

MARTINBOROUGH COMMUNITY BOARD

Agenda

NOTICE OF MEETING

An ordinary meeting will be held in the Supper Room, Waihinga Centre, Martinborough on Thursday, 11 August 2022 starting at 6:30pm. Masks and physical distancing are recommended.

MEMBERSHIP OF THE COMMITTEE

Mel Maynard (Chair), Aidan Ellims, Nathan Fenwick, Michael Honey, Cr Pam Colenso, Cr Pip Maynard and Alex Mason (youth representative).

PUBLIC BUSINESS

- 1. EXTRAORDINARY BUSINESS:
- 2. APOLOGIES:
- 3. CONFLICTS OF INTEREST:
- 4. ACKNOWLEDGEMENTS AND TRIBUTES:
- 5. PUBLIC PARTICIPATION:
 - 5.1 Joy Cooper Wharekaka Board Update
- 6. ACTIONS FROM PUBLIC PARTICIPATION/PRESENTATIONS:

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 <u>Minutes for Approval</u>: Minutes of the Martinborough Community Board meeting held on 30 June 2022.

Pages 1-4

	7.2	Martinborough Community Board meeting held on 30 June 2022.	1 4565 5 6
		Proposed Resolution : That the minutes and public excluded minutes of the Martinborough Community Board meeting held on 30 June 2022 be confirmed as a true and correct record.	
8.	DECISI	ON REPORTS FROM CHIEF EXECUTIVE AND STAFF:	
	8.1	Street Flag Application Report	Pages 7-11
	8.2	Financial Assistance Report	Pages 12-13
9.	INFOR	MATION REPORTS FROM CHIEF EXECUTIVE AND STAFF:	
	9.1	Revoking Policies Report	Pages 14-52
	9.2	Income and Expenditure Report	Pages 53-57
	9.3	Action Items Report	Pages 58-61
	9.4	Officers' Report	Pages 62-280
10.	NOTIC	ES OF MOTION:	
	10.1	None advised	
11.	CHAIR	PERSON'S REPORT:	
	11.1	Chairperson Report	Pages 281-282
12.	ELECTE	ED MEMBER REPORTS (INFORMATION):	
	12.1	None advised	

Minutes for Approval: Public Excluded minutes of the

7.2

Pages 5-6



Martinborough Community Board

Minutes - 19 May 2022

Present: Mel Maynard (Chair), Aidan Ellims, Michael Honey, Councillor Pam

Colenso and Councillor Pip Maynard

In Attendance: Mayor Alex Beijen, Stefan Corbett (Group Manager, Partnership and

Operations), Melanie Barthe (Climate Change Advisor) and Kaitlyn

Carmichael (Committee Advisor)

Public Participation Leah Hawkins

Conduct of This meeting was conducted in public in the Supper Room,

Business: Martinborough Town Hall, Texas Street, Martinborough between

6.30pm and 7.57pm and was live streamed on the Council's YouTube Channel. All members participating via video conference counted for the purpose of the meeting quorum in accordance with clause 25B of

Schedule 7 to the Local Government Act 2002.

1. EXTRAORDINARY BUSINESS

Letters of support for the proposed naming of a new private road, at 46-48 Weld Street, will be tabled for consideration under item 8.1.

2. APOLOGIES

There were no apologies.

3. CONFLICTS OF INTEREST

There were no conflicts of interest declared.

4. ACKNOWLEDGMENTS AND TRIBUTES

Cr Maynard acknowledged the passing of Niniwa Munro and noted her contribution in the establishment of the Māori Standing Committee.

Mr Honey acknowledged the work of Bryce Neems throughout his time as the Amenities and Solid Waste Manager. Members noted his contributions to Considine Park and Pain Farm Estate.

Mayor Beijen and Mr Fenwick acknowledged the passing of Pete Smith who is a long term resident of the pensioner flats in Martinborough.

Ms Maynard acknowledged the opening of the new Pain & Kershaw supermarket and congratulated the Kershaw family on their achievements.

5. PUBLIC PARTICIPATION

<u>Leah Hawkins – Road Naming Application</u>

Ms Hawkins spoke in support of her road naming application and shared the history and context for name, George Hawkins Way. Ms Hawkins requested the boards support on the preferred name.

6. ACTIONS FROM PUBLIC PARTICIPATION

Ms Maynard noted that actions from public participation would be considered under item 8.1, the Road Naming Report.

7. MARTINBOROUGH COMMUNITY BOARD MINUTES

7.1 Martinborough Community Board Minutes – 19 May 2022

MCB RESOLVED (MCB 2022/27) that the minutes of the Martinborough Community Board meeting held on 19 May 2022 be confirmed as a true and correct record.

(Moved Cr Maynard/Seconded Ellims)

Carried

8. DECISION REPORTS FROM CHIEF EXECUTIVE AND STAFF REPORTS

8.1 Road Naming Report

MCB RESOLVED (MCB 2022/28):

1. To receive the proposed naming of a new private road, at 46-48 Weld Street, In Martinborough Report.

(Moved Honey/Seconded Cr Maynard)

Carried

 To approve the proposed naming of "George Hawkins Way" for the proposed private road at 46-48 Weld Street, Martinborough. (Moved Honey/Seconded Cr Colenso)

Carried

Members acknowledged the legacy of George Hawkins and whanau and offered full support for the application.

9. INFORMATION REPORTS FROM CHIEF EXECUTIVE AND STAFF

9.1 Climate Change Report

MCB RESOLVED (MCB 2022/29) to receive the Climate Change Report.

(Moved Ellims/Seconded Fenwick)

Carried

Ms Barthe spoke to items outlined in the report and provided information on the Risk and Reliance Strategy. Ms Barthe noted upcoming workshops to discuss risk mitigation strategies for the campgrounds outlined in the report.

Members queried the risk associated with the Lake Ferry Campground and Ms Barthe provided clarification.

Members queried if the information outlined in the report will be incorporated into the Coastal Camping Bylaw. Mr Corbett noted that risk

and mitigation are relevant to the way low laying camping areas are managed.

9.2 Income and Expenditure Report

MCB RESOLVED (MCB 2022/30) to receive the Income and Expenditure Statement for the period ending 31 May 2022.

(Moved Cr Colenso/Seconded Ellims)

Carried

Members noted that the beautification portion of the report was not included. Ms Carmichael undertook distributing this to the board.

9.3 Action Items Report

MCB RESOLVED (MCB 2022/31) to receive the Action Items Report.

(Moved Cr Maynard/Seconded Ellims)

Carried

Members discussed items outlined in the report and noted further updates.

Members debated if the maintenance of costal BBQs could be undertaken by local residents. Ms Maynard undertook following up with Ms Boyne about this item.

9.4 Officer's Report

MCB RESOLVED (MCB 2022/32) to receive the Officers Report. (Moved Cr Maynard/Seconded Cr Colenso)

Carried

Mr Corbett noted the large number of transformative legislation currently being considered by central government.

Mayor Beijen provided an update on the Wellington Regional Leadership Committee.

Members discussed the Road to Zero and roading safety in the ward. Mayor Beijen noted the benefit of inviting a Waka Kotahi representative to an upcoming Council meeting. Mr Corbett provided clarification on the process and spoke to current roading priorities.

Ms Maynard noted errors in spelling of Hau Ariki Marae and Tauherenikau in the report and Mr Corbett undertook making corrections.

10. NOTICES OF MOTION

There were no notices of motion.

11. CHAIRPERSON REPORT

11.1 Chairperson Report

MCB RESOLVED (MCB 2022/33) to receive the Chairperson Report.

(Moved Cr Colenso/Seconded Fenwick)

Carried

Ms Maynard acknowledged the success of the recent Hinekura Road residents meeting and requested that the board be included in all correspondence to

residents. Mr Carmichael undertook adding the board to the email distribution list.

Members agreed to send the attached letter to the Wairarapa Dark Sky Association on behalf of the board.

Ms Maynard requested an update on the Three Waters Government Reform and Mr Corbett and Mayor Beijen provided information. Cr Maynard and Cr Colenso noted that a full update is available as part of the 30 June 2022 Council agenda.

12. MEMBER REPORTS

There were no member reports.

13. PUBLIC EXCLUDED BUSINESS

.....Date

MCB RESOLVED (MCB 2022/34) that the public be excluded from the following part of the meeting, namely:

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

Report/General Subject Matter	Reason for passing this resolution in relation to the matter	Ground(s) under Section 48(1) for the passing of this Resolution
13.1 Stock Exclusion from Waterways	Good reason to withhold exists under section 7(2)(i)	Section 48(1)(a)

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 6 or section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public are as follows:

Reason for passing this resolution in relation to the matter		
The withholding of the information is necessary to enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial	Section 7(2)(i)	
and industrial negotiations).		

Chairperson	
Confirmed as a true and correct record	
The meeting closed at 7.57pm.	
(Moved Maynard/Seconded Cr Maynard)	<u>Carried</u>
and industrial negotiations).	



Martinborough Community Board

Minutes - 30 June 2022

PUBLIC EXCLUDED

Present: Mel Maynard (Chair), Michael Honey, Aidan Ellims, Councillor Pam

Colenso and Councillor Pip Maynard.

In Attendance: Mayor Alex Beijen, Stefan Corbett (Group Manager, Partnership &

Operations), Melanie Barthe (Climate Change Advisor) and Kaitlyn

Carmichael (Committee Advisor).

Conduct of The meeting was conducted in public in the Supper Room,

Business: Martinborough Town Hall, Texas Street, Martinborough between

6.30pm and 9.03pm.

2. Apologies

There were no apologies.

13. Consideration of Public excluded business

MCB RESOLVED (MCB 2021/35) that the public be excluded from the following part of the meeting, namely:

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

Report/General	Reason for passing this resolution in relation to	Ground(s) under Section 48(1)
Subject Matter	the matter	for the passing of this Resolution
13.1 Stock Exclusion	Good reason to withhold exists under section	Section 48(1)(a)
from Waterways	7(2)(i)	

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 6 or section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public are as follows:

Reason for passing this resolution in relation to the matter			
The withholding of the information is necessary to enable any local Section 7(2)(i)			
authority holding the information to carry on, without prejudice or			
disadvantage, negotiations (including commercial and industrial			
negotiations).			

(Moved Maynard/Seconded Cr Maynard)

<u>Carried</u>

DISCLAIMER

13.1 Martinborough Community Board Minutes

MCB RESOLVED (MCB 2022/35 PE) that the minutes of the Public Excluded Martinborough Community Board meeting held on 19 May 2022 be confirmed as a true and correct record.

(Moved Ellims/Seconded Cr Maynard)

The meeting closed at 7.57pm.

Carried

Confirmed as a true and correct record	
Chairperson	
Date	

MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 8.1

STREET FLAGS APPLICATION REPORT

Purpose of Report

To present the Community Board with an application received for street flag bookings.

Recommendations

Officers recommend that the Community Board:

- 1. Receive the Street Flags Application Report.
- Consider the application from Martinborough Music Festival Trust for the installation of 13 street flags in Martinborough from 5 September to 30 September 2022 for the Martinborough Music Festival.

1. Executive Summary

Under the <u>Street Banners and Flags Policy</u> booking applications received for street flags are required to be presented to the Community Board.

One application has been received for flag bookings in Martinborough from the Martinborough Music Festival Trust. The applications is provided in Appendix 1.

The Community Board is asked to consider the application against the policy guidelines for comment and approval.

2. Policy Guidelines

The Street Banners and Flags Policy ensures a consistent approach for all organisations and groups and assists officers and Council to determine priorities in display.

To streamline the approach of taking bookings for street flags, Council requires anyone wanting to install street flags make an application through the respective Community Board. The application is to include the dates of installation and removal, reason for installation, event details, and a description or picture of the flag.

The Community Board approves and takes bookings for the flags. In determining appropriate usage the Community Board should consider the following:

Previous use and historical context

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

In addition, any flag must not contravene the Wairarapa Combined District Plan or other plans, bylaws or guidelines. Officers have reviewed the applications and confirm the Board is able to proceed with consideration of the three applications under the Street Banners and Flags Policy. It is noted however the policy is due for review. The timing of the review will be considered alongside other policies due for review and officers will report to the Finance, Audit and Risk Committee on the review programme.

3. Conclusion

The Community Board is presented with an application for flag bookings from Martinborough Music Festival Trust for comment and approval. Any deviation from the approved flags without previous agreement with the Community Board may result in the removal of flag.

The Board also reserves the right to refuse design applications at its discretion.

4. Appendices

Appendix 1 – Street Flag Application from Martinborough Music Festival Trust

Contact Officer: Kaitlyn Carmichael, Committee Advisor

Reviewed By: Amanda Bradley, General Manager, Policy and Governance

Appendix 1 – Street Flag Application from Martinborough Music Festival Trust

MARTINBOROUGH MUSIC FESTIVAL

23 SEPTEMBER - 25 SEPTEMBER 2022 WWW.MARTINBOROUGHMUSICFESTIVAL.CO.NZ

TO: MARTINBOROUGH COMMUNITY BOARD

FROM: MARTINBOROUGH MUSIC FESTIVAL TRUST

Date: 27 June 2022

STREET FLAGS APPLICATION

The Martinborough Music Festival is asking the Martinborough Community Board for approval to mount 13 street flags in Martinborough in September 2022.

Dates of Installation & Removal

Installation: Monday 5 September 2021 Removal: Friday 30 September

Reason for Installation

The annual Martinborough Music Festival chamber music festival takes place on the weekend of 23-25 September at the Martinborough Town Hall ... five concerts over the three days.

We would love the flags to be up for the three weeks before the festival weekend and for a week after the festival weekend to create a festive vibe and build awareness and excitement. We would love our festival audience ... especially those coming from out of town ... to feel like the town is welcoming them and celebrating the festival.

Description or Picture of the Flag

We plan to fly the same 13 flags as last year. See attached.

Ngā mihi nui

Brendan Smyth

Phone: 021 434 161

Email: <u>info@martinboroughmusicfestival.co.nz</u>
Web: <u>www.martinboroughmusicfestival.co.nz</u>





MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 8.2

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 Martinborough Business Association for funds of \$1,000 for Christmas garland decorations in Martinborough.
- 3. Consider the application from Martinborough Youth Trust for funds of \$500 for a 2022 community fireworks 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 <u>Grants Policy</u>.

2. Applications for Financial Assistance

The applications received for consideration are summarised in the below table.

Applicant	Amount Requested
Martinborough Business Association	\$1,000
Martinborough Youth Trust	\$500

3. Eligibility Criteria

Council adopted a new <u>Grants Policy</u> which sets out the eligibility criteria for applications. The policy takes effect from 1 July 2021.

The key eligibility criteria for Community Board grants are 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 Martinborough Community Board considers grants twice a year in August and February and the maximum grant available in each round is equal to half the available grant pool. Any remaining funds from the August round will be rolled over to the February round and GST will be added to grants approved for GST registered applicant.

The Grants Policy sets out further criteria.

3.1 Assessment against Eligibility Criteria

3.1.1. Applications from Martinborough Business Association and Martinborough Youth Trust

The applications from Martinborough Business Association and Martinborough Youth Trust have been assessed as meeting the criteria and there are no outstanding accountability forms.

4. Conclusion

The applications will be provided to members in confidence.

Contact Officer: Kaitlyn Carmichael, Committee Advisor

Reviewed By: Amanda Bradley, General Manager, Policy and Governance

MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 9.1

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

Adopted 22/11/2000 Reviewed August 2019February 2020 A100

- 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.

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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 <i>PLUS</i> 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

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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.

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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.

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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)

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.

Adopted 22/11/2000 Reviewed September 2019 Next review February 2020

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).

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.

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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	Cr Colin Olds.
Appointment:	(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.

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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.

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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 CentreGreytown : 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 subcommittee.
- **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.

MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 9.2

INCOME AND EXPENDITURE STATEMENTS

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 2022.

1. Executive Summary

The draft Income and Expenditure Statement for the period ending 30 June 2022 is attached in Appendix 1.

The Chair may ask Council officers for comment and all members may ask the Council officers for clarification and information through the Chair.

2. Appendices

Appendix 1 – Draft Income and Expenditure Statement for period ending 30 June 2022

Prepared By: Hayley McDonald, Assistant Accountant

Reviewed By: Charly Clarke, Finance Manager

Appendix 1 – Draft Income and Expenditure Statement for period ending 30 June 202

Martinborough Community Board

Income & Expenditure for the Period Ended 30 Jun 2022

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34.680.00
7,000.00
1,000.00
26,680.00

Total Personnel & Operating Costs Budget 2021-2022

Expenses

Personnel Costs

Members' Salaries	31,850.91
Mileage reimbursements	-

Total Personnel Costs to 30 Jun 2022 31,850.91

Operating Expenses

27/08/2021 Local Government NZ	Community board levy 2021/22	275.00
30/11/2021 A Mason Student Rep		100.00
30/11/2021 Staff Expenses - Memorial Gate Centennial Celebration morning tea		97.30

472.30 Total Operating Expenses to 30 Jun 2022

Committed funds

Resolution date		Original	Spent to date	Remaining
	resolution date	commitment	Spent to date	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)	200.00	100.00	100.00

(4,070.91) **Total Commitments**

TOTAL OPERATING EXPENSE BUDGET AVAILABLE* 6,427.70

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

16/08/2021 Martinborough Music Festival		500.00
16/08/2021 Kahutara Hall Society	High Tea & Evening Ball celebrating 100 years	850.00
29/06/2022 Waiararapa Mathematics	Annual maths competition 2021-22	300.00

Total Grants paid out to 30 Jun 2022 1,650.00

LESS: Committed Funds

Resolution date	1100		Original commitment	Spent to date	Remaining commitment
13/08/2020	Martinborough Community	Contribution to ongoing costs	800.00	-	800.00
13/08/2020	Garden	Contribution to water tank	1,000.00		1,000.00

3,450.00 **Total Commitments**

PLUS: Balance Carried forward from previous year* 2,069.23 * excludes Swimming Pool funds

TOTAL GRANTS FUNDS AVAILABLE 1,469.23

^{*} remaining budget for personnel and operating expenses does not carry over into subsequent financial years

Martinborough Community Board

Beautification Fund for the Period Ended 30 Jun 2022

ı	n	_	_	m	-

Income	Annual Plan 2021-2022 allocation				11,000.00
Total Incom	ne 2021-2022				11,000.00
Beautification gr	rants - operating				
5/11/2021 21/06/21 8/03/2021 04/09/202	Leafland PaperStreet OneSource Martinborough Business Association	Northern Rata Tree for Considine Park Planting of tree Considine Park Matariki Flags Remainder owing for changes Christmas Decorations for Martinborough			165.00 114.85 304.00 750.00
Total Beaut	tification grants - operating to 30 Ju	in 2022			1,333.85
Beautification gr	•				
	tification grants - capital to 30 Jun 2	022			-
	0 Tree to be planted in celebraltion 1 Martinborough Business Assn	of 150 years of Martinborough Township Christmas Garland decorations in MBO	Original commitment 279.85 750.00	279.85 750.00	Remaining commitment
PLUS: Balance C	arried forward from previous year				3,763.57
TOTAL BEAUTIF	ICATION FUNDS AVAILABLE				13,429.72

^{*} An adjustment was made to record this spend in the final accounts of June 2020 after the August report had already been completed.

^{**} There are further fountain invoices to be accounted for but will need to manually collate these in the year end process.

Martinborough Community Board

Swimming Pools Fund for the Period Ended 30 Jun 2022

	m	

Funds from Martinborough	Swimming Club			17,678.80
			•	17,678.80
Expenditure				
zaponata. c				-
Total Expenditure			•	-
Net Surplus/(Deficit) Year to Date				17,678.80
LESS: Committed Funds				
Resolution date		Original S	pent to date	Remaining commitment
24/02/2022 Swim with Sophie	Swimming lessons Martinborough	2,410.00		2,410.00
Total Commitments				2,410.00
TOTAL FUNDS AVAILABLE				15,268.80

MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 9.3

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 in Appendix 1. 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 4 August 2022

Contact Officer: Kaitlyn Carmichael, Committee Advisor

Reviewed By: Amanda Bradley, General Manager, Policy & Governance

Appendix 1 – Action Items to 4 August 2022

Number	Raised Date	Responsible Manager	Action or Task details	Status	Notes
176	19-Sep-19	4 & 5 – K Neems	MCB RESOLVED (MCB 2019/70) that: 1b. Officers report to the next full Community Board with a maintenance schedule for the homestead, cottage and surrounding land. (Moved Cr Maynard/Seconded Roy) Carried 1c. Whilst work is being undertaken on the house and cottage, that officers report to the Board at each meeting (6 weekly) on the progress of maintenance until the work is completed, and Thereafter, officers report 6 monthly on the condition of the homestead, cottage, surrounding land, and farm. (Moved Cr Colenso/Seconded Beattie) Carried 2. The repairs and maintenance work to bring the homestead and cottage up to an acceptable standard for rental purposes be undertaken as a matter of priority. (Moved Cr Colenso/Seconded Beattie) Carried 3. The exterior painting of the homestead be undertaken as the next priority and that the Board recommends Council approves up to \$30,000 for this work. (Moved Cornelissen/Seconded Cr Colenso) Carried 4. That Council review the overhead cost allocation model for the Pain Farm. 5. That following this review, that Council consider whether any overhead allocations for the last three years should be credited back to the Pain Farm account. (Moved Read/Seconded Cornelissen) Carried	Open	Review of the overhead cost allocation model to be done as part of the Long-Term Plan. 05/11/20: Members discussed timeframes of the cost allocation model review, scope of original request and sought an update to clarify the connection between the overhead cost allocation model and crediting of funds back to the Pain Farm account. 08/12/20:—It is considered efficient to look at the review of the costs at the same time as the allocation model is reviewed for the LTP. Due to resourcing constraints this has been pushed to early next year. As mentioned in a previous report it is unlikely any Corporate Support costs will be credited as they cover governance and secretarial duties, financial accounts, debt collection, internal administrative time etc for the residential accommodation, refuse station, and farm. The portion of the Professional Services which covers property management for these three income streams will form the basis of the review. The time taken for Officers to project manage the entire property including the recent upgrade to the house and farm fencing will also be taken into account. 29/4/21: Awaiting confirmation of LTP. 29/6/21: Report to be presented to FAR for discussion 11/08/21. 09/8/21: Due to resourcing constraints report is to be presented to the next FAR meeting 27/10/21. 25/11/21: Update requested by MCB. 24/02/22: Update requested by MCB. 28/03/22: Officers will factor this review into be completed by 30 June 2022. 6/5/22: Update from Finance Manager. Waiting for new General Manager, Finance to start and this will be taken up in the near future with her.
95	27-Feb-20	M Honey (MCB)	Investigate forming a Martinborough Tree Group with representatives from the community and the Martinborough Community Board.	Open	02/7/20: Mayor Beijen and Michael Honey have started the process of establishing a Martinborough Tree Group. 14/8/20: Four representatives identified but group not yet established. 24/9/20: Still in progress of forming group. 17/12/20: Mayor Beijen updated members progress has been made and invitations would be sent within the coming weeks. 29/4/21: Work in progress. 25/11/21: Michael Honey undertook continuing this project. 24/02/22: M Honey progressing with this project.
429	13-Aug-20	МСВ	Investigate entering into a funding partnership agreement with Martinborough Community Garden for the remainder of the triennium.	Open	24/8/20: Funding partnership offered through correspondence on grant. Martinborough Community Garden has requested to meet with MCB first and this request has been forwarded to the Chair. 27/10/20: Chair of MCB met with Martinborough Community Garden who has requested relocation options first be considered (refer to action 489). 27/10/20: A potential site behind the Cecily Martin Housing for Seniors area on the corner of Venice and Regent Street has been identified. 05/11/20: Members discussed the proposed location for the Martinborough Community Garden at the Cecily Martin Housing for Seniors area on the corner of Venice and Regent Street and sought clarification on the land available before members discussed the proposed location with the Martinborough Community Garden (refer Action 617) 8/12/20: The land area is approximately 1270m2 and maps of the area were provided in Appendix 3 of the Action Items Report to the meeting on 17/12/20. It is suggested if the Board wants to explore this that a community board representatives works with the Martinborough Community Garden to present a proposal to officers for consideration. 07/04/22: Action re-opened at request of MCB. Report requested outlining potential sites for the Community Garden. 20/05/22: Email sent to MCB on behalf of officers - very little council owned land available; alternative suggestions made
497	24-Sep-20	МСВ	To continuing working with mana whenua on a Martinborough town sign entrance	Open	19/05/22: MCB undertook holding a workshop to progress this.
727	17-Dec-20	МСВ	Consider putting forth a list of road names for use in the Martinborough Ward	Actioned	19/05/22: MCB undertook holding a workshop to progress this. 30/06/22: Actioned closed at request of MCB.

