

Agenda

Utilities and Roading Committee

TUESDAY

16 August 2016

4.00pm

Members:

Cr Peter Farrant (Chairperson)
Deputy Mayor Kevin Felstead
Cr Robbie J Brine
Cr Wendy Doody
Cr John Meyer
Mayor David Ayers (ex officio)

The Chairman and Members WAIMAKARIRI DISTRICT COUNCIL

A Meeting of the <u>UTILITIES AND ROADING COMMITTEE</u> will be held in the <u>COUNCIL</u> <u>CHAMBERS, 215 HIGH STREET, RANGIORA</u> on <u>TUESDAY 16 AUGUST 2016</u> to commence at <u>4.00pm</u>.

Adrienne Smith Committee Advisor

Recommendations in reports are not to be construed as Council policy until adopted by the Council

BUSINESS

Page No

1. APOLOGIES

2. CONFLICTS OF INTEREST

Conflicts of interest (if any) to be reported for minuting.

3. CONFIRMATION OF MINUTES

3.1 <u>Minutes of a meeting of the Utilities and Roading Committee held on Tuesday 21 June 2016</u>

RECOMMENDATION

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THAT the Utilities and Roading Committee

- (a) Confirms as a true and correct record the minutes of a meeting of the Utilities and Roading Committee held on Tuesday 21 June 2016.
- 3.2 <u>Minutes of the public excluded portion of a meeting of the Utilities</u> and Roading Committee held on Tuesday 21 June 2016

(see blue agenda papers)

4. MATTERS ARISING

5. DELEGATION

5.1 Shelley Huria, Barkers Road, Loburn

Mrs Huria will present a petition from residents of Barkers Road relating to the unsealed portion of Barkers Road, Loburn.

6. REPORTS

6.1 <u>Road Safety Action Plan Results 2015/16 – Kathy Graham (Journey Planner/Road Safety Coordinator)</u>

RECOMMENDATION

THAT the Utilities and Roading Committee

- (a) **Receives** report No. 160805076748
- (b) **Notes** the results of the 2015/16 Road Safety Action Plan
- (c) **Circulates** this report to the Community and Advisory Boards

6.2 <u>Mandeville North Area Speed Management Review – Bill Rice (Senior Transport Engineer)</u>

RECOMMENDATION

THAT the Utilities & Roading Committee

- (a) **Receives** report No. 160803076046.
- (b) **Supports** the calculation of appropriate speed limits in the Mandeville North area using the existing "Setting of Speed Limits Rule".
- (c) **Supports** a review of the speed limits calculated above, against the objectives and priorities of NZTA's draft Speed Management Guide, to ensure consistency with the guide.
- (d) **Supports** the identification and evaluation of additional speed management treatment using the draft guide.
- (e) **Supports** consultation with the local community, road users (including the Automobile Association and Road Transport Association), and Police regarding speed limits in the Mandeville North area.
- (f) **Notes** that staff will report back to the Committee the results of the speed limit calculations and the community views with a recommendation on speed limit changes.
- (g) **Circulates** this report to the Oxford Eyre Advisory Board.

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6.3 <u>Pegasus to Waikuku Beach Link – Kaiapoi Pa Road Upgrade – Bill Rice (Senior Transport Engineer)</u>

RECOMMENDATION

THAT the Utilities & Roading Committee

- (a) **Receives** report No. 160808077634.
- (b) **Approves** that the project to upgrade Kaiapoi Pa Road and link it to Tiritiri Moana Drive proceed no further due to the high cultural significance of the area and the likely impact of the proposed work.
- (c) **Supports** the proposal to investigate options to improve pedestrian and cycle connectivity between Pegasus and Waikuku Beach.
- (d) Notes that staff will report back to the Board on options and costs for improved pedestrian and cycle connectivity between Pegasus and Waikuku Beach.
- (e) **Supports** engagement with NZTA on their Ashley to Belfast safety improvements project.
- (f) **Supports** working with ECan to identify options to improve Public Transport provision for both Pegasus and Waikuku Beach.

6.4 Renewal of Drainage Maintenance Contract 11/52 - Greg Bennett (Land Drainage Engineer)

153 - 154

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RECOMMENDATION

THAT the Utilities & Roading Committee

- (a) **Receives** report 160714067865.
- (b) **Approves** the renewal of the Drainage Maintenance Contract 11/52 to Michael Stopforth Contacting Ltd for a further one year from the 1st of July 2016.
- (c) **Notes** that this is the final year of this contract.

6.5 <u>Waimakariri District Stockwater Race Users Customer Satisfaction</u> <u>Survey – Janet Fraser (Utilities Planner) and Greg Bennett (Land Drainage Engineer)</u>

155 - 193

RECOMMENDATION

- (a) Receives report No. 160415033885
- (b) **Approves** the *Stockwater Race Users Customer Satisfaction Survey* (TRIM 160329026818) for publication on the Council's website.
- (c) Notes the survey responses show, overall, that 79% are either satisfied or had no response to the question about overall

- satisfaction with the stockwater race service, whilst 21% are dissatisfied with the service.
- (d) **Notes** a majority of respondents (60%) think it is important to have access to a stockwater race on or adjacent to their property, and 69% are using the races for a variety of purposes.
- (e) **Notes** these responses indicate there is general support for the provision of a stockwater system in the District and that the service provided is still relevant to its customers.
- (f) Notes that there is general support among survey respondents for the water race maintenance arrangements currently in place, and notes no changes to the responsibility for race maintenance are recommended.
- (g) Notes that an information flier and other means of education covering maintenance responsibilities, methods for private race maintenance and reporting of supply issues via the Council's service request system will be prepared and circulated to all stockwater rate payers.
- (h) **Notes** specific issues with reliability and maintenance will be worked through with affected property owners".
- (i) **Notes** staff will prepare a further report on issues with stockwater race maintenance and outline proposals to address these.
- (j) **Notes** it is intended to repeat the survey every five years in order to continue to gauge the overall levels of customer satisfaction with the stockwater race system.

6.6 <u>Designated Fire Hydrant Filling Points for Contractors Water Tankers</u> – Sean de Roo (Utilities Engineering Officer)

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RECOMMENDATION

- (a) **Receives** report No. 160805076724.
- (b) Notes that eight Designated Fire Hydrant Filling Points have been installed across the district to provide a safe means for contractors to fill tankers, reduce disruption and damage caused by contractors using existing fire hydrants and to ensure backflow prevention is in place to protect the community water supply.
- (c) **Notes** that an education programme will be undertaken to inform the public and contractors on the purpose of the Designated Fire Hydrant Filling Points by erecting signs at the sites and also information on the Council's website.
- (d) **Circulates** this report to all community and advisory boards for their information.

6.7 Request for additional budget for Mandeville Water Renewals – Colin Roxburgh (Water Asset Manager)

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RECOMMENDATION

THAT the Utilities & Roading Committee recommends

THAT the Council:

- (a) **Receives** report No. 160801074771.
- (b) **Approves** an additional \$14,000 of funding to be allocated to the Mandeville Water Main Renewals budget (100627.000.5104) to bring the total budget to \$44,000, and notes that this will be depreciation funded.
- (c) **Notes** that this will allow the first stage of the Mandalea Road water main renewal to be completed to reduce the risk of ongoing leaks and bursts on this part of the scheme.
- (d) Circulates this report to the Oxford Eyre Ward Advisory Board for their information.

6.8 <u>Fernside Water Supply Upgrading and Funding Options – Gary Stevenson (Utilities Projects Team Leader) and Colin Roxburgh (Water Asset Manager)</u>

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RECOMMENDATION

- (a) **Receives** report No.160608053802.
- (b) Notes that Staff have considered a number of options to upgrade the Fernside Water Supply and that Upgrade Option A – Connect Fernside to Mandeville (Lilly Road to Fernside Headworks) has been identified as the recommended upgrade option.
- (c) **Endorses** the joining of the Fernside and Mandeville Water Supply Schemes as per Upgrade Option A (new pipe from Lilly Road to Fernside headworks).
- (d) **Receives** for comment the proposed consultation flyer and feedback form (Trim 160805076680 & 160805076681) which are proposed to be mailed to Fernside and Mandeville water supply scheme customers on 19 August 2016.
- (e) Instructs Council staff to consult with the Fernside and Mandeville communities to inform them of the preferred upgrade option for the Fernside scheme, and to seek feedback from the communities on their preferred funding option to fund the upgrade.
- (f) Notes that public consultation will be under taken from 20 August to 17 September 2016 and that the feedback received will be collated and presented to Council on Tuesday 4 October for consideration in order for Council to make a decision on which funding option to adopt.
- (g) **Circulates** this report to the Rangiora Community Board and the Oxford Eyre Ward Advisory Board for their information.

7. REPORT FOR INFORMATION ONLY

7.1 Contract 16/19 Wards Road and West Bradleys Road Stormwater

Drain Upgrade Tender Evaluation Report – Ben Pearce (Project
Engineer) and Kalley Simpson (3 Waters Manager)

(refer to copy of report no. 160427037594 to the Management Team meeting of 27 June 2016)

Item 7.1 previously circulated

7.2 Request to approve quote from Wai-Ora Forest Landscapes Ltd to plant the banks of the Kaikanui Stream – Greg Bennett (Land Drainage Engineer)

(refer to copy of report no. 160715068686 to the Management Team meeting of 25 July 2016

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7.3 <u>Consultant Engagement for Oxford WWTP Aeration Renewal Design –</u>
Ric Barber (Wastewater Asset Manager)

(refer to copy of report no. 160627061399 to the Management Team meeting of 1 August 2016

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RECOMMENDATION

THAT the information in Items 7.1 – 7.3 be received

8. PORTFOLIO UPDATES

- 8.1 Roading and Residential Streetscape Cr John Meyer
- 8.2 Stockwater and Drainage Deputy Mayor Kevin Felstead
- 8.3 <u>Utilities (Water Supplies and Sewer) Cr Peter Farrant</u>
- 8.4 Solid Waste- Cr Robbie Brine

9. MATTERS TO BE CONSIDERED WITH THE PUBLIC EXCLUDED

Section 48, Local Government Official Information and Meetings Act 1987

RECOMMENDATION

THAT the public be excluded from the following parts of the proceedings of this meeting.

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:

Item N°	Minutes/Report of:	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution
9.1	Minutes of the Public Excluded portion of the Utilities and Roading Committee meeting of 21 June 2016	Confirmation of Minutes	Good reason to withhold exists under Section 7	Section 48(1)(a)
9.2	Report of Simon Collin (Infrastructure Strategy Manager)	Drainage Maintenance Contract	Good reason to withhold exists under Section 7	Section 48(1)(a)
9.3	Report of Colin Roxburgh (Water Asset Manager)	Request to negotiate service agreement contract for water supply pump and well maintenance, well drilling, well pump installation and generator supply contract	Good reason to withhold exists under Section 7	Section 48(1)(a)
PUBL	C EXCLUDED REPORTS FO	OR INFORMATION ONLY – repor	ts previously circul	ated to members
9.4	Report of Murray Kerr (Senior Design Engineer) to the Management Team	Central Rangiora Sewer – Geotech Consultant Engagement	Good reason to withhold exists under Section 7	Section 48(1)(a)
9.5	Report of Ric Barber (Wastewater Asset Manager) to the Management Team	Parnham Lane Wastewater Pump Station flow meter installation	Good reason to withhold exists under Section 7	Section 48(1)(a)
9.6	Report of Colin Roxburgh (Water Asset Mgr) and Owen Davies (Drainage Asset Mgr)	Contract 16/21 Weka Street Drainage Upgrade Tender Report	Good reason to withhold exists under Section 7	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:

Item N°	Reason for protection of interests	Ref NZS 9202:2003 Appendix A
9.1 – 9.6	Protection of privacy of natural persons To carry out commercial activities without prejudice	A2(a) A2(b)ii

10. **QUESTIONS**

11. <u>URGENT GENERAL BUSINESS</u>

WAIMAKARIRI DISTRICT COUNCIL

MINUTES OF A MEETING OF THE UTILITIES AND ROADING COMMITTEE HELD IN THE COUNCIL CHAMBERS, 215 HIGH STREET, RANGIORA ON TUESDAY 21 JUNE 2016 AT 4.00PM

PRESENT

Councillor P Farrant (Chairperson), Mayor D Ayers, Deputy Mayor K Felstead, Councillors W Doody and J Meyer

IN ATTENDANCE

Councillors P Allen (to 5.00pm), J Gerard, N Atkinson, K Barnett (to 5.55pm) Messrs J Palmer (Chief Executive) K Simpson (3 Waters Manager), K Stevenson (Roading Manager), G Boot (Project Delivery Manager), R Barber (Wastewater Asset Manager), C Roxburgh (Senior Engineer, Project Delivery Unit), C Bacon (Senior Engineer), S Collin (Infrastructure Strategy Manager), B Rice (Senior Transport Engineer), Mrs A Klos (Project Engineer), Ms K Purton (Flood Team Leader), Ms Y Warnaar (Asset Planning Engineer - Roading) Mrs J Fraser (Utilities Planner), Mrs D Clarke (Administration Assistant, Utilities and Roading) and Mrs A Smith (Committee Advisor).

1. **APOLOGIES**

An apology was received and sustained from Councillor R Brine.

2. **CONFLICTS OF INTEREST**

There were no conflicts of interest recorded.

CONFIRMATION OF MINUTES 3.

3.1 Minutes of a meeting of the Utilities and Roading Committee held on Tuesday 19 April 2016

Moved Councillor Meyer seconded Councillor Doody

THAT the Utilities and Roading Committee

Confirms as a true and correct record the minutes of a meeting (a) of the Utilities and Roading Committee held on Tuesday 19 April 2016.

CARRIED

4. **MATTERS ARISING**

There were no matters arising.

5. **DELEGATION**

There were no delegations.

6. REPORTS

6.1 Review of Solid Waste Bylaw 2010 – Simon Collin (Infrastructure Strategy Manager) and Kitty Waghorn (Solid Waste Asset Manager)

Mr Simon Collin presented this report which seeks the support of the committee for the Council to consult with the public on a review of the Solid Waste Bylaw 2010. , The Council is required to review the Bylaw for the first time within five years since it was adopted in 2010. Mr Collin noted that Terms and conditions have been more clearly separated out, and this has been structured in such a way, that if needed, these can be changed by Council resolution. A three strikes clause for persistent noncompliance with the Terms and Conditions of use of the Recycling Bins is proposed. Mr Collin also highlighted some other proposed changes as noted in the report.

Councillor Allen noted if a copy of the old bylaw with proposed track changes would have been helpful, though it was noted that there has been significant restructuring of this document.

Councillor Doody questioned the three strikes system for contamination of recycling bins, and it was confirmed that there would be some effort to speak to those concerned and educate them in the first instance.

Moved Deputy Mayor Felstead seconded Mayor Ayers

- (a) **Receives** report No. 160525048291.
- (b) Agrees that a bylaw is still the most appropriate mechanism to control and manage solid waste issues in the district, and that the proposed *Solid Waste and Waste Handling Licencing Bylaw 2016* is the most appropriate form of bylaw and does not give rise to any implications under the *New Zealand Bill of Rights Act 1990*.
- (c) **Notes** that upon adoption, the bylaw will be renamed the *Solid Waste and Waste Handling Licencing Bylaw 2016* to reflect the date of its last review.
- (d) **Notes** that the *Solid Waste and Waste Handling Licencing Bylaw 2016* will not be required to be formally reviewed for another 10 years.
- (e) **Refers** this report to the Rangiora, Kaiapoi and Woodend-Ashley Community Boards and the Oxford-Eyre Ward Advisory Board for their information.
- (f) Recommends to Council that it:
 - i. **Initiates** the Special Consultative Procedure process to review the *Solid Waste Bylaw 2010*.
 - ii. Approves the attached proposed Solid Waste and Waste Handling Licencing Bylaw 2016 (TRIM 160525048270) and Statement of Proposal (TRIM 160525048283) for release for public consultation in accordance with the requirements of the Special Consultative Procedure outlined in the Local Government Act 2002.

- iii. Appoints Councillor Brine, Councillor Meyer and Councillor Doody to hear submissions on the proposal and to recommend decisions to the 6 September 2016 Council meeting.
- (g) **Notes** the expected hearing and deliberations date and time of 23rd August 9.00a.m. at Ruataniwha Kaiapoi Civic Centre

CARRIED

6.2 <u>Update on Flooding Mitigation Works – Gerard Cleary (Manager</u> Utilities and Roading) and Kate Purton (Flood Team Lead)

Mr Simpson spoke to this report with Kate Purton in support, providing an update on the progress of the flood mitigation works. Expenditure to date, over both 2014/15 and 2015/16 is 71% of the total budget of \$5.3m. Mr Simpson advised that since the previous update in November 2015 several projects have been completed, including the Siena Place drainage upgrade, the Dudley Park pipe, North Brook improvements at West Belt/Janelle Place, and Middle Brook Gefkins Road channel improvements. There is also several projects under way, or about to commence construction or in the investigation and design phase. There have been improvements to the way the information on stormwater and flood management is being conveyed to the public, which is including letters, public meetings, face to face meetings and works information notices. Mr Simpson highlighted the Phase four information (which is a Review of Systems and Processes) included in the report. This information is being made available for consultants and any applicants.

Mayor Ayers questioned the Phase 4, h) changes to maintenance practices. Mr Simpson advised that there is a figure included for maintenance of drains that has not been included previously in the Ohoka, Clarkville and Kaiapoi areas. There is a higher level of drain maintenance expected now by residents of these areas. The design of the drains has an impact on how they can be maintained.

Moved Councillor Farrant seconded Councillor Felstead

THAT the Utilities & Roading Committee

- (a) Receives report No. 160602052509.
- (b) **Notes** the progress on the flood mitigation works, with 71% of the 2014/15 and 2015/16 work complete and forecast 79% completion by the end of June 2016.
- (c) **Circulates** this report to the Community and Advisory Boards.

CARRIED

Councillor Farrant said it is pleasing to see the continuing strong focus on this issue, two years since the 2014 flood event. This is an exercise showing that this Council is doing its duty in an appropriate way and not letting it happen again.

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6.3 NZTA Business Case Approach, One Network Road Classification and Stakeholder Engagement Proposal – Yvonne Warnaar (Asset Planning Engineer (Roading)) and Ken Stevenson (Roading Manager)

Mr Ken Stevenson and Ms Y Warnaar presented this report to update the committee on the One Network Road Classification (ONRC) and the NZTA business case approach for the 2018-21 NLTP. It was suggested that members approach staff with any questions they may have on the ONRC Performance Measures document attached to this report.

Councillor Atkinson questioned if local businesses would be included in the stakeholder groups, and it was confirmed they would be engaged in the development of the programme.

Councillor Barnett suggested the consultation should cover the wider community, and not just the Community Boards. Mr Stevenson and Ms Warnaar suggested there would still be opportunity for engagement with the wider community. There is feedback received already through service requests and the annual plan submission process. Staff will be talking with the communications team on how this engagement process is conveyed to the public.

Following a question from Councillor Meyer, Mr Stevenson and Mr Palmer advised that this process will allow for classification of roads surrounding schools in rural areas, on secondary collector roads. This process is helping to ultimately provide some consistency and clarity in levels of service to be provided locally and nationally, across the country.

Councillor Farrant suggested there could be some local trucking firms included in the key stakeholders group to be engaged with. Ms Warnaar noted in the first instance that the Associations that these firms would be members of have been included. Councillor Doody also suggested the inclusion of rural contractors in the key stakeholder group which was acknowledged.

Moved Councillor Meyer seconded Councillor Farrant

THAT the Utilities & Roading Committee

- (a) **Receives** report No. 160531051133
- (b) **Supports** the stakeholder engagement process as outlined in this paper
- (c) **Notes** that NZTA has approved the One Network Road Classification hierarchy as shown in the attachment i. (Doc 160602052207)
- (d) **Notes** that the NZTA Business Case approach is required for all future funding applications
- (e) **Circulates** this report to the Boards.

CARRIED

Councillor Barnett, though not a member of this committee, believes the residents who use our roads are important users. This is an opportunity to go out to the wider community to show them where and how we can

get subsidies and which roads we can get subsidies on. Councillor Barnett is concerned that some of these issues just go out to the Community Boards and believes it is important that this new roading hierarchy is conveyed to all residents of the district.

6.4 <u>Approval of the Allocation of the 2016/17 Roading Capital Works</u> Programme – Ken Stevenson (Roading Manager)

Mr Stevenson presented this report seeking approval of the roading capital works programme for the 2016/17 year and to endorse the following indicative three year programmes.

Councillor Allen asked if the Fernside Road/Lineside Road intersection, are there any plans in terms of improving its safety. Mr Stevenson noted there are risks there. Mr Palmer advised that approximately 8-10 years ago there was a considered study of this area. Practical options of either realigning the intersection or the railway are challenging. There was discussion on the possibility of closing the intersection. Mr Stevenson confirmed that this intersection is not in this particular programme.

Councillor Doody questioned if there was to be any upgrade to the High Street (Rangiora) railway crossing. Mr Stevenson noted the surface has recently been upgraded and further improvements will be included in the 2017/18 year.

Mayor Ayers questioned the roundabout safety for pedestrians, and questioned why this is being put back to 2018. Mr Stevenson noted the design of the older roundabouts allows for higher speed for drivers turning left at them, creating issues for pedestrians.

Councillor Barnett asked on intersection improvements at the Rangiora-Woodend Road/State Highway One, is there any update on any discussions with NZTA for improvements at this intersection? Mr Stevenson noted there is to be some discussions held with NZTA and once these have taken place, information will be brought back to this committee. NZTA have some funding on that route.

Deputy Mayor Felstead questioned the upgrades to Burnett Street, Oxford. Mr Stevenson said this has been approved in the LTP funding, and currently is not eligible for any NZTA subsidy, but would make some enquiries to confirm this was the case or whether any subsidy could be available.

Following a question from Councillor Atkinson, Mr Stevenson said that following the recent fatal crash in the Main North Road/Empire Road area, there had been discussions with NZTA, Christchurch City Council and this Council. Councillor Atkinson suggested this incident highlighted the need to progress the cycleway in this area.

Moved Councillor Meyer seconded Councillor Doody

- (a) **Receives** report N° 160601051324
- (b) **Approves** the attached Kerb and Channel Renewal, Footpath Renewal and Minor Improvements programmes for the 2016/17 year (Doc 160602052513)

- (c) Authorises the Roading Manager to make changes to this programme as a result of consultation or technical issues that may arise during the detailed planning phase, provided the approved budgets and levels of service are met, and the changes are reported to the Committee
- (d) **Endorses** the indicative Kerb and Channel Renewal, Footpath Renewal and Minor Improvements programmes for the 2017/18, 2018/19 and 2019/20 years.
- (e) **Circulates** this report to the Community Boards and the Oxford Eyre Ward Advisory Board.

CARRIED

Councillor Atkinson suggested that the Council could start considering the issue of road safety as we do with Health and Safety and to be mindful of near misses on the roads in the district.

Mayor Ayers spoke on the issue of the Fernside Road/Lineside Road intersection and suggested that visibility of drivers (travelling on Lineside Road) from Fernside Road, is not restrictive.

6.5 <u>Tuahiwi Road/Boys Road/Rangiora Woodend Road Intersection –</u> Bill Rice (Senior Transport Engineer)

Mr Stevenson introduced Mr Bill Rice to the Tuahiwi Road/Boys Road/Rangiora Woodend Road Intersection – Bill Rice (Senior Transport Engineer committee. Mr Rice spoke to this report seeking support of the committee for staff to investigate and consult on a long term option to realign Tuahiwi Road. There have been several accidents at this complex intersection. With the addition of the cycleway along the Rangiora-Woodend Road it will make it even more complex. There is more investigation as to what side of the road the cycleway is going to go on. Some immediate ways to improve safety at the intersection were discussed, including more signage. There is a possible long term option to realign Tuahiwi Road to meet Boys Road away from this intersection. Staff are also seeking support as they go forward with engagement with key stakeholders and property owners.

