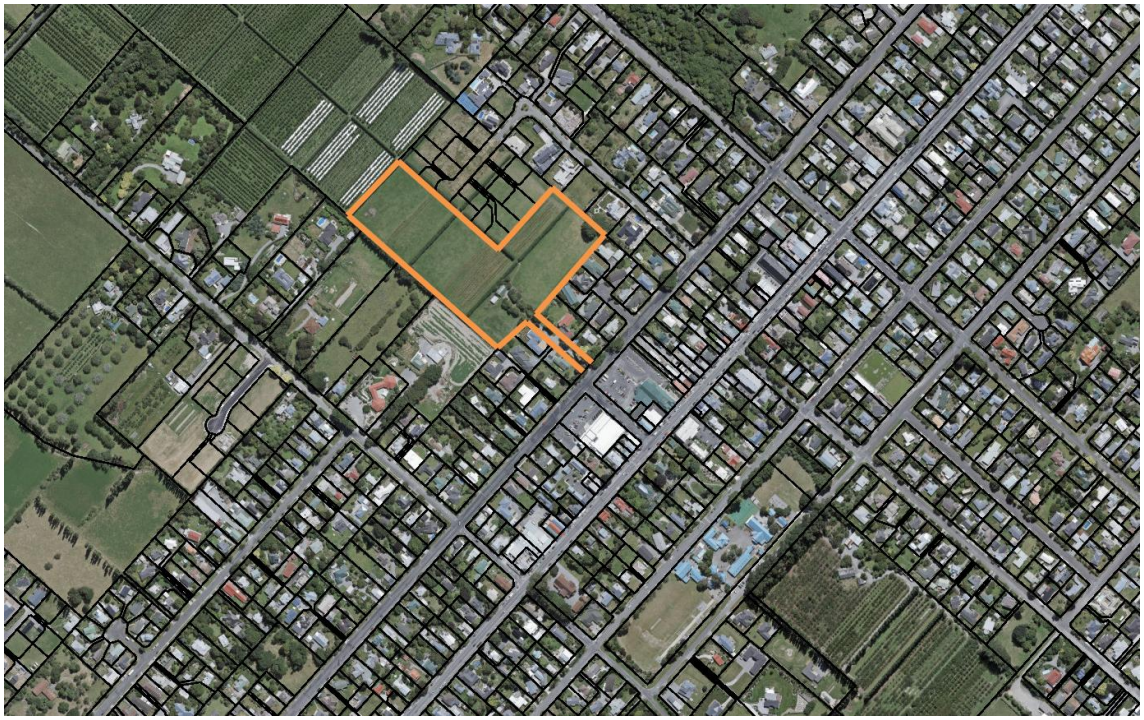
1. Background

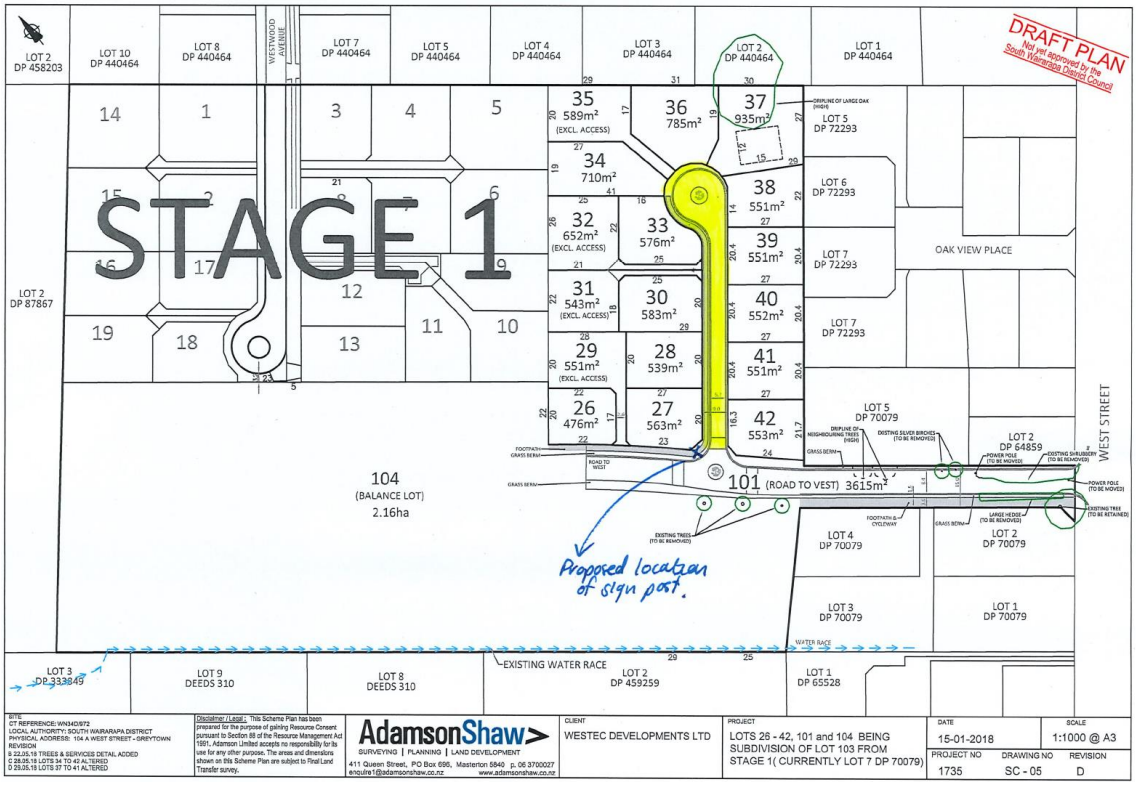
Westec Developments Ltd seeks to name the Road as part of a residential subdivision (RC 180045) at *104A West Street, in Greytown* (see appended plan in the request at Appendix 1).