Number	Raised Date	Responsible Manager	Action or Task details	Status	Notes
731	17-Dec-20	N Fenwick /MCB	Investigate who originally designed the historical information sign at Bidwill's Cutting	Open	29/4/21: Still work in progress 08/7/21: Local graphic designer, Andy Shaw, expressed interest in designing the Bidwill's Cutting sign. Martinborough Automotive Ltd would fund the design drafting costs which would then be presented to the Board. 25/11/21: Ongoing 24/02/22: Project undertaken by N Fenwick 7/04/22: Mr Fenwick provided an update on the Bidwill's Cutting sign and undertook presenting the draft to the Māori Standing Committee.
127	29-Apr-21	МСВ	Investigate the process for submitting an application to South Wairarapa Rotary Club for funding of new FlagTrax in Martinborough subject to confirmation that the Martinborough Community Board is able to apply for external funding	Open	27/5/21: The Board is able to apply externally for funds. Cr Colenso updated members an application would be presented to the next MCB meeting for consideration. 25/11/21: Cr Colenso drafting application
317	8-July-21	S Corbett	Liaise with Council officers to investigate purchasing suitable BBQ options for coastal reserves	Open	26/7/21: The costs of a single gas operated BBQ for the public is \$10,000 + GST plus concrete pad. There are also ongoing cleaning and maintenance costs. 13/06/22: Travel and cleaning time is a key cost on the BBQ, Officers biggest concern is vandalism and theft. Summer period from Labour Weekend till Easter being the busy period 26 weeks x 3 times a week possibly conservative x 120km round trip \$9,500.00 26 weeks x 2 times a week x 120km \$6,500.00 Cleaning time and material \$6,500.00 Total \$22,500.00 BBQ \$10,000.00 Concrete \$600.000 plus travel to install Overall total approx. \$ 33,100.00 This does not take into account gas bottle swaps. We find that the Waihinga playground BBQ requires cleaning twice a week now since the weather has been so good. This is done on the weekly playground equipment checks Monday and Friday. We currently have a cleaner based at Ngawi but he is well passed retirement age so there is an opportunity to utilise him in the short term which will reduce travel, we only clean the toilets twice a week and daily over the centre of the Xmas period. Even cutting out some travel approx. cost of \$20,000.00 with yearly costs of \$10,000. As you can see great to have it but expensive having them so far away at a cost that this council currently cannot cover. 30/06/22: Ms Maynard undertook following up with Tora residents on this update.
626	25-Nov-21	H Wilson	To request, through the Chief Executive, a timeline for a report on the flooding risks of all South Wairarapa Campgrounds	Actioned	2/17/22: This will be reviewed for an upcoming meeting. 24/02/22: Update requested. 31/03/22: We will pick up the detail of the risk assessment as part of our coastal reserves and camping bylaws review which will be scheduled in forthcoming policy reviews. 7/04/22: Action re-opened at request of MCB. 19/05/22: MCB requested to be informed in this process. 30/06/22: Report on 5 SWDC campgrounds to MCB - risk mitigation strategy discussed.
241	19-May-22	S Corbett	To request from Council a report on the carbon tax refund and options/costs for waterway tree planting at Pain Farm.	Open	27/7/22: Fencing is not due to be completed until October. As a 2-wire fence is planned for one of the waterways to withhold cattle but not sheep, no planting could be undertaken along that stream until a decision is made to upgrade this length of fencing to an 8-wire fence. A report will be prepared following the 8-wire fence installation along the back waterway.

MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 9.4

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.

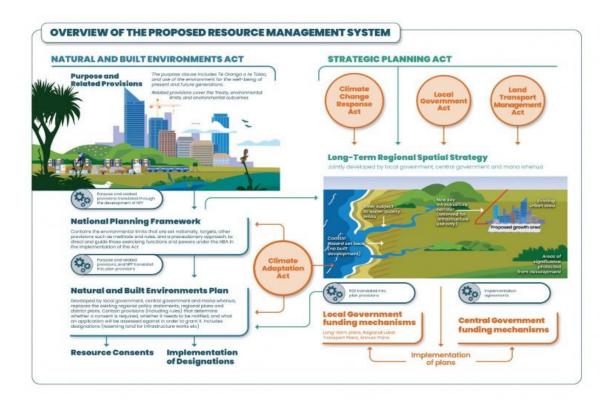
On the changes MFE information also advises that:

- 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.

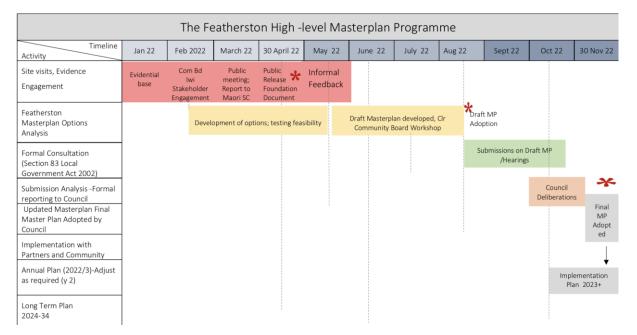
Initial Engagement	Date
 Meeting with Chair Maori Standing Committee (MSC) Meeting with Chair MSC, and member Karen Mikaere (Mana whenua and MSC member) 	1 Feb 21 Feb
Report to MSC	29 Feb
Report to Featherston Community Board	22 Feb
Meeting with Chair Wairarapa Economic Dev Strategy Governance Group	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 interagency 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 earthquakeprone 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.

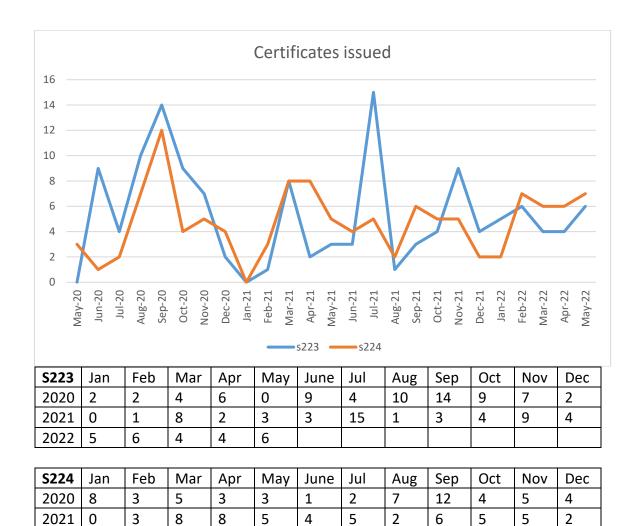
RESOURCE MANAGEMENT KEY PERFORMANCE INDICATORS	Target	YTD Result	COMMENT SOURCE, AND ACTIONS TAKEN TO ACHIEVE TARGET
Council maintains, and updates reserve management plans as required.	Yes	Yes	RMP's are generally current and appropriate. It is therefore not anticipated that any updates will be undertaken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



Land	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Use												
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	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec
division												
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	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Boundary												
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							



Local Government Act – LIMs 2.1.3.

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

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

2.2 Building Act - Consents and Enforcement

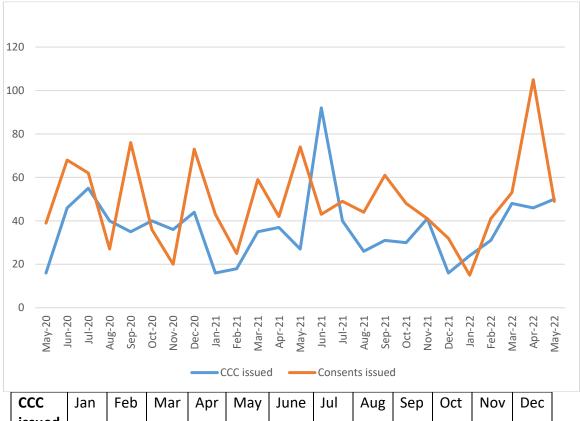
SERVICE LEVEL - Council certifies all consented work complies with the building code, ensuring our communities are safe. The Council processes, inspects, and certifies building work in my district.

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	Yes	Yes	Building Consents
ensure compliance with the BC issued for the work, Council audits BWOF's			Council inspects all new work to ensure compliance
and Swimming Pools			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

Туре – 1 Мау 2022 то 31 Мау 2022	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	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
issued												
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	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
issued												
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							

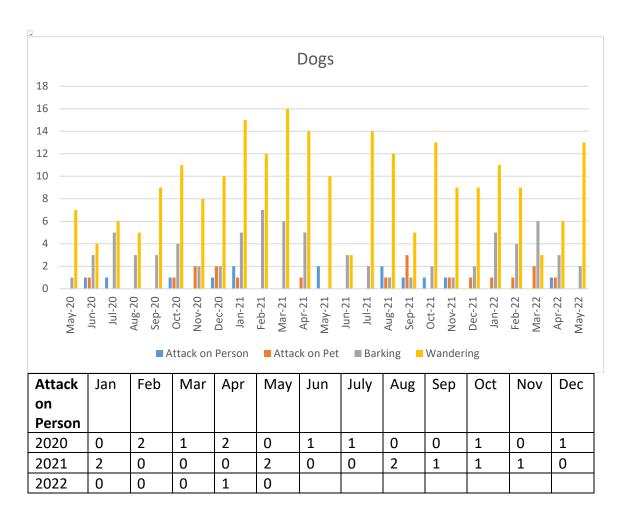
2.3 Environmental Health and Public Protection

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 1 ST MAY 2022 – 31 ST MAY 2022	FEATHERSTON	GREYTOWN	Martinborough
Attack on Pets	<u>-</u>	-	-
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)	-	-	-

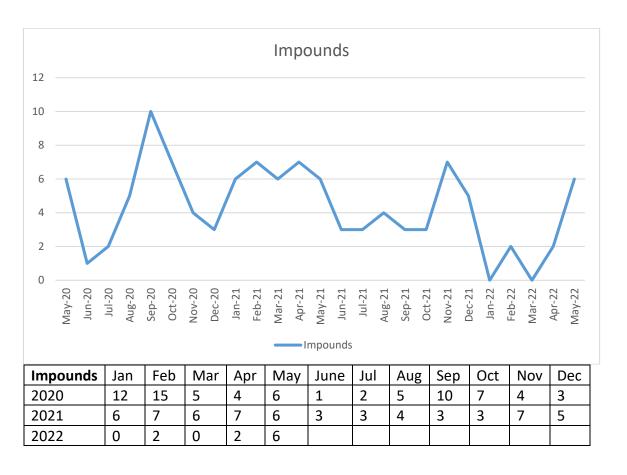


Attack on Pet	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	0	0	0	1	0	1	0	0	0	1	2	2
2021	1	0	0	1	0	0	0	1	3	0	1	1
2022	1	1	2	1	0							

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 1 ST May 2022 – 31 ST May 2022	MAY 2022	
Impounds	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

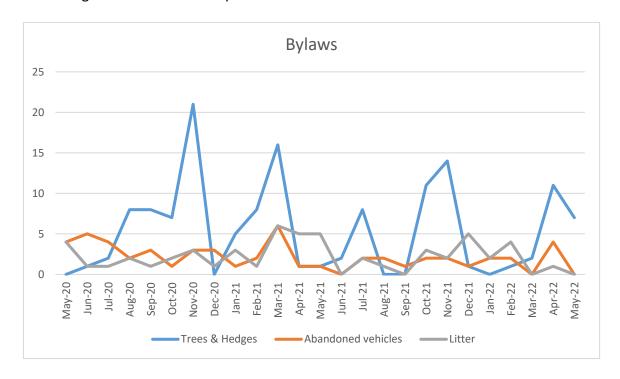
There were 1 first notices sent by Council requesting the owner/occupier to remove the obstruction from the public space. Following this there are 6 second follow up letters being sent within this period. 0 address has had contractors engaged to remove overgrown vegetation in Greytown.

Litter

O litter (fly tipping) incidents have been recorded. From these, identification was retrieved from the litter Council officer disposed. O requests for information notice have been sent to the identifiable people associated with the incident. O 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	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
&												
Hedges												
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							

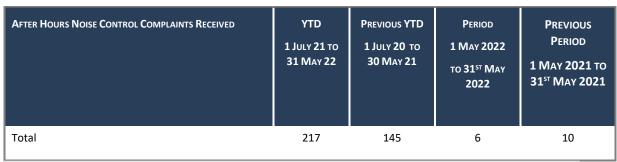
Abandoned vehicles	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	5	1	1	0	4	5	4	2	3	1	3	3
2021	1	2	6	1	1	0	2	2	1	2	2	1
2022	2	2	0	4	0							

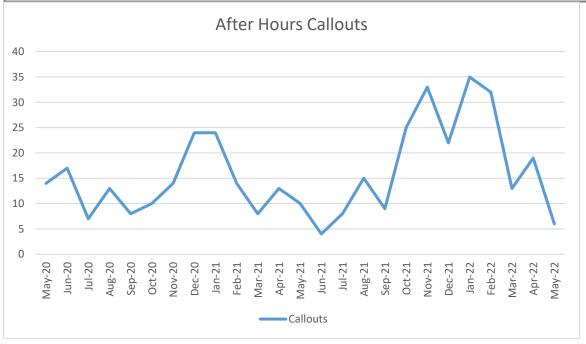
Litter	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	1	3	2	2	4	1	1	2	1	2	3	1
2021	3	1	6	5	5	0	2	1	0	3	2	5
2022	2	4	0	1	0							

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





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							

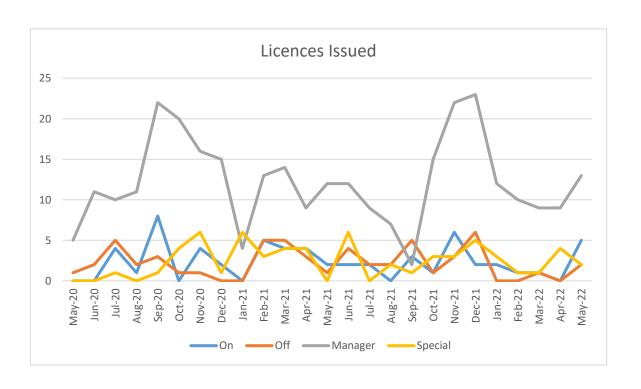
2.5 Sale and Supply of Alcohol Act - Licensing

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	100%	100% YTD	MAY 2022 LICENCES PERIOD YTD
understanding of their obligations and responsibilities under the Act			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			MAY 2022
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			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 30 th of June the following year (i.e. within a 12	75%	32.8% YTD	Due to COVID 19 this activity is not being undertaken. COMPLIANCE VISITS May 22 – 0 YTD 41/125
month period)			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 21 to 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							

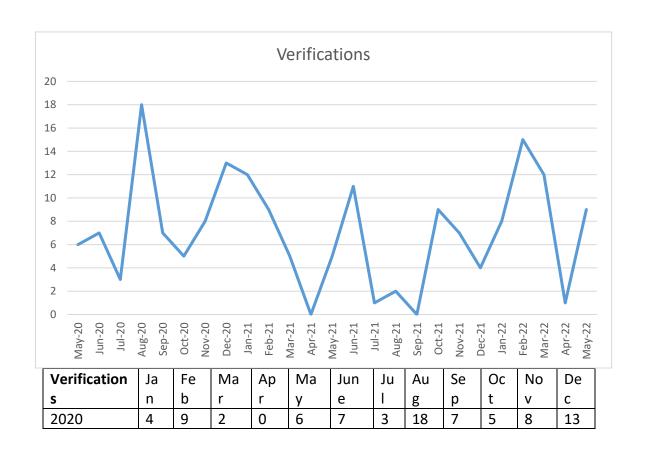
Manager	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec
2020	12	10	18	0	5	11	10	11	22	20	16	15
2021	4	13	14	9	12	12	9	7	2	15	22	23
2022	12	10	9	9	13							

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



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
- 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



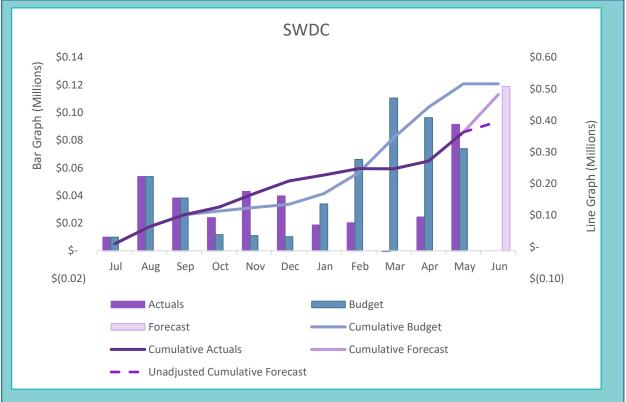
SWDC Major Projects Monthly report – May 2022

Regional summary:

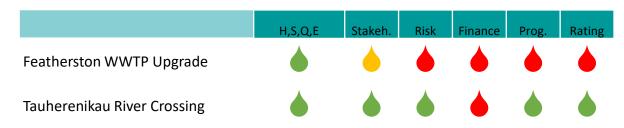
We are through the worst of covid and are managing its impacts, mainly cost for delays and materials. We have a number of strategically important projects in construction, or in the award phase in the region which means great progress on outcomes.

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.

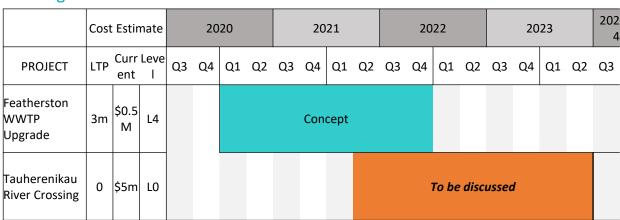
Major Project Financial progress: Forecast; Actual, budget



Risk profile



Programme



Project	Objectives	Commentary
Featherston WWTP	Upgrade of wastewater treatment plant to	Phase 1 - Short Term Consent
Upgrade	meet likely improved discharge conditions.	• 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.
*Priority Ranking 6	This objective is twofold: 1. An affordable solution that enables a	• 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
	consent for 5 – 10 years	Paper issued to SWDC ahead of SWDC transition workshop to decide whether to bring the project in house to SWDC (planned for early June)
	2. A long term solution for Featherston that	Consenting strategy, environmental monitoring and project management plan all underway to be completed in June
	meets environment outcomes	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	Identify long term preferred option for crossing	
Crossing	the Tauherenikau River	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	Financ e	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 630DPE watermain and 421m of 1800DPE 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.	•	٠	•	•	•	•
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.	•	•	•	•	•	•
Asset management systems and processes and 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 cyberattack. - 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.	•	•	•	•	•	<u> </u>
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.	•	•	•	6	6	•
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 g		•	•	•	•	•

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:

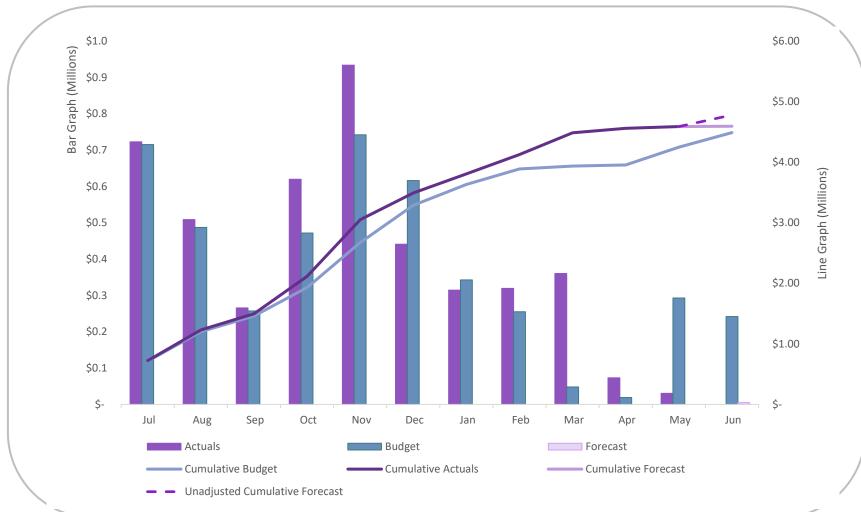
Risk Description	Mitigation / comments
The Memorial Park WTP upgrade project may experience a delay in commencing construction	Contract has been awarded to Brian Perry Civil however the project team have a number of enabling works to complete prior to construction commencing. Outstanding snags need closing 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 beer 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.