Councillor Barnett asked if there was any consideration to reducing the speed of traffic in this location. Mr Rice said this is one of the options to be looked at.

Councillor Farrant said he would like to see more coverage of other options brought back to the Committee and to see the range of options expanded before any consultation is undertaken.

Moved Deputy Mayor Felstead seconded Councillor Meyer

- (a) **Receives** report No160601051719
- (b) **Supports** the following proposed measures:
 - That the property owner / lessor be approached with a view to removing the free standing signs on Rangiora Woodend Road

- That matching Advance Warning Signs be erected opposite the existing signs to form a gated effect
- That a thorough Multi–Criteria Analysis will be carried out to identify the preferred side of Rangiora Woodend Road for the Rangiora to Woodend cycleway. This analysis will include the impacts of the Rangiora Woodend, Boys, Tuahiwi, Harris Roads intersection on the cycleway, and vice versa
- That a preferred option for the intersection will be confirmed in conjunction with the Multi-Criteria Analysis
- (c) **Supports** consultation with Runanga and the community on long term options, including realignment of Tuahiwi Road.

CARRIED

Councillor Barnett said she does not support recommendation (c) and there has been issues with this intersection for many years. Councillor Barnett does not believe that removing a few signs is going to be enough to make this area safe.

Mayor Ayers noted the crash that had occurred could have happened at any of the intersections along Rangiora-Woodend Road, and the intersection is not the perceived problem.

6.6 Combining of Woodend and Pegasus Water Supplies – Approval to Consult – Alicia Klos (Project Engineer), Kalley Simpson (3 Waters Manager) and Gary Boot (Project Delivery Manager)

Messrs Simpson and Boot and Ms Alicia Klos presented this report, seeking approval from the committee to undertake consultation with the Pegasus, Woodend and Tuahiwi communities on a proposal to combine the Pegasus and Woodend water supplies. There are benefits to the communities for having these water supplies combined. For Pegasus it means their water supply will no longer have to be chlorinated. The proposal is to consult with the community in July and report back to the committee at its September meeting.

Councillor Barnett questioned the inclusion of "Potentially connect Bramleys Road new source well" in the consultation brochure and suggest that this should be removed. Mr Simpson said this is included to show that this is an intention and that there will be water coming from a third source at a date in future. Councillor Barnett did not see any advantage of having this included in the consultation when there is no guarantee of enough water supply from this source. Mr Boot added that it was thought it was better to include the possibility of water coming from the Bramleys Road well in future.

Councillor Barnett asked about the manganese residue that occurs in the water pipes in Woodend and how this can be explained to the residents of Pegasus, who with chlorination, do not currently experience this. Mr Simpson said the council is looking at strategies for flushing the systems to more effectively do this and to obtain velocities so that there are not similar issues experienced. Residents of Pegasus need to be aware of the possibility of iron and manganese build up in the pipes, and it is proposed that there would be flushing programmes in place in Pegasus to avoid this issue. Mr Boot noted that the people of Pegasus need to understand that there are some benefits and also some risks for them with this proposal.

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It was agreed that staff would circulate this report to the Woodend-Ashley Community Board before their next meeting, which is prior to the public meeting on 27 July. There was discussion on the possibility of any updates to the consultation brochure after it had been to the Community Board and if this could be accommodated within the proposed timeframes suggested

Moved Councillor Farrant seconded Councillor Felstead

THAT the Utilities & Roading Committee

- (a) Receives report No. 160602052229
- (b) **Approves** the proposed community consultation strategy for removing chlorine from Pegasus water and combining the Woodend and Pegasus water supplies.
- (c) **Notes** that the biological treatment pilot trial has shown that the Pegasus Equestrian Park wells 1 and 3 water can be treated using a biological treatment process, without the addition of chlorine.
- (d) **Notes** this pilot trial is ongoing, with the focus being on optimising the performance of the biological filter and this is expected to be concluded by the end of August 2016.
- (e) **Notes** that the risks and benefits of removing chlorine from the Pegasus water supply is a matter for the community to consider and provide feedback on through the consultation process.
- (f) **Notes** the benefits of combining the two schemes are as follows:
 - Increased physical resilience
 - Increased financial resilience
 - Reduced capital costs
 - Reduced operating costs
 - Reduced combined long term rating impact
- (g) **Notes** that the schemes can only be joined if Pegasus discontinues chlorination.
- (h) **Notes** that the Pegasus and Woodend, including Tuahiwi, community consultation strategy will begin after July 16 2016.
- (i) **Notes** that Councillor Peter Farrant has offered to chair the Woodend community consultation meeting and that Councillor Kirstyn Barnett will chair the Pegasus community meeting.
- (j) **Consults** with the Woodend-Ashley Community Board on the 11 July with any feedback to be transferred immediately to staff.

CARRIED

Councillor Barnett said the Board is the eyes and ears of the community and it is important for matters to be brought to the Boards for their consideration. The dates for the community consultation meetings were subsequently set as Wednesday 17 August at 7.30pm for Pegasus (at Pegasus School) and Thursday 18th August at 7.30pm for Woodend (at Woodend Community Centre).

6.7 Request for budget for Ocean Outfall and Beach Testing – Ric Barber (Wastewater Asset Manager)

Mr Barber presented this report, seeking approval for new budget of \$100,000 for further testing of the beach and Ocean Outfall discharge. This will give definite data on whether the Ocean Outfall is contributing to the sea foam. It was advised that the Runanga were appreciative of this further testing being undertaken.

Councillor Atkinson questioned the occurrence of sea foam and how this is portrayed in this report. Mr Barber confirmed that it is agreed that sea foam is a natural occurrence.

Councillor Barnett questioned the increase percentage of faecal coliforms at the Waimakariri River mouth (noted in the following report) and if this could be tested at the same time, in this \$100,000 budget. Mr Barber said this testing could also be carried out.

Councillor Farrant asked if there was any data available on results of testing from Christchurch ocean outfall. Mr Barber said that to date there has not been any data received from Christchurch City Council, or ESR, the company to be used for testing, but this information would be sought from them.

Councillor Meyer questioned the need to spend \$100,000 on testing this sea foam. Mr Barber said he has received advice that this is the most accurate way of recording information. There will be testing sites at places other than Pines Beach, to have a background comparison with other sites as well, with more than one sample taken at each site. Councillor Meyer appreciates that this is being done for the benefit of the community.

Moved Councillor Farrant seconded Deputy Mayor Felstead

THAT the Utilities & Roading Committee recommends

THAT the Council:

- (a) Receives report No. 160608053630
- (b) **Approves** a new operational budget of \$75,000 for faecal source tracking testing of the Ocean Outfall and beach samples.
- (c) **Approves** the award of the testing and analysis work to ESR through a sole source proposal.
- (d) **Notes** that this has an effect of a 1.6% increase on the Eastern District Sewer Rate in the 2017/18 financial year.
- (e) Circulates a copy of this report to all Boards for their information.
- (f) Circulates a copy of this report to the Water Zone Committee for their information.

CARRIED

Councillor Farrant said this additional monitoring gives a wider picture on how well the outfall is performing outside the original scope and any effects of the Christchurch City outfall. This will be good information to have for any future review of the Council's consent. Councillor Farrant noted it is very appropriate to have this information available at this time.

Deputy Mayor Felstead said this information will be important, having been involved with both the Pegasus Bay Bylaw review and the Waimakariri Water Zone Committee.

Councillor Atkinson welcomes this testing being done and believes this is timely, and it will be useful to have all information available when further consents are required.

6.8 Ocean Outfall – 10 Year Compliance Review – Ric Barber (Wastewater Asset Manager)

Mr Ric Barber presented this report providing an update on the operation of the Ocean Outfall with it being commissioned in May 2006. Significant trends were discussed, as shown in the report, which showed improvements in most analysis, with two deteriorating trends also shown. Overall the ocean outfall has been operating within the consent conditions.

Moved Mayor Ayers seconded Deputy Mayor Felstead

THAT the Utilities & Roading Committee

- (a) Receives report No.160607053188.
- (b) **Notes** that the Ocean Outfall has adhered to consent conditions since commissioning in May 2006 apart from minor non-compliances for enterococci levels and sampling frequency.
- (c) **Notes** that a further report will be written regarding the further testing for the beach samples.
- (d) Notes that the upgrades at the Woodend and Rangiora wastewater treatment plants will provide increased treatment at these two plants.
- (e) **Circulates** this report to Council for their information.
- (f) **Circulates** a copy of this report to all Boards for their information.
- (g) Circulates a copy of this report to the Water Zone Committee for their information.

CARRIED

Councillor Atkinson believes this is very timely, and suggests that the Council should strive to be getting better results than is allowed under the consent. Councillor Atkinson believes the consent conditions are not very stringent.

Councillor Farrant does not have any concerns with the consent conditions.

Mayor Ayers said the Council needs to ensure that staff know the guidelines they need to work to.

7. REPORT FOR INFORMATION ONLY

7.1 <u>Contract Acceptance Report – 16/10 New Footpath Programme</u>
2015-16 – Ken Stevenson (Roading Manager) and Hari Pillar (Design Engineer)

(refer to copy of report no. 160413033121 to the Management Team meeting of 18 April 2016

7.2 <u>Kowhai Ave Inlet Structure – Request to Award Construction Work –</u> Owen Davies (Drainage Asset Manager)

(refer to copy of report no. 160428038209 to the Management Team meeting of 2 May 2016

7.3 <u>Blackett Street Good Street Intersection Upgrade – K Stevenson</u>
(Roading Manager) and K Straw (Project Development Unit Engineer)

(refer to copy of report no. 151202159190 to the Rangiora Community Board meeting of 11 May 2016

7.4 <u>Kaiapoi River Herbicide Testing and Ocean Outfall Sea Foam</u>
<u>Analysis – J Fraser (Utilities Planner), O Davies (Drainage Asset Manager) and R Barber (Wastewater Asset Manager)</u>

(refer to copy of report no. 160405029549 to the Kaiapoi Community Board meeting of 16 May 2016

(Items 7.1 to 7.4 circulated separately)

7.5 <u>Award of Electrical Work for New Ohoka Well Head – Colin Roxburgh, Senior Engineer, Project Delivery Unit and Kalley Simpson (3 Waters Manager)</u>

(refer to attached copy of report no. 160506041405 to the Management Team meeting of 16 May 2016)

Moved Mayor Avers seconded Deputy Mayor Felstead

THAT the information in Items 7.1 – 7.5 be received

CARRIED

8. PORTFOLIO UPDATES

8.1 Roading and Residential Streetscape – Cr John Meyer

Nothing to report

8.2 <u>Stockwater and Drainage – Deputy Mayor Kevin Felstead</u>

Nothing to report

20

8.3 <u>Utilities (Water Supplies and Sewer) – Cr Peter Farrant</u>

Nothing to report

8.4 Solid Waste- Cr Robbie Brine

Councillor Brine was not present.

9. MATTERS TO BE CONSIDERED WITH THE PUBLIC EXCLUDED

Section 48, Local Government Official Information and Meetings Act 1987

Moved Councillor Farrant seconded Councillor Doody

THAT the public be excluded from the following parts of the proceedings of this meeting.

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:

Item N°	Minutes/Report of:	General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48(1) for the passing of this resolution			
9.1	Minutes of the Public Excluded portion of the Utilities and Roading Committee meeting of 19 April 2016	Confirmation of Minutes	Good reason to withhold exists under Section 7	Section 48(1)(a)			
9.2	Report of Ric Barber (Wastewater Asset Manager)	3 Waters Electrical Maintenance Contractor – Contract Renewal	Good reason to withhold exists under Section 7	Section 48(1)(a)			
REPORT	REPORT FOR INFORMATION ONLY						
9.3	Report of Kieran Straw, (Project Manager) and Ken Stevenson (Roading Manager)	Construction of New Fence at No. 74 Southbrook Road	Good reason to withhold exists under Section 7	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:

Item N°	Reason for protection of interests	Ref NZS 9202:2003 Appendix A
9.1 – 9.3	Protection of privacy of natural persons To carry out commercial activities without prejudice	A2(a) A2(b)ii

CARRIED

CLOSED MEETING

Resolution to resume in open meeting

Moved Councillor Farrant seconded Councillor Doody

THAT open meeting resumes and the business discussed with the public excluded remains public excluded until the contractor is advised for Item 9.3 and once the contract is awarded for Item 9.2.

CARRIED

OPEN MEETING

10. **QUESTIONS**

There were no questions

11. URGENT GENERAL BUSINESS

There was no urgent general business.

There being no further business, the meeting closed at 6.20pm.

CONFIRMED

Chairman

Date

BRIEFING

At the conclusion of the meeting, a Briefing was held to discuss the Oxford Rural No.1 Water Supply Funding Options.

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO: CMS 06 02/ 160805076748

REPORT TO: Utilities and Roading Committee

DATE OF MEETING: Tuesday 16 August 2016

FROM: Kathy Graham – Journey Planner/Road Safety Coordinator

SUBJECT: Road Safety Action Plan Results 2015/16

SIGNED BY:

(for Reports to Council or

Committees)

Department Manager

Chief Executive

1. **SUMMARY**

1.1. The purpose of this report is to present the results of the Waimakariri Road Safety Action Plan for 2015/16.

Attachments:

- i. Results Road Safety Action Plan 2015/16.
- ii. Evaluations & Reports from programmes and campaigns

2. **RECOMMENDATION**

THAT the Utilities and Roading Committee:

- (a) Receives report No. 160805076748
- (b) **Notes** the results of the 2015/16 Road Safety Action Plan
- (c) **Circulates** this report to the Community and Advisory Boards

3. <u>ISSUES AND OPTIONS</u>

- 3.1. In 2006 the National Road Safety Committee agreed that Road Safety Action Plans (RSAP) should be the primary mechanism for coordination of education, engineering, and enforcement approaches to road safety at a district and sub-regional level. Local Government are best placed to lead RSAP's as they own and maintain the land transport infrastructure assets and have statutory objectives to promote community wellbeing and improve the performance of the land transport system.
- 3.2. RSAP's have proved to be an effective tool to bring together all of the Councils road safety partners under one plan. Reporting to the actions in the plan occurs at each road safety committee meeting, providing an opportunity for discussion and focus on the key issues and concerns for the District.
- 3.3. The Management Team has reviewed this report and supports the recommendations.

4. COMMUNITY VIEWS

- 4.1. A RSAP highlights local road safety issues and is focused on coordinating the delivery of enforcement, education and engineering activities to best manage key local road safety risks.
- 4.2. Evidence and data is analysed by all road safety partners to identify issues to be targeted. This information includes local crash data provided by the New Zealand Transport Agency, and local Police information.
- 4.3. The Council has a number of partners who work collaboratively to implement the plan, including: Environment Canterbury, New Zealand Police, New Zealand Transport Agency, AA New Zealand, NZ Trucking Association, New Zealand Road Transport Association, ACC and SADD.

5. FINANCIAL IMPLICATIONS AND RISKS

5.1. There is a risk that in preparing an action plan that the wrong issues will be identified and targeted. However the Road Safety Coordinating Committee is made up of the appropriate local and regional organisations and this, along with an evidence based assessment of road safety issues in the district ensures the appropriate priorities have been recognised.

6. CONTEXT

6.2. Legislation

This RSAP supports the implementation of New Zealand's Safer Journey's road safety strategy by outlining actions for the District that will also address and progress the national road safety actions. This will include a range of local road safety works, road safety programmes, enforcement and local initiatives.

6.1. Community Outcomes

The Action Plan gives effect to the following community outcomes

- There is a safe environment for all;
- Crime, injury and road crashes are minimised;
- Transport is safe, accessible, convenient, reliable, affordable and sustainable.

Kathy Graham

Journey Planner/Road Safety Coordinator

Road Safety Action Plan Results Report

Waimakariri District Council

July 2015 – June 2016

Goal: to reduce the incidence and severity of road crashes in the Waimakariri

Date: 31 July 2016



Waimakariri Road Safety Action plan 2015-2016

This Road Safety Action Plan sets out the priority areas, actions, measures and responsibilities for the Waimakariri community for the 2015 – 2016 financial year.

It has been developed in consultation with Waimakariri key road safety partners and stakeholders; including the Waimakariri District Council, New Zealand Police, New Zealand Transport Agency, ACC, New Zealand Automobile Association, New Zealand Trucking Association and the Road Transport Association. These groups make up the Waimakariri Road Safety Coordinating Committee; the committee meets every two months to discuss local road safety issues and monitor the action plan.

New Zealand Transport Agency crash data showed that in the last five years 2010 – 2014 there were 1091 recorded crashes (419 injury, 681 non-injury). 22 people died on the roads during this period and 130 people were seriously injured.

This plan also uses data from the New Zealand Transport Agency's communities at risk register, the Government's "Safer Journeys' Strategy and the Waimakariri District Council Road Safety Strategy.

The New Zealand Transport Agency National Land Transport Programme 2012 – 2015 (NLTP) provides funding for the community projects identified in the plan.

The approved funding for 2015/16 is \$120,000 for road safety promotion activities addressing the following "Safer Journeys" areas of concern

- Alcohol and drugs
- Speed
- Roads and roadsides (including intersections)
- Young drivers

The Government's Road Safety Strategy 'Safer Journeys' 2010 - 2020 has a long term goal for road safety in New Zealand, its vision is, "a safe road system increasingly free of death and serious injury" This vision challenges us to see road deaths and serious injuries as preventable.

The Safe System approach differs from traditional approaches to road safety. Rather than always blaming the road user for causing a crash, it acknowledges that even responsible people sometimes make mistakes in their use of the roads. Given that mistakes are inevitable, the Safe System has objectives to:

- make the road transport system more accommodating of human error
- manage the forces that injure people in a crash to a level the human body can tolerate without serious injury
- minimise the level of unsafe road user behaviour

Emerging issues for the committee are older drivers, distracted drivers and breaches of driving licence. The committee will continue to monitor road safety in the District and assess and respond to situations and concerns that might also arise.

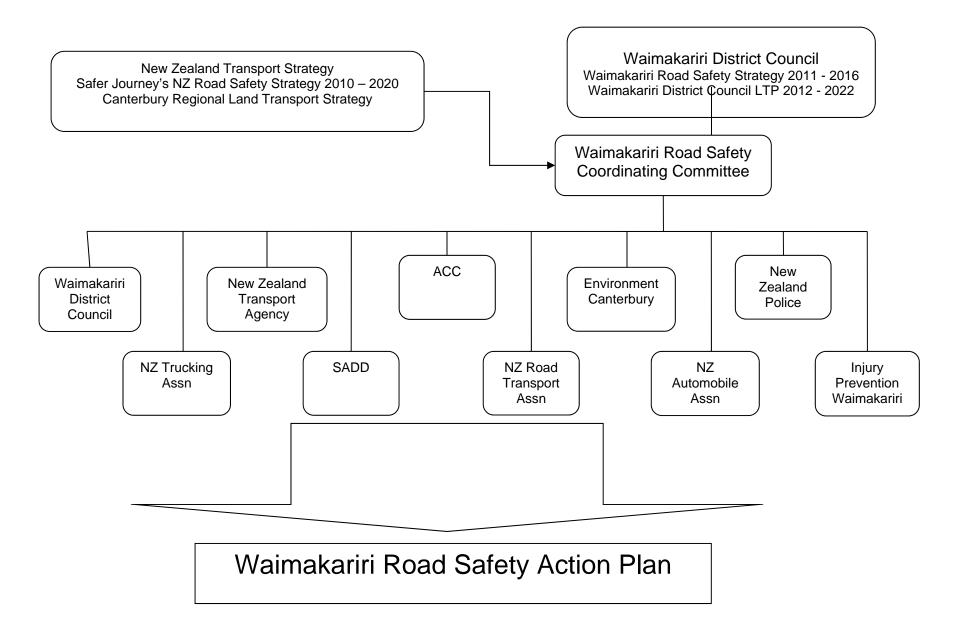
Background notes to the Waimakariri District;

The Waimakariri population, as at the June 2013 census, has an estimated population of 56,000, this has grown post-earthquake since the 2006 census when the population was recorded at 42,834

From traffic count surveys taken between the years 2009 to 2013, the following changes were noted:

- > The number of people travelling to Christchurch to work increased by 1794 (20.1 percent)
- > An overall increase of traffic by 21.7 percent across the District
- An increase in the light vehicle count of 19.8 percent.
- > An increase in the heavy vehicle count of 55.6 percent.

The number of Registered Vehicles has grown to 53442 in 2013 from 46135 in 2009, greater than the whole population.





SAFE ROAD USERS - Alcohol Action Waimakariri

Local Statistics 2010 -2014

- There were 148 crashes involving alcohol (14% of all crashes) 54 of these were injury, 94 were non-injury
- There were 8 deaths and 26 road users were seriously injured
- Most of the crashes happened on local roads (85%) and half of these in urban areas.
- Just over half (55%) happened at weekends and 67% happened at night.
- Most (83%) of the crashes were lost control/head on types, 48% on bends and 35% on straight roads
- Over a third (37%) also involved speed too fast for the conditions.
- Nearly half (46%) of the at fault or part fault drivers were under 25 and 32% were between 30 and 50 years old.
- 40% were on restricted (27%) or learner (13%) licences

Target groups

All drivers and those associated with the hospitality industry.

Stories behind our actions

Alcohol has been identified in the Governments Road Safety Strategy "Safer Journeys" as a major area of concern. It is a key issue in Waimakariri's Road Safety strategy and is also on the Police "Fatal Five" list.

The Waimakariri District Council Community Team has developed an action plan to address alcohol issues across a wide section of the community, as alcohol is part of a much wider social issue; binge drinking amongst the young, easy availability of alcohol, family violence, lack of alternate transport options, a rural drinking culture and increased traffic and population growth post the earthquakes - especially in the rural areas.

In 2013, Police Alco-Link data provided information about the physical address alcohol was consumed prior to the arrest. In the District approximately 45% of this consumption was in private residences followed by just over 20% who reported that they had their last drink in licensed premises.

Local Police report that between 6.00 pm Saturday night and 6.00 am Sunday morning over 90% of incidents attended in the Waimakariri District have alcohol as a significant contributing factor. Private parties, outside of the licensed premises, have been identified as places where an uncontrolled supply of alcohol is available which contributes to bigger issues in the wider community such as vandalism, nuisance, assault and other criminal activity.

Monitoring

The Waimakariri Road Safety Committee will monitor the actions, responsibilities and measures of this plan at its two monthly committee meetings.



Safe Road Users - Alcohol Action Waimakariri

Activities	Actions and Outcomes	Measures and Targets	Dates	Responsibility
Police enforcement	Short Duration checkpoints. Anytime-	An annual target for Canterbury	By June 2016	NZ Police
	Anyplace.	District of 238,000 breath tests. This		
	Every driver stopped for whatever reason	number is based on former PNHQ		
	will be breath tested.	targets of 160,000 compulsory breath		
		tests and 78,000 mobile breath tests		
			As advised	NZ Police
		Measured by the number of		
	Waimakariri will dovetail projects in with	campaigns undertaken and		
	Police national campaigns.	completed.		
	See calendar for seasonal factors and crash	·		
	risk			

Over the twelve months to 30 November 2015 249,530 breath tests had been conducted (representing delivery of 5% above target) NZTA Road Safety Advertising Calendar 2015/16 refers

Liquor Licensing	WDC to work with licensees so that they fully understand licensing laws and the risks they face when serving or selling alcohol to intoxicated people or minors and promote host responsibility training.	Measured by the number of contacts with licensees.	June 2016	WDC Environmental Services Team along with the Police
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The Local Alcohol Policy has bedded in well, so too the new Sale and Supply of Alcohol Act. Licensees and duty managers continue to display excellent knowledge around the new legislation with very few issues experienced in licenced premises. 3 controlled purchase operations once again saw no sales made to underage patrons - confirming the robust procedures that licenced premises are adopting in the Waimakariri District. With over 200 premises inspected and monitored by Council in conjunction with Crown Health and Police, this has given Council added assurance that the District's licenced premises, licencees, and those working within the industry, do understand the laws, are aware of the consequences, and appear committed to reducing alcohol related harm.