Council has authority to accept or reject suggested names of roads/rights of way in the South Wairarapa pursuant to Section 319(1)(j) of the Local Government Act 1974.

The proposed name has not been selected from the pre-approved list that the Greytown Community Board approved at the 19th February 2020 meeting. The proposed name is "Peony" which is the applicants preferred option for this new road vested in Council. It has been assessed that "Drive" or "Place" would be an appropriate suffix for this new road with "Place" being more suitable. The applicant has selected "Peony Drive" as the preferred name. Council has delegated to community boards the authority to approve road names. As the developer has not selected a name from a pre-approved list, this report is required to go to the Greytown Community Board for approval.

Subdivision location:





2. Discussion

2.1 Legal situation

Under Council's guidelines (Clause 4.2) for road naming, owners are requested to suggest at least three possible road names.

The applicant has requested that the following names are considered;

1. Peony Drive
2. Applewood Drive
3. Oakwood Place

2.2 Assessment of Councils Policy

The proposed road name needs to be approved by the Greytown Community Board. Council's criteria for Naming of Public Roads, Private Roads and Rights-of-Way (the Policy), includes the following;

4.3.1 There must not be another road with the same name in the South Wairarapa District emergency services area; this includes the same road names with a different suffix. However, existing roads with the same names as of the date of adoption of this Policy are allowed.

There are no existing roads or right of ways which include "Peony Drive", "Applewood Drive", "Oakwood Place" within the Wairarapa.

4.3.2 Identical names with different spellings will not be accepted (e.g. Beach, Beech).

No issue identified.

4.3.3 The name should have significant local content or meaning.

The application has set out why the preferred names have been selected.

The proposed names have specific local content and meaning.

Peony Drive
Prior to the site being developed for the subdivision, the site was largely planted in peonies which had been grown and sold for export for approx. 10 years. Prior to this the site was owned by the Farley family (the main road is named Farley Avenue after this). Westec Developments then offered the plants for sale prior to development starting and donated the money received to local organisations such as Greytown Primary School and Life Flight Trust. The proposed name reflects the previous use of the site.

Applewood Drive
Applewood Drive was chosen as a second option due to the site being used as an apple orchard for many years prior to it being planted in Peonies. The surrounding area still has a significant number of trees that produce large quantities of apples primarily used for export. The proposed name reflects the previous use of the site.

Oakwood Place
Oakwood Place was chosen due to the proximity of the site to "Farleys Oak". This tree is listed as being notable and was planted circa-1860. The subdivision site has strong links to the Farley family (hence the major road being Farley Avenue). The proposed name reflects the history of a notable tree in close proximity.