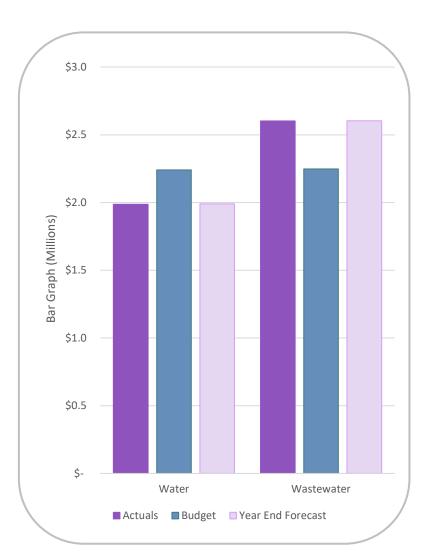
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May 2022 SWDC PMO CAPEX Programme Update







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.	06 July 2022
	Note this updated memo incorporates actions from the initial meeting (12/05/2022) and subsequent communications.	

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.



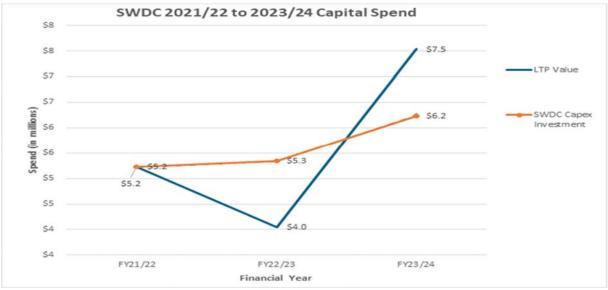


Figure 1 - Three-year LTP values and revised profile for Featherston Funding

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



Risks, Issues & Opportunities

- 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.



Appendix A – Budget Breakdown (Scenario 3)

Financial Year	Sustained Uplift (\$)			LTP Value				Project Forecast
	Lower	Mid-Point	Upper	(inflated values) (\$)	Change to LTP spend profile (\$)	SWDC Capex Investment (\$)	Total Planned Projects (\$)	vs Revised Budget (\$)
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%



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



Appendix C - Proposed Projects & Spend

Project Title	Water Type	LGA	Value	Value
Troject file	water type	Classification	Year 2 (\$)	Year 3 (\$)
GTN Memorial Park WTP Upgrades - Stage 3	Water	Level of Service	2,450,000	· ca. 5 (\$)
FTSN WWTP Consent (alternative disposal systems	Water	Level of Service	2,430,000	
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	VVastevvater	LEVEL OF SELVICE	30,000	200,000
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		Renewal	45,000	45,000
GTN Greytown WWTP Reactive Renewals	Wastewater Wastewater			
FSTN Lake Ferry WWTP Reactive Renewals	Wastewater	Renewal Renewal	45,000 45,000	45,000 45,000
MTB WWTP Reactive Renewals	Wastewater			45,000
		Renewal	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	\\/	Danassal	20.000	20.000
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	- 20,000
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 Water	Level of Service	20,000	20,000
SWDC-CPX-GTN Water Modelling		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 SWDC-CPX-MTB Global SW Consent	Stormwater	Level of Service	20,000	-
	Stormwater	Level of Service	20,000	10,000
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	Value	Value
•		Classification	Year 2 (\$)	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.

 <u>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.</u>
 - 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		
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.



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



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	Value Year 3 (\$)
CTN Mamarial Park WTD Ungrados Stage 2	Water	Level of Service	Year 2 (\$)	Year 3 (\$)
GTN Memorial Park WTP Upgrades - Stage 3	Water	Level of Service	2,450,000	600 000
FSTN Waiohine WTP Stage 3 upgrades		1	300,000	600,000
MTB WW Control System Upgrades	Wastewater	Level of Service	90,000	100,000
SWDC - Remote Water Quality Sensors - zone	Mator	Lavel of Comica	75 000	
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	10,000
	Wastewater		,	
SWDC Treatment Plant Datalogging		Level of Service	6,000	20.000
WWTP - Generator readiness	Water	Level of Service	-	20,00



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	Value	Value
		Classification	Year 2 (\$)	Year 3 (\$)
FSTN Donald Street Pump Station upgrade	Wastewater	Renewal	2,230,000	ı
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	-



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	Value	Value
		Classification	Year 2 (\$)	Year 3 (\$)
FTSN WWTP Consent (alternative disposal systems	Wastewater	Level of Service	1,300,000	1,600,000
FTSN)	wastewater	Level of Service	1,300,000	1,000,000
WWTP - Health and Safety (H&S) upgrades -	Wastewater	Level of Service	100,000	280,000
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	Wastewater	Renewal		100,000
Base	wastewater	Reflewal	_	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







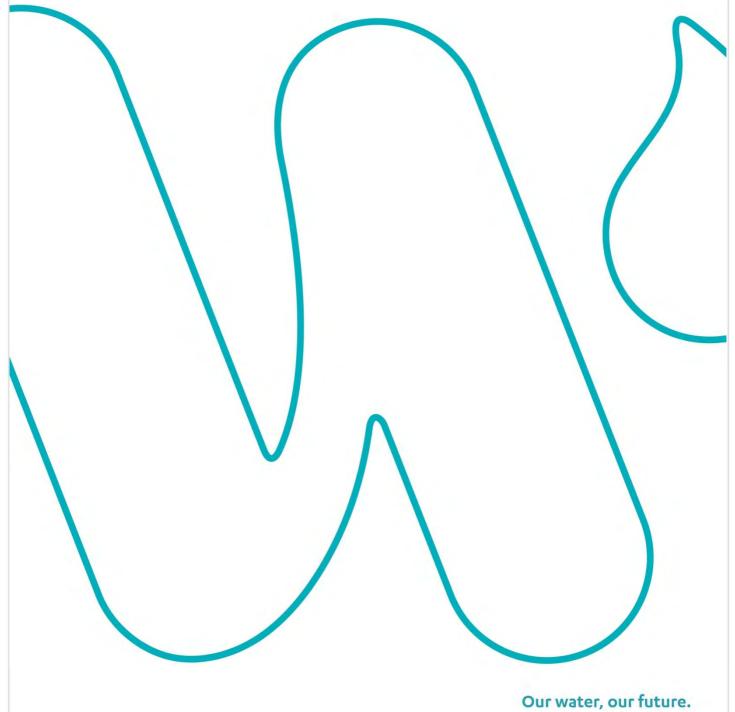


Design Report

Project Name: Tauherenikau River Crossing Options

Project No.: OPC 101202

Date: 15 June 2022



Project Name: Tauherenikau River Crossing Options

Document Control

Panel Member		Stantec					
Panel Project Manager		Paul Marsden	Paul Marsden				
Client Council South Wairarapa			a District Cour	ncil			
REVISION SCHEDULE							
Current Status			Draft				
No	Date	Descri	ption	Prepared by	Checked by	Reviewed by	Approved by
1	03/06/22	Draft fo	r review	РВ	ВН	PM	PM
2	15/06/22	For app	roval	РВ	ВН	PM	PM

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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.



Prepared by: Date: 15 June 2022 Status: Draft

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Appendix B – River Morphology Assessment

Appendix C – MCA Workshop Commentary

Appendix D – Level 1 Cost Estimate

Appendix E – Safety in Design Register

Appendix F – Project Risk Register

Appendix G – Communications Plan



Project Name: Tauherenikau River Crossing Options

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

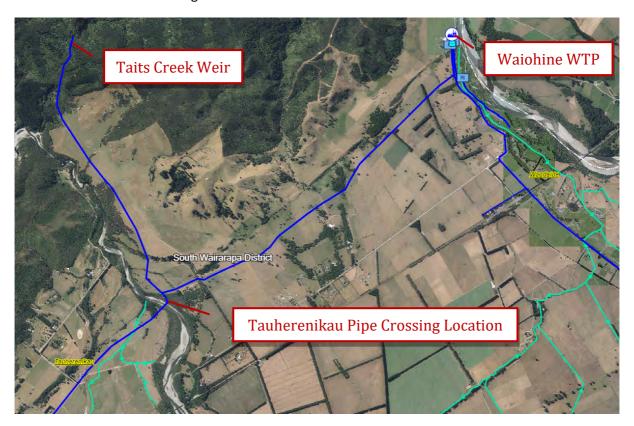


Figure 1 Waiohine Water Treatment Plant and Tauherenikau Crossing

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.



Project Name: Tauherenikau River Crossing Options

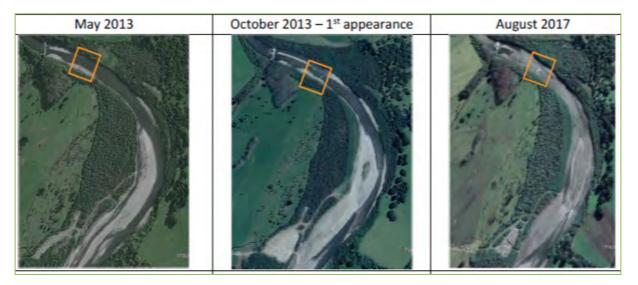


Figure 2 Aerial photos showing appearance of water supply pipe in Tauherenikau River

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.

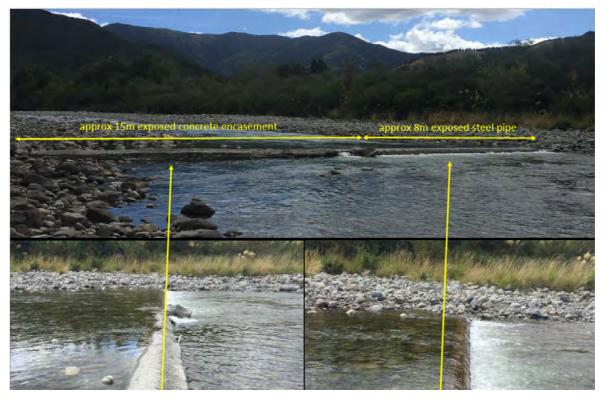


Figure 3 Photos of exposed pipe in Tauherenikau River



Project Name: Tauherenikau River Crossing Options

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 event¹. 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 Science², 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.

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

² How do we know which fault is most likely to rupture next in Wellington? / Wellington Fault / Major Faults in New Zealand /



 $^{^{1}}$ Little, Schermer, Van Dissen, Begg, Carne (2008). Field Trip 5. GNS Science, Lower Hutt

Project Name: Tauherenikau River Crossing Options

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.



Project Name: Tauherenikau River Crossing Options

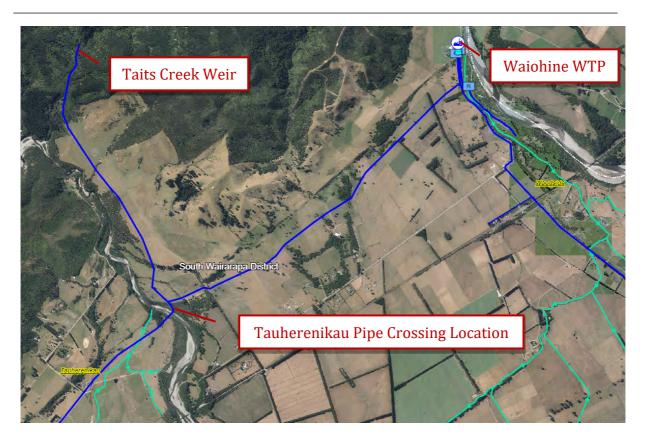
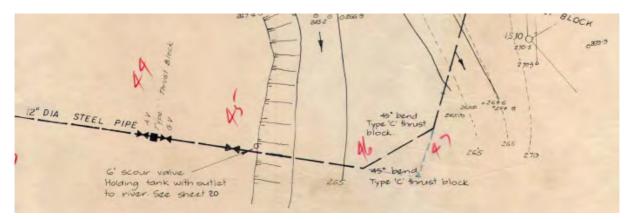


Figure 4 Water Network Configuration

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.





Project Name: Tauherenikau River Crossing Options

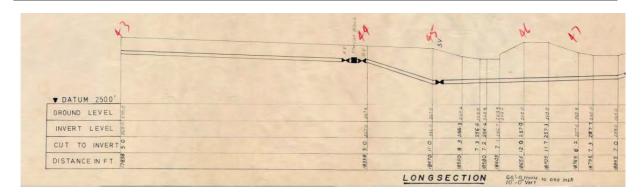
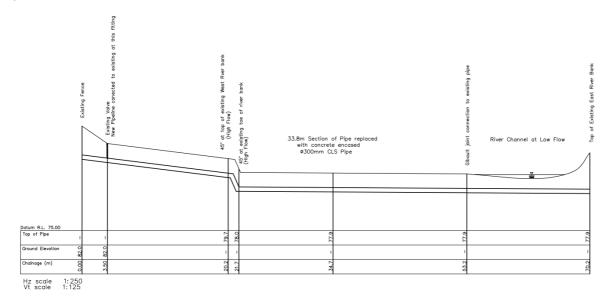


Figure 5 Original Tauherenikau River Crossing Longsection

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.



Tauherenikau River Crossing Pipe Relay

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



Project Name: Tauherenikau River Crossing Options



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.



Project Name: Tauherenikau River Crossing Options

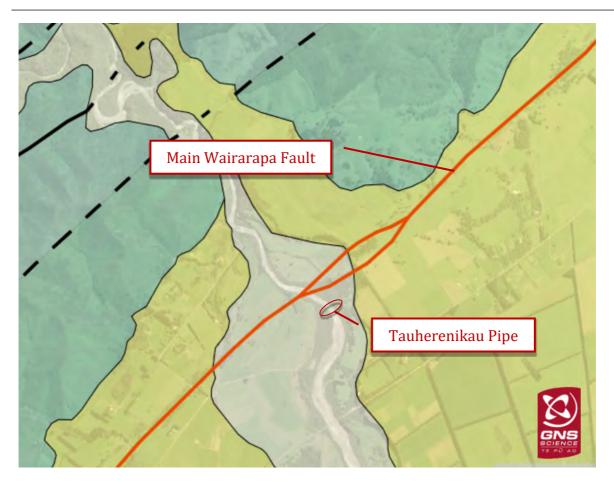


Figure 8 Wairarapa Fault Location

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 (%)
Cont	Capex	Capital cost	30
Cost	Opex	100 year operational cost	10
	Fault Rupture	Resilience to ground shaking and lateral movement from a seismic event for initially constructed asset	4.0
Resilience (including during-event and post-event recovery)	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 advice³.
- 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.



Project Name: Tauherenikau River Crossing Options

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		- Pipe condition is currently unknown
- No effects associated with	r construction -	- Large river flow event could cause washout of



Project Name: Tauherenikau River Crossing Options

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.

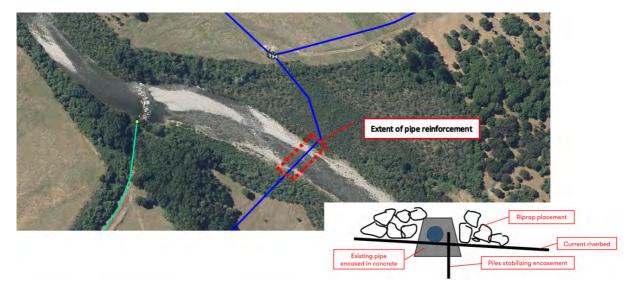


Figure 10 Option 2 - Reinforce the Existing Pipe



Project Name: Tauherenikau River Crossing Options

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.



Project Name: Tauherenikau River Crossing Options

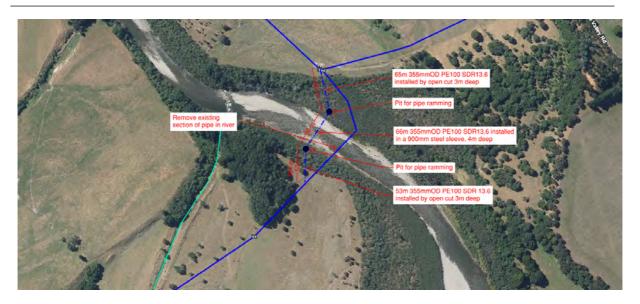


Figure 11 Option 3 – Trenchless Installation

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.



Project Name: Tauherenikau River Crossing Options

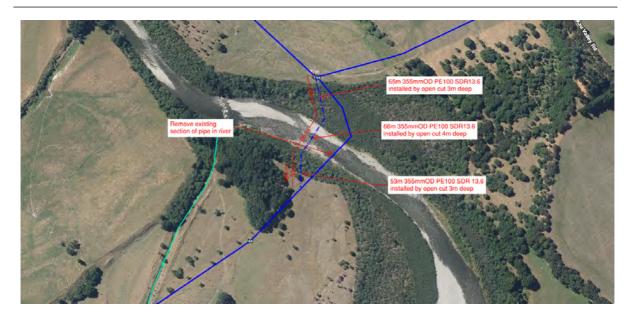


Figure 12 Option 4 – Trenched Installation

Benefits and Risks

Benefits	Risks
- Provides added resilience to riverbed degradation – can potentially achieve 100-year	 Requires river diversion and likely impact on river environment
design life - Relatively quick installation time and lower capital cost	 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.



Project Name: Tauherenikau River Crossing Options

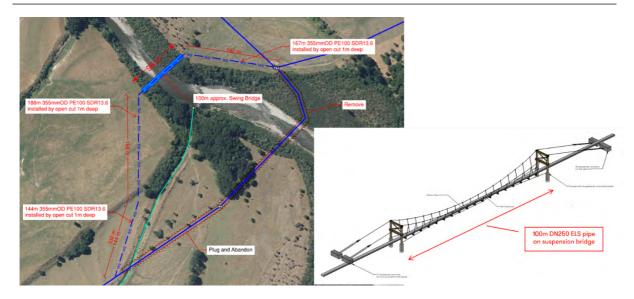


Figure 13 Option 5 – Suspension Bridge at Existing Site

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



Project Name: Tauherenikau River Crossing Options

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.

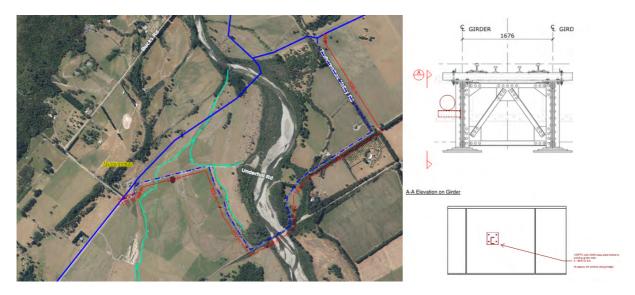


Figure 14 Option 6 – Crossing at Rail Bridge

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 	 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 				
 Bridge structure likely to be maintain by Kiwirail in reasonable condition for the foreseeable future 					

Capital Cost Estimate

95% Level 1 Estimate: \$7.90M

Likely Maintenance and Operating Cost Estimate

Maintenance will include:

• Annual bridge and pipe inspection



Project Name: Tauherenikau River Crossing Options

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.



Project Name: Tauherenikau River Crossing Options

		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 de	еер		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



Project Name: Tauherenikau River Crossing Options

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



Project Name: Tauherenikau River Crossing Options

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



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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



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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
- <u>Discount Rates (treasury.govt.nz)</u> last accessed 17 May 2022.



Prepared by: Date: 15 June 2022 Status: Draft Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix A – Geotechnical Desktop Assessment



Prepared by: Date: 15 June 2022 Status: Draft

holmesconsulting.co.nz



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.

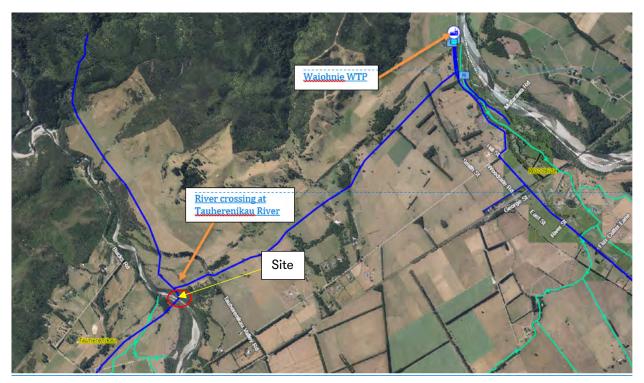


Figure 1 Site Plan

3 AREA WIDE GEOTECHNICAL DATA REVIEW

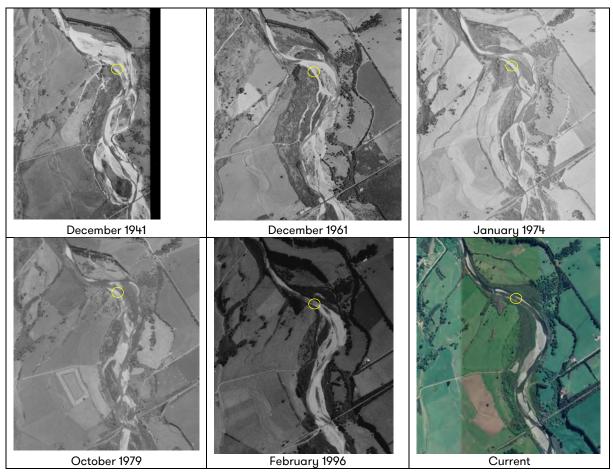
In preparation for this desktop assessment, we reviewed publicly available information relevant to the site. We summarise this information in the sections below.

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.



- 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].



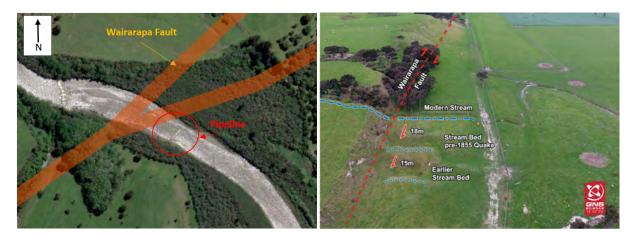


Figure 3 (left): Mapped location of the Wairarapa fault and the location of the pipeline Figure 4 (right): GNS example of previous fault ruptures along the Wairarapa fault.