NZTA national advertising	Advertising and media programmes aimed at reducing drugged and drinking drivers	NZTA. Evaluation	Ongoing	NZTA
programme for				
drugged and drink				
driving	In a dead 40 A of 2045 have //	. /	/	
	launched 19 April 2015 - https://www.nzta.govt			
"Local Legends" Ca	impaign – ongoing since 30 Nov 2014 <u>https://ww</u>	w.nzta.govt.nz/safety/driving-safely/al	<u>cohol-and-drugs</u>	<u>/drink-driving-</u>
advertising/local-le	egends/			
"Thoughts" Campa	iign – launched 21 February 2016 https://www.n	zta.govt.nz/safety/driving-safely/alcoho	ol-and-drugs/dru	g-affected-driving-
advertising/though	-			
daver clonig/ chough	<u>1657</u>			
NZTA Alcohol	Implement a national alcohol interlock	NZTA Evaluation	Ongoing	NZTA
interlocks	programme leading to reduced crashes by	,		
	high risk repeat offenders			
	ing Hak repeat offeriders			
Ongoing	·	·	•	
HR Training	Online nationally consistent Host	Measured by the registration of the	December	HPA
	Responsibility Training for all bar staff. The		2015	
	aim is to manage clientele so they do not			
	_			
	get to a point where they suffer from			
	l alcohol related harm at home in nublic/o	n		

Not available

roads.

Community education	Support SADD regional coordinator and	Measured by number of high schools	By June 2016	SADD
campaigns	local high schools by encouraging all schools	with a working SADD group.		Local schools, PEO"s
	to have a strong working SADD group,			R/safety Coordinator
			D. I 2016	Darid Cafel
	Work with other members of the WDC	At least one presentation on technique	By June 2016	Road Safety Coordinator and the
	Work with other members of the WDC Community Team to promote and develop	-		WDC Community
	"Teenagers – the good, the bad and the	alcohol		Team
	ugly". A programme aimed at parents,			ream
	involving workshops, presentations,			
	articles, Facebook and advertising etc. The			
	GBU will be a parenting toolbox and will			
	include information about alcohol use and		November –	Road Safety
	harm		December	Coordinator working
	Made State Black to consider the constant	Manager and by a contract of an almost a contract of	2015	with Safer
	Work with publicans to promote the use of			Community Council
	courtesy vans and carry out advertising in support of the campaign so patrons are	publicans, feedback from the publicans and the number of		
	more aware of courtesy vans and their	•		Road Safety
	timetables. Outcome is to increase the Pub	aavertionig campaignor	June 2016	Coordinator, the
	courtesy van usage, especially over the			WDC Community
	summer period.			Team and the Police
	Support "Good One" project	Measured by number of registered		
		parties		

3 x Students funded to attend SADD Conference in Christchurch Presentation by Road Safety Co-ordinator at South Island SADD Conference.

Parents evening forum – "Teenagers - The good, bad and ugly" - presentation and workshop supported by Waimakariri Community Team. Attitudes and NZ Police with presentations targeted at teenage alcohol and drug use related to driver behaviour and host responsibility

All of districts publicans visited and collateral promoting safe driver behaviour distributed. All publicans confirmed availability of courtesy van.

Good One project supported however limited uptake by party organisers in District.

Recidivist drink drivers programme	Assist with the planning, funding and promotion of the recidivist programme "Drive Sober North Canterbury" aimed at reducing the number of repeat drink drive offenders.	Target is to run three programmes by June 2016, 10 – 12 participants each programme Evaluate the programme to ascertain the effect it has had on repeat offenders.	June 2016	Road safety Coordinator working with Safer CC and Wellbeing North Canterbury
	Support HPA initiative to screen drink drivers after a positive test	Pilot programme in North Canterbury to be evaluated by HPA.	June 2016	Police HPA RSCC

Drive Sober course funded – facilitated through Wellbeing North Canterbury – see attached report



Safe Road Users – Roads and Roadsides (includes intersections)

Local Statistics 2010 -2014 (Local Roads and Highways)

- Crashes at intersections account for 30% of all crashes in the Waimakariri
- There were 426 reported crashes at intersections (169 injury and 257 non-injury crashes).
- 4 deaths and 36 users seriously injured.
- 51% of the crashes were at urban intersections and 49% at rural intersections.
- Failure to give way/stop and poor observation were the most common cause factors (52% and 46% of the crashes).
- Speed and alcohol were also relatively high factors at 13% and 10% respectively.
- Crashes at intersections include lost control turning as well as the main crossing/turning type crashes.
- The highest number of crashes at intersections (over a three hour period) happened between 3.00pm and 6.00 pm.
- Nearly three guarters of the at-fault drivers held full licences
- All age groups are represented in drivers at fault or part fault with 26% under 24 years old and 31% over 60 years old

Target groups

All Waimakariri road users.

Background

Intersections are a key area of concern in the Waimakariri Road Safety Strategy. The Safer Journeys Road Safety Strategy has "Safe Roads and Roadsides" as one of its priority areas.

Rural intersections are of particular concern as any crashes at those intersections occur at a higher speed than those in urban areas. Given the nature of the District there are many long straight and intersecting roads. There has been an increase in the sale of lifestyle blocks in recent years with a corresponding growth in traffic in rural areas.

Safer Journeys identifies the importance of strengthening techniques to integrate road safety into land use planning, land use has a major influence on the safety of the transport system. A well laid out community safe and convenient access for all modes of transport. Waimakariri is aligned with the Canterbury Urban Development Strategy who recognise this need and it is one of their basic principles.

Monitoring

The Waimakariri Road Safety Committee will monitor the actions, responsibilities and measures of this plan at its two monthly committee meetings.



Safe Road Use – Roads and Roadsides (includes intersections)

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
Police enforcement and actions	Police carry out enforcement at intersections to ensure drivers behave appropriately and comply with intersection controls. See calendar for seasonal factors and crash risk	Report the number of infringement notices issues relating to intersection offences.	Ongoing	NZ Police
	Police to report any intersection concerns to WDC	Numbers intersections reported		

Waimakariri Police staff issued 714 infringement notices in the financial year to the end of March.

Local Community Campaign - Initial observations (letters sent out)- 101 vehicles noted - 74% failed to come to a complete stop, 26% complied; Police enforcement campaign - 112 infringement notices issued for failing to stop over 2 weeks

Second round of observations following advertising and police enforcement period (no letters to be sent out) - 109 vehicles noted - 67% failed to come to complete stop, 51% complied.

Note: There was some variation in the time of day the intersections were observed between the first and second time.

		,		,
Regular control of vegetation and maintenance of signs and road markings at intersections and along roadsides	Regular network inspections and maintenance work by the road maintenance contractors to ensure intersections are free from visual obstructions and all signs and road markings are in good condition and comply with relevant standards.	Measured by regular audits of the network and of the contractor's performance and by the annual day time and annual night time independent network inspection. Target is 90% of audits and inspections show compliance with relevant standards.	Ongoing	WDC Roading Team and Sicon- Ferguson. NZTA State Highway consultants and contractors.
	l verall the maintenance of roads and roadsi entage measure against the 90% target is no			ocumented audits were
Engineering activities that improve the safety of our roads and roadsides	Regular network inspections and maintenance work by the road maintenance contractor to ensure roads and roadsides are in good condition and comply with relevant standards.	Measured by regular audits of the network and of the contractor's performance and by the annual day time and annual night time independent network inspection Target is 90% of audits and inspections show compliance with relevant standards.	Ongoing	WDC Roading Team and Sicon. NZTA State Highway consultants and contractors.
	One Network Road Classification (ONRC)	Adopt and review ONRC levels of service being developed		NZTA

Regular inspections showed overall the maintenance of roads and roadsides is being carried out to a good standard. Formal documented audits were not carried out and so a percentage measure against the 90% target is not available. Formal audits are now being carried out. ONRC has been adopted along with customer levels of service. Performance measures are still being developed.

Intersection layout, control	Regularly monitor intersections and	Measured by annual day time and	Ongoing	WDC Roading
and design and roadside	roadsides by inspections, analysing crash	night time independent network		Team.
hazard identification	records, investigating feedback from the	inspections and by the number of		NZTA State
	public and from the road maintenance	intersection and roadside		Highway
	contractor, to ensure intersection layout,	improvements carried out.		consultants and
	controls and design, and roadside hazards			contractors
	comply with industry best practise so as to	Target is 90% of intersection layout		
	provide a consistent environment for	and design is in accordance with best		
	drivers.	practice taking into account the road		
		hierarchy and the traffic numbers		
	Ongoing programme of roadside hazard	using the intersection, or are included		
	removal on rural strategic and arterial	in an improvement programme.		
	roads. Complete investigations and	Report the number of intersection		
	reports for Depot Road and Oxford Road	improvements and roadside hazard		
	and develop an action plan.	removal projects completed annually.		
New Roading infrastructure	All new infrastructure is built in accordance with best practise standards and guidelines	New infrastructure projects have independent safety audits and all issues identified are addressed	Ongoing	WDC Roading Team and consultants
	and guidennes	issues identified are addressed		Consultants
All new projects had indeper	ndent safety audits carried out and issues add	ressed		l
Land use	Strengthen techniques to integrate road	Structure Plans, Plan Change	Ongoing	Planners
	safety into land use planning by promoting	applications, subdivision approvals		Developers
	road safety and good design in Structure	and the District Plan all meet best		Roading Team
	Plan development, Plan Change	practice standards in relation to road		
	applications, subdivision approvals and when reviewing the District Plan	safety		

Intersection safety	Develop and deliver a coordinated	Measured by the number of	June 2016	Road safety
awareness and education	education campaign aimed at improving	education programmes delivered.		Coordinator
programmes.	road user behaviour at intersections.			working with
	Road Users will have a better	Target is one programme delivered by		NZ Police
	understanding of the nature of	June 2016		
	Waimakariri intersections and will be			
	encouraged to adopt appropriate,			
	attitudes and behaviours at intersections.			
	Drivers will have a heightened awareness			
	of crash risk at rural intersections through			
	media stories and advertising			

Local Community Campaign - Initial observations (letters sent out)- 101 vehicles noted - 74% failed to come to a complete stop, 26% complied; Local print advertising, social media and cinema advertising highlighting intersection safety carried out.

Second round of observations following advertising and police enforcement period (no letters to be sent out) - 109 vehicles noted - 67% failed to come to complete stop, 51% complied.

Note: There was some variation in the time of day the intersections were observed between the first and second time.

Social media advertising – on Facebook reached nearly 5000 people with 15 shares of one intersection safety post and discussion generated on the topic in the comments;



Safe Road Use - Restraint Use

Local Statistics

The 2013 MOT Seat belt Survey for child restraints 5 -9 years

Canterbury – 98% wearing rate, note that 19% of the sample were noted to be in approved child restraints Waimakariri – 98% - the sample figures were very low

MOT Adult front seat wearing survey

2010 97 % 2011 96 % 2012 99. %

Target groups

All drivers and their passengers

Background

Restraint use is one of the Police "Fatal Five" areas of interest. It has not been identified as a serious area of concern for the Waimakariri through either the communities at risk register or the Waimakariri Road Safety Strategy; however we will continue to monitor the situation. The Safer Journeys Strategy shows restraint as an area of continued and emerging focus.

We have a Kidsafe Coalition in the District, supporting the work of Safekids, Safekids advocate for the continued use of booster seats for children.

Monitoring

The Waimakariri Road Safety Committee will monitor the actions, responsibilities and measures of this part of the plan at its two monthly committee meetings.

Safe Road Use - Restraint wearing **Activities Actions and Outcomes Target and Measures** Responsibility **Dates** Police Enforcement Measured by number of infringement Police enforcement campaign June 2016 **NZ Police** See calendar for seasonal factors and notices. crash risk Waimakariri Police Officers gave out 483 infringement notices to motorists for not wearing seat belts for the 12 months ending March 2016. Community awareness of **Injury Prevention** need for child restraints Use "SafeKids" campaigns to raise Target is to deliver one Booster seat Waimakariri June 2016 greater awareness of the importance of campaign by June 2016 RSC child car restraints. Develop relationship with Plunket group Booster seat campaign planned in conjunction with Police postponed to next financial year due to resourcing issues. **NZTA Advertising** Raise awareness of the use of restraints Number of NZTA campaigns, June 2016 NZTA

billboards etc.

Included in NZTA advertising calendar over the months of July – September 2015 inclusive

Campaigns



Safe Road Use – Speeds (including too fast for the conditions)

Local Statistics 2010-2014 (Local Roads and Highways)

- 141 crashes involved speed too fast for the conditions (54 injury and 87 non-injury).
- 6 deaths and 25 users seriously injured.
- There has been a slight decrease from the previous five year period down 16 reported crashes,
- Over two thirds (70%) of the crashes happened in rural areas, most (89%) on local roads and most (84%) were single vehicle crashes.
- Nearly half (45%) happened at weekends and 56% happened at night.
- Over two thirds were bend lost control/head on type crashes.
- Over a third of the crashes also involved alcohol as a factor.
- Nearly half of the "at fault" or "part fault" drivers were under 25 years old.
- Older drivers have appeared as an area of concern on the communities at risk register
- Distracted drivers have also appeared as an area of high personal risk

Target groups

All drivers, with an especial focus on young drivers

Stories behind our actions

The Safer Journeys document identifies "safe speed" as a high area of concern for the country. We have also identified it as a key issue in both our Road Safety strategy and our previous Road Safety Action Plans.

Police have "speed" as one of their "fatal five" areas of concern and continue to work in this area

The picture in the Waimakariri is one of drivers in a hurry with time constraints - pressure of life and work – attitude that time is money, also drivers not making appropriate changes to their driving in varying road conditions,

The hierarchy of roads – in our rural area not all roads are built to be driven at 100k

Monitoring

The Waimakariri Road Safety Committee will monitor the actions, responsibilities and measures of this plan at its two monthly committee meetings

Wormoning

Safe Road Use – Speeds (including too fast for the conditions)

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
Police enforcement	Consistent ongoing enforcement, focusing on these 'low end' speed offences is considered to be of most benefit in reducing the overall speed distribution and its resulting road trauma Lower tolerance around schools	50% of all speed tickets be issued for speeds 1 to 15 km/h in excess of the limit, and 45% in the 11 to 15 km/h band	Ongoing	NZ Police
	High Police presence in poor driving conditions			
	Police National campaigns See calendar for seasonal factors and crash risk	Report number of national campaigns annually		

Waimakariri Police staff issued 3,621 infringement notices for speeding in the financial year to the end of March. Canterbury Police staff issued 38, 054 infringement notices for speeding in the financial year to the end of March. 46% of speed notices in the Waimakariri were issues for < 15km/h excess

Work with Schools	Work with schools on issues including; speed past schools and buses, chaos outside the gates and relationships with other road users to improve the safety outside schools.	Measured by the number of improvements made at schools. Target is to respond to issues with school communities as they arise and to report the number of improvements implemented.	Ongoing	Road Safety Coordinator working with Schools NZ Police NZ Police (PEO's)
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West Eyreton School - 40 km advisory signs"When Children Present" have been installed Kaiapoi North – 40km VSL advisory signs installed Improvements were completed on Ohoka Road at Kaiapoi High School

Review speed	Monitor and change speed limits as required to	Measured by number of speed limits changes.	Ongoing	WDC Roading Team.
limits	meet changing needs, such as new			NZTA State Highway
	developments, and community expectations to	Target is to report the number of speed limit		Team and Police.
	ensure all speed limits comply with the NZTA	changes annually.		1
	speed limits rule.			1
				1

The 80km/h speed limit on Cust Road was moved out to Tippings Road in response to new housing being built. No other speed limits were reviewed as NZTA requested we wait until they had completed trials in the Waikato and the new speed management guidelines were released. The new guidelines were released in July.

Driving to the	Use local media to promote "driving to the	Measured by the number of awareness	Ongoing with	Road Safety
conditions:	conditions" so motorists are given relevant	promotions.	an especial	Coordinator,
Raise awareness of the	warning and understanding of various	Target is one sun strike promotion, one	focus on	Roading Team and
dangers of	driving conditions; ie sunstrike, snow or ice.	winter driving campaign and one headlight	winter	Sicon.
environmental factors.		promotion	driving	
			May – August	
	Inform landowners of the dangers their			
	trees could present in winter with ice	Target is to run three advertisements and	Ongoing	RSC and Roading
	shaded roads	take opportunities to engage with landowners as they arise		team
	Sicon advise radio stations when ice is present so message can be broadcast to drivers using the roads	As necessary	In winter conditions	SICON

Winter driving campaign media and promotion through various channels - social media, print, and collateral distributed;
Social media campaign - Is 100 OK ? Facebook page related publicity and promotion - increase in over 700 page likes in last 12 months including reaching over 2000 views on winter driving and drive to the conditions video;

WDC and SICON partnered with NZTA in Winter Journey's website https://nzta.abley.com/winterjourneys/

Community Speed	Work with local communities where	Measured by the amount of community		
Campaigns	concerned local residents will promote	involvement	By June 2016	RSC
	lower speeds in their neighbourhoods so			WDC Community
	motorists voluntarily choose to drive at	Target is to run one "community"		NZ Police
	lower speeds, improving safety, especially	campaign a year.		
	for more vulnerable road users.			
Distraction		Target is to run one campaign during the	By June 2016	RSC
	Identify causes of driver distraction and run	year		
Travelling times	a campaign highlighting the issue			
			By June 2016	RSC and Police
	Inform public of minimal differences in	Media campaign		
	travel speed when travelling within the			
Tailgating	District if speed is reduced. Ie between			
	Rangiora and Kaiapoi			
			By June 2016	RSC and Police
		Target is to run two campaigns via		
Older Drivers	Highlight issues around use of flush median,	advertising, media and Police enforcement		
	tailgating and right hand turns			
			By June 2016	Age Concern and
		Run four Older driver education courses		RSC
	Work with Age Concern to provide older	Throughout the District		
	driver education courses			
				ļ

3 x Older Drivers Courses run by Age Concern funded for Waimakairi District - included related advertising – 31 attendees over 3 courses – refer attached evaluation reports.

Social media and print advertising targeting speed, particularly during adverse road conditions and including 'share the road' advertising

Speed awareness, Speed Indicator	Use of the Speed Indicator Devices to raise the awareness of speed.	Measured by the number of sites used and the change in driver behaviour.	June 2016	Road safety
Device		Target is to place the Speed indicator devices at 4 sites annually and to achieve a lowering of the mean speed at each site when comparing before and after speeds.		Coordinator, Roading and Sicon.
•	Device was installed for four months at a tim set was purchased in 2015/2016 and another	The state of the s	_	•
NZTA national advertising programme on speed promotion	National Television and Radio Advertising. Promote serious consequences and human vulnerability so that more people are aware that driving at high speeds is dangerous. Increase public acceptance of the danger	Measured by the number of promotions run by NZTA	Ongoing	NZTA
	Monitor the progress of the National Speed working group.	Members attend working group meetings		NZTA

"Numbers" Campaign – launched 4 January 2015 https://www.nzta.govt.nz/safety/driving-safely/speed/speed-ads/numbers/
"Mistakes" Campaign – continuation of campaign which was commenced 5 January 2015 https://www.nzta.govt.nz/safety/driving-safely/speed/

Ongoing

RSCC members

Fleet Safety	Support a continued growth in the number of companies who are logged on and actively using the Fleet Safety system in each police district across New Zealand	Measure: 3000 companies with fleets over 5 vehicles logged on already. Measure: Growth of at least 10% for Canterbury	ACC
	gramme (FSP) in partnership with NZTA MORIE	and Police	

- 1. Fleet Safety Programme (FSP), in partnership with NZTA, MOBIE and Police.
- 2. ACC Fleet Saver Programme

www.accfleets.co.nz

Vehicle safety technology is a gateway to decrease injury rates.

ACC promotes this via Fleet Safety and Fleet Saver products

Fleet Safety is again a priority on the Safer Journeys Action Plan 2016 to 2020.

Motorcycles	ACC provide ongoing subsidised training to all licenced riders in line with the new Competency Based Training and Assessment guidelines.	Measure-take up of training for Waimakariri based riders for the year	ACC	
	WDC to promote subsidised courses within the District	Measured by advertising and take up of riders	WDC	

RideForever courses promoted and safe riding practices/equipment use through Waimakariri social media channels. ACC Ride Forever -Subsidised MC training across NZ-promotion by ACC and contracted providers



Safe Road Use - Younger drivers

Local Statistics 2010 - 2014 (Local Roads and Highways - injury only data)

- Young drivers (aged 16 to 24 years old) were at fault or part fault in 36% on the injury crashes in Waimakariri District 2010 to 2014
- 152 injury crashes involved young drivers.
- 10 deaths and 56 users seriously injured.
- The main crash types are lost control, head on and intersection type crashes, similar to the pattern for all crashes in the district.
- Alcohol is a factor in 17% of the young driver crashes compared to 14% for all crashes in the district.
- Poor observation, poor handling, poor judgement and failed to give way/stop are also common factors for young drivers.
- Two thirds of the crashes happened in rural areas and 34% at weekends.
- 36% occurred at intersections.

Target Groups

All Young drivers aged 16 – 24. Any campaigns will also have to consider their parents

Stories behind our actions

NZTA crash trends shows a decreasing trend in fatal and serious casualties for all New Zealand in young driver data but show an increase for the Waimakariri.

The 2014 community at risk register shows young drivers in the Waimakariri as being at a high personal risk. As road crashes are the single biggest killer of young people aged 15 to 24, reducing those crashes that involve young drivers is an area of high concern in the Safer Journeys Road Safety Strategy.

Monitoring

The Waimakariri Road Safety Committee will monitor the actions, responsibilities and measures of this plan at its two monthly committee meetings.



Safe Road Use -Younger drivers

Activities	Actions and Outcomes	Target and Measures	Dates	Responsibility
Police enforcement	Consistent on-going enforcement	Measured by the number of Police campaigns and by the number of	Ongoing	NZ Police
	See calendar for seasonal factors and crash risk	infringement notices.		

Waimakariri Police issued 1337 infringement notices for GDLS breaches in the twelve months ended March 2016. Local police reported not all notices relate to younger drivers.

Community	Deliver two "Road Crash Day" workshops	Measured by number of workshops held		Road safety Co-
Projects	for High School students based on the	and feedback from participants.	By June 2016	working with
	consequences of a fatal alcohol related car	Target is two workshops- Rangiora High		Police, assorted
	crash so students will have a better	School and Kaiapoi High School- and that		speakers,
	understanding of the far reaching effects	evaluations demonstrate students have		emergency
	and consequences of a crash.	taken the key messages on board		services and
				Schools
			By June 2016	
	The Community Team have put together a	Deliver one workshop and associated		Community Team
	package targeting parents of teens.	articles on teen driving, including		Road Safety
GBU	"Parenting – the good bad and ugly" It plans	information from the Brainwave Trust and		Coordinator
	to deliver a series of workshops, articles etc.	NZTA		
	One aspect of these workshops will be on			
	teen driving		By June 2016	
U Drive				Oxford Comm
				Trust
	Support the Oxford Community Trust in	Measured by the progress of the project		Community
	their driver mentoring program		By June 2016	members
Breaches of				School, Police, RSC
Licence		6.1.		D 1: DCC
	Work with schools and Police to reduce	Raise awareness of this issue through		Police, RSC,
	numbers of breaches of GDLS	schools and media. Investigate running a		Schools
		workshop for students who have breached		
		their licence		

2 x Road Crash Days - Kaiapoi and Rangiora High Schools - attended by over 220 students - evaluation forms from each school attached.