4.3.4 Names are to be selected in proportion to the length of the road. Long names on short cul-de-sac's can be difficult to display on the map

None of the proposed names are particularly long and can be clearly displayed on a map.

4.3.5 The end name for the roadway should be one that most accurately reflects the type of roadway that it is.

All proposed names are considered consistent with the policy. "Place" Would be a more appropriate suffix in this scenario.

4.3.6 All private roads and rights-of-ways serving more than four lots are to have the suffix "Lane" or "Way".

All proposed names are considered consistent with the policy.

4.3.7 Where the road is continuation of an existing named road, or will in the future link to an existing named road, then the current road name will automatically apply.

Not applicable.

2.3 Procedure for Naming Roads of the Naming of Public Roads, Private Roads and Rights-of-Way Policy Review

Section 4.2 will be reviewed and aligned with the community board delegation to name roads when it is next reviewed. Until the Policy has been reviewed, roads named by community board delegation will be referred to Council for information.

3. Conclusion

All proposed names are consistent with the guideline criteria in the road naming policy. The applicant has been asked to select their preferred road name, being "Peony Drive" however "Peony Place" would be a more suitable name for this type of road. There are second and third preferred options for this new road. This selection will be reported to the Greytown Community Board for approval.

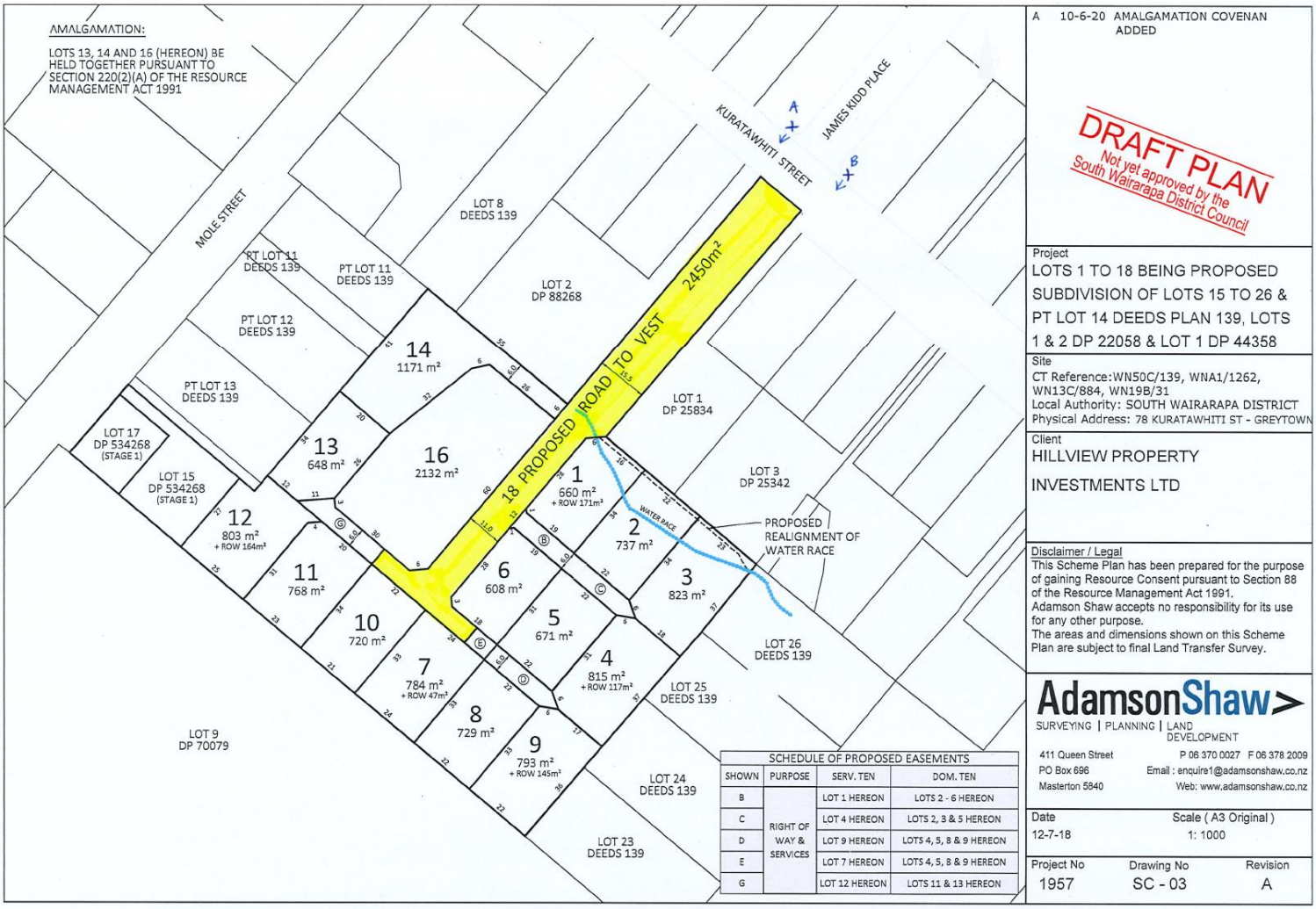
4. Appendices

Appendix 1 - Subdivision Scheme Plan

Prepared by/Contact Officer: Godwell Mahowa, Planning Manager

Reviewed by: Russell O'Leary, Group Manager Planning and Environment

Appendix 1 - Scheme Plan



Appendix 2 - Greytown Community Board Minutes – 16 September 2020

GREYTOWN COMMUNITY BOARD
Kia Reretahi Tātau

Greytown Community Board

Minutes – 16 September 2020

Present:	Ann Rainford (Chair until 8.20pm), Shelley Symes (Chair from 8.20pm), Graeme Gray, Simone Baker and Aimee Clouston (youth representative).
In Attendance:	Mayor Alex Beijen, Russell O'Leary (from 7.08pm), Glenda Seville (Community Development Coordinator) and Steph Dorne (Committee Advisor).
Also in Attendance:	Liz Farley, Jez Partridge (Greytown Tree Advisory Group), Katie Abbott (Greytown Tree Advisory Group) and Winifred Mahowa (Department of Internal Affairs)