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

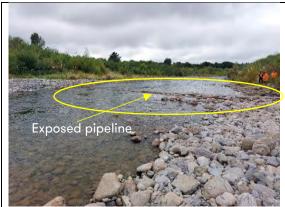
- The photos show a stratigraphy colour change consistent with the logs reviewed in our NZGD review.
- The photos show the type of plant and machinery that can successfully excavate into the alluvial deposits at the site (SK210LC 22 ton excavator and SH120 12 ton excavator).
- Boulders up to the internal 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 $k=1\times10^{-2}$ to 1×10^{-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.





Table 6: Preferred options

-	Comments	Risks	Likelihood#
General comment associated with all	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	Significant ground shaking occurring at the site within the design life of the structure	Unlikely
options	material (HDPE or alternative) to increase the performance of the pipeline during differential seismic movements. Flexible joints and couplings should also be considered.	Fault rupture occurs at the pipeline.	Rare
	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	Liquefaction causes differential settlement and damages pipeline.	If seismic event occurs - Unlikely
	 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. 		
1 - Reinforcing the	High seismic ground shaking	Reinforced pipe within river channel is damaged	If seismic event
existing pipe within the current	The existing pipe is not considered flexible. Encasing the pipe in concrete may reduce its performance during seismic movements. Boulders and oversized material	during a small to moderate seismic event. Difficulty excavating and installing stream protection	occurs - Possible Possible for
streambed	• 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	works due to boulders and oversized material.	excavations. Likely for driven elements
	difficult but it has been shown to be possible at upstream locations Future Scour	Scour still occurs at depth or river changes course exposing the pipeline after reinforcing works	Likely - dependent on type of
	Following the conclusions from the hydrology assessment, ongoing scour may still occur in flooding events.	complete.	protection work
2 -Constructing a new pipe underneath the riverbed using pipe	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	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.	Possible
ramming or open trenching	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	Predicted scour depth makes pipe ramming very deep/not practical.	Possible
Š	limited/no subsurface information at this depth. High groundwater and groundwater intrusion	Jacking pit encounters groundwater issues requiring shoring, dewatering or stabilization.	Possible
	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. Description of the base may be required along with dewatering. The risk of pits being damaged during a flood event should also be considered.	Flooding occurs during construction damaging	Possible
	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	jacking pit.	
	seismic event in case it is a fault rupture event.	Unable to repair pipeline following damage during a seismic event	rare
3A Putting a new	3A - New pipe bridge at the existing river crossing	Large fault displacements.	Rare
pipe over the river,	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.		1-5
• •		Foundation scour	Possible
either on a new pipe bridge or 3B	High seismic ground shaking		
either on a new pipe bridge or 3B attaching to the	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		
either on a new pipe bridge or 3B attaching to the rail bridge	 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. 		
either on a new pipe bridge or 3B attaching to the	 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. 	problems with piling into gravel with large boulders	Likely - especially in the upper
either on a new pipe bridge or 3B attaching to the	 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 	problems with piling into gravel with large boulders	Likely - especially
either on a new pipe bridge or 3B attaching to the	 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 3B - Rerouting pipeline and using existing rail bridge to cross river 	problems with piling into gravel with large boulders Issues with ground conditions when trenching	Likely - especially in the upper
either on a new pipe bridge or 3B attaching to the	 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 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 	problems with piling into gravel with large boulders	Likely - especially in the upper alluvium
either on a new pipe bridge or 3B attaching to the	 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 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. 	Issues with ground conditions when trenching pipeline. Bridge is damaged during seismic movements or deteriorating condition damages pipeline	Likely - especially in the upper alluvium Possible/ unlikely
either on a new pipe bridge or 3B attaching to the	 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 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. 	Issues with ground conditions when trenching pipeline. Bridge is damaged during seismic movements or	Likely - especially in the upper alluvium 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 Holmes Consulting LP

Copies to:



Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix B – Tauherenikau River Morphology Assessment



Prepared by: Date: 15 June 2022 Status: Draft





memorandum

:	то	Peter Brown	FROM	Ella Boam & Ramon Strong
		Holmes Consulting	DATE	2 June 2022
	RE	Featherston Water Supply Pipeline	Crossing of t	he 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.

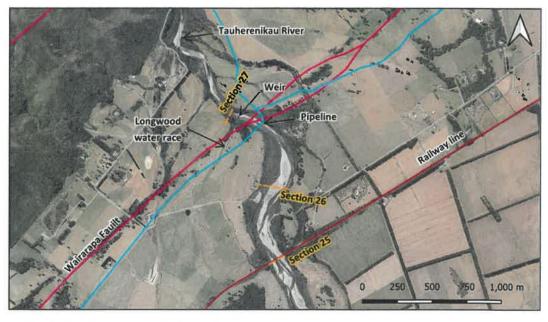


Figure 1: Location of the pipeline crossing

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HOLMES CONSULTING - FEATHERSTON WATER SUPPLY PIPELINE CROSSING OF THE TAUHERENIKAU RIVER

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 \sim 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.

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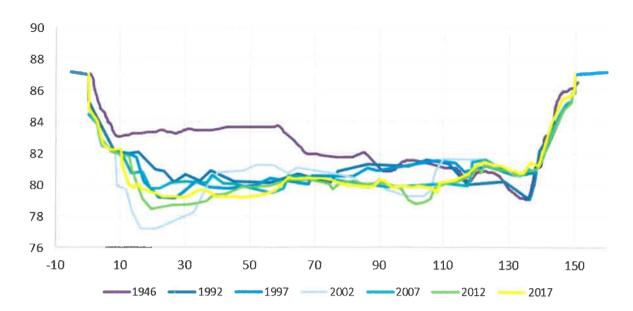


Figure 2: GWRC cross section data (1992 – 2017) and 1946 bed level survey at Section 25 (rail bridge). View is downstream.

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.

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HOLMES CONSULTING - FEATHERSTON WATER SUPPLY PIPELINE CROSSING OF THE TAUHERENIKAU RIVER

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

Reviewed and Approved by

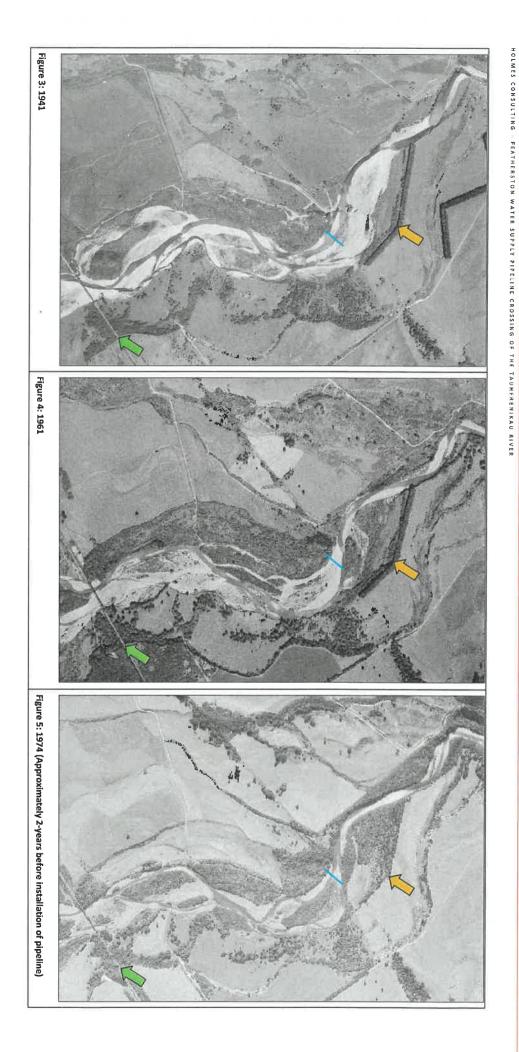
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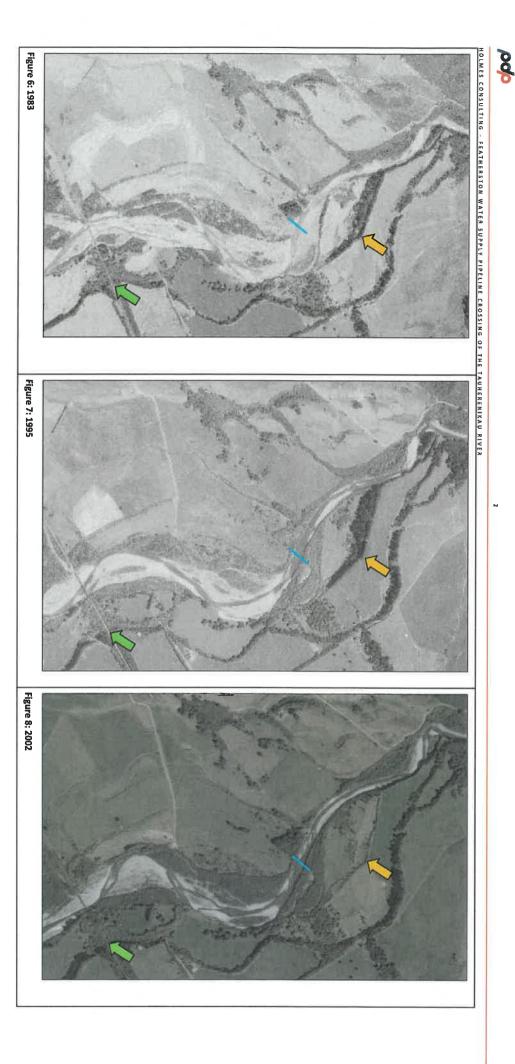
Ella Boam

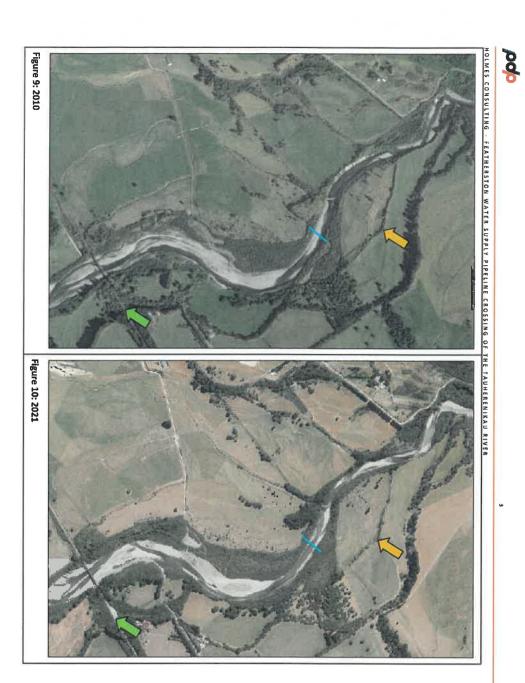
Senior Hydrogeologist

Ramon Strong

Technical Director







Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix C – MCA Workshop Commentary



Prepared by: Date: 15 June 2022 Status: Draft

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.



Australia Netherlands New Zealand USA

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- 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

<u>Manu Whenua</u> - 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.

- o 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:





Memo

To: Peter Brown From: Richard Peterson

Holmes Consulting LP 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 Phone: +64 4 381 6708 Mobile: 0277057408

richard.peterson@stantec.com

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 livi, GWRC officers and Fish and Game. Noted that potential ivi 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 need¹ 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,	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'.



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

New pipe under river bed (open trench)	 Piver 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 Tauherenikau 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, in the pNRP (i.e. less than 3,000 m2 per property). Assumed dewatering, if required, in the pNRP (i.e. less than 3,000 m2 per property). <	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

	 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	 River works 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 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 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 per property). 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) ...

Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix D – Level 1 Cost Estimate



Prepared by: Date: 15 June 2022 Status: Draft

Tauherenikau - 4m Open Trench Tauherenikau River Crossing Project Name: Current Phase: Develop Base Date: 14/06/2022 Phase Description **Base Estimate** Contingency Total Develop 125,000 Consultancy Fees 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.) 1,807 6,323 4,516 \$ **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.) \$ 1,807 \$ 6,323 4,516 \$ Total Detailed Design \$ 104,844 \$ 41,938 \$ 146,782 Procurement \$ Consultancy Fees 18,066 \$ 7,226 \$ 25,292 \$ 9,033 12,646 Other Costs (Legal, Land, etc.) 3,613 \$ **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 \$ 64,680 18,480 \$ \$ \$ \$ \$ Other Construction Costs \$ Risk SubTotal \$ 574,200 \$ 229,680 On Site Overheads \$ 181,260 \$ 72,504 253,764 Off Site O/H & Profit \$ 47,128 \$ 164,947 117,819 \$ Total Physical Works \$ 903,279 \$ 349,312 \$ 1,252,591 **Total Construction** 948,443 \$ 1,285,820 367,377 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:			

Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix E – Safety in Design Register



Prepared by: Date: 15 June 2022 Status: Draft

Safety in Design H&S Risk Assessment

Administration

Project Name Tauherenikau						
Project No. (if applicable)	applicable) OPC101202					
Safety in Design Process Decisions						
Opex: Technical Input Required? (Step III)		No				
Design Meeting Required? (Step V)		No				
Record decision reasoning for Step V: Already familiar with the details.						
More Detailed Assessment (e.g. Hazop) Required? (Step VIII)						
Record decision reasoning for Step VIII: Not at this stage. It is a pipeline project so no process flow workshop is needed						

Designer Peter Brown SID Process Step Initial H&S Risk Assessment (Step II)	Α	ssessment Date	12/05/2022	Asset Type	Water - Pipe	Location / Site Name	Tauherenikau River
	D	Designer	Peter Brown	SID Process Step	Initial H&S Risk Assessment (Step II)		

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

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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	emporary diversion of river and early araning alarms if water begins to rise.		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		et a temporary repeater set up at site required					N/A	Contractor	
	Community / Access	Anglers or kayakers cross the site	Minor 10	Unlikely 3	Low 30	Have warning signs upstream and		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		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								N/A		

Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix F – Project Risk Register



Prepared by: Date: 15 June 2022 Status: Draft

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	

											Cu	rrent Exposu	ıre						Residu	al (Target) Ex	posure		
											Se	mi-Quantitati	ive				Treatment Strategy		Se	mi-Quantitat	ive		
7	?	?	7	?	?	?	?	?	?	?		?	?	?			7	7	?			?	?
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 timest that MCA process not suitable for subsequent consent process: Cause: The cause of the threat is the possibility of MCA process being sweyed 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		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	construction does not progress 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	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	sociect programme Description: There is a threat that the existing pipe could fail at any stage due to a high-flow river event weahing 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	pole color de insulence Description: There is a threat that one of the landowners wants compensation and easements for the pipeline repair works and pipeline through their proper 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 constluction 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 conditions will impact construction works Cause: The cause of the threat is limited geotechnical investigation and knowledge of the deep (z/dm) ground			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 Document Date: OPC 101202 Project/Contract ID: Supplier Lead: Paul Marsden WWL Lead: Linda Fairbrother RM Specialist: 20 Risk Tolerance Threshold: Current Exposure Residual (Target) Exposure Semi-Quantitative Semi-Quantitative Treatment Strategy Delay (Months) Likely Cost (\$M) Likely Cost (\$M) Description/ Cause/ Consequence Commentary & Closure Statement RID Risk Title Risk Status Phase Description: There is a threat that the MCA process does not suitably reflect Manu Whenua values WWL to engage with local lwi groups thoughout the optioneering phase to gain their input on option Cause: The cause of the threat is a lack of engagement with local lwi groups during the options phase and MCA process 15 010 lwi engagement Linda Fairbrother WWL 18/05/2022 Live - Treat Optioneering Medium Medium Medium Low

Consequence: The consequence of the threat is increased difficulties in the resource consent process and delays

Design Report Project Number: OPC 101202

Project Name: Tauherenikau River Crossing Options

Appendix G – Communications Plan



Prepared by: Date: 15 June 2022 Status: Draft

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

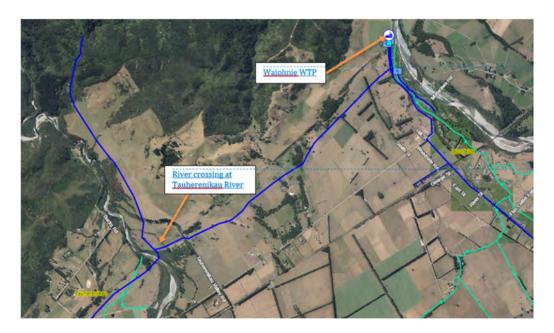
MCA should include elements of resilience, operational, financial, environmental and social/cultural impacts.

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

Key internal stakeholders

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

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	Advisor RMA Consents &	Approach to Mana Whenua and local
the wider RMA team	Environment	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	COG stakeholder (interface for
	Group	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	Details on engagement activities to be added once a
groups	preferred long-term option is selected by council



Tauherenikau Pipeline Crossing

Long term solutions
June 2022



Our water, our future.

Tauherenikau River crossing – critical asset



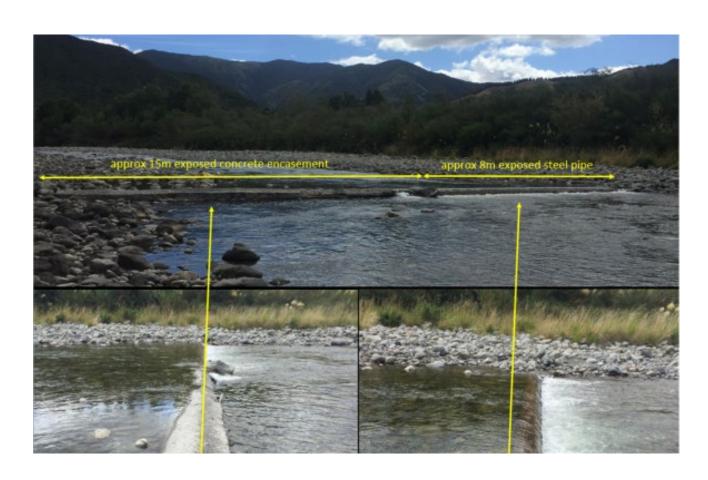


Why are we doing this project?

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.

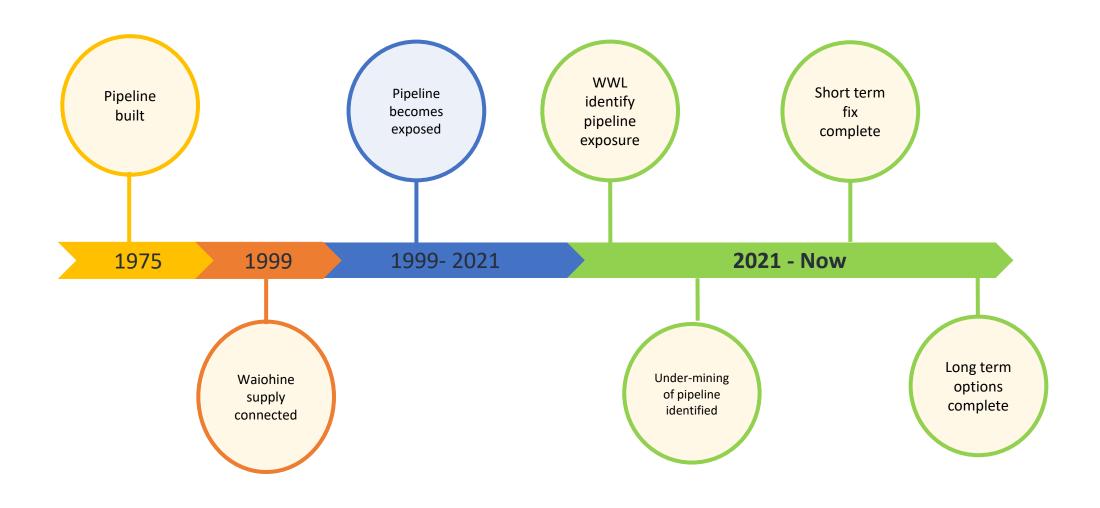
Project Outcome?