Supported U-Drive - Oxford Community Trust - funded mentor training and costs to assist with learner drivers moving onto restricted licence;

Parents evening forum - Teenagers - The good, bad and ugly - presentation and workshop supported by Waimakariri Community Team, Attitudes and NZ Police with presentations targeted at teenage alcohol and drug use and behaviour and host responsibility.

Practise programme	Encourage teenagers to engage with the Practise website	Numbers of young drivers enrolled	Ongoing	NZTA/ACC RSCC support
NZTA Safe Teen Driver	Promote parents to go to the Safe Teen Driver website	Numbers of hits on website	Ongoing	NZTA/ACC RSCC support
Restricted driving test	Encourage parents to do 120 hours supervised driving	More supervised experience, more skills acquired leading to safer young drivers NZTA Evaluations	Ongoing	NZTA RSCC support
Safer Cars			June 2016	NZTA RSCC support
	Encourage use of "Right cars" website	Promotion through social media of right cars website		

ACC - DRIVE has been launched to the public on 15/6/2016 This has replaced Practice for drivers progressing through the graduated driver licencing.

NZTA High School	Promote integration of road safety across	Improved road safety knowledge and	Ongoing	NZTA	
Curriculum work	school curriculum	awareness by young people		RSCC support	
and competition		NZTA Evaluation			

Ongoing





Road Safety Action Plan Evaluation Reports 2015/16

Programme Reports

This report contains a brief overview and evaluations on the various programmes either run under or funded from the Waimakariri Road Safety funding for the 2015/16 year.

Kaiapoi School Road Crash Forum Evaluation 2016

Male

60

Which parts of the program did you find interesting? Please tick on the scale

	Good	Ok	Not so interesting
Crash Scene	69%	26%	5%
Police presentation - NOK	62%	35%	3%
First Aid at scene of a crash - workshop	47.5%	28%	6.5%
Physics of a car crash - workshop	67%	30%	3%
Truck safety - workshop	58%	34%	8%
Fire Service - workshop	62%	33%	5%
Breath Testing - workshop	54%	38%	8%
Brain Injury Assn presentation	61%	36%	3%
Attitudes	79%	20%	1%

Have you ever travelled in a vehicle, when you felt the driver had had too much to drink and was probably unsafe to drive?

Yes 10

No 50

If yes was it:

An adult family member

5

One of your friends

Other

3

What other options do drivers and their passengers have to get home if they choose to drink?

Taxi mentioned 48 times Family/Parents 16 times, Bus 25 times, Sober driver 8 times

Walk 12 times, Stay over 4 times, Police 1 time Friend/mate 10 times Bike

3 times Uber 1 time

Is there any part of what you say or heard today that would make you think differently in the future about: Tick which ones apply:

Driving after you had been drinking

Getting in a car with someone else who had been drinking

Thinking about the choices you make when out in a car with friends

Getting in a car with an unlicensed/learner driver

75% ticked this option
75% ticked this option
75% ticked this option

What part of the day had the most effect on you, if any?

Most mentioned were the following:

Attitudes Presentation -7 Police presentation -4 Crash Scene -7 All of it -3 Firefighter talk about the baby -4 Brain Injury talk -8

General comments on what had the most effect:

Be careful when you are driving; The brain injury presentation seeing the effect it actually has; Peer pressure – think before you do, choices; The fire service workshop was the best to find out about her job; the talk with the old fella; Just to not drink and drive; Made me more aware of the inherent risks of driving; Thinking about what and what not to do when driving; Getting into a car with a guy on his learners licence is bad.

Female

61

Which parts of the program did you find interesting? Please tick on the scale

	Good	Ok	Not so interesting
Crash Scene	95%	5%	
Police presentation - NOK	61%	39%	
First Aid at scene of a crash - workshop	69%	24%	7%
Physics of a car crash - workshop	73%	22%	5%
Truck safety - workshop	54%	32%	14%
Fire Service - workshop	74%	24%	2%
Breath Testing - workshop	66%	26%	8%
Brain Injury Assn presentation	81%	16%	3%
Attitudes	93%	7%	

Have you ever travelled in a vehicle, when you felt the driver had had too much to drink and was probably unsafe to drive?

Yes

No

If yes was it:

An adult family member 8

9

One of your friends 1

52

Other

What other options do drivers and their passengers have to get home if they choose to drink?

Taxi mentioned 47 times Family/Parents 16 times, Bus 22 times, Sober driver 27 times

Walk 7 times, Stay over 7 times, Police 1 time Friend/mate 16 times Bike 0 times

Uber 1 time Courtesy bus 1 time

Is there any part of what you say or heard today that would make you think differently in the future about: Tick which ones apply:

Driving after you had been drinking 86 % ticked this option

Getting in a car with someone else who had been drinking 88% ticked this option

Thinking about the choices you make when out in a car with friends 86% ticked this option

Getting in a car with an unlicensed/learner driver 78% ticked this option

What part of the day had the most effect on you, if any?

Mentions were made of the following:

Attitudes Presentation – 8

Crash Scene – 21 All of it – 3

Firefighter talk – 4 Brain Injury talk - 21

General comments on what had the most effect:

The part of what the ambulance, fire and police actually do and wanting to keep us safe; The crash scene, being shown how long it would take to help someone in a crash is scary and it was helpful to know; The crash scene – showed me how serious a crash can be; The crash scene and the consequences it has on everyone; Crash scene because it showed what really happens in those situations; Presentation after the crash scene – was really emotional; The crash scene because it could possibly happen to me and that's scary; Brain injury because he had the same logic as we do and it was a real long term consequence; The man that got injured really made me see what can actually happen, really inspiring; The crash scene because it made me think about the consequences.

Rangiora Road Crash Forum Evaluation 2016

Male

57

Which parts of the program did you find interesting? Please tick on the scale

	Good	Ok	Not so interesting
Crash Scene	86%	14%	
Police presentation - NOK	71%	29%	
First Aid at scene of a crash - workshop	60%	32%	8%
Physics of a car crash - workshop	63%	31%	6%
Truck safety - workshop	65%	23%	12%
Breath Testing - workshop	75%	24%	1%
Brain Injury Assn presentation	80%	20%	
Attitudes	87%	10%	3%

Have you ever travelled in a vehicle, when you felt the driver had had too much to drink and was probably unsafe to drive? Yes No

If yes was it:

An adult family member

10

One of your friends

Other

2

What other options do drivers and their passengers have to get home if they choose to drink?

Taxi mentioned 28 times Family/Parents 15 times, Bus 9 times, Sober driver 4 times Walk 6 times, Friend/mate 3 times

Is there any part of what you say or heard today that would make you think differently in the future about: Tick which ones apply:

Driving after you had been drinking 63% ticked this option
Getting in a car with someone else who had been drinking 61% ticked this option
Thinking about the choices you make when out in a car with friends 58% ticked this option
Getting in a car with an unlicensed/learner driver 56% ticked this option

What part of the day had the most effect on you, if any?

Most mentioned were the following:

Attitudes Presentation – 4 Breath testing - 6

Crash Scene – 6 All of it – 2

Brain Injury talk - 18 Truck safety - 3 Physics – 1

General comments on what had the most effect:

The guy that came to talk about his experience; All of it; Booze-bus – shows us what happens; Tim speaking; Brain injury guy was quite emotional; Truck blind spots and the guy who talked about his experience; Tim talking and showing us the long term effects; Everything was good; Telling us about drink/driving it scares people; When Tim told us his story;

Female

37

Which parts of the program did you find interesting? Please tick on the scale

	Good	Ok	Not so interesting
Crash Scene	95%	5%	
Police presentation - NOK	62%	32%	
First Aid at scene of a crash - workshop	59%	38%	2%
Physics of a car crash - workshop	73%	40%	5%
Truck safety - workshop	49%	43%	5%
Breath Testing - workshop	78%	19%	
Brain Injury Assn presentation	84%	16%	
Attitudes	86%	5%	2%

Have you ever travelled in a vehicle, when you felt the driver had had too much to drink and was

probably unsafe to drive? If yes was it:

Yes

An adult family member



One of your friends

Other

No



What other options do drivers and their passengers have to get home if they choose to drink?

Taxi mentioned 12 times

Family/Parents 21 times,

Bus 1 times,

Sober driver 4 times

Walk 1 time

Friend/mate 10 times Stay over 2 times,

Carpool 1 time

Is there any part of what you say or heard today that would make you think differently in the future about: Tick which ones apply:

Driving after you had been drinking

67 % ticked this option

Getting in a car with someone else who had been drinking

72% ticked this option

Thinking about the choices you make when out in a car with friends

81% ticked this option

Getting in a car with an unlicensed/learner driver

65% ticked this option

What part of the day had the most effect on you, if any?

Mentions were made of the following:

Attitudes Presentation - 4

Truck safety – 1

Crash Scene - 7

All of it -5

Brain Injury talk – 13

Physics – 1 EBA - 1

General comments on what had the most effect:

The car crash scene made me emotional because it was very realistic and reminded me of a crash my cousin had; The physics as I didn't realise how much science was really behind car crashes and the brain injury; I really learned a lot from all this, it was good and I enjoyed it so much; Talking about how to react around a truck and where the blind spots are; The part of the day that had the most effect on me was when Tim talked because it showed how driving can change people's lives; I think Tim's speech had the most impact on me because it was all real and true and very eye-opening for the future; The crash scene

because it showed me what it was like to be in a crash; Everything because I learnt heaps, was really interesting; Tim made me think about the long term effects one decision can have.

DRIVE SOBER NORTH CANTERBURY RESULT CARD

September 2015

Population Result: Road users are skilled, and competent, alert and unimpaired

Vision: The Waimakariri District has a safe road system that is increasingly free of death and serious injury Population Indicator: Crashes involving alcohol in the Waimakariri District

Story Behind the Population Data:

Alcohol was involved in 20% of all fatal or serious injury crashes in the Waimakariri District in the period from 2005 to 2009. Between 2008 and 2012, there were 169 alcohol related crashes recorded in the Waimakariri District (Source - New Zealand Transport Agency) Up to 25% of all drink driving offences presenting at Court are committed by recidivist drink drivers. The issue of recidivist drink driving has been identified as of concern for both the Waimakariri Safer Community Council and the Road Safety Coordinating Committee over the past four years.

Story Behind the Programme:

This is the eighth Drive Sober programme to be run in North Canterbury – the first programme ran in October – November 2011. A total of 18 participants registered in the six week (two hours per week) Drive Sober North Canterbury Programme, which ran from 11 August to 15 September 2015. A new development is the collaboration with Odyssey House who also deliver a Driving Change 10 week programme in Waimakariri. By working the dates together, it ensures that there is a recidivist drink driving programme available year round for our local community. This collaboration continues into 2016 as the next Drive Sober programme is due to commence in October – November 2016 just before Christmas. Community Wellbeing North Canterbury Trust hosts and delivers the programme on behalf of the Waimakariri Road Safety Committee.

Participants were all court mandated to attend and their backgrounds ranged from professionals to tradespeople and whose ages spanned 27 to 57. The number of incidence of drinking and driving ranged from between 4-9. The participant group overall had repeat EBAs (excess blood alcohol levels) ranging from 451 to 1100.

Two trained facilitators Grant Harris and Frances Knight delivered the programme that included initial clinical assessment, educational workshops aimed at changing behaviours.

Programme Partners

- Community Wellbeing North Canterbury Trust (hosting organisation)
- Community Probation Service
- North Canterbury Police
- Waimakariri Road Safety Committee

Programme Participant Results

- 99% stated that the programme was useful or very useful
- 100% completed the six week programme (2 participants missed sessions due to sickness)
- 99% said that the programme has changed their attitudes towards drinking and driving
- 100% have learnt new strategies to prevent them from drinking and driving
- 76% have used these strategies to prevent themselves from drinking and driving again. (5 have not had the opportunity to use their strategies yet as they do not have their licence))
- 100% said that they thought that it is risky or very risky to drink and drive
- 99% said that they would never drink and drive again
- 100% of participants we are able to articulate in writing the consequences of drinking and driving including the following:
 - Jail death loss of income
 - Harming other people
 - Killing someone
 - Increasing health risks
 - Loss of family and time with children
 - Financial loss.

What we can do better

We have learned that initial participant screening prior to the course commencement helps to set the scene for more productive and positive learning, while assisting with the engagement process with the facilitators. Having a male and female facilitator co facilitating gives a good balance to the programme delivery. Letting Probation know well in advance of courses coming up help to ensure good participant numbers.

Participants Comments and Feedback

"This is a good course for those who need it"

"The talking and learning about what alcohol does to the brain was really good."

"I learnt how little alcohol it takes to have an effect"

"Good to be able to talk about stuff"

"If you drink don't drive at all"

"Good to learn about the effect and impact that drinking and driving has on others"

"Awareness of drinking habits and bad decision making and group involvement was good"

"Increased my awareness of risk and impairment caused by alcohol intoxication"

"Learning about triggers and how to identify them in order to avoid pointless harmful drinking"

"Listening to everyone's problems and the solutions to the problems and meeting people in similar situations"

"Watching the videos and listening to others made me more aware"

AGE CONCERN CANTERBURY

Confident Driving for Mature Drivers Course Evaluation

	se held at per of partic	_	xford To	wn Ha	II		on 20	6th May 2016	
1.	How d	lo you	rate this c	ourse?					
	Excellent	5	Very Go	od 3	Good	2	Fair	Poor	
	Not too ea	asy to l ating to	near as acc good prac	oustics b ctices fo	oad. Inforr or mature	nativ drive	ve, refresh ers. Hard t	enue. Everyone should ning, some good remi to hear presenter (no teresting, great prese	nders, wide range of ise vibration). A lot
2.	How do y	ou rate	the prese	nters?					
	Excellent	7 V	ery Good	3 (Good	1	Fair	Poor	
			presenter : senter, ver	-		•	new her s	stuff, experienced & e	erudite, Yvonne was
3.	Will you r	ecomn	nend this o	ourse t	o others?	1			
	Yes 11	N	0		Maybe	1			
4. that a	What other							groups & any age, you	inger age groups
5.	As a resul			hat cha	anges mig	ht yo	ou make i	n your driving, or as	a pedestrian, or in
	_	5 Rev	_	o Road	_		Time of D g Direction	riving 3 n Intentions 3	
6.	Please ide	entify 3	ways the	ageing	process a	nd o	ther facto	ors can impact on dri	ving ability.
	Vision 1 Medication Other		ring 7 Alcohol		rkness Weat	2 her		igue 8 d Conditions 1	
7.	Do you fe	el mor		t as a d	river havi	_	-	this course?	
8.	Yes 9 How did y	ou he	No ar about th	nis cour	se?	Ma	ybe	3	
	Neighb Keepin	unity r oourho Ig Mov	th 2 notice in lood od Suppor ing book/ <i>I</i> oad safety	t (eeping		6	Pub We	Doctor Dication (name) <u>2(C</u> bsite (name) dio/TV advertisement	

9.	What age	group do	you belong	to?
----	----------	----------	------------	-----

Under 60 60-64 65-69 1 70-74 4

75-79 2 80-84 4 85-89 1 90+

10.. Nationality/Ethnicity:

NZ European 11 Maori Pacific Islander Asian

Other

11. Please show which of the following is the MAIN reason why you chose to do this course?

I have been referred

To improve my general driving confidence 8

To support my spouse/partner attending the course 1

Heard the course was worth doing 2

Revision of road rule changes 4

Other (please complete) My rustiness on road rules

Any other comments; Enjoyable as well as informative, Thank you Yvonne, a worthwhile experience, well worthwhile

Course held at: Woodend Community Centre

on 26th April 2016

Number of participants: 9

2. How do you rate this course?

Excellent 7 Very Good 2 Good Fair Poor

Comments. Every retired driver should attend this course, well worth the trip, as a foreigner learnt some rules that I was not aware of, very informative – well explained, this is the second class I have been to. We can always learn!

2. How do you rate the presenters?

Excellent 7 Very Good 2 Good Fair Poor

Comments Spoke very clearly, both presenters were clear, concise and informative, very good in presenting the whole scenarios of driving in New Zealand, Yvonne made it a really good place to be, lots of laughs

3. Will you recommend this course to others?

'es 9 No Maybe

4. What other groups might benefit from this course? Probus, Anyone, Women's Institute, Senior High School Students, I will definitely recommend this course to my friends from India, all groups where age is prominent

5. As a result of this course what changes might you make in your driving, or as a pedestrian, or in your decision making?

Roundabout Driving 3 Route Planning 5 Time of Driving 1
Clothing 4 Reversing Onto Road 3 Indicating Direction Intentions 2
Other: Be aware of what's going on around me, taking care not to exceed the speed limit

6. Please identify 3 ways the ageing process and other factors can impact on driving ability.

Vision 7 Hearing **3** Darkness 2 Fatigue 5
Medication 5 Alcohol **3** Weather 1 Road Conditions 4
Other 2 Your health, taking care not to speed, emotional state

7. Do you feel more confident as a driver having completed this course?

Yes 8 No Maybe 1

8. How did you hear about this course?

Word of mouth 1 GP/Doctor

Community notice in local newspaper 7 Publication (name) Northern Outlook

Neighbourhood Support Website (name)

Keeping Moving book/Keeping On Radio/TV advertisement

Other 1 Family member working at NZ Transport

9. What age group do you belong to?

10. Nationality/Ethnicity:

NZ European 6 Maori Pacific Islander Asian Other 2 Dutch, Indian

11. Please show which of the following is the MAIN reason why you chose to do this course?

I have been referred 3 To improve my general driving confidence 4

To support my spouse/partner attending the course 1

Heard the course was worth doing 1

Revision of road rule changes

Other (please complete) 3 curiosity / general interest

Any other comments; This course should be done in most of the colleges as there are students studying from all over the world; Wife ordered me!

Cour	se held at: R	angiora	– Mainpo	wer Ova	al		on 21/03/20	16
Numb	per of participa	ants:	6					
Н	ow do you rate Excellent		rse? y Good 3	Good	Fair	F	Poor	
		•			•		endly well presented y driving, most helpf	. •
2.	How do you Excellent 5 Comments (Very G	ood 1	Good	Fa nt	nir	Poor	
3.	Will you reco	ommend t No	this course	to others Maybe				
4. Group	What other gos, all age grou	•	ght benefit	from this	course?	Students,	. High schools, Comn	nunity & service
5.	As a result of your decision Roundabout Clothing 1 Other:	n making ? Driving 4	Route Pla	nning 4	Time	e of Drivin	our driving, or as a po g 2 Intentions 2	edestrian, or in
6.	Please ident Vision 5 H Medication Other	learing	2 Da	process a rkness Wea	3	r factors c Fatigue Road Co		រូ ability.
7.	Do you feel Yes	more con	fi dent as a c No	driver hav	ving comp Maybe		s course?	
8.	Neighbou	mouth ity notice ırhood Su	in local new	/spaper	1	Website	cor tion (name) <u>1</u> e (name) TV advertisement	<u></u>
9.	What age gr	oup do yo	u belong to	?				
	Under 60		60-64		65-69		70-74	
	75-79 1		80-84	4	85-89		90+	

10.. Nationality/Ethnicity:

NZ European 5 Maori Pacific Islander Asian

Other

11. Please show which of the following is the MAIN reason why you chose to do this course?

I have been referred

To improve my general driving confidence 4

To support my spouse/partner attending the course 2

Heard the course was worth doing

Revision of road rule changes 3

Other (please complete)

Any other comments:

U–Drive Programme – Oxford Community Trust

U-Drive has been set up to help young people in the Oxford Community obtain their Restricted Drivers Licence. Each programme runs for a 12 week period and we have trained mentors who will take the person they



are working with for driving practice using the vehicle provided by the Trust. Participants will also have one professional lesson by a qualified driving instructor.

Following three courses, we are now in the fourth round of the programme, and have successfully moved thirteen young people onto their Restricted License, and have four still to sit. Based on the success of the programme and the interest that is shown in the community we expect that in the next year we will run two 15 week courses 6-8 participants. The feedback we have had from Students and Parents has been extremely positive, and one of the parents has gone on to become a successful Mentor.

The Oxford Community Trust driver-mentoring programme was recognised by the Associate Minister of Transport Craig Foss at a function at Oxford on the 17th August 2015.

https://mattdoocey.national.org.nz/news/2015-08-27-u-drive-programme-empowering-oxford%E2%80%99s-youth-waimakariri-mp-says

Stop Means Stop

Intersection Safety Campaign

Making sure road users come to a complete stop at intersections controlled by stop signs is the focus of an upcoming campaign to reduce crashes in the Waimakariri District.

In the last five years (2011-2015) 39% of all crashes in the district have occurred at intersections, with four of those crashes resulting in a fatality.

During early June Police will be paying extra attention to intersections controlled by stop signs with no tolerance for those who fail to stop.

Sergeant Rene Pabst of the Strategic Traffic Unit says many drivers seem to believe that slowing down at a stop sign is sufficient.

"A stop sign means the vehicle must come to a complete stop, they can't roll through the stop," he says.

Waimakariri District Council Journey Planner, Kathy Graham, says road users can sometimes get complacent at intersections that they travel through every day.

"Poor judgement and poor observation are two of the factors that have been prominent in crashes as well as inattention and distraction," she says. "It's a timely reminder that driving requires our full concentration at all times."

The police focus on intersections will be complemented by related print and social media advertising.

Sergeant Pabst says failing to stop at a stop sign attracts a \$150 fine as well as 20 demerit points.

"It would be great if we didn't have to give out any tickets, but if we help educate drivers through doing so we will be helping reduce crashes in our area and that is our ultimate aim."

The intersection campaign is supported by the Waimakariri District Council Road Safety Co-ordinating Committee.

27 May 2016 Published/released

Intersection Campaign actions:

Initial observations (letters sent out)- 101 vehicles noted - 74% failed to come to a complete stop, 26% complied;

Police enforcement campaign - 112 infringement notices issued for failing to stop over 2 weeks;

Second round of observations following advertising and police enforcement period (no letters to be sent out) - 109 vehicles noted - 67% failed to come to complete stop, 51% complied.

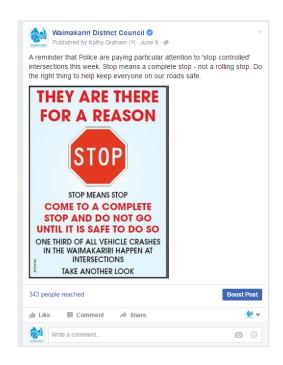
Note: There was some variation in the time of day the intersections were observed between the first and second time.



Examples of social media posts which included Facebook and Twitter.

Complimented also by print advertising in local newspapers.

Social media advertising – on Facebook reached nearly 5000 people with 15 shares of one intersection safety post and discussion generated on the topic in the comments;

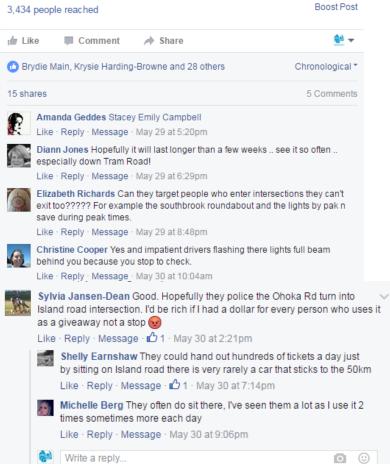




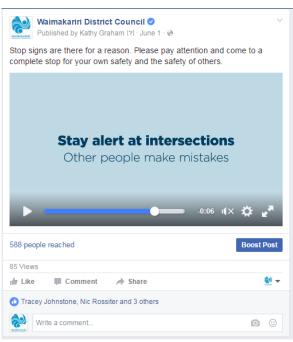


Do the right thing at intersections and stop completely where there's a Stop sign. Police will be targeting intersections in our district over the next couple of weeks.