Conduct of Business:	The meeting was conducted in public in the WBS Room, Greytown Town Centre on 16 September 2020 between 7:00pm and 8.58pm.

1. EXTRAORDINARY BUSINESS

There was no extraordinary business.

2. APOLOGIES

GCB RESOLVED (GCB 2020/38) to receive apologies from Councillor Fox and Councillor Plimmer.

(Moved Rainford/Seconded Gray) Carried

3. CONFLICTS OF INTEREST

There were no conflicts of interest declared.

4. ACKNOWLEDGMENTS AND TRIBUTES

There were no acknowledgments or tributes.

5. PUBLIC PARTICIPATION

Liz Farley – Skate Park at Soldiers Memorial Park

Ms Farley spoke of her request for a skate park in Greytown to be reconsidered as part of the 2021-2031 Long-Term Plan. Ms Farley spoke about the importance of a skate park to youth and suggested this be based at Soldiers Memorial Park.

6. ACTIONS FROM PUBLIC PARTICIPATION

Liz Farley – Skate Park at Soldiers Memorial Park

The Board discussed recommending a skate park through its submission to the Long-Term Plan and encouraged Ms Farley to liaise with members of the Greytown Wheels Park Steering Group on potential design and cost to inform the submission.

GCB NOTED:

Action 462: Invite Sid Kempton, prior Chair of Greytown Wheels Park Steering Group, to speak on matters relating to a Greytown skate park at the next Community Board meeting, K Yates.

Mr O'Leary joined the meeting at 7.08pm

7. COMMUNITY BOARD MINUTES

7.1 Greytown Community Board Minutes – 5 August 2020

GCB RESOLVED (GCB 2020/39) that the minutes of the Greytown Community Board meeting held on 5 August 2020 be confirmed as a true and correct record.

(Moved Symes/Seconded Gray) Carried

8. REPORT FROM COMMITTEES

8.1 Tree Advisory Group

Mr Partridge updated members that the required funds had been raised for the structural brace for the St Luke's Gum tree and consideration is being given to reducing the size of the tree.

Tree planting had been undertaken at the Greytown Rail Trail and O'Connor's Bush.

Ms Abbott is liaising with Council officers on a request for a rubbish bin and matters relating to pest control in O'Connor's Bush.

Ms Abbott requested the Board put aside funds next financial year for replacement Arbor Day memorial trees if the Kowhai trees transplanted from the southern entrance to Greytown do not survive over summer.