To provide a long-term solution for this critical asset



Pipeline history





Short term (temporary) solution



- 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



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

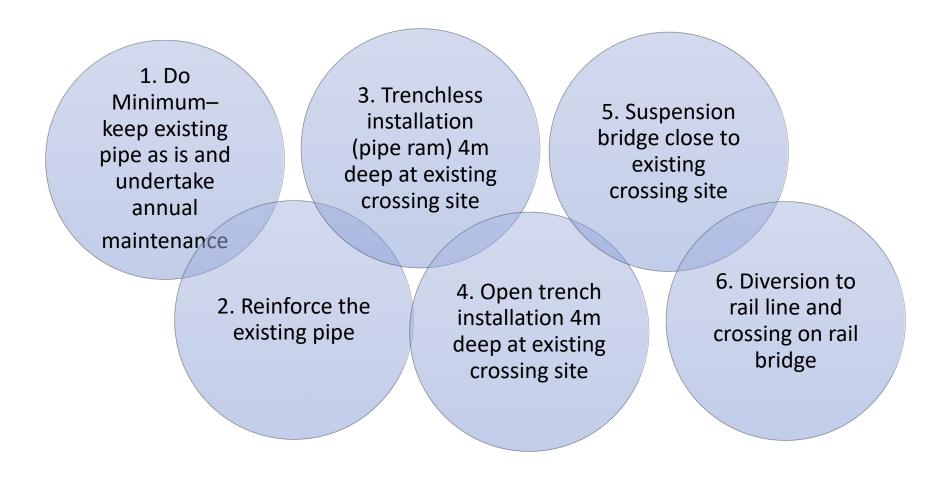
The pipeline could fail at any time, risks of failure include:

- 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

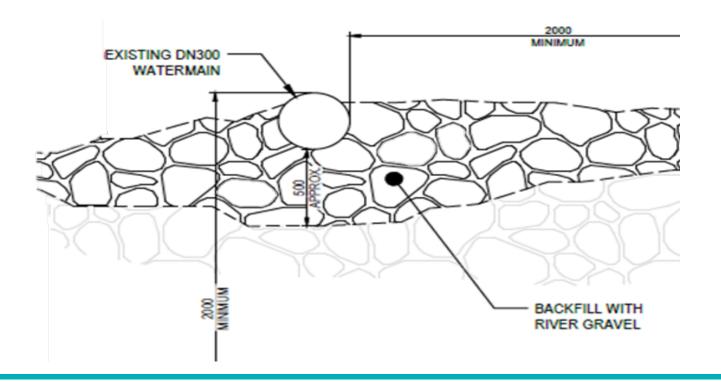




Option 1 - Do Minimum

- DRAFT W
- 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	

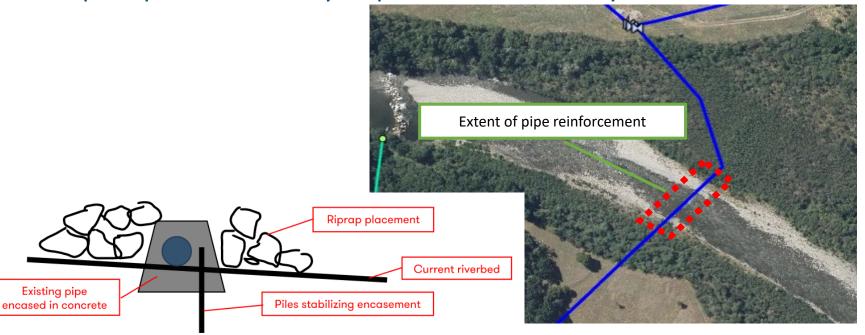
Option 2 - Reinforce Existing





- Keep existing pipeline but provide additional protection with concrete encasement and stablisation piles
- Annual rock replacement required (assumed 15%)

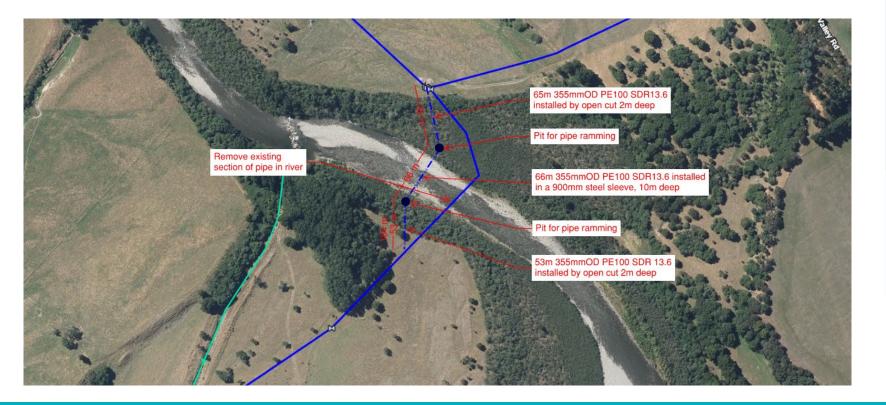
Pipe replacement likely required within 20-30 years



Risks	Benefits
Internal pipe condition is currently unknown	Provides some resilience to high river flow events and
Multiple large river flow event could cause washout of upstream or downstream armouring, putting the encasement at risk of damage	scour protection
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

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



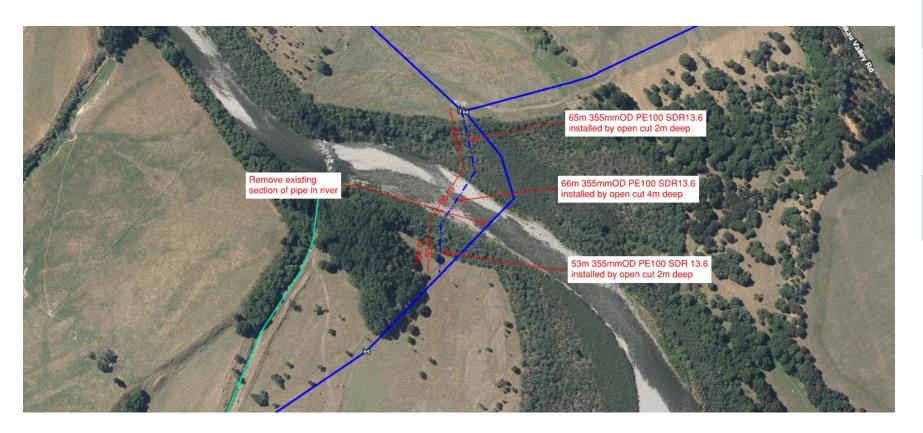


Risks	Benefits
There is evidence of some boulders up to 800mm below the ground surface at this location. The pipe ram could strike a boulder that cannot be passed resulting in an open trench in the river to complete the work – both would need to be consented	Provides added resilience to riverbed degradation.
	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



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

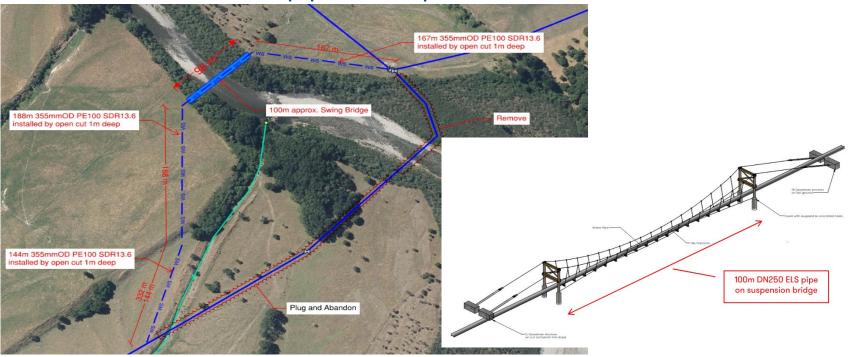


Risks	Benefits
Requires river diversion and likely impact on river environment	Provides added resilience to riverbed degradation.
Flooding during construction could have safety implications for working around an open trench	Can potentially achieve 100 year design life
	Relatively quick installation time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



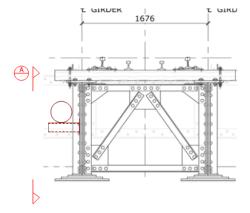
Risks	Benefits
Requires additional crossing of Wairarapa faultine	Provides added resilience to river movement and scour
Lifespan of a wooden suspension bridge structure is anticipated at 50 year maximum	Does not require work in the river
Requires annual bridge and pipe inspections	
Lightweight structure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

Option 6 – Rail Bridge

- DRAFT Wellington Water
- New pipe installed on existing rail bridge downstream of existing crossing
- Annual bridge and pipeline inspections required

~1.3km additional pipeline required





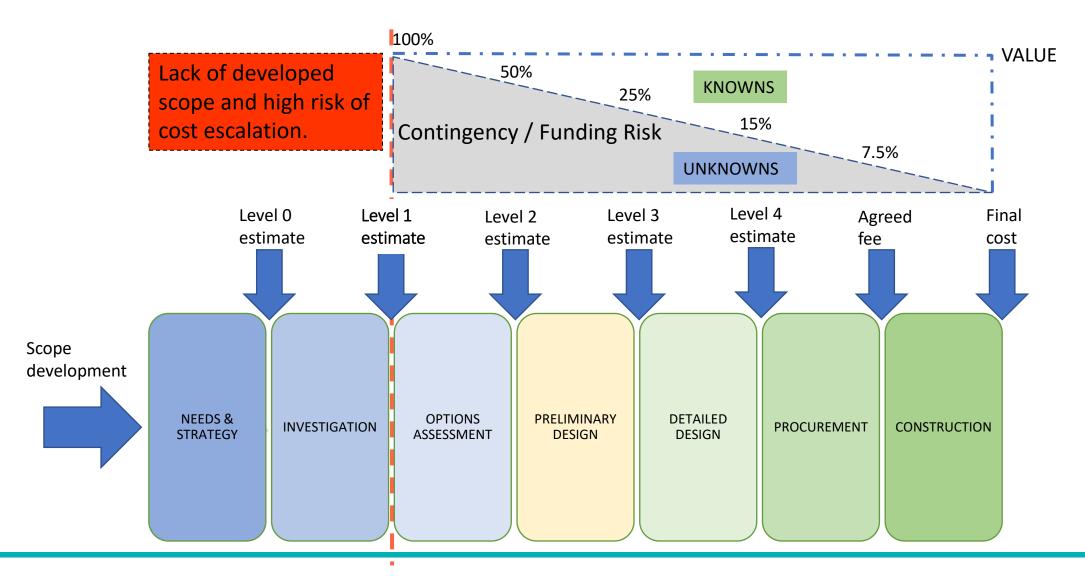




Risks	Benefits
Requires annual bridge and pipe inspections on an asset not owned by SWDC.	Provides added resilience to river movement and scour
Access agreement may be required by Kiwirail	Does not require work in the river
Over 1.3km of extra pipe length compared to existing alignment, potentially increases 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





Estimate definitions



Outside of estimating manual

Multiple options -100% contingency

Single option – 50% contingency

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.

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.

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



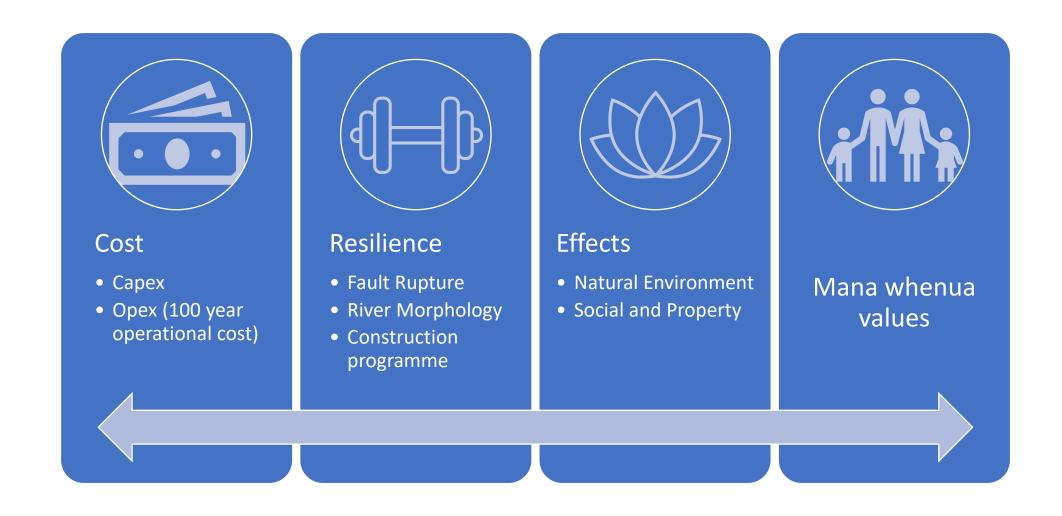
Options	Level 1 Capex estimate	Estimated maintenance ¹
1. Do minimum – keep existing pipe as is and undertake annual maintenance	\$130,000	\$3,080,000
2. Reinforce the existing pipe	\$5,390,000	\$1,620,000
3. Trenchless installation (pipe ram) 4m deep at existing crossing site	\$4,930,000	\$0
4. Open 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





What mana whenua have told us



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



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.

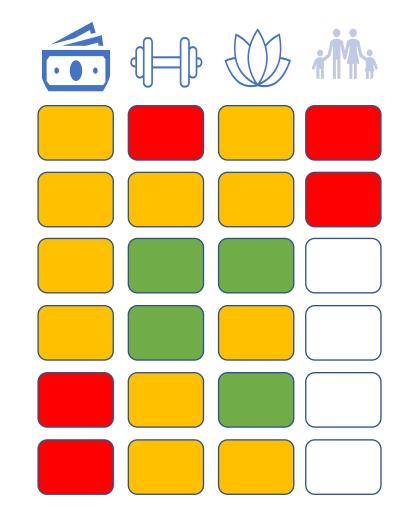
Removing existing pipeline – Options 3-6

• 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



- 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



- 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



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

South Wairarapa District Council 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	4	27/06/2022
Reviewed by	Project Director	Mary O'Callahan	May Call	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

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Appendix B: Consultancy Fee Estimate

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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 I 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.
- 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
 - o General Arrangement drawings
 - o 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.

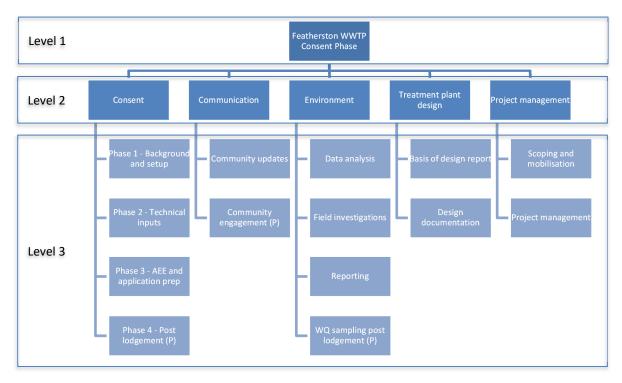


Figure 2: Work breakdown structure ('P' - provisional item) (Level 4 not shown)

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.

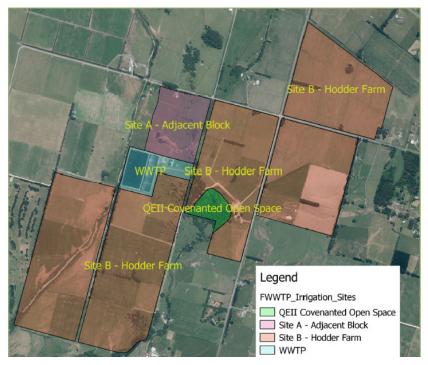


Figure 2 Existing land parcels

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:
 - 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:

- 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 resubmission.
- 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:

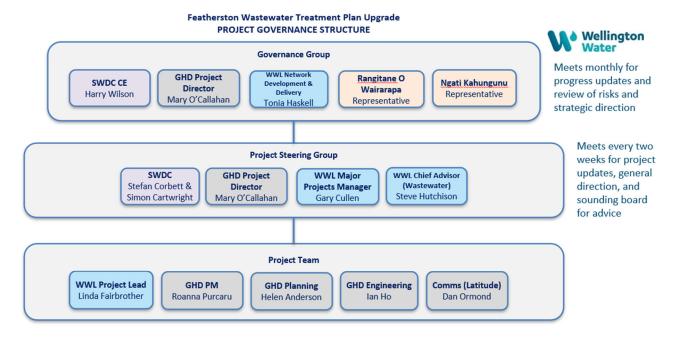
- Project Review Brief Management of Featherston's Wastewater Disposal 8 April 2020
- Resource Consent Application FINAL, and accompanying Appendices (WAR170229)
- SWDC and submitter evidence for WAR170229
- Technical memos and reports from previous consultants for WAR170229

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3 Project management

3.1 Project governance

The project governance for this project is shown on the figure below.



Our water, our future.

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.	
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.	
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)	lan 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	lan.Ho@ghd.com

Name	Phone number	Email address
Dan Ormond Stakeholder engagement Consultant (Latitude)	027 251 9849	<u>Dan@latitudesc.co.nz</u>
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
- Consultation with project partners and key stakeholders to confirm the project team understanding of their feedback to date

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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 EST	ГІМА	ATE				
Project Name:	Management of Featherston'	s Wast	ewater Disnos	al			
Current Phase:	Concept Design - Level			Jui			
Description:	FWWTP LTP Budget Concept			,			
2 cocpt.c	2 Daaget concept		,			ļ	
Phase	Description	Ва	ase 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	3		,		•		•
	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	\$	300,000	\$	_	\$	300,000
	Site General	\$	405,000		81,000	\$	486,000
	Subtotal Physical Works	\$	7,853,650		1,267,130		9,120,780
	Subtotal Filysical Works	Þ	7,833,030	Þ	1,207,130	Þ	9,120,780
	Professional Costs During Construction	\$	345,250	¢	69,050	¢	414,300
	Floressional Costs Duning Construction	Þ	343,230	Þ	09,030	Þ	414,300
	Total Construction	\$	8,198,900	¢	1,336,180	¢	9,535,080
Base Estimate	Total Construction	4	0,130,300	¥	1,330,100	4	3,333,000
buse Estillate	Base Estimate	\$	10,481,688				
	Contingency	•	23.2%	\$	2,435,668		
	Wellington Water Management Fee		23.270	*	_,.55,000	\$	628,292
	Expected Estimate					\$	13,545,648
95th Percentile Est	<u>'</u>					7	13,3 13,0 10
33th reicentile Est	Funding Risk					\$	3,681,089
	95th Percentile Estimate					\$	17,226,737
	John refeeme Estimate					4	11,440,131

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 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.	

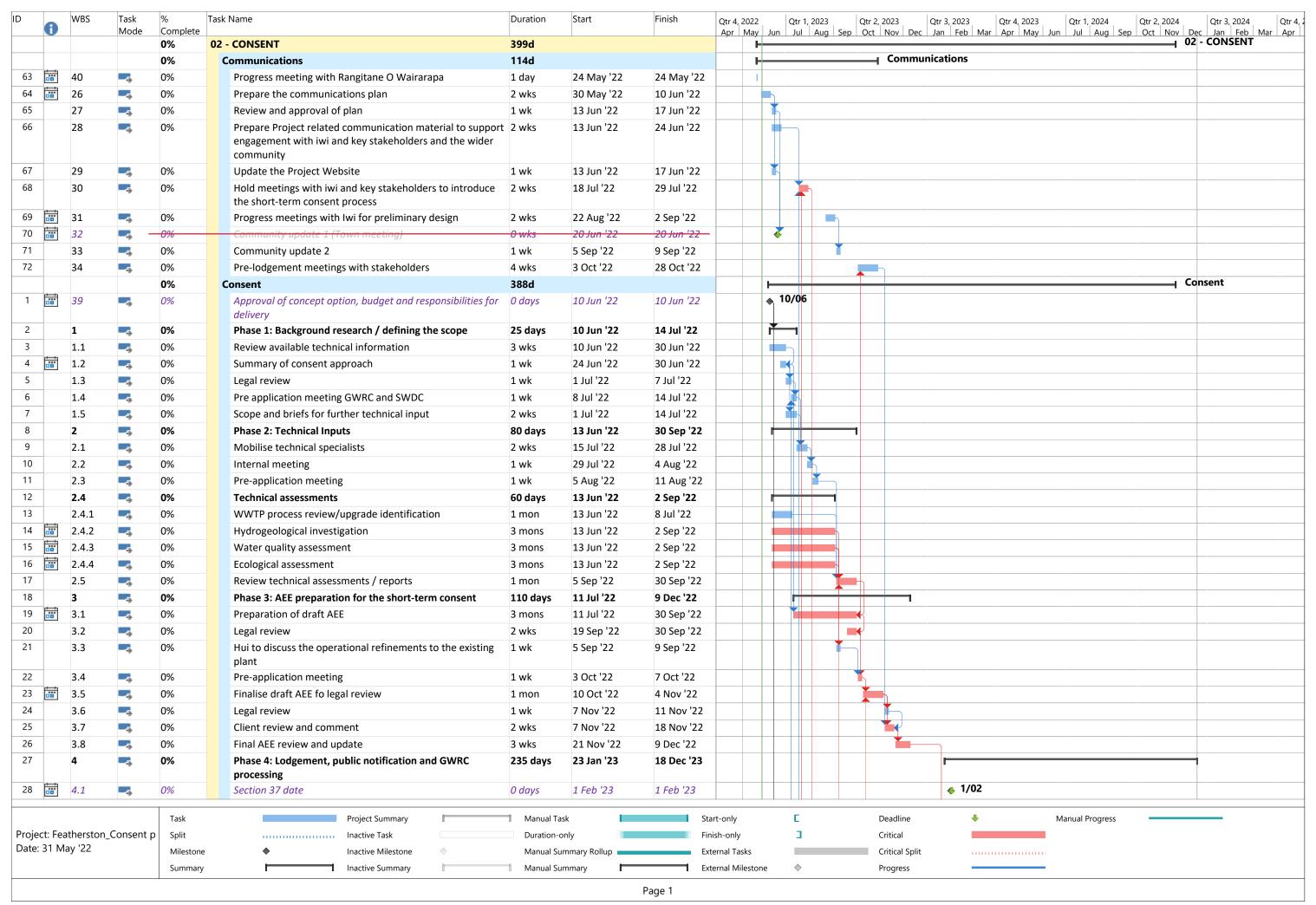
Key Risk	Control Measure	
	Consequence: Delay to lodging resource consent or additional information requests after lodgement.	