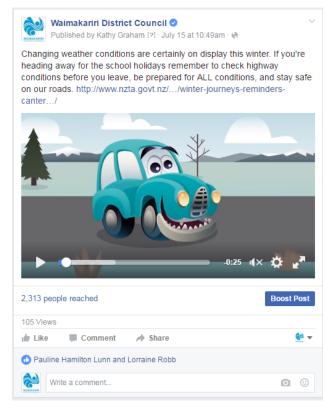




WINTER DRIVING CAMPAIGN

Social media and print advertising using the attached posters and videos

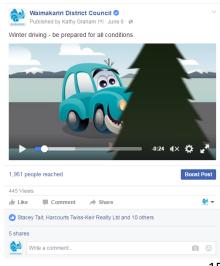






Winter driving campaign media and promotion through various channels - social media, print, and collateral distributed; Social media campaign - Is 100 OK? Facebook page related publicity and promotion - increase in over 700 page likes in last 12 months including reaching over 2000 views on winter driving and drive to the conditions video;

WDC and SICON partnered with NZTA in Winter Journey's website https://nzta.abley.com/winterjourneys/



WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: 160803076046

REPORT TO: Utilities and Roading Committee

DATE OF MEETING: 16th August 2016

FROM: Bill Rice, Senior Transport Engineer

SUBJECT: Mandeville North Area Speed Management Review

SIGNED BY:

(for Reports to Council or

Committees) Department Manager

hief Executive

1. **SUMMARY**

- 1.1. The purpose of this report is to
 - Inform the Committee on issues regarding speed limits and speed management in the Mandeville North area, and to
 - Seek the Committee's support to
 - Calculate appropriate speed limits in the Mandeville North Residential and Business zones using the current Setting Speed Limits Rule.
 - Review the calculated speed limits against NZTA's draft Speed Management Guide to ensure consistency with the Guide.
 - Identify and assess any additional speed management treatments which may be helpful in managing speeds in the area.
 - Seek feedback from the community and road users regarding speed limits and speed management in the area.
- 1.2. Land uses in the Mandeville North area have changed significantly in past years. The zoning of much of the land around the intersection of Tram Road with McHughs and Bradleys Road is now Residential 4A or 4B. A block of land near the intersection has also recently changed to Business 4. Council, as a Road Controlling Authority, is required to review speed limits when there is a significant change in land use.
- 1.3. The "Land Transport Rule: Setting of Speed Limits" sets out the methodology for calculating speed limits, and the legal process for setting them. NZTA's draft "Speed Management Guide" sets out an alternative methodology for assessing appropriate speeds on roads, and measures for managing speeds. As the guide is still a draft document, speed limits still need to be applied through the existing legal mechanisms of Speed Limits New Zealand.
- 1.4. It is therefore proposed to calculate the appropriate speed limits using the current Setting Speed Limits Rule, but to review those calculated limits to confirm they are consistent with the draft guide. Obtaining and considering the views of the community will be an integral part of the process.

2. RECOMMENDATION

THAT the Utilities and Roading Committee:

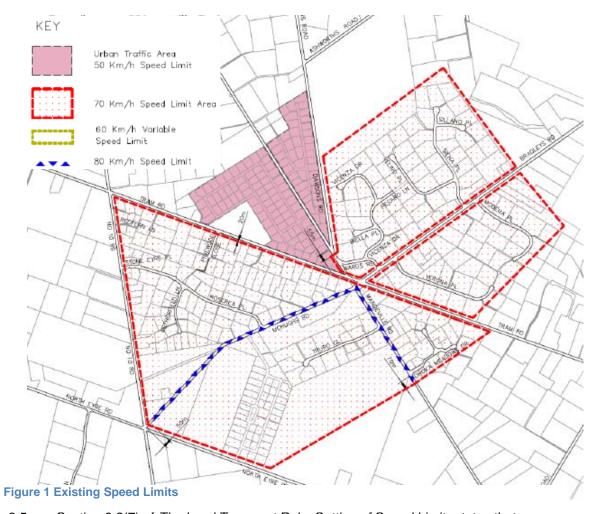
- (a) **Receives** report No. 160803076046.
- **Supports** the calculation of appropriate speed limits in the Mandeville North area using the existing "Setting of Speed Limits Rule".
- **(c) Supports** a review of the speed limits calculated above, against the objectives and priorities of NZTA's draft Speed Management Guide, to ensure consistency with the guide.
- **Supports** the identification and evaluation of additional speed management treatment using the draft guide.
- **Supports** consultation with the local community, road users (including the Automobile Association and Road Transport Association), and Police regarding speed limits in the Mandeville North area.
- **Notes** that staff will report back to the Committee the results of the speed limit calculations and the community views with a recommendation on speed limit changes.
- **(g) Circulates** this report to the Oxford Eyre Advisory Board.

3. ISSUES AND OPTIONS

Existing Situation

- 3.1. The Mandeville North area has changed from a predominantly large block rural area to a smaller block rural / residential area in past years. The effects of this change on the road network include:
 - Significantly increased traffic volumes on existing roads such as Tram Road, Bradleys Road, and McHughs Road.
 - A significant increase in the number and proximity of property accesses on the existing roads.
 - A number of new cul-de-sacs in the areas zoned Residential 4A and 4B. These streets typically have a number of comparatively closely spaced property accesses.
 - A likely increase in the numbers of pedestrians and cyclists on the road network as a result of the increased population in the area.
- 3.2. A number of the areas zoned Residential 4A and 4B have not yet been fully developed. It is therefore expected that these changes will continue into the future.
- 3.3. A site to the south west of the Tram Road / McHughs Road intersection has recently been zoned Business 4. The expected development of this site is likely to result in further impacts on the road network in the Mandeville North area, including:
 - Traffic accessing the development from Tram Road, either via a new entrance to the site or via the existing intersection with McHughs Road
 - A possible demand for pedestrian and cyclist access to the business park, and a resulting further increase in pedestrian and cycle numbers.

3.4. The Mandeville North area has a combination of 100, 80, 70, and 50km/h speed limits, as shown in Figure 1 below. The application of these speed limits appears to be inconsistent at times. For example, Mandeville North Road has an 80km/h limit through the area, while Bradleys Road has a 100km/h limit, and most of the rural / residential area has a 70km/h limit, whilst the area between Dawsons Road and Wards Road, and between Wards Road and Tram Road has a 50km/h limit.



- 3.5. Section 3.2(7) of *The Land Transport Rule: Setting of Speed Limits* states that:
 - A road controlling authority must review a speed limit when:
 - (a) there is a significant change in the nature, scale or intensity of land use adjacent to a road; or
 - (b) there is a significant change in a road, its environment or its use; or
 - (c) the road controlling authority receives a written request to do so from the [Agency].
- 3.6. Given the recent, and expected future, changes in land use in the Mandeville North area, it is therefore considered appropriate to review speed limits in the area.
- 3.7. NZTA has recently released their draft Speed Management Guide. This document includes guidance on appropriate speeds for different road environments. It also outlines measures to manage speeds, including the use of speed limits and other treatments and activities.
- 3.8. The guide's draft status means that the setting of speed limits "should continue to be applied through the existing legal mechanism of Speed Limits New Zealand. However, it

is intended that the Setting of Speed Limits Rule may be reviewed at the end of 2016" (p4 of the guide).

3.9. It is therefore proposed that:

- Speed limits in the Mandeville North area are assessed, and appropriate speed limits calculated, using the methodology in the existing Setting of Speed Limits Rule. This methodology includes a requirement to consult with people and organisations affected by the speed limit.
- The results of this assessment are further reviewed against the objectives and priorities of the draft Guide to ensure they are consistent with those objectives and priorities, and
- Any further speed management treatments (such as thresholds) are identified and evaluated using the draft Guide.
- Feedback is sought from the local community and road users, and NZ Police.
- 3.10. The Management Team has reviewed this report and supports the recommendations.

4. COMMUNITY VIEWS

- 4.1. Both the Setting of Speed Limit Rule, and the draft Speed Management Guide require consultation with those affected by any changes to the speed limits. It is therefore proposed to consult with the community, road users (including the Automobile Association and Road Transport Association), and Police, early in the assessment process, and again once speed management options have been identified.
- 4.2. Individual residents in Mandeville Park, Roscrea Place and Truro Close have approached the Council in recent times requesting the speed limits in these areas be reduced from 70km/h to 50km/h.
- 4.3. It is proposed that the consultation will involve writing letters to all property owners in the Mandeville North area seeking their views on the speed limits and by notices in the local newspapers, on the Council website and via social media.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. The cost of changing and installing new speed limit signage is not significant and can be met from existing budgets.
- 5.2. There are no significant risks associated with reviewing the speed limits in the Mandeville North area.

6. CONTEXT

1.1. Policy

This is not a matter of significance in terms of the Council's Significance Policy.

1.2. Statute

Section 145 of the Local Government Act 2002 empowers the Council to make a bylaw for its district to protect, promote and maintain public health and safety.

The Land Transport Rule: Setting of Speed Limits Rule (54001/1) requires that permanent speed limits be set by bylaw.

The Speed Limits Bylaw 2009 enables the Council to set speed limits by Council resolution.

1.3. Links to Community Outcomes

- 1.3.1. There is a safe environment for all:
 - Crime, Injury and road accidents are minimised
 - Harm to people from natural and manmade hazards is minimised
- 1.3.2. Transport is accessible, convenient, reliable, affordable and sustainable
 - The standard of our District's roads is keeping pace with increasing traffic numbers

Bill Rice Senior Transport Engineer

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: RDG-32-54 / 160808077634

REPORT TO: Utilities and Roading Committee

DATE OF MEETING: 16th August 2016

FROM: Bill Rice – Senior Transport Engineer

SUBJECT: Pegasus to Waikuku Beach Link – Kaiapoi Pa Road Upgrade

SIGNED BY:

(for Reports to Council or Committees) Department Manager

rtment Manager (/ Chief Executive

1. SUMMARY

1.1. The purpose of this report is to:

- Update the Committee on upgrading Kaiapoi Pa Road to provide a link between Pegasus and Waikuku Beach, including a summary of the public consultation and the Cultural Impact Assessment.
- Seek the Committee's support to:
 - Not proceed with upgrading Kaiapoi Pa Road to provide a link between Pegasus and Waikuku Beach.
 - Investigate options to improve pedestrian and cycle connectivity between Pegasus and Waikuku Beach.
 - Engage with NZTA to develop a strategy of safety improvements for the SH1 corridor from the Ashley River to Belfast.
 - Work with ECan to develop options to provide improved public transport services to both Pegasus and Waikuku Beach
- 1.2. An upgrade of Kaiapoi Pa Road to provide a local road connection between Pegasus and Waikuku Beach has been included in the Council's Long Term Plans since Pegasus was first developed in 2006.
- 1.3. The connection would potentially address a number of issues for those travelling between Pegasus and Waikuku Beach, such as road safety at the Waikuku Beach Road intersection with SH1 and providing a shorter route between Pegasus and Waikuku Beach for local trips and for public transport.
- 1.4. Community consultation has indicated a very strong level of support within the Waikuku Beach and Pegasus communities for an improved link between the two communities. However, a Cultural Impact Assessment (CIA) prepared on behalf of Te Ngāi Tūāhuriri Rūnanga strongly indicated that "... Ngāi Tūāhuriri does not support the proposed upgrade of Kaiapoi Pā Road as an entry point to Pegasus via Tiritiri Moana Drive."
- 1.5. Because of the high cultural significance of this area it is recommended that the upgrade of Kaiapoi Pa Road does not go ahead. However other options can be investigated to improve the pedestrian/cycle connectivity, the road safety and the public transport provision.

Attachments:

- i. Business Case Point of Entry Memo (Doc 160119003342)
- ii. Consultation Report (Doc 160726072488)
- iii. Cultural Impact Assessment (Doc 160728073712)

2. **RECOMMENDATION**

THAT the Utilities and Roading Committee recommends to Council that it:

- (a) Receives report No. 160808077634.
- (b) **Approves** that the project to upgrade Kaiapoi Pa Road and link it to Tiritiri Moana Drive proceed no further due to the high cultural significance of the area and the likely impact of the proposed work.
- (c) **Supports** the proposal to investigate options to improve pedestrian and cycle connectivity between Pegasus and Waikuku Beach.
- (d) **Notes** that staff will report back to the Board on options and costs for improved pedestrian and cycle connectivity between Pegasus and Waikuku Beach.
- (e) **Supports** engagement with NZTA on their Ashley to Belfast safety improvements project.
- (f) **Supports** working with ECan to identify options to improve Public Transport provision for both Pegasus and Waikuku Beach.

3. ISSUES AND OPTIONS

- 3.1. The 2015-25 Long Term Plan included \$700,000 in the 2015/16 year for the Kaiapoi Pa Road upgrade. The 2016/17 Annual Plan reprogrammed this funding to the 2017/18 year. The purpose of this project was to provide a local road connection between Pegasus and Waikuku Beach via Kaiapoi Pa Road.
- 3.2. A Business Case Point of Entry memo was prepared for NZTA National Land Transport Programme funding for this project in January 2016. It is attached to this report (Attachment i). The following issues and options were identified in the memo.

Road Safety issues

- 3.3. Currently the State Highway 1 (SH1) corridor in the vicinity of Pegasus and Waikuku Beach is a high risk corridor based on KiwiRAP modelling of predicted Deaths and Serious injuries (DSis). Furthermore, the corridor has a 1 star safety rating in the vicinity of the /Waikuku Beach Road intersection. It has a 2 star rating near the SH1/Preeces Road and SH1 intersection. These ratings are significantly below the minimum star rating of 4 specified in the One Network Road Classification (ONRC) for a National Strategic Route such as SH1 in this location.
- 3.4. The "Ashley to Belfast Safety Improvements Project" is included in NZTA's 2015-18 National Land Transport Programme (NLTP). It is expected that this project will include safety improvements at intersections along this corridor. NZTA have engaged consultants to recommend improvements for the corridor. It is expected that engagement with stakeholders along the corridor, including Council, will start in August or September 2016.

Access between Pegasus and Waikuku Beach

3.5. Pegasus provides services that are accessed regularly by Waikuku Beach residents, including the local primary school, medical centre, general store, cafes, and recreational facilities.

- 3.6. The primary school was relocated to Pegasus from Waikuku Beach in 2014. A school bus operates between Waikuku Beach and the school. A small number of pupils from Waikuku Beach walk or cycle to school on the existing Pegasus Bay Walkway.
- 3.7. There is provision for further retail development on Pegasus Main Street. The likely timing of this development is unknown.
- 3.8. Pegasus residents also access recreational facilities at Waikuku Beach.
- 3.9. The travel distance on the road network between Waikuku Beach and Pegasus would be reduced by approximately 2.6km if a connection to Tiritiri Moana Drive was constructed from Kaiapoi Pa Road.

Public Transport

- 3.10. Public Transport services are provided to both the Pegasus and Waikuku Beach communities. The distance between Pegasus and Waikuku Beach, and the requirement to back track along Pegasus Boulevard to SH1 affects the efficiency of these services.
- 3.11. The Management Team has reviewed this report and supports the recommendations.

4. **COMMUNITY VIEWS**

4.1. A Consultation report was prepared in March 2016. It is attached as Attachment ii. Key points from the report are summarised in the following sections. The consultation involved three key phases, namely informal discussions with affected property owners and other stakeholders, wider community consultation, and consultation with Te Ngai Tuahuriri Runanga, including the preparation of a Cultural Impact Assessment.

Affected Property Owner and other Stakeholders

4.2. The first phase of consultation was carried out in November 2015. It involved informal, face to face or telephone discussions with property owners and residents on the route and on Preeces Road, and with other stakeholders including the Pegasus Bay School principal, Mahaanui Kurataiao Ltd and elders of Te Ngai Tuahuriri Runanga, and the Pegasus Bay Residents Association.

Wider Community Consultation

- 4.3. The second and more formal consultation phase started on 22 January 2016, using a leaflet to communicate the key aspects of the proposal. It was delivered to residents of Pegasus Town, Waikuku and Waikuku Beach. The leaflet was also available from the Rangiora Library, shops and cafes in Pegasus Town, and at the school. A copy of the leaflet was posted online on the Waimakariri District Council website
- 4.4. A meeting was held with members of the Pegasus Town Residents Association committee, and another with the Pegasus Bay School Board of Trustees. A Drop In session was held at the school from 2.30pm to 6.30pm on 10 February 2016, and was attended by 11 people.
- 4.5. A total of 86 responses were received. Of these, 39 were from addresses in Waikuku Beach, and 19 from Pegasus. The remainder were primarily from from other locations in the Waimakariri District, plus 4 from Christchurch, and 1 from Hong Kong.
- 4.6. 74 of the responses indicated that they were in favour of the proposal to open a link between Pegasus and Waikuku Beach using Kaiapoi Pa Road. 66 respondents indicated

- a preference for the link to include a shared pedestrian/cycle path or a separated cycle path.
- 4.7. 6 indicated that they were not in favour of the proposal, and 4 asked questions, and didn't indicate a preference.
- 4.8. Pegasus Bay School indicated that they "will only support this proposal if:
 - There is a separate cycle track;
 - The speed limit is defined and measures put in place to ensure it is adhered to (e.g. speed bumps);
 - The local iwi are also in support of it following their consultation and the cultural impact report."

Te Ngāi Tūāhuriri Rūnanga Consultation

- 4.9. The project has been discussed at monthly liaison meetings between the Rūnanga and Council. A Cultural Impact Assessment (CIA) of the project has been prepared. The CIA was endorsed by General Meeting of Te Ngāi Tūāhuriri Rūnanga on 1st May 2016, and confirmed and approved by the Te Ngāi Tūāhuriri Environment Committee on the 16th June 2016.
- 4.10. A copy of the CIA is attached as Attachment iii. It identified that the Kaiapoi Pa site and its surrounds has particular significance to Te Ngāi Tūāhuriri. There are numerous archaeological sites in the vicinity, indicating ongoing occupation of the area. The Rūnanga therefore considers it a Wāhi Taonga site.
- 4.11. The CIA also indicates that there was a burial ground, or urupā within the pa walls, and that there are likely to be human remains from the massacre on the site. The site is therefore considered a wāhi tapu site. It goes on to say that "Of all the wāhi tapu in the Ngāi Tūāhuriri takiwa, the Kaiapoi Pā site is easily the most significant. The Kaiapoi Pā was the scene of a massacre the scale of which was not likely seen before or after in the Ngāi Tūāhuriri takiwa."
- 4.12. The CIA identifies the following "...values of particular cultural significance, for consideration and appropriate provision within the design and development..."
 - Whakapapa
 - Rangatiratanga
 - Taonga
 - Kaitiakitanga
 - Mauri
 - Wāhi Tapu/Wāhi Taonga and Urupā

The CIA seeks the following outcomes for each of the identified values:

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi Pā.
- 4.13. The recommendations of the CIA are copied in full below (emphasis added):

The division of the Kaiapoi Pā precinct by Preeces Road has long been a sore point with members of Ngāi Tūāhuriri. Moreover the neighbouring Pegasus subdivision has also significantly eroded the values of the wider cultural landscape.

The remaining Kaiapoi Pā precinct faces ongoing pressure from vandals and inappropriate activities inconsistent with the wāhi tapu status of the site.

In the early stages of planning of Pegasus, Ngāi Tūāhuriri understood that Kaiapoi Pā Road was never going to be used as a northern access route to Pegasus for any reason. Consequently Ngāi Tūāhuriri does not support the proposed upgrade of Kaiapoi Pā Road as an entry point to Pegasus via Tiritiri Moana Drive.

Ngāi Tūāhuriri considers the relatively minor safety gains for traffic travelling between Waikuku Beach and Pegasus is not considered relative to the damage caused by further encroachment of a widened Kaiapoi Pā Road on known and unknown archaeological sites and potential burial sites.

Te Ngāi Tūāhuriri Rūnanga have identified the following issues with regards to the potential for adverse effects on Ngāi Tūāhuriri values:

- a.) Wāhi Tapu/Urupā, Wāhi Taonga.
- A further objective of this report is to provide recommendations to avoid, remedy or mitigate adverse effects on tangata whenua values. To this end, Te Ngāi Tūāhuriri Rūnanga have provided the following recommendations to assist the New Zealand Transport Agency to respond to Te Ngāi Tūāhuriri Rūnanga concerns;
- a.) Te Ngāi Tūāhuriri Rūnanga recommend that Waimakariri District Council and NZ Transport Agency further investigate the implementation a revised traffic layout at the intersection of State Highway 1 and Waikuku Beach Road.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. A total sum of \$700,400 is included in the LTP for the Kaiapoi Pa Road upgrade with about \$26,000 already spent on the consultation and the Cultural Impact Assessment leaving a balance of \$674,400. Some of this remaining budget may be required for the pedestrian and cycleway connectivity work and this will depend on the options identified and the cost of those options.
- 5.2. A high level of community support for the project was indicated in the community consultation. There is therefore a risk of some community dissatisfaction if the project does not proceed. The level of dissatisfaction may be tempered, to an extent, by the community support for the proposed link to include a shared (pedestrian and cycle) or

separated (cycle only) facility. The recommended investigation into options to improve pedestrian and cycle connectivity between Waikuku Beach and Pegasus is likely to identify options which address the demand for improved pedestrian and cycle facilities.

5.3. There is also a risk of crashes at intersection of Waikuku Beach Road and SH1, and, to a lesser extent, at the intersection of Preeces Road and SH1. These risks are mitigated by NZTA's project to identify safety improvements for the route from Ashley to Belfast.

6. CONTEXT

6.1. Policy

This matter is / is not a matter of significance in terms of the Council's Significance Policy.

6.2. Community Outcomes

Transport is accessible, convenient, reliable, affordable and sustainable.

There is a safe environment for all.

Bill Rice Senior Transport Engineer

Memo

File no and trim no: RDG-32-54 / 160119003342

Date: 19 January 2016

Memo to: Steve Higgs, NZ Transport Agency

From: Ken Stevenson, Roading Manager, WDC

Subject: Business Case Point of Entry – Kaiapoi Pa Road Upgrade

1. Introduction

This memo presents the case for funding the upgrade of Kaiapoi Pa Road and suggests a 'point of entry' into the business case approach for NLTP funding. Given the low project value, small geographic area and rural nature of the transport network involved it is not considered that a programme business case is necessary. Instead, option assessment will be undertaken as part of the indicative business case to ensure that the form of development is the most appropriate to solve the identified problems and offers value for money.

At this stage it is envisaged that the Kaiapoi Pa Road upgrade will involve forming and sealing the road and providing a direct link to Tiritiri Moana Drive in the Pegasus development. See **Figure 1.1** for the general form of the Kaiapoi Pa Road.



Figure 1.1 Kaiapoi Pa Road looking toward Pegasus (left hand side)

There are a number of forms that the development of Kaiapoi Pa Road could take, the option selected will be based on the problems and opportunities presented in this memo and further investigation.