9. CHAIRPERSON REPORT

9.1 Chairperson Report

Winifred Mahowa presented on the community-led development approach, including an overview of the five principles of the approach and an example of how the approach has supported the Masterton East Community. Members discussed the opportunity to engage with youth through partnering with primary and secondary schools.

Mrs Rainford spoke to matters as outlined in the Chairperson Report. Members agreed to use the image of the old red building on State Highway 2 at the north end of Greytown for the second set of flags for the Main Street, and to

approach local youth to sing at the Children's Christmas event rather than fund a professional singer.
Mrs Rainford updated members that Council officers would take the lead on engaging with Kuranui College for the Long-Term Plan.
Members discussed their meeting start time and undertook to defer changing it until feedback had been sought from all Board members.

GCB RESOLVED (GCB 2020/40):

1. To receive the Chairperson Report
   (Moved Symes/Seconded Baker) Carried
2. To discuss possible community led initiatives in Greytown and report back to the next Greytown Community Board meeting.
   (Moved Symes/Seconded Gray) Carried
3. To approve a further $1,300 for the purchase of a third set of flags for the Main Street, to be funded from the beautification fund.
   (Moved Symes/Seconded Gray) Carried
4. To approve Option D for the Main Street Barrels – that community donations are sought to fund the barrels for the period to August 2021.
   (Moved Symes/Seconded Gray) Carried
5. To agree that the maximum value of Greytown Community Board grants be increased to $1,000 and that grants will be considered quarterly (at every second meeting) unless there are exceptional circumstances, when a grant will be considered at the next available meeting.
   (Moved Baker/Seconded Symes) Carried
6. To approve the Memorandum of Understanding between the Greytown Community Board and the Greytown Tree Advisory Group for the 2019-2022 triennium.
   (Moved Symes/Seconded Baker) Carried
7. Agree to undertake community engagement on the Long-Term Plan, consisting of a meeting with students at Kuranui College if possible and a meeting with Greytown Community on Wednesday 30th September 2020.
   (Moved Symes/Seconded Gray) Carried

Ann Rainford vacated the Chair at 8.20pm.
Shelley Symes assumed the Chair at 8.20pm.

10. CHIEF EXECUTIVE AND STAFF REPORTS

10.1 Officers' Report

GCB RESOLVED (GCB 2020/41) to receive the Officers' Report.

(Moved Gray/Seconded Baker) Carried

10.2 Action Items Report

Members discussed the items and noted further updates.

GCB RESOLVED (GCB 2020/42) to receive the Action Items Report.

(Moved Baker/Seconded Rainford) Carried

10.3 Income and Expenditure Report

GCB RESOLVED (GCB 2020/43):

1. To receive the Income and Expenditure Statement for the period 1 July 2020 – 31 August 2020.
2. To transfer the $2,000 committed to the Greytown Tree Advisory Group for the St Luke's Gum Tree from the grant fund to the beautification fund.

(Moved Gray/Seconded Baker) Carried

10.4 Applications for Financial Assistance

Members debated whether to defer the grant application pending the development of their vision however undertook to consider it given the ongoing nature of the service.

Members discussed the limited grant funds available for 2020-21 and undertook to discuss their budget with Council officers.

GCB NOTED:

Action 463: To discuss the Community Board budget for 2020-21 with Council officers, A Rainford.

GCB RESOLVED (GCB 2020/44):

1. To receive the Application for Financial Assistance Report.

   (Moved Gray/Seconded Symes) Carried
2. To grant Wharekaka Trust Board funds of $500 to support its Meals on Wheels service.

   (Moved Gray/Seconded Baker) Carried

10.5 Naming of a New Road At 104A West Street Report

GCB RESOLVED (GCB 2020/45):

1. To receive the Naming of a new road, at 104A West Street, in Greytown Report.
2. To approve the name "Peony Drive" for the proposed road on Lot 101 at 104A West Street Greytown.

   (Moved Gray/Seconded Symes) Carried

11. NOTICES OF MOTION

There were no notices of motion.

12. MEMBER REPORTS (INFORMATION)

There were no member reports.

13. CORRESPONDENCE

There was no correspondence.

The meeting closed at 8.58pm.