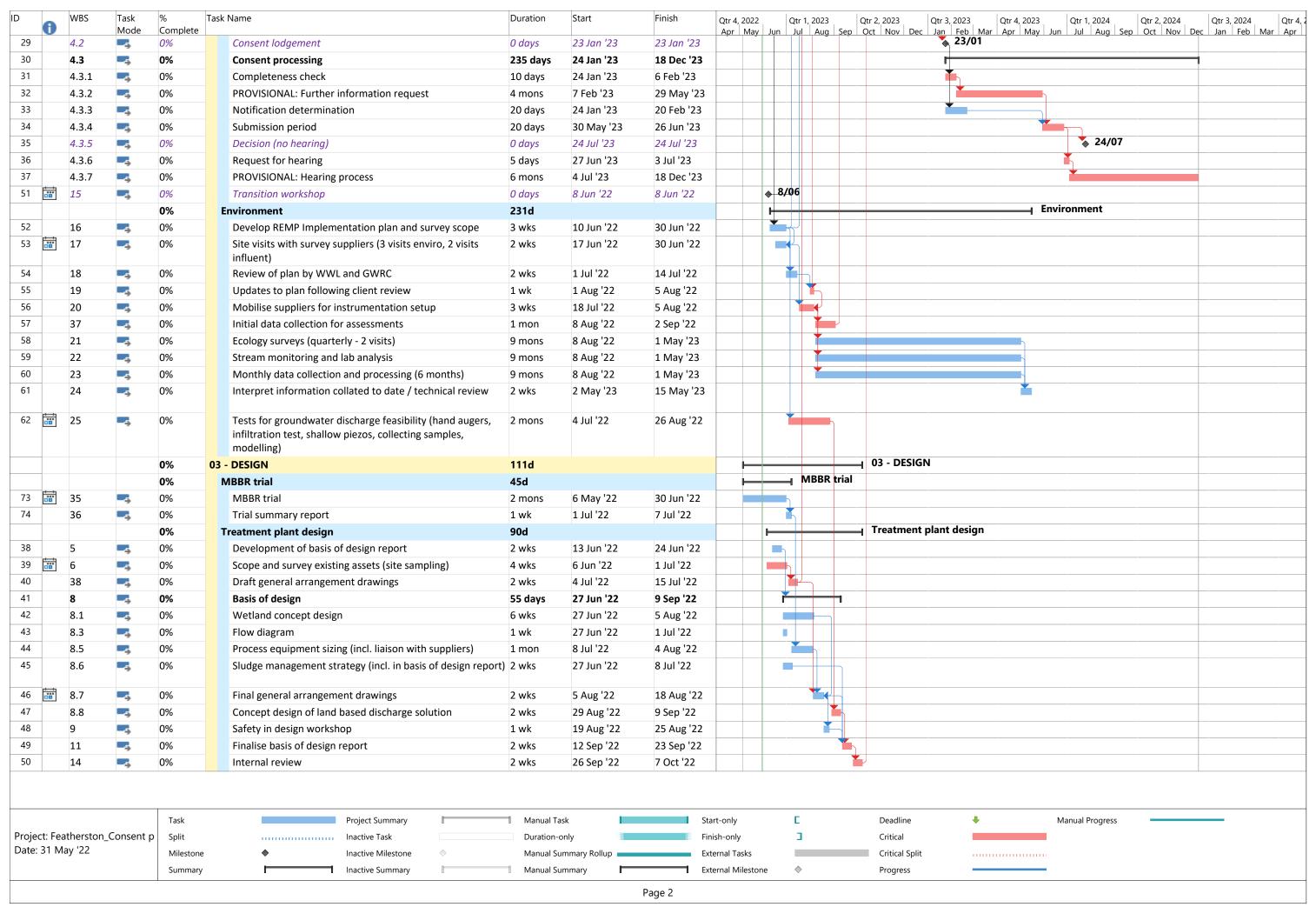
Other risks of note listed on the register include:

- 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

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Appendix B: Consultancy Fee Estimate

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E	ESTIMATE - SCOPE OF WORK]		lds												ı					Niehouseau				
	27 June 2022			Ö													-			Ι	Disbursements				
HD	Featherston WWTP - consent phase			Role / Name	Mary O'Callahan (Project	director / Planning (Project manager)	(Project coordinator)	Helen Anderson (Planning lead) (Intermediate planner)	(Graduate planner)	Dusk Mains	Claire Eyberg	Environmental scientist lan Ho (Process lead) (Process lead) (Water engineer) Mile Mills	(CAD lead) Ray Tan (Digital Lead AS) Electrical - Sesh (for	power & SCADA Cristo (PS & RM review)		TOTAL	For Sub-cons enter "S/C' in unit tem	Ecology Boffa Miskell	Comms Latitude	Recon Site survey	Field equipment for enviro surveys		Travel	TOTAL	ESTIMATE
Grand Total:	Total number of work weeks, Hrs/Wk: \$1,147,131	5	40	Ctgy	2	70 217	07	270 153	125	100	152 2	0 103 246 152 15	2 217 27	270		ABOUR	Unit Dose Bate	s/c 1	s/c 1	s/c	s/c 1		ea	DISB. \$ Value	TOTAL \$
Grand Total:	\$1,147,131			Rate \$	2	70 217	97	270 15.	2 125	19:	5 152 2	0 103 246 152 15	2 217 270	2/0	Hrs	\$ Value	Desc. Rate	1	1	1	1		1	\$ value	Lab. + Disb.
CA WP	Activity Description	Start	Finish	Dur Days	0 1	99 1013	201	0 699 26	8 64	0 162	2 228 7	5 150 161 266 5	4 4 6	4	0 3555.2	\$944,335	s	\$70,000	\$45,000	\$18,000	\$59,796 \$0	\$0 5	\$10,000 \$0	\$202,796	\$1,147,1
		Date	Date MBER OF WORK DA									88 3.75 4.03 6.66 1.3						70,000							
	CHECKONA	WEIDAGE TOTAL NO	WIBER OF WORK DA	IJ FER WEEK =	0 4.	39 23.3	3.02	0 17.5 0.7	1.0	0 4.0	0 3.7 1.	88 3.73 4.03 0.00 1	35 0.1 0.1	5 0.1	0	\$0	Qty	70,000	43,000	18,000	33,730 0		10,000 0	\$0	
(CONSENT																							\$0	
F	Communications Progress meeting with Rangitane O Wairarapa	24-May-22	24-May-22	1											0	\$49,037 \$0								\$45,000 \$0	
	Prepare the communications plan	30-May-22	10-Jun-22	10		2									2	\$433								\$0 \$0	\$4
	Review and approval of plan Prepare Project related communication material to support engagement with iwi and key	13-Jun-22 13-Jun-22	17-Jun-22 24-Jun-22	5		24		24							6	\$1,622								\$0 \$0	\$1,
s	stakeholders and the wider community	42.122	17-Jun-22	10		16		24							48 16	\$11,686 \$3,466								\$0	\$11, \$3,
F	Update the Project Website Progress meetings with Iwi for preliminary design (refer line 32)	13-Jun-22 22-Aug-22	02-Sep-22	10		10									0	\$3,466								\$0	\$3,
	Community update 1 (Town meeting)	20-Jun-22	20-Jun-22	1 5		8		8							0	\$0								\$0 \$0	¢a.
F	Community update 2 Pre-lodgement meetings with stakeholders (refer line17)	05-Sep-22 03-Oct-22	09-Sep-22 28-Oct-22	20								4			20 0	\$4,502 \$0								\$0 \$0	\$4,5
S	Setup and coordination of community updates	30-May-22 30-May-22	09-Dec-22 09-Dec-22	140 140		40		16 40	1			5 16			0 128	\$0 \$27,328			15000 30000					\$15,000 \$30,000	
<mark>.</mark>	PROVISIONAL - setup and coordination of community engagement	50-iviay-22	09-Dec-22	1		40		10 40	,			3 10			0	\$0			30000					\$30,000	
	Consent Approval of concept option, budget and responsibilities for delivery	10-Jun-22	10-Jun-22												0	\$440,082 \$0								\$30,000 \$0	\$470,0
															0	\$0								\$0	
F	Phase 1: Background research / defining the scope Review available technical information	10-Jun-22 10-Jun-22	14-Jul-22 30-Jun-22	27 17				32 24							0 56	\$0 \$12,293								\$0 \$0	\$12,2
F	Prepare consenting approach/strategy (short and long term consenting	24-Jun-22	15-Jul-22	16	1	.6		60							76	\$20,543								\$0	\$20,5
L	egal review of consenting strategy	01-Jul-22	07-Jul-22	7											0	\$0 \$0								\$0 \$0	
	Engagement (Iwi and GWRC)														0	\$0								\$0	
	wi engagement on consenting strategy and ongoing during AEE preparation (monthly meetings x 2 iwi)							32 32	2						64	\$13,507								\$0	\$13,
F	Pre application meeting (to discuss consent strategy) with GWRC and SWDC	08-Jul-22	14-Jul-22	7		8		8							16	\$4,325								\$0	\$4,3
	Ongoing monthly meetings with GWRC (to Idogement - february 2023)							16 16	i						32 0	\$6,754 \$0								\$0 \$0	\$6,7
	Phase 2: Technical Inputs (for short term consenting)	13-Jun-22	30-Sep-22	80											0	\$0								\$0	
	Scope and briefs for further technical input Workshop with tech team (1 day)	01-Jul-22 15-Jul-22	14-Jul-22 28-Jul-22	12 12		8		40 8 8				8 8			40 48	\$10,812 \$10,458								\$0 \$0	\$10,8 \$10,4
li li	nternal meeting (refer Line 41)	29-Jul-22	04-Aug-22	7											0	\$0								\$0	
	Pre-application meeting with GWRC to discuss technical inputs / REMP Fechnical assessments	05-Aug-22 13-Jun-22	11-Aug-22 02-Sep-22	7 60				8				8			24	\$6,296 \$0								\$0 \$0	\$6,2
	WWTP process review/upgrade identification	13-Jun-22	08-Jul-22	20											0	\$0								\$0	
	Hydrogeological investigation Water quality assessment	13-Jun-22 13-Jun-22	02-Sep-22 02-Sep-22	60 60											0	\$0 \$0					***************************************			\$0 \$0	
l l	Ecological assessment	13-Jun-22	02-Sep-22	60											0	\$0		30000						\$30,000	\$30,
	Cultural Impact Assessment Review technical assessments / reports / CIA	05-Sep-22	30-Sep-22	20				100						-	100	\$0 \$27,030								\$0 \$0	\$27,
	terrew terminar assessments / reports / em	03 309 22	30 3CP 22					200							0	\$0								\$0	Ų.,,
F	Phase 3: AEE preparation for the short-term consent Preparation of draft AEE	11-Jul-22 11-Jul-22	09-Dec-22 30-Sep-22	110 60	1	.6		120 60	60					-	0 256	\$0 \$53,339								\$0 \$0	\$53,
L	egal review	19-Sep-22	30-Sep-22	10					1						0	\$0								\$0	
	Jpdate AEE following legal /client review Pre-application meeting with GWRC	01-Oct-22 03-Oct-22	07-Oct-22 07-Oct-22	7 5		8		32 12							32 20	\$8,650 \$5,406								\$0 \$0	\$8,6 \$5,4
F	Finalise draft AEE for legal review	10-Oct-22	04-Nov-22	20		4		4 24	l .						32	\$5,806								\$0	\$5,8
	Legal review Client review and comment	07-Nov-22 07-Nov-22	11-Nov-22 18-Nov-22	5 10			ll								0	\$0 \$0								\$0 \$0	
F	Prepare Conditions (with Iwi and GWRC input), legal also input required							60 60)			8			136	\$29,460								\$0 \$0	\$29,4
	Final AEE review and update	21-Nov-22	09-Dec-22	15		4		16	+		1-1-	+ + + + +		+	20	\$5,406 \$0				-				\$0 \$0	\$5,4
	Phase 4: Lodgement, public notification and GWRC processing and Post Lodgement	23-Jan-23	18-Dec-23	236											0	\$220,000								\$0	\$220,0
	PROVISIONAL) Lodgement													1	0	\$0								\$0	
	Compile and collate AEE for lodgement (disbursements - lodgement fee?)														0	\$0								\$0	
	Post lodgement engagement with stakeholders														0	\$0 \$0								\$0 \$0 \$0	
	Response to s.92	***************************************													0	\$0								\$0	
	Manage s.92 response, specialist input, prepare s.92 response, legal and client review and update														0	\$0								\$0	
	Cubusissians														0	\$0								\$0	
	Submissions Review submissions, prepare summary, triage submissions														0	\$0 \$0								\$0 \$0	
	Workshop submisison responses with tech team (1/2 day)														0	\$0 \$0								\$0 \$0	
	Submitter meetings, submisison resolution Submitter resolution - update conditions (tech team input required)														0	\$0 \$0								\$0 \$0	
															0	\$0 \$0								\$0 \$0	
	Hearing Preparation Legal Case stagegy and client liaison		***************************************												0	\$0 \$0								\$0 \$0 \$0	
+	Workshop - expert briefing					+			+		1 1	+		+	0	\$0 \$0				-				\$0 \$0	
	Preparation of evidence														0	\$0								\$0	
	Evidence preparation (planning and tech experts) Review of evidence - Tech team review of each others evidence						-								0	\$0 \$0				1				\$0 \$0	
	Update following client and legal review														0	\$0								\$0	
+	Review submitter evidence					+		-1	+	-	+	+		+	0	\$0 \$0				-				\$0 \$0	
1 1 1	Prepare rebuttal evidence Respond to client / legal review														0	\$0								\$0 \$0	
				1			1 1								0	\$0				1				\$0	
	Client/Legal discussion - EIC and rebuttal									\sim						¢o.				***************************************				¢o.	***************************************
		************************	***************************************							2	5 1				0	\$0 \$0								\$0 \$0	

	Prepare for and attend conferencing	 											0	\$0								\$0
	Hearing Process and Review Council Decision												0	\$0 \$0								\$0 \$0
	Hearing attendance (assume 3 day hearing)				1		1						0	\$0								\$0
	Support to legal during hearing process				1		-						0	\$0								\$0
	Closing submissions and final conditions												0	\$0 \$0 \$0								\$0
	Post hearing client / legal liaison	1					-						0	\$0								\$0
	Decision review												0	\$0 \$0 \$0								\$0
-				1	ļ!								0	\$0 \$0								\$0 \$0
	Environment			1			صع						U	\$76,324								\$89,796
	Deliverable 1: Data analysis			1									0	\$0								\$0
	Data review and prepare REMP			1 1			+		24 7				31 0	\$6,572 \$0		-						\$0 \$0
-	Deliverable 2: Field investigation			1									0	\$0								\$0
	Prep and equipment	1		1					2 8 4	4			14	\$2,014								\$0
	Initial field investigation and dispatch samples	1		1	l l	1			8 26 4 2	22			60	\$8,843								\$0
	WQ sampling and dispatch samples (6 trips)			1					40 4	10			80	\$10,172								\$0
-	Telemetry			1	1								0	\$0 \$0		30000						\$0,000
	Ecology field surveys and reporting WQ sampling and field equipment			1			-						0	\$0 \$0		30000		44616				\$44,616
-	WQ sampling and held equipment WQ sampling ongoing after consent submitted (provisional 6 months/12 trips)				1				80 8	_												
	(PROVISIONAL)			1					80 8	30			160	\$20,344				15180				\$15,180
	Deliverable 3: Reporting			1 1		·····							0	\$0 \$0								\$0 \$0
	Factual reporting			1	***************************************				4 30 4				38	\$6,415								\$0
1	Interface with process team/meetings			1	1	ı — İ — —	1		4 4				8	\$1,861		1		1	1			\$0
	Tech assessment			1					40 16 8				64	\$12,391								\$0
1	Interpretation of low flow monitoring and update reports (PROVISIONAL)			1					16 16 8				40	\$7,711								\$0
		l		1 1	 		4						0	\$0 \$0		ļ		ļ	1			\$0 \$0
	Project Management				استريين	سنرع	سندين	أستنسنه	منسلس نصارها				3	\$307,846								\$10,000
	Scoping consent phase	20-May-22	13-Jun-22	19	8		10	6	8 8	4	8		112	\$24,458								\$0
	Monthly reporting (June) and progress meeting			1	2	12							15	\$3,410								\$0
1	Prepare letter and programme for GWRC, attend meeting with GWRC			1	4	16	24				2		46	\$11,338								\$0
	Team briefing and setup of project administration	01-Jun-22	16-Jun-22	12	2	24 16		B 4 4		4 8	4		86	\$15,721								\$0
	Client kick off meeting Monthly reporting, reconcile project costs, update forecast, update server and coordination	13-Jun-22	01-May-23	1	2	2	2	+	2	2			10	\$2,397		1		-	1			\$0
	of information	13-Juli-22	U1-IVIdy-23			ıl																
	Assumed 16 hours per week for PM, 1 hour per week for the PD, 4 hours per month for the Assistant PM	1		231	46.2	739 46.2							831.6	\$177,098								\$0
	Weekly project management document updates and coordination of information	13-Jun-22	01-May-23																			
	Reviewing project financials each week and document management on woogle 2 hours per week for APM	ĺ		231		92.4							92.4	\$9,000								\$0
	Team meetings (fortnightly)	13-Jun-22	01-May-23	231	46.2	46.2 46.2	2 46	.2	46.2		46.2		277.2	\$55,505								\$0
	General disbursements for travel			1									0	\$0						10000		\$10,000
	Fortnightly steering group meetings (1 hour per session)	01-Jul-22 01-Jul-22	01-May-23 01-May-23	219 219	22 11		+	+		-			22 11	\$5,947 \$2,973		-			-			\$0 60
	Monthly governance meetings (1 hour per session)	01-JUI-22	U1-IVIdy-23	1	11		-						0	\$0								\$0
			1	1		,t							0	\$0								\$0
-			1	1			+	+					0	\$0 \$0 \$0							1	\$0 \$0
	DESIGN																					,.
	Treatment plant design Deliverable 1: Basis of Design Report			1									0	\$71,046 \$0								\$28,000 \$0
1	Development of basis of design report											1 1		ŞU		1	1					30
1		13-Jun-22	24-lun-22	10	1 1					4	40			\$7.058								\$0
	Sludge management strategy (incl. in basis of design report)	13-Jun-22 27-Jun-22	24-Jun-22 08-Jul-22	10 10	-	l				4 2	40		44	\$7,058 \$1,100								\$0 \$0
1	Sludge management strategy (incl. in basis of design report) Review of MBBR trial outcomes / reporting	13-Jun-22 27-Jun-22 04-Jul-22	24-Jun-22 08-Jul-22 15-Jul-22	10 10 10			-							\$7,058 \$1,100 \$1,157								\$0 \$0 \$0
	Review of MBBR trial outcomes / reporting Finalise basis of design report	27-Jun-22 04-Jul-22 12-Sep-22	08-Jul-22 15-Jul-22 23-Sep-22	10 10 10						2	4		44 6	\$1,100 \$1,157 \$2,200								\$0 \$0 \$0 \$0
	Review of MBBR trial outcomes / reporting	27-Jun-22 04-Jul-22	08-Jul-22 15-Jul-22	10 10						2	6		44 6 7 12 6	\$1,100 \$1,157 \$2,200 \$1,478								\$0 \$0 \$0 \$0 \$0
	Review of MBBR trial outcomes / reporting Finalise basis of design report Internal review	27-Jun-22 04-Jul-22 12-Sep-22	08-Jul-22 15-Jul-22 23-Sep-22	10 10 10 10 10						2 1 4	6		44 6 7 12 6	\$1,100 \$1,157 \$2,200 \$1,478 \$0								\$0 \$0 \$0 \$0 \$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22	08-Jul-22 15-Jul-22 23-Sep-22 07-Oct-22	10 10 10 10 10 11						2 1 4 6	4 6 8		44 6 7 12 6 0	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0			19000					\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22	08-Jul-22 15-Jul-22 23-Sep-22 07-Oct-22	10 10 10 10 10 1 1 1 20						2 1 4 6	4 6 8 4 4		44 6 7 12 6 0 0	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722			18000					\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
	Review of MBRR trial outcomes / reporting finalise basis of design report internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACHOLDER Draft general arrangement drawings	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22	08-Jul-22 15-Jul-22 23-Sep-22 07-Oct-22	10 10 10 10 10 1 1 1 20						2 1 4 6	4 6 8		44 6 7 12 6 0 0 9	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0			18000					\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Draft general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22	08-Jul-22 15-Jul-22 23-Sep-22 07-Oct-22 01-Jul-22 15-Jul-22 05-Aug-22	10 10 10 10 11 1 1 20 10						2 1 4 6	4 6 8 4 4		44 6 7 12 6 0 0 9 44	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722 \$6,868 \$9,856			18000					\$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Draft general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER Ecology input to wetland design - PLACEHOLDER	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22	08-Jul-22 15-Jul-22 23-Sep-22 07-Oct-22 01-Jul-22 15-Jul-22 05-Aug-22 05-Aug-22	10 10 10 10 10 1 1 1 20						2 1 4 6	4 6 8 4 10 32		44 6 7 12 6 0 0 9	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722 \$6,868 \$9,856 \$0		10000	18000					\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Oraft general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER Ecology input to wetland design - PLACEHOLDER Process Flow Diagram	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22 27-Jun-22	08-Jul-22 15-Jul-22 23-5ep-22 07-Oct-22 01-Jul-22 15-Jul-22 05-Aug-22 05-Aug-22 01-Jul-22	10 10 10 10 11 1 1 20 10 30 30 5						2 1 4 6 1 2 40	4 6 8 4 4 10 32 6 2		44 6 7 12 6 0 0 9 44 40 0 9	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722 \$6,868 \$9,856 \$0 \$1,461		10000	18000					\$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Draft general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER Ecology input to wetland design - PLACEHOLDER Process flow Diagram Process equipment sizing (incl. liaison with suppliers)	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22 08-Jul-22 08-Jul-22	08-Jul-22 15-Jul-22 23-5ep-22 07-Oct-22 01-Jul-22 15-Jul-22 05-Aug-22 05-Aug-22 04-Aug-22	10 10 10 10 1 1 1 20 10 30						2 1 4 6 1 2 40 1 6	4 4 4 10 32 6 2 16		44 6 7 12 6 0 0 9 44 40 0 9	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722 \$6,868 \$9,856 \$0		10000	18000					\$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Oralt general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER Ecology input to wetland design - PLACEHOLDER Process Flow Diagram Process equipment sizing (incl. liaison with suppliers) Final general arrangement drawings	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22 27-Jun-22	08-Jul-22 15-Jul-22 23-5ep-22 07-Oct-22 01-Jul-22 15-Jul-22 05-Aug-22 05-Aug-22 01-Jul-22	10 10 10 10 11 1 1 20 10 30 30 5						2 1 4 6 1 2 40	4 6 8 4 4 10 32 6 2	6 4	44 6 7 12 6 0 0 9 44 40 0 9	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722 \$6,868 \$9,856 \$0 \$1,461		10000	18000					\$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Draft general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER Ecology input to wetland design - PLACEHOLDER Process Flow Diagram Process equipment staing (incl. liaison with suppliers) Final general arrangement drawings 10 drawings estimated	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22 08-Jul-22 05-Aug-22	08-Jul-22 15-Jul-22 23-5ep-22 07-Oct-22 01-Jul-22 15-Jul-22 05-Aug-22 05-Aug-22 04-Aug-22 18-Aug-22	10 10 10 10 11 1 1 20 10 30 30 5						2 1 4 6 1 2 40 1 6 40	4 4 4 10 32 6 2 16	6 4	44 6 7 12 6 0 0 9 44 40 0 9	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0 \$1,722 \$6,868 \$9,856 \$0 \$1,461 \$3,907 \$9,759		10000	18000					\$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PLACEHOLDER Draft general arrangement drawings 10 drawings estimated Wetland concept design - PLACEHOLDER Ecology input to wetland design - PLACEHOLDER Process Flow Diagram Process equipment sizing (fincl. liaison with suppliers) Final general arrangement drawings 10 drawings estimated Concept design of land based discharge solution Safety in design workshop Safety in design workshop Safety in design workshop	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22 27-Jun-22 08-Jul-22 08-Jul-22 08-Jul-22 19-Aug-22	08-lul-22 15-jul-22 23-5ep-22 07-Oct-22 01-jul-22 15-jul-22 05-Aug-22 01-jul-22 04-Aug-22 18-Aug-22 09-5ep-22 25-Aug-22	10 10 10 10 10 1 1 20 10 30 30 5 22 12						2 1 4 6 1 2 40 1 6	4 6 8 4 4 10 32 6 2 16 24 16 20 8 8	6 4	44 6 7 12 6 0 0 9 44 40 0 9 22 54	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$0, \$1,722 \$6,868 \$9,856 \$0 \$1,461 \$3,907 \$9,759		10000	18000					\$0 \$0
	Review of MBRR trial outcomes / reporting Finalise basis of design report Internal review Deliverable 2: Concept Design Documentation Scope and survey existing assets - PIACEHOLDER Draft general arrangement drawings 10 drawings estimated Wetland concept design - PIACEHOLDER excology input to wetland design - PIACEHOLDER Process Flow Diagram Process equipment sizing (incl. liaison with suppliers) Final general arrangement drawings 10 drawings estimated Concept design of land based discharge solution Safety in design workshop Cost estimate update	27-Jun-22 04-Jul-22 12-Sep-22 26-Sep-22 06-Jun-22 04-Jul-22 27-Jun-22 27-Jun-22 08-Jul-22 08-Jul-22 08-Jul-22 19-Aug-22 19-Aug-22	08-lul-22 15-lul-22 23-Sep-22 07-Oct 22 01-lul-22 15-lul-22 05-Aug-22 01-lul-22 04-Aug-22 18-Aug-22 09-Sep-22 25-Aug-22	10 10 10 10 11 1 1 20 10 30 30 5 22 12						2 1 4 6 6 1 1 1 6 6 4 4 6 6 2 2 8 8	4 4 4 10 32 6 2 16 24 16 20 8 16	6 4	44 6 7 12 6 0 0 9 44 40 0 9 22 54 26 10	\$1,100 \$1,157 \$2,200 \$1,478 \$0 \$1,722 \$6,868 \$9,856 \$0 \$1,461 \$3,907 \$9,759 \$4,514 \$1,707 \$4,400		10000	18000					\$0 \$10,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
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Appendix C: Risk Register