The study area is shown in **Figure 1.2.**



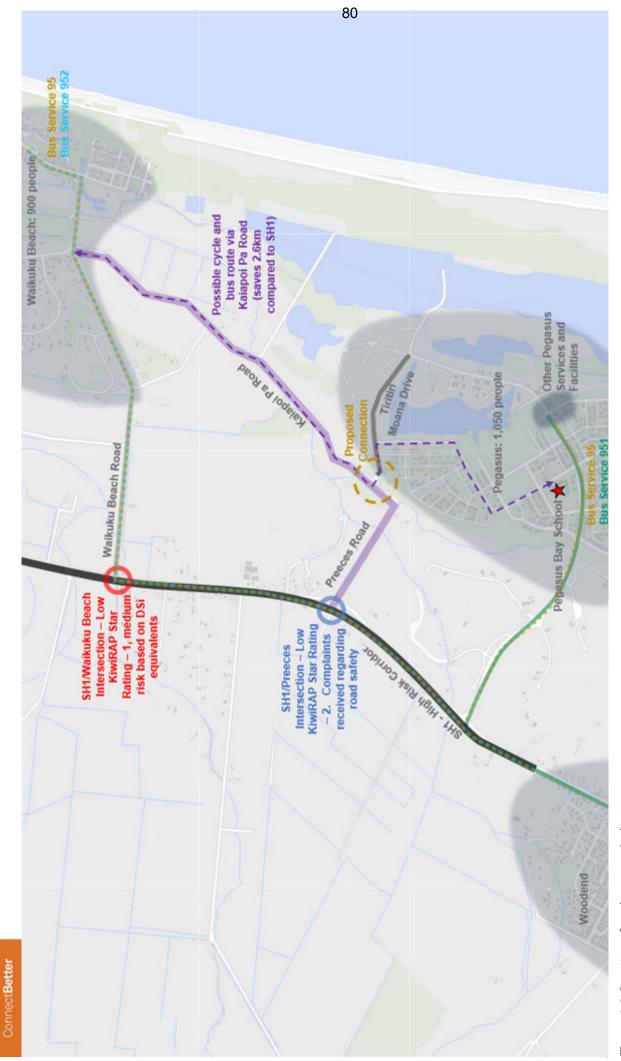


Figure 1.2 Overview of study area and relevant transport aspects



2. Problems and opportunities

The problems and opportunities associated with Kaiapoi Pa Road are wide ranging and have been developed through feedback from stakeholders and local knowledge. The following problems and opportunities have been identified, these are explained in more detail in the following subsections:

- Currently the State Highway 1 (SH1) corridor in the vicinity of Pegasus and Waikuku Beach is a high risk corridor based on KiwiRAP modelling of predicted DSis. Furthermore, in the vicinity of the SH1/Preeces and SH1/Waikuku Beach intersections the corridor has a road safety star rating of 2 and 1 respectively. These ratings are significantly below the minimum star rating of 4 specified in the One Network Road Classification (ONRC).
- Pegasus provides services that are accessed regularly by Waikuku Beach residents, for example the local primary school. The primary school was relocated to Pegasus in 2014. The travel distance on the road network between Waikuku Beach and Pegasus would be reduced by approximately 2.6km if a connection to Tiritiri Moana Drive was constructed from Kaiapoi Pa Road.
- Public Transport services are provided to both the Pegasus and Waikuku Beach communities. The distance between Pegasus and Waikuku Beach effects the efficiency and reliability of these services.
- When Tiritiri Moana Drive was constructed the western end was designed in a way that it can be easily connected to Kaiapoi Pa Road. The road reserves of the two corridors are connected, therefore no land purchase is required to create a connection (opportunity).

2.1 Road safety on SH1 and intersections with wider road network

SH1 Corridor

The Woodend corridor is listed as requiring safety improvements in the Regional Land Transport Plan. It is understood that the business case for this corridor is currently under development. SH1 north of Woodend is a High risk corridor as shown in **Figure 2.1** and **Figure 2.2**, excerpts from the NZ Transport Agency's SafetyNET.

SH1 north of woodend is classified as a 'National Strategic Route' under the ONRC. For this road category the ONRC cusomer levels of service (cLOS) require a high KiwiRAP 3 or 4-star standard ^[1]. Improvements to Kaiapoi Pa Road would provide alternative routes to access Waikuku Beach and the historically important Kaiapoi Pa. Consequently this provides an opportunity for safety improvements on SH1, through allowing the restriction of movements at intersections along the corridor and reducing the number of right turns onto and off SH1.

Regardless of whether movements are restricted at the SH1/Preeces and SH1/Waikuku Beach intersections, the number of right turning movements on to and off SH1 will be reduced through Kaiapoi Pa Road providing a shorter route between Waikuku Beach and Pegasus (approximately 2.6km shorter) that does not utilise SH1.

A collision diagram showing 10.5 years (2005 – 2015) of crash history in the vicinity of the proposed upgrade is shown in **Figure 2.3**.

 $^{1\} https://www.nzta.govt.nz/assets/Road-Efficiency-Group-2/docs/customer-levels-of-service.pdf$



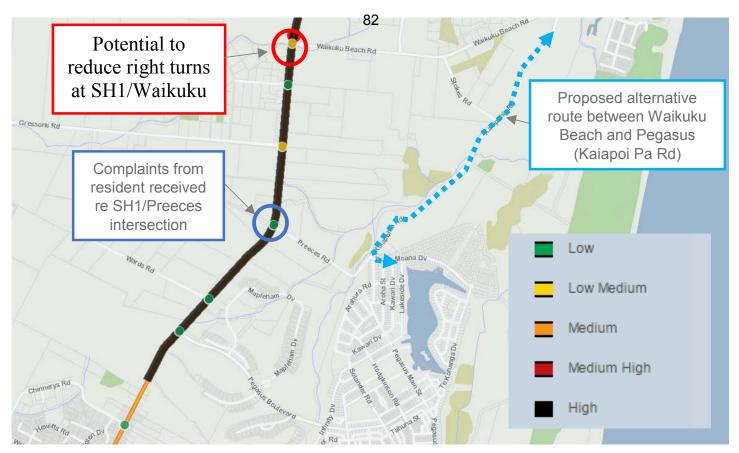


Figure 2.1 KiwiRAP risk ratings on SH1 based on predicted DSi and safety improvement opportunities

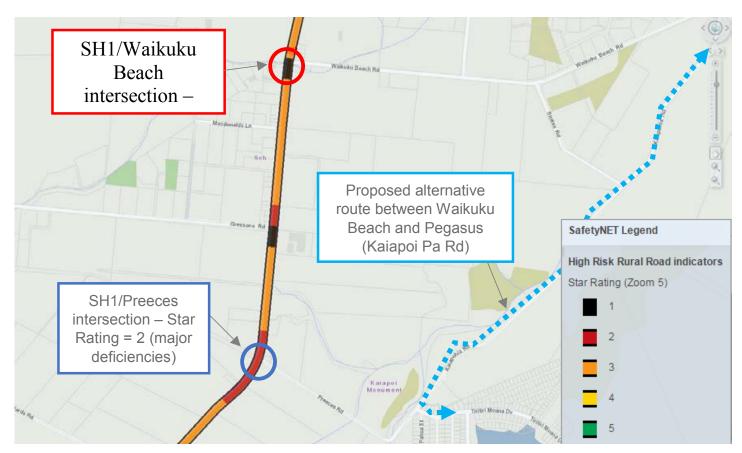


Figure 2.2 KiwiRAP road safety star rating on SH1

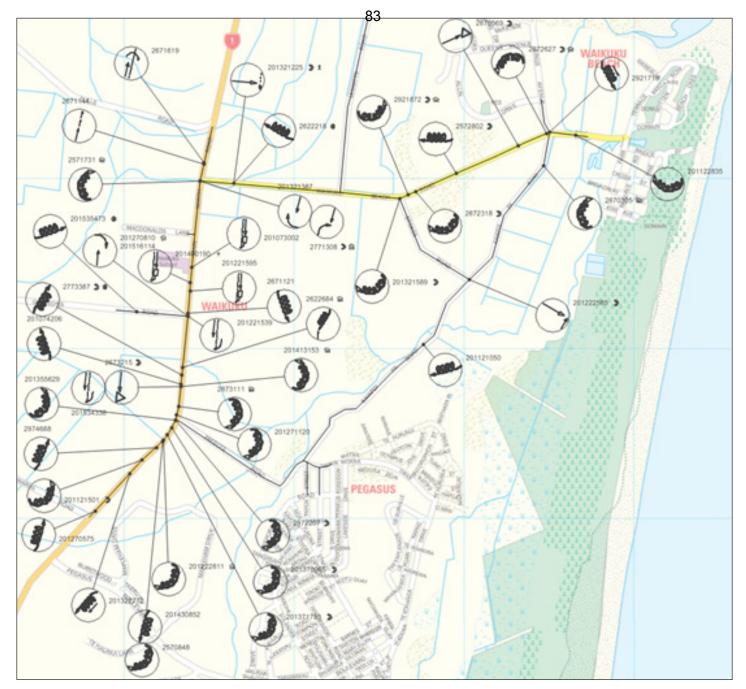


Figure 2.3 Collision Diagram 2005-2015

SH1/Preeces Intersection

In addition to the poor road safety star rating at the SH1/Preeces intersection, the resident who lives adjacent to the SH1/Preeces Road intersection has raised concerns complaints regarding road safety. NZTA is currently investigating options for improvements at this intersection. Upgrading Kaiapoi Pa Road and/or Preeces Road provides an opportunity to consider more options for improving the intersection.

SH1/Waikuku Beach Intersection

Ten years of data at the SH1/Waikuku Beach intersection shows that this intersection has a medium risk rating using the KiwiRAP methodology. Based on 10 years of data there have been 1.11 DSi equivalents over the 10 year period (~0.6 over five years). This aligns with the criteria for medium strategic fit in the investment assessment framework.

The DSi equivalent value is based on three crashes at the intersection; a JA – crossing right turn, right side crash (2013), a LB - right turn against crash (2007) and a DA - loss of control while cornering crash (2005). Any upgrade to Kaiapoi Pa Road will reduce turning movements at the Waikuku Beach/SH1 intersection and therefore contribute to reducing the road safety risk at the intersection.



2.2 Utility trips between Waikuku Beach and Pegasus

The Waikuku Beach and Pegasus populations are approximately 900 and 1,050 respectively, based on 2013 census data. Pegasus provides many services to the wider area including a medical centre, primary school, general store, cafes and other local businesses. Waikuku Beach is a predominantly residential settlement with a small general store/takeaways shop.

The local primary school was relocated to Pegasus in 2014. Currently the school bus from Waikuku Beach transports approximately 80 students to the school. It is estimated that a further 10 students $^{[2]}$ are driven to the school each day. Approximately 5-6 students cycle to school from Waikuku Beach during fine weather via the 'Pegasus Bay Walkway'. This shows that there is an existing propensity for students to cycle to the school over this distance and there may be an opportunity to increase travel by this mode if a more convenient route is provided for students that live in the western area of Waikuku Beach, see **Figure 2.4.**

Furthermore the length of the school bus route may be able to be reduced with a link from Kaiapoi Pa Road to Tiritiri Moana Road. The NZ Transport Agency's Safer Journeys to Schools guide currently being developed considers road safety risk in the vicinity of schools. Reducing travel for the school bus route and children in cars on the high risk SH1 corridor would align with the principles of the guide.

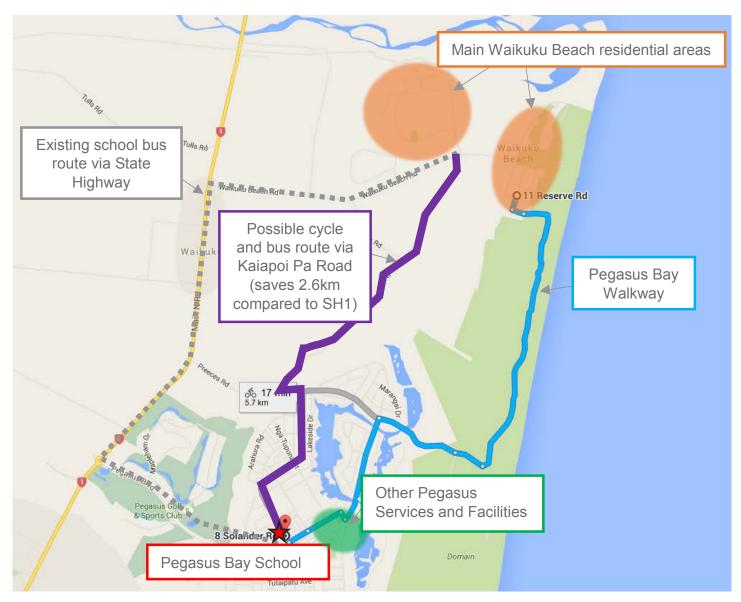


Figure 2.4 Routes Between Pegasus and Waikuku Beach

2.3 Public transport links

Currently three bus routes service the Pegasus and Waikuku Beach areas; the 95, 951 and 952 services, see **Figure 2.5** and **Figure 2.6**. ECan have advised that a connection via Kaiapoi Pa Road between Pegasus and Waikuku Beach would allow the 951 and 952 services to be combined into a single service with a higher frequency (higher level of service). While existing bus patronage is relatively low a higher frequency bus service in future would likely increase patronage and improve fare box recovery.

Routes 951 and 952 connect to the Blue Line, a service to Christchurch, and Rangiora with ~30minute headways (in the Waimakariri) across the majority of the day. Allowing a connection to every Blue Line bus will increase the attractiveness of public transport for Pegasus and Waikuku Beach residents and provides an opportunity to reduce traffic accessing Christchurch from the north.

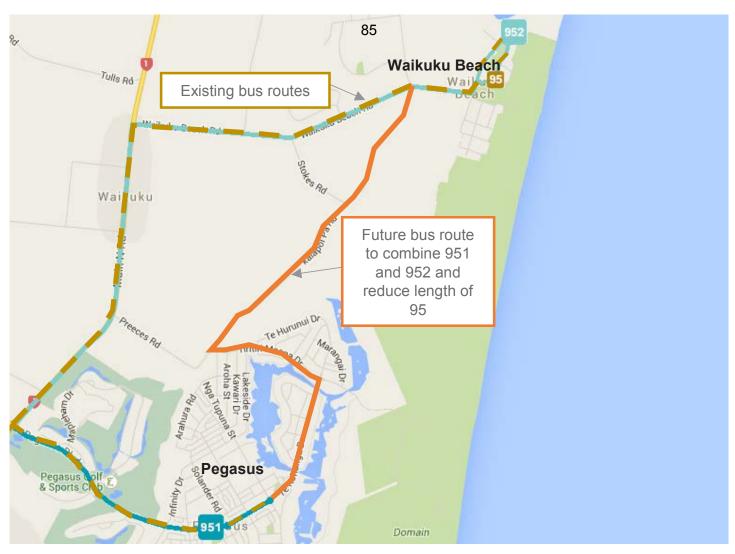


Figure 2.5 Public transport routes

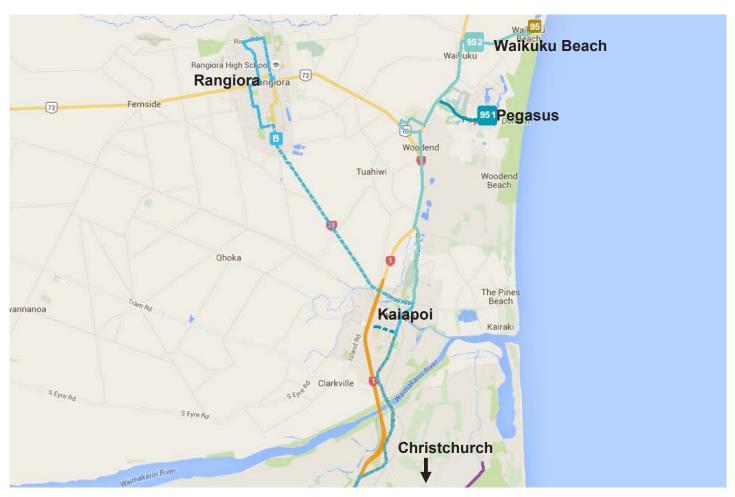


Figure 2.6 Wider Waimakariri bus network

The existing road reserves on Kaiapoi Pa Road and Tiritiri Moana Drive are connected, as shown in **Figure 2.7**. Therefore no land purchase is required to achieve this connection reducing the costs and risks of the proposal. Currently a fence and embankment impede all users from accessing Pegasus from Kaiapoi Pa Road, see **Figure 2.8**.

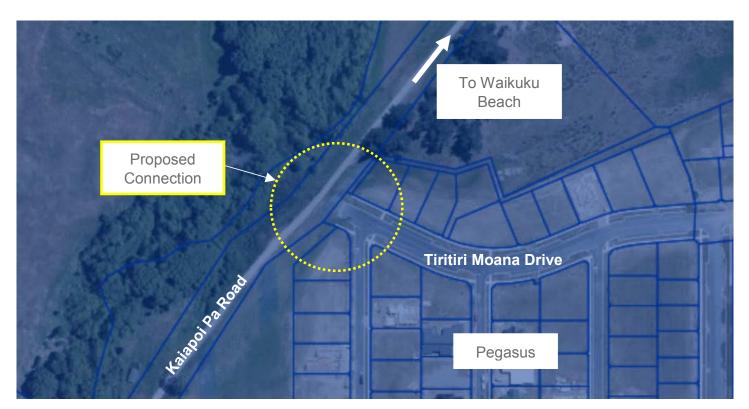


Figure 2.7 Land parcels



Figure 2.8 Proposed connection location

3. Long term plan

The upgrade of Kaiapoi Pa Road to connect Waikuku Beach with Pegasus is listed as a short term activity (2015/16-2016/17) in the Waimakariri Long Term Plan (LTP). Under the LTP significant capital projects \$700,000 is allocated to the upgrade.

The Kaipoi Pa Road upgrade is also included in the Canterbury Regional Land Transport Plan (RLTP) as priority level 4. **The total cost stated in the RLTP is \$750,000 for 2015.**

4. Project timeline

The upgrade of Kaiapoi Pa Road is scheduled for the short term, 2015/16 - 2016/17. The following bullets represent stages and anticipated spending profile:

- 2015/16 Investigation and design, \$30,000
- 2016/17 Design and construction, \$720,000

5. NLTP funding proposal

Council has considered this programme against the GPS and NLTP funding criteria and consider that the upgrade is a potential candidate for funding under the road improvements category for the purposes of improving road safety.

SH1 in the vicinity of the SH1/Waikuku Beach and SH1/Preeces intersections has a road safety star rating of less than or equal to 2. This aligns with the criteria for **high strategic fit** in the investment assessment framework. Furthermore, the Waikuku Beach/SH1 intersection is a medium risk intersection based on 10 years of data with 1.11 DSi equivalents over the 10 year period (~0.6 over five years). This aligns with the criteria for medium strategic fit.

In the past 10 years there have been three crashes at the intersection; a JA – crossing right turn, right side crash (2013), a LB - right turn against crash (2007) and a DA - loss of control while cornering crash (2005). Any upgrade to Kaiapoi Pa Road will reduce turning movements at the Waikuku Beach/SH1 intersection and therefore contribute to reducing the road safety risk at the intersection.

Furthermore, Environment Canterbury have identified that an upgrade to Kaiapoi Pa Road would allow them to increase the frequency of a combined 951/952 service to 30 minute headways. This will allow public transport to become a more viable transport mode for Pegasus and Waikuku Beach residents and may assist with relieving congestion over the Waimakariri River, where limited route choice is available.

No benefit cost appraisal or detailed assessment against the investment assessment framework has yet been undertaken. However it is anticipated that the assessment profile for the proposal is HML (BCR: 1-3). A more detailed assessment of effectiveness and benefit and cost appraisal will be undertaken as part of the next steps.

6. The next steps

Council considers that given the above investment story, scale of the costs and limited spatial area of the proposal the appropriate point of entry is through an indicative business case. Furthermore, Council suggests that given the scale of the project it is appropriate to combine the indicative and detailed business cases into a single step. The combined indicative/detailed business case will further develop the evidence base, consider options for the upgrade and involve appropriate stakeholders.

Council seeks that the NZ Transport Agency confirm agreement with this point of entry into the business case approach by responding to this memo in writing.

Kaiapoi Pa Road opening and improvements

Feedback from area wide community consultation re the proposal to open and improve Kaiapoi Pa Road from Pegasus Town to Waikuku Beach Road - Jan Feb 2016

Introduction

This report summarises and details feedback from people living and owning property in Pegasus Town and Waikuku/Waikuku Beach, re the proposal to open access to and improve Kaiapoi Pa Road from Pegasus Town to Waikuku Beach Road. This stage of the project followed the gathering of Initial Issues feedback from immediate neighbours of the roads in question, and other stakeholders.

The proposal has been on the Waimakiriri District Plan since planning began for Pegasus Town. The aim is to enable local residents to drive to and from the two towns without going onto State Highway 1 (SH1). The road opening will also provide an alternative exit/entrance for Pegasus in an emergency, and enable cycling and walking between the two towns. It is anticipated that this will be welcomed by school parents who can drive children to school without using SH1, and/or have their children bike or walk safely to school. Environment Canterbury has indicated that the metro bus service will start at Waikuku Beach, and go via Kaiapoi Pa Road to include Pegasus Town on its route.

The implementation of the proposal would involve construction of a new intersection at the northern end of Tiritiri Moana Drive, and widening/sealing of Kaiapoi Pa Road.

Consultation was designed to gather feedback from local residents on these and other issues. It is recognised that community feedback is a vital pre-requisite to the design, and that iwi involvement in the development of a Cultural Impact Assessment has been most valuable.

Te Ngāi Tūāhuriri Rūnanga Consultation

A Cultural Impact Assessment (CIA) has been prepared on behalf of Ngāi Tūāhuriri and Ngāi Tahu whānui. The CIA is also attached to the Council reports which this report is attached to.

It identified that the Kaiapoi Pa site and its surrounds has particular significance to Te Ngāi Tūāhuriri. There are numerous archaeological sites in the vicinity, indicating ongoing occupation of the area. The Rūnanga therefore considers it a Wāhi Taonga site.

The CIA also indicates that there was a burial ground, or urupā within the pa walls, and that there are also likely to be human remains from the massacre on the site. The site is therefore considered a wāhi tapu site. It goes on to say that "Of all the wāhi tapu in the Ngāi Tūāhuriri takiwa, the Kaiapoi Pā site is easily the most significant. The Kaiapoi Pā was the scene of a massacre the scale of which was not likely seen before or after in the Ngāi Tūāhuriri takiwa."

The CIA identifies the following "...values of particular cultural significance, for consideration and appropriate provision within the design and development..."

- Whakapapa
- Rangatiratanga
- Taonga
- Kaitiakitanga

- Mauri
- Wāhi Tapu/Wāhi Taonga and Urupā

The CIA seeks the following outcomes for each of the identified values:

"a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi $P\bar{a}$."
- 4.13. The recommendations of the CIA are copied in full below:

"The division of the Kaiapoi Pā precinct by Preeces Road has long been a sore point with members of Ngāi Tūāhuriri. Moreover the neighbouring Pegasus subdivision has also significantly eroded the values of the wider cultural landscape.

The remaining Kaiapoi Pā precinct faces ongoing pressure from vandals and inappropriate activities inconsistent with the wāhi tapu status of the site.

In the early stages of planning of Pegasus, Ngāi Tūāhuriri understood that Kaiapoi Pā Road was never going to be used as an northern access route to Pegasus for any reason. Consequently Ngāi Tūāhuriri does not support the proposed upgrade of Kaiapoi Pā Road as an entry point to Pegasus via Tiritiri Moana Drive.

Ngāi Tūāhuriri considers the relatively minor safety gains for traffic travelling between Waikuku Beach and Pegasus is not considered relative to the damage caused by further encroachment of a widened Kaiapoi Pā Road on known and unknown archaeological sites and potential burial sites.

Te Ngāi Tūāhuriri Rūnanga have identified the following issues with regards to the potential for adverse effects on Ngāi Tūāhuriri values:

a.) Wāhi Tapu/Urupā, Wāhi Taonga.