Confirmed as a true and correct record

……..Chairperson

……..Date

Appendix 3 - South Wairarapa District Council Road Naming Policy

Policy on
Naming of Public Roads, Private Roads and Rights-of-Way

1.0 RATIONALE:

The South Wairarapa District Council is responsible for naming roads within its boundaries. A consistent and comprehensive approach is needed for naming of roads in the District. Roads are named to ensure ease of identification for the Council, the public and key services such as emergency, postal and utility services. The Council is empowered to name roads under Section 319A of the Local Government Act of 1974. The procedures under which the Council wishes to achieve the abovementioned objectives are defined below.

2.0 PURPOSE:

To set out guidelines and standards relating to the naming of public roads, private roads and rights-of-ways in the South Wairarapa District. The Council's policy will apply to new or unnamed roads, both public and private, including roads with existing names that may be locally, but not officially, recognized and will also apply to proposals to change the name of an officially named road. The policy also includes areas that would benefit from an official address for identification purposes such as private rights-of-way serving more than four lots. This policy is critical for correct addressing, which is used by emergency services, making our community safer.

3.0 DEFINITIONS (for purposes of this Policy only):

Road – A generic term that for the purposes of this policy only encompasses public roads, private roads and rights-of-ways that serve more than four lots.

Private Road – any roadway, place or arcade laid out on private land by the owner thereof intended for the use of the public generally. Private roads are not maintained by the Council but shall be formally named for the reasons set out in Sections 1.0 and 2.0 of this Policy.

Public Road – Any road open to public travel that is under the jurisdiction of and maintained by the Council.

Rights-of-Way (Private Way) - An easement, a privilege to pass over the land of another, whereby the holder of the easement acquires a reasonable and usual enjoyment of the property,

(normally the right to pass and re-pass) and the owner of the land retains the benefits and privileges of ownership consistent with the right of way easement. Rights-of-ways are not maintained by the Council but those rights-of-ways that serve more than four lots may be formally named for the reasons set out in Sections 1.0 and 2.0 of this Policy.

Suggested Suffixes – Terms such as "road", "street", "lane" etc. are to be used in circumstances appropriate to the physical situation, with the following suffix definitions acting as a guide:

Avenue	A wide straight road planted with trees on either side
Boulevard	A wide, main road, often planted with rows of trees
Circle	A street surrounding a circular or oval shaped space
Common	A street with a reserve or public open space along one side
Court	A short enclosed road, i.e. a cul-de-sac
Crescent	A crescent shaped street, generally with both ends intersecting the same street
Crest	A road running along the top or summit of a hill
Cul-de-sac	A short enclosed road
Drive	An especially scenic road or a main connecting route in a subdivision
Glade	A tree covered street or passage between streets
Green	As for Common, but not necessarily bounded by a reserve
Grove	A road that often features a group of trees standing together
Heights	A road traversing high ground
Lane	A narrow road
Lookout	A road leading to or having a view of fine natural scenery
Parade	A public promenade or road
Place	A short, sometimes narrow road
Ridge	A road along the top of a hill
Rise	A road going to a higher place of position
Road	A route between places, general usage
Row	A road with a line of professional buildings on either side
Street	A road that usually has houses on both sides
Track	A narrow country street that may end in pedestrian access
View	A road commanding a wide panoramic view across the surrounding areas
Way	A narrow road, often synonymous with lane

4.0 GUIDELINES:

4.1 GENERAL

4.1.1 The naming of roads provides a unique address to enable a property to be identified for power, telephone, mail and emergency services.

4.1.2 The Council is responsible for naming roads.

4.1.3 The Council will actively promote the formal naming of

existing unnamed (or informally named) public or private roads and any rights-of-ways that serve more than four lots.

4.1.4 All approved road and rights-of-way names, both public and private, will be recorded in the Council's GIS system and flagged as a public road, private road or rights-of-way.

4.1.5 This Policy will be reviewed and amended from time to time.

4.2 PROCEDURE FOR NAMING ROADS

4.2.1 Applications for naming all roads that are created or extended as part of a subdivision are required to be submitted as part of the resource consent process.

4.2.2 To assist Council in assigning a name, an application for subdivision consent where a road is proposed to be named shall include three possible road names to Council for consideration and approval. For rights of way serving more than four lots where it is proposed to name the right of way, the users of the right of way shall jointly submit an agreed proposed name which shall be adopted by Council subject only to the guidelines for the selection of new road names being satisfied.