Doc ID: ACT23-786332335-772 Version: 0.1, 12 April 2019

Project/Contract: Project/Contract ID: Supplier Lead Steven Kelliher GHD

[Enter data in '2 Project Information New']

GHD

[Enter data in '2 Project Information New'] RM Specialist: Residual (Target) Exposure Treatment Strategy Descriptio Cause/ Consequer Likely Dela (Months) Risk Score Risk Score Commentary & Closure Statemen Risk Title RID Established Controls Org nvolve an independent cost estimator such as 3 ond CM or Alta Inaccurate cost estimates could result in insufficient funding approvals. 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 10/08/2021 Live - Treat Procurement 19 11 roject Manager The project influences a wide range of stakeholders in the region. There is the risk that local and nationa government influences and impacts the progress of the project through funding, public communication, stakeholder communication and pressure on the Stakeholder register to be updated regularly SWDC to support the engagement and Legal review of the MCA process and communications plan. Also include project sponsor and comm lead at WWL to review the comms plan 2 10/08/2021 Live - Treat Optioneering High Medium 19 Medium Low 11 If consenting authorities are not engaged effectively at the start of the project it may require rework and delays to the option assessment process. Consent authority engagement is not forthcoming Monthly meetings and email updates to be sen 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. 0/08/2021 11 There is a risk that if partners or stakeholders have a d 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. Comms plan and process to be legally reviewed and all identified stakeholders contacted early before Objection on the shortlist or preferred option by key stakeholders legular update emails to key stakeholders Design Development vorkshops to ensure they are orrect and available. ncrease the comms and focused 24 16 10/08/2021 Very High High Obtain dates for SWDC public engagements integrate into programme - such as the LTP engagement. Integration of this project's public engagement with If there are scheduling conflicts or cross communication about this project is could reduce the effectiveness of the option selection process. Medium 0/08/2021 Live - Treat 15 Low 3 11 gagement with ier WWL and WDC projects If all stakeholders are not at the relevant workshops then the effectiveness of the option selection could be reduced. Follow meetings with lwi. Turnout to meetings has been positive. Individual stakeholder plans can be developed if roject Manager 0/08/2021 Live - Treat Optioneering Medium Medium 15 Medium Low 3 11 required.
The criteria for assessment will evolve but the MCA lead should maintain focus on the kay outcomes. Legal counsel involved at the right Legal review and clear guidelines for the setup of the definition workshop. Contact all stakeholder early and provide clear project information. Project Manager 0/08/2021 Live - Treat Optioneering Low Medium 10 Very Low Low 3 information.

Perform a desktop review of allexisting information and engage stakeholders in the long list-development. 11/08/2021 Closed Medium 15 Low 11 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. 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. 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. Ongoing liaison with SWDC to review shortlist and costs before releasing to the community. 0.005 roject Manager 0/08/2021 Live - Treat Optioneering 15 Low 11 Availability of key Personnel resourcing is not able to be provided to the level required Incorporate technical specialists in the planning stage of the project. Use team briefing sheets to create clarity in the scope of work. Live - Treat 17 15 /08/2021 Resource consent application proceeds through public notification process Prepare a consent strategy and review with Buddle Findlay and WWL Legal reviews and a detailed comms plan is required to minir or mitigate this risk. 0/08/2021 Live - Treat Construction Medium High 17 Medium Low 11 large number of bmissions are Effective community engagement and use of project website, the community needs to be onboard with the process and the option A large number of submissions will increase the programme duration and increase the project costs received which are against the preferr option, or stakeholder not in comms plan is required to mir or mitigate this risk. Experienc workshop facilitators involved. Design Development 17 Medium 15 Project Manager 0/08/2021 Live - Treat High favour of the Local councillor influences external to the project plan, may cause change or delays during delivery. SWDC placing requests for information or requiring Meetings with Councillors to be arranged as required.

Papers to be prepared to SWDC quarterly to provide an update to Councillors. Provide updates at stage gates in the project, via the Assets & Services committee 15 13a Project Lead 10/08/2021 Live - Treat Optioneering Medium Medium Medium Low 11 Fortnightly meetings with SWDC.
Collaborative approach for community
engagement, whereby endorsement for
engagement is sought from SWDC before any
public releases. SWDC placing requests for information or requiring reviews during delivery of the project, this will impact ocal council officer 13b 15 11 0/08/2021 Live - Treat Optioneering Low programme ublic releases egal review throughout the MCA process julatory changes Any potential changes are to be flagged as risks during the option Live - Treat Optioneering High 17 Medium 1 15 assessment process
A treatment technology workshop is
to be carried out to pool WWL,
GHD and Veolia knowledge
together and display the outputs to
the community. Review comms plan for engaging with the community and receiving feedback. Options to be developed at concept and prelim design stages. 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. Medium 0.005 11 Live - Treat 15 Low 0/08/2021 Optioneering 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. This may require additional work to address queries, however this would be the same as wit addressing community queries via the website. More regular updates are required with Councillors to hear their feedback and to mitigate their concerns as they arise. 15 Review by Buddle Findlay. And reminder/disclaimer updates provided at A&S meetings. 17 15 3 which may have meet an initiative soft SWDC decision making. Level of fwi engagement during delivery may cause delays or changes. At present an overarching lwi agreement is not in place with WWL. 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. Staging of options to be developed to support option selection - to be progressed during lorssent anolication preparation. Level of Iwi engagement Progress meetings to review content in more detail. Arrange introductions at board level between 18 0/08/2021 Medium 15 15 WWL and Iwi The council has a limited budget as a placeho this project, and could change the delivery or effectiveness of the outcome. Regular engagement with SWDC and understand if staging strategie will impact options. onsent application preparation.
leetings with WWL operations and SWDC to
etermine the operational improvements and 21 21 Project Lead 0/08/2021 Live - Treat High High High High eternime the operational improvements and incrities of upgrades. Regular meetings with GWRC to determine the tetalis of the consent approach. Legal input earl the consent development. Environment monitoring plan to be developed 20 10/08/2021 nd discussed with GWRC technical specialis 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 - Setup regular meetings with SWDC
- Progress early environmental monitoring to might delays
- Regular engagement with GWRC to develop consent strategy
- Maintain regular communication with MCA process has beer abandond to select an option based on affordability Risk of missing the Section 37 deadline of Feb 23 Regular engagement with SWDC close out queries and obtain approval to progress the project. 19 21 roject Manager 13/09/2021 Closed Optioneering High High 21 High Medium tisk of re-visiting MCA if stakeholders change, wo date may diminish based length of time to Maintain regular communication with stakeholders and understand if there are any Currency of the feedback from stakeholders stakenonders and understand ir intere are any changing resources and priorities.

- Ensure all engagement is minuted clearly

- Mitigate delay between completing the MCA and starting consent preparation

Agree the scope of work with SWDC and mobilise team to start consent preparation as soon as possible - in progress. roject Manager 15 11 and provide updates to key stakeholders involved in the MCA. There is a short amount of time to prepare the consent application and consult with key k of missing the stakeholders before submission. This is cause by not tion 37 deadline of Feb 23

Project lead Escalate issue with SWDC and collaborate on defining decision making criteria to proceed. WWL Soun as possible - III progress
Setup regular working groups with key
stakeholders to have regular input in the design
and application. Consent 23 5/05/2022 Live - Treat Medium 19 Low 16 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. 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. Robustness of option assessment process Medium 15 0 24 lanning Lead WWL 14/06/2022 Live - Treat Consent Medium 0 0 0 0 0 0 0 0 0 0 0 0 0 0 \$10.01M 65 months Residual Risk Score Risk Status Current Risk Score Count populated 25

10 August 2021

19

TOTAL

Moderate

Low

TOTAL

13

Draft

Live - Treat

Live - Parked

Impacted Closed 23

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Project management plan

Doc ID: ACT23-786332335-772 Version: 0.1, 12 April 2019

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%

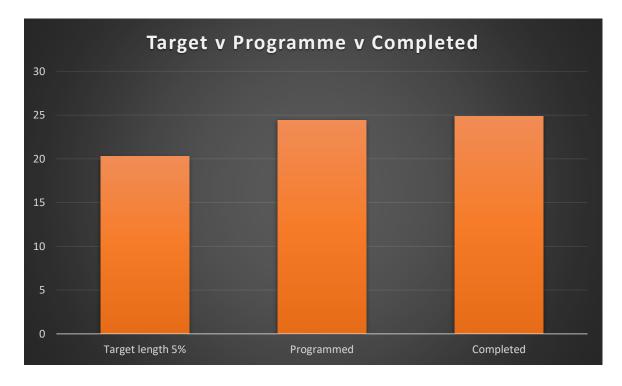


Approved Waka Kotahi Budget \$544,500 year to date spend \$526,582 =96.7%

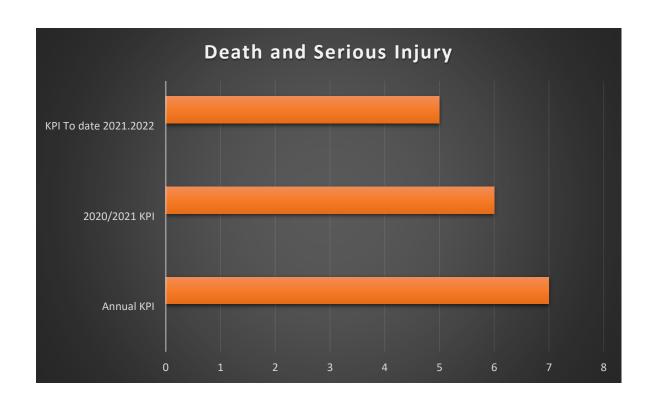


8.6 Key Performance Indicators (Year to date reporting)

- 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.

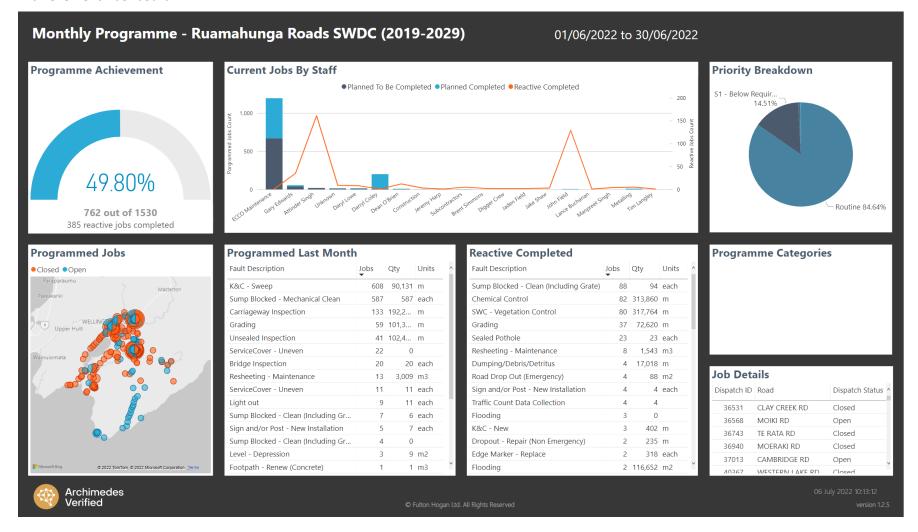


- Change in number of fatalities and serious injury crashes on the local road network from previous year. Performance target is < 7.
- The data below has been extracted for Waka Kotahi Crash Analysis System. Generally, there a time lag from the accident to data being uploaded to the system.



8.7 Fulton Hogan Monthly reporting on Ruamahanaga Roads Contract

8.7.1. Achievement Dashboard



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).

Collective Risk = <u>(Fatal crashes + serious injury crashes) / number of years of data</u> 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:

Personal Risk = (<u>Fatal crashes + serious injury crashes</u>) / number of years of data

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.

			ths and serious c			
			2021 Kegister			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RI
DSI/100MVKT	Territorial Authority		Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
13	Wairoa District		16	9	NORTHLAND	190
11	Gisborne District		49	3	AUCKLAND	652
11	Waitomo District		26	7	WAIKATO	420
10	Kaipara District		35	6	BAY OF PLENTY	197
10	Ötorohanga District		14	8	TARANAKI	91
10	Far North District		85	7	MANAWATŪ-WHANGANUI	193
9	Masterton District		19	11	GISBORNE	49
9	South Waikato District		37	8	HAWKE'S BAY	120
9	Buller District		17	6	WELLINGTON	211
9	Whanganui District	1 STDEV	28	6	TASMAN NELSON MARLBOROUGH	101
8	Öpötiki District Stratford District		13	7	WEST COAST CANTERBURY	42
8	Tararua District		11 24	5	OTAGO	340 177
8	South Taranaki District		28	7	SOUTHLAND	92
8	Horowhenua District	0.5 STDEV	32	,	SOUTHWAND	32
8	Taupo District		51	6	NATIONAL	2,876
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 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 Waimate District		24 11			
6	Ruspehu 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			
,	Central Otago District Mackenzie District		24 11			
,	Upper Hutt City		16			
3	Kawerau District		1			
5	Hamilton City		60			
5	Waipa District		38			
5	Kapiti Coast District		26			
5	Timaru District		28			
5	Christchurch City		158			
5	Selwyn District		51			
	Hutt City		36			
•	Waimakariri District		31			
5	Auckland Urban South Auckland Urban West		177			
,	Auckland Urban West Porirua City		53 25			
4	Queenstown-Lakes District		29			
4	Queenstown-Lakes District Tauranga City		47			
4	Ashburton District		22			
4	Kaikoura District		3			
4	Auckland Urban Central		188			
2	Auckland Urban North		86			

PERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE R
35	Kaipara District		11	24	NORTHLAND	53
23	Whanganui District		9	11	AUCKLAND	179
22	Buller District		3	15	WAIKATO	113
22	Far North District		23	12	BAY OF PLENTY	52
21	Gore District		4	16 17	TARANAKI MANAWATŪ-WHANGANUI	24 56
20	Ötorohanga District Horowhenua District		9	17	GISBORNE	9
20	Central Otago District	1 STDEV	8	14	HAWKE'S BAY	31
19	Tararua District		7	12	WELLINGTON	50
19	Southland District		18	12	TASMAN NELSON MARLBOROUGH	21
18	Taupo District Clutha District		15	16 9	WEST COAST CANTERBURY	8 84
18	Invercargill City		10	16	OTAGO	54
18	Öpötiki District		3	19	SOUTHLAND	33
18	Masterton District		4			
18	Waitaki District Hauraki District		9	12	NATIONAL	768
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 Central Hawkes Bay District		15			
16	Whakatane District		9			
16	Auckland Rural South		19			
16	Thames-Coromandel District		6			
15	Waitomo District Kapiti Coast District		9			
15	Whangarei District		19			
15	Auckland Rural North		20			
15	Gisborne District		9			
15	Waimate District		3			
15	Dunedin City South Waikato District		22 8			
14	Tasman District		10			
14	Rotorua District	MEAN	16			
14	Wairoa District		2			
14	Hastings District Rangitikei District		17 6			
14	Palmerston North City		12			
14	South Taranaki District		6			
13	Timeru District		9			
13	Nelson City		6			
12	Napier City Carterton District		2			
12	Matamata-Piako District		12			
12	Hurunui District		5			
12	Waipa District		11			
12	Ruapehu District Waikato District		4 25			
11	South Wairarapa District		1			
11	Christchurch City		43			
10	Auckland Urban West		16			
10	Hamilton City Queenstown-Lakes District		19			
10	Upper Hutt City		4			
10	Marlborough District		,			
10	Auckland Urban South		55			
9	Ashburton District Porirua City		7			
9	Waimakariri District		7			
9	Hutt City		8			
9	Wellington City		15			
7	Grey District		10			
7	Selwyn District Auckland Urban Central		45			
6	Tauranga City		10			
6	Auckland Urban North		25			
4	Mackenzie District		1			
0	Kaikoura District Kawerau District		0			
-			~			

		Al	lcohol and/or dru	ıgs		
			2021 Register			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/100MVKT	Territorial Authority		Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
4	Ötorohanga District		3	2	NORTHLAND	47
3	Gisborne District		11	1	AUCKLAND	123
3	Kaipara District		9	2	WAIKATO	75
3	Far North District		23	1	BAY OF PLENTY	36
3	Waitomo District		6	2	TARANAKI	18
2	Wairoa District		3	1	MANAWATŪ-WHANGANUI	35
2	Horowhenua District		7	3	GISBORNE	11
2	Masterton District		4	1	HAWKE'S BAY	18
2	South Taranaki District		6	1	WELLINGTON	30
2	Waimate District	1 STDEV	3	1	TASMAN NELSON MARLBOROUGH	17
2	Taupo District Stratford District		12	1	WEST COAST CANTERBURY	7 59
2	Hauraki District		7	1	OTAGO	27
2	Western Bay Of Plenty District		13	1	SOUTHLAND	15
2	Whakatane District		7	-	SOUTHERNS	- 25
2	Whangarei District	0.5 STDEV	15	1	NATIONAL	519
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	Öpötiki District		2			
1	Palmerston North City		7			
1	Whanganui District		4			
1	Dunedin City South Waikato District	MEAN	13			
1	Rotorua District	MEAN	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 Auckland Urban West		37 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		8			
1	Hamilton City 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			
	Gore District		0			
0						

		Speed (t	oo fast for the co	onditions)		
			2021 Register			
ERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/100MVKT	Territorial Authority		Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
4	Gisborne District Masterton District		18 7	3	NORTHLAND AUCKLAND	57 149
3	Far North District		28	2	WAIKATO	103
3	Buller District		6	2	BAY OF PLENTY	51
3	Wairoa District		4	2	TARANAKI	20
3	Waitomo District		7	2	MANAWATŪ-WHANGANUI	44
3	Whanganui District South Waikato District		9	4 2	GISBORNE HAWKE'S BAY	18 27
3	Kaipara District		10	2	WELLINGTON	49
2	Whakatane District		11	1	TASMAN NELSON MARLBOROUGH	22
2	Westland District	1 STDEV	5	2	WEST COAST	13
2	Öpötiki District South Taranaki District		7	1	CANTERBURY OTAGO	65 35
2	Taupo District		14	1	SOUTHLAND	18
2	Ötorohanga District		3			
2	Palmerston North City	0.5 STDEV	11	1	NATIONAL	672
2	Whangarei District		19			
2	Stratford District 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 Nelson City		7			
2	Rotorua District		13			
2	Hastings District		15			
2	Mackenzie District		3			
2	Kawerau District Tasman District	MEAN	10			
2	New Plymouth District		11			
2	Matamata-Piako District		10			
1	Auckland Rural North		16			
1	Hutt City		11			
1	Waipa District Hurunui District		7			
1	Central Otago District		6			
1	Auckland Urban West		15			
1	Auckland Urban South		51			
1	Tararua District Manawatu District		6			
1	Dunedin City		12			
1	Waikato District		22			
1	Invercargill City		5			
1	Thames-Coromandel District 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 Clutha District		4			
1	Rangitikei District		4			
1	Waitaki District		5			
1	Upper Hutt City		3			
1	Christchurch City Queenstown-Lakes District		7			
1	Queenstown-Lakes District Ruapehu District		3			
1	Grey District		2			
1	Hamilton City		12			
1	Wellington City		13			
1	Marlborough District Timaru District		5			
1	Ashburton District		3			
1	Tauranga City		10			
1	Kapiti Coast District		4			
1	Selwyn District		6			
1	Auckland Urban Central Waimakariri District		32 4			
0	Auckland Urban North		17			
0	Kaikoura District		1			

		U	Irban intersectio	ns		
			2021 Register			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RI
DSI/100MVKT	Territorial Authority		Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DS
8	Wairoa District		2	3	NORTHLAND	16
7	Öpötiki District		1	2	AUCKLAND	187
7	Waimate District		1	3	WAIKATO	45
6	Waitomo District Waitaki District		1	3	BAY OF PLENTY TARANAKI	28
5	Horowhenua District		4	4	MANAWATŪ-WHANGANUI	15 27
,	Buller District		2	4	GISBORNE	6
,	Ruspehu District		1	4	HAWKE'S BAY	20
5	Invercargill City		12	2	WELLINGTON	51
5	Stratford District	1 STDEV	1	3	TASMAN NELSON MARLBOROUGH	15
4	Whanganui District		7	3	WEST COAST	3
4	Dunedin City		22	2	CANTERBURY	85
4	Tararua District		2	3	OTAGO	30
4	New Plymouth District		11	3	SOUTHLAND	13
4	Matamata-Piako District		4			
4	Gisborne District	0.5 STDEV	6	2	NATIONAL	542
3	Wellington City		26			
3	Manawatu District		2			
3	Hastings District		10			
3	South Taranaki District		2			
3	Hauraki District South Waikato District					
3	South Walkato District 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			
2	Whangarei District		10 3			
2	Taupo District 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 Ashburton District					
2	Ashburton District Selwyn District		2			
2	South Wairarapa District		0			
2	Timaru District		3			
1	Thames-Coromandel District		2			
1	Queenstown-Lakes District		3			
1	Ötorohanga District		0			
1	Porirus 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	Clutha District		0			
0	Hurunui District		0			
	Kaikoura District		0			
0	Annual Control of		_			
0	Mackenzie District		0			