A further objective of this report is to provide recommendations to avoid, remedy or mitigate adverse effects on tangata whenua values. To this end, Te Ngãi Tūāhuriri Rūnanga have provided the following recommendations to assist the New Zealand Transport Agency to respond to Te Ngãi Tūāhuriri Rūnanga concerns;

a.) Te Ngāi Tūāhuriri Rūnanga recommend that Waimakariri District Council and NZ Transport Agency further investigate the implementation a revised traffic layout at the intersection of State Highway 1 and Waikuku Beach Road."

Community Consultation Methodology

Wider community consultation followed an Initial Issues investigation phase which was carried out in November 2015. The first phase involved informal, face to face or telephone interviews with property owners and residents on the route and on Preeces Road, and other stakeholders including the Pegasus

Bay School principal, Mahaanui Kurataiao Ltd and elders of Te Ngai Tuahuriri Runanga, Pegasus Bay Residents Association.

This second and more formal consultation phase started on 22 January 2016, using a leaflet to communicate the key aspects of the proposal. It was delivered to all letterboxes in Pegasus Town, Waikuku and Waikuku Beach, and to the PO Boxes at Waikuku Beach Store. It was also available from the Rangiora Library, shops and cafes in Pegasus Town, and at the school. A copy of the leaflet was posted online on the Waimakariri District Council website where a response form was available for online submissions. This form could be downloaded, hand filled and posted. People could also send an email submission and were also invited to phone the Consultation Facilitator to discuss the proposal. The consultation period closed on 19 February 2016 and the school Board of Trustees were offered an additional week to submit their views.

A meeting was held with members of the Pegasus Town Residents Association committee, and another with the Pegasus Bay School Board of Trustees. A Drop In session was attended by 11 people, at the school from 2.30pm to 6.30pm on 10 February 2016. Notes from the 'Drop In session are appended at the end of this report, discussed in the first 'Summary of Responses' section but not included in the itemised feedback.

Responses

One paper form response was received, and 85 email or online responses.

Where indicated, the responses from residential addresses were distributed as follows:

Christchurch	4
Hong Kong	1
Pegasus	19
Rangiora	1
Kaiapoi	2
Waikuku	6
Waikuku	
Beach	39
Woodend	1

74 respondees indicated either explicitly by ticking the box) or implicitly in their response, that they were in favour of this proposal. The school gave clear provisos for their conditional support of the proposal. 6 indicated that they were not in favour and 4 didn't give either response as they were asking a question.

The table below shows the Initial Issues verbatim comments made, sorted by issue. The interviewee Identification number (ID#) is shown on the left hand column and matches the numbers on a spreadsheet used to collect names, addresses, contact details as well as the feedback. Using the ID#, the reader can be given the name of the interviewee making the comment.

Editing: In order to sort by issue, the original feedback has been cut and pasted. Occasionally parts of the submission have been duplicated to retain the sense of the message in each 'issue' section. Obvious literals have been corrected where it was possible to do so without changing the meaning of the response.

Summary of the responses

Overall there is strong support for the proposal. While this is a 'qualitative' exercise and not statistical interpretation can be made from the responses, it is clear that the majority of respondents are in favour of opening the road from Pegasus Town to Waikuku Beach.

Preliminary and other comment

- 15 general comments that don't cover issues raised elsewhere.
- 11 of these 15 are in general in favour of the proposal.
- 4 express concerns and are not 100% in favour. Concerns are: Waikuku Beach is already being 'swallowed up' by Pegasus; increased traffic and associated safety issues; loss of the rural nature of the road and risk to the special cultural environment of the Pa, when there is no real need (for a link), given that there is already a cycle track, and there is no need to move vehicles of SH1.

What do you think about giving preference to farm vehicles, stock, pedestrians and horses on Preeces Road, and discouraging through traffic to State Highway 1?

- 63 responses.
- 47 explicitly support favouring farm vehicles, stock, pedestrians and horses on Preeces Road and discouraging or preventing through traffic to SH1
- One of these suggests that all motor traffic should be discouraged except for farm vehicle, emergency vehicles and buses
- 6 state that Preeces Road should stay open as a through route for all traffic as at present
- 6 state no preference or support retaining through access to SH1
- 4 don't answer this question precisely but express concern about the safety of the SH1 intersection
- Several comments contain questions eg 'how would this be achieved' or suggestions about how it could be achieved and some include requests for changes at the SH1 Preeces Road intersection.
- Concerns are expressed about access to Kaiapoi Pa monument, and asking the council to maintain the rural nature of the road.
- Among these comments are also concerns about slowing the traffic, and not doing anything to encourage speed.

What do you think about including a shared cycle and pedestrian path, either separated from the road itself or an on-road cycle lane?

- 79 comments
- 66 state preference for a shared cycle/ pedestrian path or a separated cycle path. (Any comments that include the words 'cycle way', 'cycle path', 'Separated', 'segregated' or 'off road' are included in this count. Some of these say that unless there is a separate cycle or cycle pedestrian path, then the project should not go ahead, or should wait until funding is available for the path
- 4 state that an on-road cycle lane would be good
- 5 are in support of a cycle facility but do not specify a separated path. From the comments it is not possible to say that these people are specifying a separated pathway or not
- One says that there is no need to change the road at all and that the SH1 route is satisfactory
- One asks whether there would be a cycle track. Perhaps this one could be added to those in support of a separated path
- Three make various suggestions for expanding and linking this cycle path to others in the area to make an integrated cycling network
- One says that a separated cycle path would be required if higher than 30kph speed limit set
- Various reasons for supporting and encouraging cycling and walking (health, environment etc) are given.

Do you think there should be a lower speed limit on Kaiapoi Pa Road?

- 60 responses
- Lower speed limit supported without specifying the speed 25
- 50 or 60kph -21 responses (3 of these say 60)

- 70 or 80kph 10 responses
- 30kph 1 response
- Road improvements will help control the speed 4 responses eg speed bumps, sealing the road, minor corner corrections.

What landscaping would you like to see on the roadsides?

- 27 ask for native plants one specifying groupings of taller natives making a mini bush setting intermittently along the road
- 7 mention retaining clear sight lines for traffic and cyclists (among other comments)
- Several references are made to other roadside planting in Pegasus, on Waikuku Beach Road etc
- Several request that planting is appropriate to the area, two referring to maintaining the rural nature of the existing road and two specifying the cultural significance of Kaiapoi Pa.
- Two say grass, one asks for hedges, and others say that landscaping is not a priority, that money would be better spent on providing a cycle path

Bus services

Three comments in support of the bus service

Cultural and Iwi issues

- Four comments asking for cultural awareness of the Kaiapoi Pa and surrounding area
- One of these asks the WDC to request that Ngai Tahu maintain the Pa area with more care
- One expresses concern over a perceived lack of correct consultation with iwi

Hoons

 One response expressing concern that this change will attract hoons, and whether the police have been asked for their opinion.

Road width

- Why widen and accommodate two way traffic when traffic volume will be low?
- A 6 metre wide road not wide enough
- Five metres wide would be sufficient and would reduce traffic speed, maintain the rural environment, discourage short cutting to SH1.

Kaiapoi Pa Road /Waikuku Beach Road crossing

- Consider a designated crossing point or facility across Waikuku Beach Road.
- Consider STOP controls rather than GIVEWAY controls at this intersection.

Stokes Road

 One asking how Stokes Road 'fits' into the proposal, and the other wondering if people will use Stokes Road as a short cut to SH1

Horses

A request for a dedicated horse path, and suggesting that it would be better to improve the SH1
Waikuku Beach Road intersection.

Consultation

- One criticism of the framing of questions in the leaflet, such that they imply that the decision to open Kaiapoi Pa Road has already been made, and the decision was due to increased demand as a result of the school being moved.
- One saying that the iwi must be consulted, outcomes made public, and cultural impact study guidelines adhered to

Other comments in general

16 closing comments in favour of this proposal – 3 of these have provisos – one that it must include a
cycle path and a low speed limit, one that all motor vehicle traffic should be restricted, and the school
has several.

Verbatim comments, sorted by issue

	Feedback sorted by topic
ID	Preliminary and other comment
#	Tremminity and other comment
	Summary 14 general comments that don't cover issues raised elsewhere. 11 of these 14 are in general in favour of the proposal. 4 express concerns and are not 100% in favour. Concerns are: Waikuku Beach is already being 'swallowed up' by Pegasus; increased traffic and associated safety issues; loss of the rural nature of the road and risk to the special cultural environment of the Pa, when there is no real need given that there is already a cycle track, and there is no need to move vehicles of SH1.
	Generally in favour of the proposal
1	Our family is in favour of the proposals in your flyer received today. Lots of benefits for us to drive there and use their pool and fish n chips at Waikuku.
2	Love the thought that we will be able to use the road directly to and from Waikuku.
3	We fully support this initiative.
4	Thanks for the opportunity to provide feedback. I am a resident and property owner in Pegasus and support the opening and upgrading of Kaiapoi Pa Road into Pegasus.
5	I would like to offer my thought on the opening and upgrading of Kaiapoi Pa Road. I live in Pegasus but travel to Waikuku most days. I sometimes travel along Kaiapoi Pa and Preeces Rd. I would be in support of the opening and upgrade work for a number of reasons. (sorted into issues below) A wonderful initiative and I wish you all the best in getting this across the line!
8	We think this road is a great idea and cannot wait to go from Pegasus to Waikuku using it. It will also be much safer for everyone travelling between there daily.
9	Great news that the Pa road will be upgraded and access to Pegasus will be available without going into the "trucking lane" of state highway
18	Thank you very much for the opportunity to comment on the proposals to connect Kaiapoi pa Road to Tiritiri Moana Drive. We initially rented a house in Pegasus and then moved to our own house in Northside Country on Waikuku Beach Road. We always thought and hoped that Waikuku Beach and Pegasus would be connected this way. We are excited that this now seems to becoming a reality. We have two children that go to the pre-school in Pegasus. It first of all would save us time to drop them off via Stokes Road onto Kaiapoi Pa Road. More important, we hope that our kids one day can bike to the Pegasus Bay school from our development.
20	In support of new road access to Pegasus. I think it very good idea to have a secondary route. As the population grows it's a slight weakness in plan to have only one road in. Also good to be able to avoid using main road.
40	Totally in support of the proposal
43	Thank you for the pamphlet about the proposed changes to Kaiapoi Rd. This is an admirable example of community consultation so you deserve congratulations.
46	As a resident of Waikuku Beach since 1999, interested and involved in community issues and wider 21st century challenges, I would like to contribute to the intended opening and upgrading of the Kaiapoi Pa Road, in order to provide safe and direct access to Pegasus township, to encourage safe, healthy opportunities for social interaction/development, amongst our younger people on their way to and from school and the encouragement of less reliance on fossil fuels for all.
57	I wish to register strong support for Council's proposed changes to Kaiapoi Pa Road. This is because the main aim of the project (local traffic using local roads rather than state highway 1) meets the objectives of: - enhancing opportunities for greater use of local transport including bus, farm vehicles, pedestrians, cyclists and horses 2) building a syringe (strong??) local community - reducing risk of injury (The section of State Highway 1, and turning on and off it, is genuinely dangerous)

Concerns expressed therefore not 100% in favour 28 We wish to provide some feedback on the proposal to open and upgrade Kaiapoi Pa Road between Waikuku Beach and Pegasus. Although we are not that happy about Kaiapoi Pa Road being opened up and upgraded as Waikuku Beach is already getting 'swallowed up' by Pegasus I know that this needs to be done, especially to give Waikuku Beach children better access to their school without having to use SH1. 52 My concern is the increase in traffic that is going to be using Pegasus, we already have an issue with Speeding and non compliance of Give Way and Stop rules that is not being adhered to that needs to be addressed, I have personally had near misses. There is an increasing number of children living in the area, if traffic flow increases then I demand Traffic Police to be present on a regular basis, not only at school times. If these concerns were considered as part of the proposal I would be in agreement. 55 I have been a resident of Waikuku Beach for 16 years and while I appreciate upgrading of services and realise that time does not stand still, I do not want to lose the rural feel of our beach settlement. I am against the proposed changes for the following reasons: Our family moved to this area because of the rural nature. I believe in the safety of our children within this community but do not consider it necessary to change the roading because the school has changed sites & moved to Pegasus. There is an adequate cycle track at the edge of the forest which enters Pegasus for anyone wanting to bike. I see no reason at all to move cars and school bus off the Main Rd. I see no need to divert traffic when there is access from the rear of Pegasus along the forest track or existing access from SH via Beach rd. Potential for boy racers if Kaiapoia Pa Rd was upgraded. I consider Kaiapoia Pa Rd to have extreme cultural significance for this area and I believe this should be preserved. 85 Please note: This submission is made on behalf of the school and takes into account feedback we have received from our school parents as well as the wider Waikuku and Pegasus community via a survey we did (attached for your information). Our primary priority is the safety of our school children. Individual staff, parents and board members hold their own views on matters relating to Kaiapoi Pa Road, and have submitted their feedback to you separately. ID What do you think about giving preference to farm vehicles, stock, pedestrians and horses on Preeces Road, and discouraging through traffic to State Highway 1? **Summary** 62 responses. 47 explicitly support favouring farm vehicles, stock, pedestrians and horses on Preeces Road and discouraging or preventing through traffic to and from SH1 One of these suggests that all motor traffic should be discouraged except for farm vehicle, emergency vehicles and buses 6 state that Preeces Road should stay open as a through route for all traffic as at present 6 state no preference or support retaining through access to SH1 4 don't answer this question precisely but express concern about the safety of the SH1 intersection Several comments contain questions eg 'how would this be achieved' or suggestions about how it could be achieved and some include requests for changes at the SH1 Preeces Road intersection. Concerns are expressed about access to Kaiapoi Pa monument, and asking the council to maintain the rural nature of the road. Among these comments are also concerns about slowing the traffic, and not doing anything to encourage speed. I agree that the use of this road should be limited as much as possible to school traffic, farm vehicles, pedestrians and cyclists. I'm concerned that Pegasus residents nearest Preeces Road will try to use it to

Highway 1 are prohibited through road design and traffic signs. This is a good idea. There is a main way in and out of both Pegasus and Waikuku. This will create a safer road for the main users.

gain entry to Pegasus from the Main Road, so would make the suggestion that right turns from State

I agree....the turn off from the Main North Rd into Preeces Rd is dangerous....

I agree with preference be given to farm vehicles, stock, pedestrians and horses. I agree with discouraging through traffic to State Highway 1 possibly with a 20 to 30 km speed restriction, a Left hand turn only onto State Highway 1 with any traffic moving from east to west only and no entry from State Highway 1 I think that would be good 14 18 A) The road should remain rural i.e. for the locals, farmers and recreational people. It should not become another speedway for petrol heads that don't obey speed limits. Or that like to do burn outs at night. The road has a special character which should remain. As a property owner in Waikuku beach my preference is that the improvements of this road primarily 21 address the needs of pedestrians, cyclists, horses and farm vehicles. 23 Agree traffic should be discouraged from using as an access to SH1 25 Good idea 26 Great 28 We also believe that giving preference to farm vehicles, stock, pedestrians, cyclists and horses on Preeces Rd is a great idea and we don't think this route should be used as a main thoroughfare to get to SH1. Keeping Preeces Rd unsealed should remain to discourage its use as a main thoroughfare and hopefully to stop" hoons". The rural nature and surrounds also needs to be preserved. I agree that Preeces Road shouldn't be a thru road for cars to the highway. But how do you stop 31 that? Many people would want to access the highway as a shortcut from the north side of Pegasus 33 a) Preeces Rd: discouraging access to SH1 sounds sensible 1 - please maintain the rural nature of the road, its undulations, curves, trees at the side and narrowness 34 in places - we don't need a SH1 alternative. Overly 'enhancing' and 'improving' will detract. A good idea - I think the main entrance to Pegasus should be encouraged as the only entrance/exit. 35 I support giving the preference to farm vehicles, stock, pedestrians. horses (and cycles) on Preeces Road and discouraging the use of this road for access to/from Pegasus. However 'discouraging' would not in my view be an adequate strategy. I would prefer to see one (or more) of the following: -A locked gate (or gates, being one at each end) on Preeces Road, with pedestrian/cycle/horse access alongside, with key access to the farms and other landowners affected. I am aware that Pegasus Residents aspire to a second exit from Pegasus in the event of a emergency, such as a civil defence matter, and this could be addressed either by the farmers, emergency services or civil defence having the means to open the gate. I'm also aware that the residents value the security that having a single access to their town provides, which would of course be maintained if this option were developed. A prohibition on turning left onto Preeces Road when exiting Pegasus, and a 'no entry except for farm access' to address the traffic that will, seeing a short cut, come from Waikuku. Both the above to be enhanced by road shaping/engineering to reinforce the strategy adopted. The right turn from State Highway 1 onto Preeces Road should not ever have been permitted. Kaiapoi Pā Road should be restricted to light vehicles only, except for access (which enables the buses to transit the road) 38 I fully support that proposal. The road should be able to accommodate all potential functions and be used just like an ordinary country lane. Warning/Caution signs should be erected for livestock, cyclists, farm vehicles, etc. Yes stop through traffic. Farmers, stock, and horses have traditionally used this Road and should still safely 42 be able to use it. 43 The Preeces Road suggestion has merit if it does not cause disruption. No doubt the local farmers will have more ideas about this. 44 I think this is great will there still be car access from SH1 to gain access to the Pa? 45 Great idea as that corner with the state highway is a tricky one to use Is the intention to put up signage to discourage use of Preeces road, or is it hoped the existing form and 46 shingle surface will naturally deter any growth?

47	Agree - but they need to ensure that people still can access the Pa site
48	Yes I like this idea. We would utilise Kaiapoi Pa Road if the access is created with preference to pedestrians and cycling. We have family living in Waikuku and with x2 5 year olds this would be an asset to us being able to bike and walk to visit them. Due to this a speed limit would be preferable for us.
50	I think this is excellent, particularly for pedestrians, cyclists and horse riding and he speed limit should reflect this.
56	I would definitely support discouraging traffic from State Highway 1. It would be disappointing if the new road became a raceway through to Waikuku so anything to discourage this I would support.
57	1. Giving preference to I emphatically support this
58	I support this, due to the safety issues. Not sure about the practicalities though.
59	Strongly in favour
60	I think this is an excellent idea but I wonder how it will actually work in practice. I also wonder how any horses will get to Preeces Road if they have to travel down a busy Kaiapoi Pa Road or State Highway 1. There is no proposal for any shared horse riding path along the route and nobody that I know of that lives along Preeces Road owns or rides horses.
62	Great idea but at the moment Pa Rd and Stokes Rd are used a lot more by stock, farm vehicles and horses.
63	Good idea
64	I agree
65	I strongly agree that Preeces Rd should NOT become a through road for regular uses. This would increase the amount of traffic turning off and onto state highway 1 at this intersection, which as a regular user of this area would create a high risk situation for accidents to occur. We already see this often enough at the Main N Road and Sandhill Rd intersection. Access to Waikuku Beach is sufficiently served by Waikuku Beach Rd. Use by farm vehicles, stock and pedestrians should continue.
66	I agree, this will discourage the route being abused and speeding through using it as a shortcut for any driver wanting to get off the SH1.
67	A) The CDHB supports giving preference to local users on Preeces Road and discouraging its use to access State Highway 1.
69	In the short term, I agree as where Preeces road meets SH1 would be a dangerous intersection at present. I do however think this should be upgraded in the future to tar seal and the intersection be improved be able to be used as another entry/exit to Pegasus as it currently only has the one which I believe from an emergency perspective is risky.
70	Yes, it is a good idea.
71	I agree with this. General traffic on Preeces Rd, should be in emergencies only. Perhaps narrowing of the road and landscaping at that point, plus signage, could deter drivers from going that way.
72	Correct allocation.
73	I completely agree. Otherwise this will become a through road for people living in Pegasus traveling North.
74	This design of this roads needs to be prioritised for pedestrians and cycles. Purpose need to be for access from Pegasus to Waikuku and discourage motorised traffic not encourage it. It is my view that there needs to be restricted access from State Highway 1. Any through traffic with the exception of farm vehicles, stock, pedestrians, horses, school bus should be heavily discouraged with speed mitigation measures, road design (speed bumps, reduced straights, narrow width). I would like to note that there are already too many speeding vehicles in this area given the remoteness and unpoliced nature of rural side roads. Examples Beach Road and Kings Avenue.

75	I am in favour of pedestrians and cycles using this access route to and from Pegasus and Waikuku. As a mother of two primary school children I can see the benefit this will have for an easy cycle to school – encouraging healthy activity. I am in no way in support of it linking in with SH1 – all association with fast road traffic must be discouraged to maintain a rural feel and a safe route for our two communities. With this in mind I am in favour of a walk way / cycle path and no upgrade to the existing road or opening up of the Kaiapoi Pa road through to Pegasus unless restricted to emergency vehicles /access if required. Should both opening and upgrade take place, then it's essential that a design be done which deters both fast speed and heavy use of motorised vehicles. There is much talk in our Waikuku community that speeding cars are already an issue, especially along Kings Ave towards the Stop bank.
79	I think through traffic should be discouraged giving priority to all of the above plus the metro and school buses. I see this an opportunity to change the junction with sh1 and Preeces road to discourage people from turning right into Preeces road off sh1. As it stands now it's a dangerous turning.
83	Give preference to farm vehicles etc. discourage through traffic to State Highway 1. Security camera at Preeces /Kaiapoi Pa/ Tiritiri Moana junctions
85	We agree that access to Preeces Road from State Highway 1 should be discouraged. Also, traffic should not be able to exit Pegasus and enter State Highway 1. The current exit routes from Waikuku and Pegasus to State Highway 1 should be the only ones able to access the main road.
	Preeces Road should stay open as a through route for all traffic as at present
16	a) No! Preeces Rd should receive the same upgrade as Kaiapoi Pa Rd because Pegasus residents close to it may prefer to use it; also Waikuku residents wanting to use it as an alternative to Waikuku Beach Rd.
27	I think people coming from the north are going to use Preeces Road regardless of whether it is sealed or not. It'll cut out a few minutes of travelling particularly for those living in North Pegasus.
29	Rubbish. People will still use that road as an access type. They won't go through Waikuku Beach to get there and the road will end up being used but not suitable. You'll then need to get that road upgraded anyway. The only cyclists that will use a shingle road are mountain bikers. Road cyclists who could actually benefit from it being sealed won't *ever* use it.
51	Through traffic should be encouraged, as the Kaiapoia Monument should be an interesting tourist and local attraction.
68	It should be opened and encouraged for use as access to SH1.
77	We support maintaining Preeces Rd usage and access as at present.
	No preference either way
2	I don't really care who has preference. It would be nice to have easy car access to Waikuku from here. I think I might also be inclined to extend my walks around Pegasus, to the bright lights of Waikuku too. I would like to be able to turn left on to the main north road from Preeces road but am happy for the right turn to be stopped.
8	A: No preference
17	I don't mind if traffic can access Kaiapoi Pa Road from SH1
41	Priority should be given to all road users not just vehicles. Cyclists, horse riders, stock and farmers should not be put in danger from the inevitable rat runners. Children need to be encouraged to make their own way to school without a car.
49	No opinion
76	Not sure
	No specific answer to the question but concerned about the safety of the SH1 intersection
5	State Highway #1 is a busy and often dangerous road, turning left and right on and off State Highway #1 through heavy or fast moving traffic is hazardous. Turning right from SH1 onto Preeces Rd is an especially dangerous manoeuvre as cars travelling north carry around the bend and need to be alert to stationary vehicles waiting to turn onto Preeces Rd.