The names should be listed in order of preference with a brief statement of their significance. The applicant must also submit a concept/survey plan identifying the road, and pay the appropriate fee.

4.2.3 Once Council receives the application, it will check the suitability of the preferred and alternative names against its Policy.

4.2.4 The road naming application will be submitted to the relevant Community Board for a recommendation prior to consideration and decision by Council. The final decision to approve the name shall remain at the discretion of Council.

4.2.5 The Council will approve, amend or decline the name by way of a formal resolution adopted by Council.

4.2.6 Council will advise the applicant in writing of the decision.

4.2.7 Council will ensure that the road naming process is completed and the signs are installed at no cost to Council before the Section 224C certificate is prepared for issue. Performance bonds will not be accepted.

4.2.8 Applications for naming of existing roads are required to be submitted to the Council's Chief Executive Officer. The Council will consider and make a decision on the road name application and will follow steps 4.2.3 to 4.2.5.

4.2.9 The Council also requires to be consulted for naming of existing private roads and rights-of-way to ensure that a current or proposed name complies with Council policy and the various agencies to be informed are appropriately advised.

4.2.10 Applications for private road and rights-of-way names are to be submitted to the Council on a standard form that is available from the Council office after consideration by officers. Such applications will be submitted to the Council for the adoption of a name, or names.

4.2.11 Immediately after Council approves the name of any road, the Council will advise Land Information NZ, Quotable Value, Council's rating and GIS departments and all emergency services in the area of the name of the road.

4.3 GUIDELINES FOR THE SELECTION OF NEW ROAD NAMES

4.3.1 There must not be another road with the same name in the South Wairarapa District emergency services area; this includes same road names with a different suffix. However, existing roads with the same names as of the date of adoption of this Policy are allowed.

4.3.2 Identical names with different spellings will not be accepted (e.g. Beach, Beech).

4.3.3 The name should have significant local content or meaning.

4.3.4 Names are to be selected in proportion to the length of the road. Long names on short cul-de-sac's can be difficult to display on a map.

4.3.5 The end name for the roadway should be the one that most accurately reflects the type of roadway that it is.

4.3.6 All private roads and rights-of-ways serving more than four lots are to have the suffix "Lane" or "Way".

4.3.7 Where the road is a continuation of an existing named road, or will in the future link to an existing named road, then the current road name will automatically apply.

4.3.8 Names are entirely at the discretion of Council, whether for policy reasons or for other considerations.

4.4 CHANGING EXISTING ROAD NAMES

4.4.1 Where there is uncertainty about a road name, generally the most recently gazetted name will be the officially recognized name for the road.

4.4.2 A name change will only be made if the Council considers that the change will result in a clear benefit to the community. Reasons for changing road names may include:

- To correct the spelling
- To eliminate duplication in spelling or sound
- To clarify a situation where more than one name is used for a road
- To make geographical corrections
- To assign different names to separate ends of a road with a permanently impassable section somewhere along the length

4.4.3 Where a road name is requested to be changed, a significant majority of residents and owners along the road must support the proposed change. The applicant shall also provide any history relating to the existing street name. The road name change report shall be presented to the relevant community board and to the Maori Standing Committee, (if required), for comment prior to the Council meeting. However, the final decision to allow a road name to be changed and the new name of the road is always at the discretion of the Council.

4.4.4 Where a road name is requested to be changed to correct a demonstrated spelling error, the change shall be presented to Council for approval without the requirement for prior consultation with the relevant community board and residents and landowners.

4.5 SIGNAGE

4.5.1 If Council approves the name of a road as part of a subdivision, a standard Council road sign shall be created and erected at the applicant's expense. This requirement will usually be a Section 224 condition of resource consent.

4.5.2 Street signs on private roads and rights-of-ways must have the word "Private" under the street name and the applicant is required to pay for the sign, its installation and maintenance.

4.5.3 Repair, maintenance or replacement of any road sign for a private road or rights-of-way will not be at Council's expense.

4.5.4 Council will provide and erect nameplates and posts for existing public roads that are newly named (not part of a recent subdivision).

4.5.5 Council will maintain all road signs on public roads.

4.5.6 Where appropriate, and at the discretion of Council, when signage for a road that has a significant historic name is to be replaced, a sign plate may be erected that identifies the historic significance of the name.