			Rural intersection	15		
			2021 Register			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/100MVKT	Territorial Authority	Standard Deviation	Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
	,		,		, ,	'
3	Palmerston North City		3	1	NORTHLAND	13
3	Hamilton City		6	1	AUCKLAND	32
2	Selwyn District		20	1	WAIKATO BAY OF PLENTY	51 17
2	Central Hawkes Bay District Invercargill City		3	1	TARANAKI	10
2	Manawatu District		9	1	MANAWATŪ-WHANGANUI	25
2	Carterton District		2	1	GISBORNE	2
2	Auckland Rural South		13	1	HAWKE'S BAY	12
2	Waimakariri District		9	1	WELLINGTON	16
2	Timaru District Upper Hutt City		6 3	1 0	TASMAN NELSON MARLBOROUGH WEST COAST	8
2	South Waikato District		6	1	CANTERBURY	50
2	Matamata-Piako District	1 STDEV	10	1	OTAGO	17
1	New Plymouth District		6	1	SOUTHLAND	12
1	South Taranaki District		3			
1	Tararua District	0.5 STDEV	3	1	NATIONAL	265
1	Waitaki District Horowhenua District		5			
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 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 Walkato District		13			
1	Hurunui District		3			
1	Far North District		7			
1	Christchurch City		6			
1	Ötorohanga District		1			
1	Masterton District		5			
1	Whangarei District Rotorua District		4 _			
1	South Wairarapa District		1			
1	Thames-Coromandel District		2			
1	Marlborough District		3			
1	Öpötiki District		1			
1	Gisborne District		2			
1	Dunedin City 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 Porirua City		2			
0	Ruspehu District		1			
0	Waitomo District		1			
0	Mackenzie District		1			
0	Westland District		1			
0	Wellington City		1			
0	Tauranga City		0			
0	Wairoa District 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 Kawerau District		0			
U	Nawerau District					
	Auckland Gulf Islands		0			

PRINCIPAL REST				All intersections	5		
Page				2021 Register			
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Section Technolis Amonely Section Sect	DERECKIAL DIEK		Chandred Davidsian	COLLECTIVE DIEV	DEDCOM AL DIEN		COLLECTIVE DI
Billimetration form City		•	Standard Deviation			Road Safety Regions	
Palmetric Number City	DSI/ 200 M VK I	Territorial Additiontly		Syl XVG DSI	DSQ 200H VK1	nood salety neglons	341 240 031
1	4	Invercargill City		15	1	NORTHLAND	29
1	3			15	1	AUCKLAND	219
Continuer City 79	3	Whanganui District		8	1		96
The Proposition Control 17					1		
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2	2	Horowhenua District		8	1	WEST COAST	5
2 Weingen City 15 2 2 NATIONAL 200	2	Nelson City		10	1	CANTERBURY	134
2	2	Waitaki District		9	1	OTAGO	47
Central Interest Eng (District 9 9 1 1 1 1 1 1 1 1					2	SOUTHLAND	25
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2 South Traveski District 6		Auckland Rural South	0.5 STDEV				
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1	1	Whangarei District		15			
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1	1	Kapiti Coast District		7			
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1 Kajpara District 3 1 Buller District 2 1 Western Bay Of Plenty District 8 1 Thames-Coromandel District 4 1 Walsomo District 2 1 Walsomo District 4 1 Grey District 2 1 Taupo District 6 1 Taupo District 1 1 South Walrarspa District 1 1 Otorohanga District 1 1 Porirus City 5 1 Cluthan 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 Ruspehu District 2 0 Westiang District 1 0 Mackenzie District 1				-			
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1 Waitomo District 2 1 Hauraki District 4 1 Grey District 2 1 Taupo District 5 1 Toupo District 6 1 South Wairarapa District 1 1 Ötorohanga District 1 1 Porirus 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 Raupehu District 3 1 Raupehu District 1 1 Raupehu District 3 1 Raupehu District 1 0 Westiand District 1							
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1 Grey District 2 1 Taupo District 6 1 South Wairarape District 1 1 Ötorohanga District 1 1 Porirus City 5 1 Clutha District 3 1 Central Otago District 4 1 Queenstown-Lakes District 4 1 Queenstown-Lakes District 5 1 Hurunui District 3 1 Auckland Urban North 28 1 Rangibikel District 3 1 Rangabu District 3 1 Rangabu District 3 1 Rangabu District 1 0 Westland District 1							
1 Taupo District 6 1 South Wairanapa District 1 1 Otorohanga District 1 1 Porirus City 5 1 Clutha District 3 1 Central Otago District 4 1 Queenstown-Lakes District 4 1 Queenstown-Lakes District 6 1 Hurunui District 3 1 Auckland Urban North 28 1 Ranghikai District 3 1 Ruspehu District 2 0 Westland District 1							
1 South Wairarapa District 1 1 Ötorohanga District 1 1 Porirus 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 Ranghikei District 3 1 Ruspehu District 3 1 Ruspehu District 3 1 Ruspehu District 1 0 Westland District 1							
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			2021 Register	(speed zones >		
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ERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RIS
12	Wairoa District Gisborne District		13 29	7 2	NORTHLAND AUCKLAND	110 117
9	Waitomo District		19	3	WAIKATO	217
8	Kaipara District		22	3	BAY OF PLENTY	83
8	Ōtorohanga District		9	6	TARANAKI	39
7	Stratford District		7	5	MANAWATŪ-WHANGANUI	89
7	Buller District		12	12	GISBORNE	29
7	Masterton District Far North District		8 34	6	HAWKE'S BAY WELLINGTON	56 40
7	South Waikato District	1 STDEV	23	4	TASMAN NELSON MARLBOROUGH	42
7	Whanganui District	251024	10	6	WEST COAST	29
7	Gore District		8	3	CANTERBURY	114
6	Westland District		13	4	OTAGO	81
6	Taupo District		35	5	SOUTHLAND	49
6	Tararua District		15			
6	South Wairarapa District Whakatane District		7	4	NATIONAL	1,094
6	Whakatane District Clutha District		19			
6	Auckland Rural South	0.5 STDEV	39			
6	South Taranaki District	2.2.1.2.1	14			
5	Whangarei District		34			
5	Auckland Rural North		47			
5	Hastings District		32			
	Horowhenua District		15			
5	Rotorua District Öpötiki District		7			
,	Tasman District		23			
,	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 15			
4	Rangitikei District 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 Western Bay Of Plenty District		17 29			
4	Grey District		3			
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 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 23			
3	Selwyn District Kapiti Coast District		23 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 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			

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			2021 Register			
			TOTA NEBISIEI			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/100MVKT	Territorial Authority		5yr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
286	Wairoa District		3	164	NORTHLAND	33
279	South Wairarapa District		4	108	AUCKLAND	141
244	Stratford District		3	125	WAIKATO	70
226	Buller District		4	101	BAY OF PLENTY	37
221	Kaipara District		7	164	TARANAKI	16
215	Ötorohanga District		3	122	MANAWATŪ-WHANGANUI	32
213	Tararua District		6	143	GISBORNE	6
200 193	Westland District Waitomo District		4	143 134	HAWKE'S BAY WELLINGTON	22 47
193	Masterton District		4	152	TASMAN NELSON MARLBOROUGH	24
184	Auckland Rural North	1 STDEV	19	197	WEST COAST	11
165	Grey District	131024	3	71	CANTERBURY	55
158	Far North District		14	80	OTAGO	25
156	Tasman District		9	83	SOUTHLAND	12
154	Nelson City		7			
152	Thames-Coromandel District		7	105	NATIONAL	531
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			
131	Öpötiki District 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 98	Waimate District		2			
	Central Otago District Christchurch City		30			
96 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	Timeru District		4			
75 73	Southland District Queenstown-Lakes District		5			
68	Waimakariri District		3			
67	Selwyn District		7			
63	Central Hawkes Bay District		2			
62	Western Bay Of Plenty District		3			
58	Ruspehu 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			

			Cyclist involved			
			2021 Register			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RISI
DSI/Mhrs	Territorial Authority		Syr AVG DSI	DSI/Mhrs	Road Safety Regions	Syr AVG DSI
20	New Plymouth District		4	15	NORTHLAND	4
17	Invercargill City		2	6	AUCKLAND	49
17	Napier City		3	6	WAIKATO	15
17	Southland District Stratford District		1	7	BAY OF PLENTY	12
16	Stratford District Kaipara District		0	16	TARANAKI MANAWATŪ-WHANGANUI	7
15	Whangarei District		2	3	GISBORNE	3
14	Hastings District		4	9	HAWKE'S BAY	7
13	Far North District		2	5	WELLINGTON	26
13	South Waikato District		1	3	TASMAN NELSON MARLBOROUGH	10
12	Auckland Urban Central		25	7	WEST COAST	2
12	Tauranga City	1 STDEV	7	4	CANTERBURY	36
11	Whanganui District		3	7	OTAGO	11
11	Õpõtiki District		0	14	SOUTHLAND	3
11	South Taranaki District		1			
10	Queenstown-Lakes District		3	6	NATIONAL	192
10	Waipa District		2			
9	Dunedin City		7			
9	Waitaki District	0.5 STDEV	1			
9	Wellington City		17			
8	Hamilton City		6			
7	Gore District Carterton District		0			
7	Carterton District 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 Tararua District		0			
,	Kapiti Coast District		2			
,	Waikato District		2			
3	Horowhenua District		1			
4	Timeru District		2			
4	Nelson City		3			
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 Gisborne District		3			
2	Gisborne District 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	Ötorohanga District		0			
0	Rangitikei District		0			
0	Ruapehu District		0			
0	Wairoa District		0			
	Auckland Gulf Islands		1			
	Chatham Islands Council		0			

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			2021 Register			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/Mhrs	Territorial Authority		Syr AVG DSI	DSI/Mhrs	Road Safety Regions	Syr AVG DSI
11	Öpötiki District		2	4	NORTHLAND	14
5	Whakatane District Mackenzie District		4	2	AUCKLAND WAIKATO	112 34
,	Mackenzie District Whangarei District		8	3	BAY OF PLENTY	23
,	Stratford District		1	3	TARANAKI	7
3	Hauraki District		2	2	MANAWATŪ-WHANGANUI	17
3	Gore District		1	2	GISBORNE	3
5	Far North District		5	3	HAWKE'S BAY	9
5	Wairoa District		1	1	WELLINGTON	35
4	Waitomo District		1	1	TASMAN NELSON MARLBOROUGH	9
4	Western Bay Of Plenty District	1 STDEV	4	1	WEST COAST	1
4	South Walkato District		2	2	CANTERBURY	32
4	Rotorua District		5	2	OTAGO	22
4	Hamilton City		13	3	SOUTHLAND	5
4	Whanganui District		4			
3	Waikato District Thames-Coromandel District	0.5 STDEV	6	2	NATIONAL	326
3	Thames-Coromandel District Waitaki District		3			
3	Dunedin City		15			
3	New Plymouth District		3			
3	Tauranga City		8			
3	Hastings District		3			
3	Horowhenua District		3			
3	Kaikoura District		0			
3	Matamata-Piako District		3			
3	Napier City		3			
3	Ötorohanga 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 Queenstown-Lakes District		4			
2	Christchurch City		25			
2	Gisborne District		3			
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 Ruapehu District		19			
1	Ruapenu District 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			
0	Porirua City Hurunui District		0			
0	Central Otago District		0			
0	Ashburton District		1			
0	Kawerau District		0			
0	South Wairarapa District		0			
0						

			2021 Register			
PERSONAL RISK		Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
	S. Norter . r .					
1	Õpõtiki District Whakatane District		2	0	NORTHLAND AUCKLAND	11 46
1	Buller District		2	0	WAIKATO	30
1	Hauraki District		4	1	BAY OF PLENTY	18
1	Westland District		2	1	TARANAKI	8
1	South Taranaki District		3	0	MANAWATŪ-WHANGANUI	13
1	Central Otago District		3	0	GISBORNE	2
1	New Plymouth District Nelson City	1 STDEV	3	0	HAWKE'S BAY WELLINGTON	15
1	Manawatu District		3	1	TASMAN NELSON MARLBOROUGH	9
1	Stratford District		1	1	WEST COAST	4
1	Carterton District		1	0	CANTERBURY	28
1	Marlborough District		3	0	OTAGO	13
1	Taupo District		4	0	SOUTHLAND	6
1	Waitaki District		2 2	0	NATIONAL	211
1	Invercargill City Mackenzie District	0.5 STDEV	1		MATIONAL	211
1	Waikato District		9 .			
1	South Wairarapa District		1			
1	Hastings District		3			
1	Far North District		4			
1	Masterton District		1			
0	Whanganui District Ruapehu District		1			
0	Dunedin City		,			
0	Waimakariri District		3			
0	Whangarei District		5			
0	Waitomo District		1			
0	Palmerston North City		3			
0	Rotorua District		4			
0	Gisborne District Auckland Rural South	MEAN	2			
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 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		3			
0	Napier City 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 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 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 Wairoa District		0			
0	Ötorohanga District		0			
0	Kawerau District		0			

			Fatigue			
			2021 Register			
PERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK	David Cadaba Davissa	COLLECTIVE RIS
DSI/100MVKT	Territorial Authority		Syr AVG DSI	DSI/100MVKT	Road Safety Regions	5yr AVG DSI
2	Waitomo District		4	1	NORTHLAND	14
2	Kaikoura District		2	0	AUCKLAND	22
2	Wairoa District		2	1	WAIKATO	41
1	Taupo District		7	0	BAY OF PLENTY	14
1	South Wairarapa District		1	0	TARANAKI	3
1	Ötorohanga District		1	0	MANAWATŪ-WHANGANUI	12
1	South Waikato District		4	1	GISBORNE	4
1	Hurunui District		4	1	HAWKE'S BAY	10
1	Gisborne District	1 STDEV	4	0	WELLINGTON	8
1	Buller District		2	0	TASMAN NELSON MARLBOROUGH	7
1	Rotorua District		6	1	WEST COAST	4
1	Kaipara District Westland District		2	0	CANTERBURY OTAGO	18 10
1	Westiand District Tasman District		4	0	SOUTHLAND	7
1	Tasman District	0.5 STDEV	2		SOUTHLAND	,
1	Waipa District	3.3.3.004	3	0	NATIONAL	174
1	Matamata-Piako District		3	-		
1	Far North District					
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 Masterton District		1			
_	Western Bay Of Plenty District		5			
0	Thames-Coromandel District	MEAN	2			
0	Manawatu District	MEAN	3			
0	Ashburton District		3			
0	Grey District		1			
0	Central Hawkes Bay District		1			
0	Ruspehu 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 2			
0	Napier City 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 Horowhenua District		1			
0	Öpötiki 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			

			2021 Register			
ERSONAL RISK DSI/100MVKT	Ranking Territorial Authority	Standard Deviation	COLLECTIVE RISK 5yr AVG DSI	PERSONAL RISK DSI/100MVKT	Road Safety Regions	COLLECTIVE RIS
	·					
18	Mackenzie District Nelson City		6	7	NORTHLAND AUCKLAND	15 48
16	Kawerau District		0	8	WAIKATO	48 32
15	Gisborne District		4	9	BAY OF PLENTY	19
15	Invercargill City		5	9	TARANAKI	7
15	Carterton District		1	7	MANAWATŪ-WHANGANUI	17
15	Masterton District Upper Hutt City		3	7	GISBORNE HAWKE'S BAY	10
14	Öpőtiki District		1	10	WELLINGTON	22
13	South Taranaki District		3	10	TASMAN NELSON MARLBOROUGH	12
13	Ötorohanga District		1	8	WEST COAST	4
12	Napier City	1 STDEV	,	8	CANTERBURY	36
12	Westland District Waitomo District		2	7 9	OTAGO SOUTHLAND	16
11	Selwyn District		4		SOUTHERNO	
11	Auckland Rural North		7	7	NATIONAL	251
11	Hamilton City		6			
10	South Waikato District Horowhenua District	0.5 STDEV	3			
10	Horowhenua District Kapiti Coast District	V3 STDEV	6			
10	Dunedin City		7			
9	Far North District		6			
9	Ruapehu District		i			
9	Kaipara District		3			
9	Waitaki District 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 Stratford District		1			
8	Hauraki District		3			
8	Manawatu District		3			
7	Waikato District		,			
7	Tauranga City Waimakariri District		7			
7	Grey District		1			
7	Wellington City		4			
7	New Plymouth District		4			
7	Ashburton District		3			
7	Southland District 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 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			
5	Wairoa District Rotorua District		2			
,	Whakatane District		2			
5	Auckland Urban South		8			
5	Hurunui District		2			
•	Auckland Urban North		11			
4	Thames-Coromandel District Marlborough District		2			
4	South Wairarapa District		1			
4	Gore District		1			
4	Timaru District		2			
4	Porirua City		1			
3	Taupo District Clutha District		1			
3	Rangitikei District		1			
1	Kaikoura District		0			

			2021 Register			
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ERSONAL RISK	Ranking	Standard Deviation	COLLECTIVE RISK	PERSONAL RISK		COLLECTIVE RIS
DSI/100MVKT	Territorial Authority	Standard Deviation	Syr AVG DSI	DSI/100MVKT	Road Safety Regions	Syr AVG DSI
_						
2	Wairoa District Far North District		14	0	NORTHLAND AUCKLAND	25 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 Ötorohanga District		2	2	MANAWATŪ-WHANGANUI GISBORNE	18 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 South Taranaki District		3	1	WEST COAST CANTERBURY	3 28
1	Waitomo District		2	1	OTAGO	14
1	Horowhenua District		4	1	SOUTHLAND	8
1	Auckland Rural South		8			
1	Kaikoura District Buller District	0.5 STDEV	1	1	NATIONAL	243
1	Ruapehu District		2			
1	Waitaki District		3			
1	Carterton District		1			
1	Central Otago District Gore District		3			
1	Gore District Tasman District		4			
1	Hastings District		6			
1	New Plymouth District		5			
1	Stratford District		1			
1	Rangitikei District Öpötiki District		1			
1	Whangarei District	MEAN	6			
1	Southland District		5			
1	Manawatu District		3			
1	Kawerau District Western Bay Of Plenty District		5			
1	Rotorua District		4			
1	Waikato District		9			
1	Mackenzie District		1			
1	Whanganui District Auckland Rural North		6			
1	Palmerston North City		3			
1	Ashburton District		3			
1	Waipa District		3			
0	Waimakariri District Dunedin City		3			
0	Hutt City		3			
0	Invercargill City		2			
0	Westland District		1			
0	Thames-Coromandel District		2			
0	Napier City Clutha District		2			
0	Hauraki District		2			
0	Central Hawkes Bay District		1			
0	Matamata-Piako District		3			
0	Timaru District Selwyn District		2			
0	Auckland Urban South		13			
0	Kapiti Coast District		2			
0	Christchurch City		10			
0	Hurunui District Auckland Urban West		1			
0	Upper Hutt City		1			
0	Grey District		0			
0	Wellington City		4			
0	Mariborough District Hamilton City		1			
0	South Wairarapa District		0			
0	Nelson City		1			
0	Auckland Urban Central		9			
0	Queenstown-Lakes District		2			
0	Tauranga City Porirua City		1			
0	Auckland Urban North		3			

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			

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		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



MARTINBOROUGH COMMUNITY BOARD

11 AUGUST 2022

AGENDA ITEM 11.1

CHAIRPERSON REPORT

Recommendations

The chairperson recommends that the Community Board:

1. Receive the Chairperson Report.

Topic 1 - Hinekura Road Martinborough

Councils integral road infrastructure to our Hinekura community remains lost, with hour long diversions, via Carterton's Admiral Road access, the only way in and out available to residents at present. A resident led solution, from Don McCreary with support from John and Liz Hancox, is being pursued for an alternative light vehicle access way for individuals and whānau across their private land until Council replaces their broken infrastructure. With the recent good weather there has been some good progress on this.

The DHB is looking to help support at Hinekura also by providing a clinic that will suit the residents needs (either stationary i.e at hall, or mobile i.e. in the home).

Topic 2 – Waihenga Bridge SH53 proposal

Following the meeting in March 2022 attended onsite at the Waihenga Bridge by elected members, with local residents and Minister of Transport Chris Wood, Aidan proposed Martinborough Community Board seek assistance in putting a joint application forward with the Martinborough Business Association to help assess the impacts of flooding and SH53 road closures on the Martinborough Community and wider community.

Aidan and I attended a Martinborough Business Association meeting on Wednesday 6 July and discussed potentially two pieces of work.

- 1. A submission detailing the impacts businesses have experienced in the past with bridge closures, covering off three points, ie safety issues, growth of the area and resilience this was what Minister Wood said they needed to understand at Waka Kotahi. This submission would be forwarded to Waka Kotahi.
- 2. Ask local businesses to record the impacts they suffer each time the bridge closes, as a living project over the next 3-5 years which we can then provide to Waka Kotahi for submissions in the future.

The Martinborough Business Association was supportive of this idea and Aidan has since provided a draft submission and questionnaire to Charlotte Harding, Secretary of the

Martinborough Business Association, for its members to review and propose any adjustments necessary back to Martinborough Community Board.

Topic 3 – Personal Home Care Kits for use during Covid19

Further meetings have been held at Hau Ariki Marae with community groups, led by Whaea Sandy Ngamoki and Whaea Tiu Dawson, continuing to move this kaupapa forward. Last week, Whaea Sandy, Whaea Tiu, Whaea Marama Tuuta and Featherston Community Board Chair Mark Shepherd met with Te Whatu Ora o Wairarapa to discuss funding and options for these Covid19 kits to support our South Wairarapa communities. This meeting had really successful outcomes with 200 kits committed to, and to arrive into communities within the next few weeks. Te Whatu Ora o Wairarapa has also committed to fund this kaupapa as and when further kits are needed. The funding stream will be managed by REAP. Since they had the ear of everyone at the table, they asked for more clinics and support for our Hinekura community and for support of the community clinics at Pirinoa, with Nurse Corina Ngatai. The DHB is going to provide a monthly calendar of their new remote clinics detailing when and where they will be in South Wairarapa.

Nga mihi nui ki a koutou.

Report compiled by Mel Maynard Chair Martinborough Community Board