- As a part time resident of Waikuku Beach, I am pleased with the proposals to improve access in this area, however I would like to point out one major area of concern. Has there been any plans for the intersection of Preeces Rd and Main North Rd. As you are aware this main road is 100kph at present, and traffic travelling north on SH1 will be able to make a right hand turn into Preeces Rd. As you know the correct road rule is to pull to the left to let approaching traffic through, and then make the turn when the road is clear. However, many motorists do not obey this rule, and move to the centre of the highway and stop, waiting for an opportunity to turn. As this intersection is on a curve, the degree of turning difficulty is increased, as approaching vehicles can be obscured, and could lead to a disastrous 'head-on' crash. A couple of ideas to prevent loss of life would be: either a Right turn dedicated lane marking on SH1, or better still, a 'NO RIGHT TURN' island on SH1 and only allow a LEFT TURN into Preeces Rd from SH1 north, and a LEFT turn out of Preeces Rd to SH1 south. This may have the effect of 'discouraging' traffic on Preeces Rd,--- can you outline how your proposals would be effected? I expect Transit NZ would be involved in this plan somewhere?
- The second concern is your statement regarding the use of Preeces Road and your method or signage to discourage access to the Highway. Just how will you be able to discourage the general user from using Preeces Road? Certainly a sticky one, but how?
- 80 If, as noted in point #6 of the Project Features, Preeces Road is to remain unchanged how will the above road users be given preference over normal vehicular traffic. I understand that Preeces Road is to remain unsealed but what other measures is the Council proposing to make the road more accessible to farm vehicles, stock, pedestrians, cyclists and horses while discouraging use of the road to access State Highway 1?

The Preeces Road intersection with State Highway 1 has safety issues since it is located on the outside of a bend therefore any increase in traffic through this intersection is a safety concern. Connecting Tiritiri Moana Dr in Pegasus to Preeces Rd/ Kaiapoi Pa Road will inevitably increase traffic through the Preeces Rd intersection. Preeces Rd/Kaiapoi Pa Rd is currently used by some Waikuku residents as an alternative access to Waikuku therefore opening up the road to Pegasus will mean some residents and visitors to Pegasus will use this alternative route. Before this project goes ahead robust measures to discourage use of Preeces Rd need to be determined and included in the construction schedule. One suggestion would be to make Preeces Rd left-in and left-out at its intersection with State Highway 1, obviously this would require consultation with NZTA.

What do you think about including a shared cycle and pedestrian path, either separated from the road itself or an on-road cycle lane?

Summary

- 78 comments
- 65 state preference for a shared cycle/ pedestrian path or a separated cycle path. (Any comments that include the words 'cycle way', 'cycle path', 'Separated', 'segregated' or 'off road' are included in this count. Some of these say that unless there is a separate cycle or cycle pedestrian path, then the project should not go ahead, or should wait until funding is available for the path
- 4 state that an on-road cycle lane would be good
- 5 are in support of a cycle facility but do not specify a separated path. From the comments it is not possible to say that these people are specifying a separated pathway or not
- Two say that there is no need to change the road at all one says that the SH1 route is satisfactory, and the other says that the beach track is satisfactory and that the money would be better spent improving the SH1 / Waikuku Beach Road intersection.
- One asks whether there would be a cycle track. Perhaps this one could be added to those in support of a separated path
- Three make various suggestions for expanding and linking this cycle path to others in the area to make an integrated cycling network
- One says that a separated cycle path would be required if higher than 30kph speed limit set
- Various reasons for supporting and encouraging cycling and walking (health, environment etc) are given.

Preference for a shared cycle/ pedestrian path or a separated cycle path

1 Path for biking and golf carts.

A separate shared lane, off the road, would be great, safe for kids too. Cycle and walking track would be nice. 3 We feel that the cycle track is a great idea and would recommend a physical barrier between the cars and the bikes; e.g. a wire cable and posts. Our experience has shown that white lines offer cyclists no protection, particularly when we are talking about unpredictable children and careless drivers. Good work team. 4 I think a cycle path would be fantastic as there are a number of locals, myself included who do cycle down Kaiapoi Pa Road – I could see the potential for school children and their families to be cycling to school from Waikuku via this route too. 5 Having safe access for Waikuku children to Pegasus School would be of great benefit. Kids should have the ability to ride bikes to school where at all possible and this would enable this. It would also save significant time for buses and school runs. I think the linking of this road would bring the two communities closer together, great for business interests (and therefore the region) I would like to see the rural environment protected and enhanced in fact on the road. I think a cycle track/lane would be very important. The road will continue to have curves and a dedicated cycle area will protect walkers, cyclists and children. I believe it is essential to have a separate cycleway along the Kaiapoia Pa Road as: (a) this will be a main route for children cycling to school and they need to be safe; (b) exercise should be promoted as a healthy community strategy and a cycleway will encourage this; as well as physical health and co-ordination, children can develop more awareness about dressing for the weather, noticing their environment (plants, litter on the road, seasonal change, weather change) (c) this is an opportunity to reduce the need for motor transport and all the environmental implications of this(d) a safe cycleway is in keeping with other plans for Waikuku community developments relating to motorcars and people; motorcars not being seen as the most important thing on a community transportway (e) noise pollution will be less in the community; less traffic will be roaring off at the same time if people, including children, have a cycle option(f) the attractiveness of Waikuku and Pegasus for recreation: this is an additional asset for offroad cycling; and could be incorporated into cycling events and triathlons (g) to be able to cycle or walk enjoyably between the settlements of Waikuku and Pegasus would increase community bonding between the two townships, as people passing each other by foot or cycle are likely to greet each other as they pass by, whereas this just does not happen with car transport (except for road rage communications). Overall, my opinion is that if there is not enough space for a carway and a cycleway, then the carway should be eliminated. I hope you will give serious consideration to my points of view. Great idea to have a cycle /pedestrian path 1. I do think it would be major oversight not to include a cycle lane or track within the upgrade. Of all the times to include a cycle path, it would always be cheaper to achieve with the road upgrade. The benefits for the community, especially the kids would include; 1. A safe route for primary children of Waikuku to cycle to school in Pegasus, with the fitness benefits included free!! 2. Much more leisure activities able to be organised between Waikuku Beach and Pegasus communities .ie Triathlons to include the beauty of both areas. 3. Healthier Mums and Dads that may dust off the old bike and join their children on the cycle to/from school. 4. Less traffic and delays to deal with than State HW 1. 10 Preference would be to have a separate cycle way as it is much safer for bike users. If this had native plants dotted alongside it, it would look attractive as well. 11 We think this a fantastic proposal however we feel strongly that the road upgrade should only go ahead if a cycleway is included. 12 I believe this is a must....it is a windy road for children to cycle along, cars will upon them before the driver has seen them. 13 I agree with a shared cycle way and pedestrian path separated from the road itself.

14

That would be a must have, separated if possible

1. The main aim of the project is to allow the use of traffic (including cyclists) between Waikuku Beach and Pegasus town to make their journey off of SHW1. I would assume the expected traffic numbers to be low, so why the need for two way traffic for the entire length of roadway? 2. A cycle lane must be included and kept separated from the mainstream traffic by a reasonable distance. The fact that primary school children are likely to be cycling to school along this route; alone; must be off key concern. And, at the end of the day a crusher dust type track similar to the one currently along Kings Ave is adequate and I assume reasonably priced. I believe that ensuring there is adequate provision for the cycle, should be as fundamental to this roading project as ensuring there is adequate provision for a motor car or bus. I have been thinking on the proposal and cannot help but thinking there could be opportunity here for a more complete solution, perhaps with input from other areas of Council (recreation). Imagine an uninterrupted cycle track, Kaiapoi Pa Rd, Tiritiri Moana Dr, TKOT cycle track (Tuhaitara Trail?) Waikuku Beach Rd footpath (or better still the Rakahuri (Ashley) stopbank), Kings Ave and back onto Kaiapoi Pa Rd. This bigger picture puts the need for a dedicated, and separate cycle track along Kaiapoi Pa Rd more in focus. A cycle track that could be used by residents of Pegasus, (Ravenswood?), Waikuku, visitors, and off-course with the link to TKOT tracks extend right down to Pines Kairaki. I know of other plans that could extend/connect even further, Cathy Batchelor has been involved with this. b) Separate cycle & pedestrian path preferred for safety reasons, particularly Waikuku children biking to school. 17 This is an absolute must. There is no point in putting a road in from Waikuku to Pegasus if you do not include a dedicated cycle path and footpath. One of the main reasons for the road is extra traffic to and from school. Lots of children - including my 2 sons will bike to school if they can do so safely. B) A cycle path would be preferred so kids can bike safely to school. This to avoid home-school car traffic or reliance on the school bus. 19 My preference is for a separate cycle way like the Waikuku Beach Road has. This is for safety reasons. 22 Wouldn't it be a great asset to the area if the road was more part of an ongoing recreational route? Catering for motor transport from the outset with the continual development of Pegasus Bay and Waikuku beach will create a busier road in the future than the initial intention today. If this Road is to happen, I believe to address the needs of Pedestrians, cyclists, and horses then it would make sense to have this track completely separate to the road like many cycleways throughout NZ today. 23 If funding is available for a shared cycle/pedestrian path it should be separated from the road itself. Encourage pedestrians and cyclists to get to and from Pegasus/Waikuku in the safest way possible. 25 Separated cycle and pedestrian path is a must. 26 A Separated cycle and pedestrian path is a must so our community's children can bike to school. 27 A cycle path would be great here. In fact, it needs to take preference of landscaping/gardening. Giving families opportunity to bike to Waikuku Beach without having to use the path much further down near the beach. Firstly and most importantly we believe that a shared cycle/pedestrian path is a MUST and to have it separated from the road is the safest option given that there will be a lot of young children using this to get to and from school. We would love our daughter to be able to walk or cycle to school and knowing that she won't be at risk with vehicles would really put our minds (and other parents) at rest. Kaiapoi Pa Road is a narrow and winding road with blind corners so the safest option is to have a separate shared cycle/pedestrian path. With there being such a big emphasis on getting people out of cars and into public transport and walking/cycling, perhaps NZTA could help fund this project (if they're not already involved)? You can't put a price on our children's lives! 31 I think that the cycle way should be separate from the road. 32 I think a separate cycle way is crucial, a key feature of this road is to gain access to Pegasus school, there are going to be young children biking this road, it is windy, please they must be kept of the road.

33	We are happy with the Kaiapoi Pa Rd upgrade proposal, except the cycleway/pedestrian path should be mandatory, not subject to funding. b) A separate cycle/pedestrian path is essential for school kids and others safety. Funding must be provided for it.
34	2 - a separate cycle path is necessary to enable school kids to travel safely. This should be sealed. The reason for sealing is that not all primary age kids have mountain bikes that can cope with a rougher surface. Small wheels on bikes, scooters, roller blades and strollers all require a smooth surface to be enjoyably used. The best way to encourage kids to travel under their own steam is to make it enjoyable and safe. A sealed cycle path is an investment in healthy life choices for future generations. It should be wide enough for side by side riding along its entire length or kids will be tempted to use the road.
35	A great idea! We would use this path often to walk/bike to Waikuku.
37	Supported, without any reservation. However, whether to separate or integrate, is inherent in the ultimate speed limit adopted. If 30km/h is adopted, then integrated should be acceptable, as this would be not inconsistent with the roads around Waikuku township. If however a higher speed limit is adopted, then consideration to separation should be given as is consistent with Waikuku Beach Road.
38	Giving children the option of cycling to and from school safely instead of using the bus, promotes child fitness. I would very much like to see a sealed cycle lane separated from the road, especially if the speed limit is above 50kmph. I walk along that road on occasion and so with the likely increase of vehicle use, provision of a narrow unsealed footpath would be appreciated.
39	Separate cycle/pedestrian path please.
41	Separate - drivers are idiots
42	Due to the large amount of school children who will use the cycle lanes it should be segregated from the road
43	I think it is a very good idea to keep people off the main road and a walking and bicycle facility seems to me a "must have".
46	I believe most affected ratepayers would expect a separated bike track to be a given, in fact, concurrent with the bus, the most important aspects of this proposal. This is a unique opportunity for the WDC to show NZ some 21st century thinking.
48	I really like the idea of a separated from the road cycle & pedestrian path, due to my reasons previously mentioned.
50	A wide shared pedestrian and cycle path would be safest particularly for children cycling and scootering. I think it should be separated from the road with planting similar to that of the beach end of beach road in Waikuku next to the farm.
51	Cycle and pedestrian paths would create an interest from Pegasus residents and those who live in the district. I would prefer a separate cycle/walking path.
54	It would be great to have a family friendly cycle path available. We drove the road on the weekend, it's narrow with blind corners. I don't think mixing cars with bikes would work real well, so it would be great if the cycle path could be separate from the road. It would not need to be sealed, it could be firm packed bike paths like the ones that go through the Pegasus wetlands, but something suitable for families to ride on.
56	I think that this is a priority. Children and families need to be able to use this road to access school safely. Also if we are to promote healthy living and exercise for our children access to cycle ways and walking paths that are safe is essential.
57	2. Separate cycle / pedestrian path Emphatically support. I am therefore dismayed to see reference to "subject to funding". The only effective way to encourage, and provide appropriate levels of safety, to cyclists and pedestrians is a separate path. This is especially relevant given the school children traffic in question. It is a very short sighted decision to exclude this from the proposal (in fact it's it absolutely contradictory to what I assume is a target of the proposal which is school / local traffic). I would prefer to see something else reduced to make way for funding the separate path. Or a simpler / less polished path built from the outset with plans to upgrade in the near term. In summary, please link Kaiapoi pa road to Pegasus town but do so whilst providing the logical infrastructure for cyclists and walkers (separate path)

58	I see it as being very high priority (as high as the road itself. Would much prefer to see the cycle/pedestrian path separate to the road. I believe many recreational cyclists and walkers would use this as well as the school children (Lets do what we can to encourage the children to exercise!)
59	Yes I would like to see a separate cycle/pedestrian path.
60	I think it is an excellent idea. I believe they are always better separated from the road itself. But currently there is hardly any bicycle or pedestrian traffic on Kaiapoi Pa Road. The only traffic besides vehicular is horse on this road. I personally ride down Kaiapoi Pa Road nearly every day in the summer and then every few days in the winter. My wife also rides on the road and I hope that my young son will ride along the road as well to the beach. Many others ride horses on this road as well.
61	This proposal is a good one but it has two major "fish hooks". The first one is that I have grave doubts when the term "subject to. funding availability" is used. It usually means that the cheap option will be decided on. Until funding for a separated shared cycle and pedestrian path is available the proposal should be put on hold. The Kaiapoi Pa Road, with its many bends, is too dangerous to have anything other than a separate path for children. either walking or on cycles. the same for the Kaiapoi Pa Road. In fact, the Pa Road is more deserving of a separate pathway.
62	A separate path for pedestrians, cyclists and horses would be preferred, the road at the moment is used predominantly by farm vehicles, stock, horses, people running their dogs behind their vehicles and the occasional cyclist and the odd hoon.
63	I would like safe cycle options along this road. It is a good return loop to Pegasus after cycling the track along the coast from Woodend beach to Waikuku. A track separate to the road would be best, however as traffic volumes would not be high, a wide lane beside the road would be ok.
64	It should be separated from the road so kids can bike safely to school
65	Including a shared cycle and pedestrian path separated from the road would be a must. If this road is to have a speed limit of anything other than 50km/hr then the cycle lane needs to be separate. If the whole idea is to link Waikuku with Pegasus to remove the need for using State Highway 1 then this should be for all road users which includes cyclists and pedestrians.
67	B) The CDHB supports the development of a cycle path along Kaiapoi Pa Road and recommends a separated cycleway. Separating vehicles, cyclists and pedestrians is the safest option for all as it reduces the likelihood of modal conflict and accidents. Good quality active transport infrastructure encourages more people to cycle and walk. A separated cycleway along Kaiapoi Pa Road will improve community connectedness by enabling people to cycle and walk safely between Waikuku, Pegasus and Woodend. This may help to further reduce the volume of traffic on State Highway 1. If sufficient funding is not available for a fully separated cycleway, then a shared cycle and pedestrian path would be the next best option. Council would need to install clear signage to reduce the risk of collisions between cyclists and pedestrians. As this road will be used by public buses and school buses, an on road cycleway would pose a high risk to cyclists and should be avoided
68	Great Idea, this will make it safer for cyclists and pedestrians. However it must be sealed (not gravel) so as to allow road cyclists to use it as well.
69	Definitely need a cycle lane, preferably separate as this is safer and could also be used for runners/walkers. Only need to look at the emphasis on cycle ways nationally to realise this would be an added feature for Pegasus and Waikuku residents. I cycle regularly to Waikuku up the existing track next to the pine trees and whilst this is ok, another better option would be welcomed by all.
71	Absolutely vital - for safe passage by school children and recreational riders, as well as pedestrians with or without prams, or people on mobility scooters or in wheelchairs. I think it is more important than the road. If we are to encourage healthy lifestyles we need to increase the desire for people to get out and about.
73	I would like to see a cycle/pedestrian lane separate from the road. This would enable my children to bike to school on their own and would give me more peace of mind then a shared lane on the road. specially with the bus traveling on that road.

74	As above the road should be prioritised for cyclists and pedestrians. Other traffic should be discouraged, however I do consent that there is advantage in providing some vehicle access, namely farm vehicles, property access, emergency vehicles, School bus. In this regard it is my opinion the cycle lane needs to be separate from traffic lane. As a parent in Waikuku I would prefer my children to be actively cycling to school and to Pegasus but would be cautious in letting my young children go alone if this was dependent on the judgement of other roadway users i.e. them sharing the lane with other traffic. By providing a separate cycle/pedestrian lane I believe you will encourage more non-motorised travel across a greater range of ages. This is and should be the goal of this project and certainly not to improve the access for more motorised vehicles.
75 76	I would not have myself or my family take this route, either on foot or bike unless the pathway was separate from the road. Should we cycle to and from Pegasus, we chose to follow the forest track and therefore do not see an attraction in doing this route alongside vehicles. As I clearly out lined in my response to the previous question, I am not in favour of the road upgrade for the reasons I outlined above. Would really appreciate a shared cycle and pedestrian path desperate from the road to ensure safety for
	our Tamariki travelling to and from school.
77	We support building a shared bike/walking path on Kaiapoi Pa Rd.
78	We strongly encourage a shared cycle/pedestrian path along Kaiapoi Pa Road, we believe this would be well-utilised and provide safety for the many cyclists of the area. Although it is noted as being subject to funding, we believe the long-term benefits would surely outweigh this short-term costs.
79	A separate cycle path would be good. For the schoolchildren who wish to bike or walk to school and anybody else who wants easy access to Pegasus without a vehicle.
80	I believe that a separated shared cycle/pedestrian path is an essential element to this upgrade and should be constructed at the same time as the road upgrade. The main aim of the project is to connect Pegasus to Waikuku Beach now that the school is in Pegasus. The majority of people travelling from one town to another will therefore be school children. Upgrading the road to accommodate buses and car traffic is not sufficient. Provision needs to be given to children who wish to bike or walk to school. This is particularly important from a wellbeing point of view as it gives children the opportunity for exercise and fresh air. The path will take some children off the bus which will benefit the school bus service since some of the school runs to Waikuku Beach are full. Upgrading the road before the path is constructed will lead to children biking to school on the road which is not safe
81	We think a separate cycle/pedestrian path is absolutely necessary as the road will be used a lot by children going to school and families going on walks/bike rides between Pegasus town and Waikuku. We are certainly planning on (and looking forward to!) using the road for those purposes with our 2 young boys.
82	We would like consideration to option b – cycle path on the following basis: 1. This would align with the North Canterbury Cycle Way being an extension of Woodend to Rangiora cycle track. 2. In conjunction with the school bus and metro bus service users should have the option to cycle, certainly school aged children as part of their road safety training and experience. 3. This will provide a safer means of travel (during winter months) whereby the current access via the forest track is not useable.
83	Shared cycle/pedestrian path on Preeces Road.
85	This is imperative. We will strongly object to the road being built if the cycle track is not built at the same time. Our survey also enforces this view. Today we have 119 children currently living in Waikuku who would potentially use that access way to bike to and from school each day. In addition, there would be many children travelling back and forth along that road after school and in the weekends to visit friends, this number will increase as the houses are built in Pegasus and more families move in. Not having a cycle path would make it extremely dangerous for cyclists. Please see our attached survey. Of the 187 respondents: • 99.5% want to see a cycle track included; • 90% of respondents want a cycle track separate to the road, similar to the one on Waikuku Beach Road; • 81% of respondents want the cycle track at the same time as the road is constructed, 14% want the cycle track first and only 5% would be happy to have the road first and the cycle track in the future.
	Support an on road cycle lane
	Support an on road cycle lane I would like to see a cycle lane for children, to cycle to and from Pegasus Bay School.

29	On-road cycle lane would be best as they are safer for everyone.
44	I think an on-road cycle lane would be sufficient.
47	On road cycle lane
	In support of a cycle facility but do not specify a separated path
45	Great idea to encourage cycle use and the road is narrow
49	This would be excellent. I am a casual road biker (10-15km) and as road bikes can only be ridden on sealed
	roads the only option is to ride on the busy state highway which is quite nerve wracking.
66	It's a great idea for the kids going to and from school, and keep the speed down to keep the children safe.
70	A very good idea and is very important.
72	Good idea if within budget
	No need for change
55	I believe in the safety of our children within this community but do not consider it necessary to change the
	roading because the school has changed sites & moved to Pegasus. There is an adequate cycle track at the
	edge of the forest which enters Pegasus for anyone wanting to bike. I see no reason at all to move cars and
	school bus off the Main Rd. I see no need to divert traffic when there is access from the rear of Pegasus
	along the forest track or existing access from SH via Beach Rd.
62	A cycle/pedestrian/horse track is a fine idea although there is currently a cycle track connecting Waikuku
	to Pegasus running alongside the reserve which gets plenty of use, rather than seal the road and make it
	so much wider taking away our country identity the money would be better spent on a roundabout
	between Waikuku Beach Rd and HW1. This would improve access for all.
20	Other
30 50	Will there be plans for a cycle track on this road?
30	I also think a great cycle trail could be marked similar to what has recently been completed at Leithfeild
	beach. A route could be marked on Kaiapoi Pa road, though Waikuku beach, alongside the forest, through
ID	Pegasus and around. ⓒఈ♥
#	Do you think there should be a lower speed limit on Kaiapoi Pa Road?
-	Summary
	60 responses
	 60 responses Lower speed limit supported without specifying the speed – 25
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	be limited. Also, should have speed bumps to ensure it is not used as a race track.
18	Speed limit should be 50km max. With measures to reduce speeding. An even gravel road for the bus and
	rural traffic would do with a tarmac bicycle path.
23	Yes, particularly if a cycle/ped path is not separate from the road. Thinking about peak times for schools
	etc - cars, buses, cyclist and pedestrians all on a narrow winding road at the same time
25	Yes
26	Yesgood idea
27	50kph tops. Maybe even 30kph given its windiness. We need to embrace the slow pace nature of the area
	which is why i was in favour of the speed decrease on Beach Road.
28	If there is a separate cycle/pedestrian path then the speed limit on Kaiapoi Pa Rd could be 80km, if not
	then in the interest of safety it should be 50km or 60 km.
29	50 is fine.
31	The speed should be lower than 100kph. I believe that the speed should allow for the cyclists, (especially
	children cycling to and from school) and width of the road
32	I definitely think a lower speed limit would be a good idea, would hopefully discourage the use of this
	road as a short cut to SH1. It would also make it a safer road for school children to be on. And shows
	respect to the farmers affected.
33	An appropriate speed limit sounds sensible
37	Yes I do. Unsealed as it is, effectively keeps it quiet, and inherently keeps speeds low. Sealed as it will be,
	will inevitably increase speeds, and given the community benefit will come predominantly from our
	primary school age children travelling to school, public transport and recreational use, there is no obvious
	requirement for 'faster' travel. This is a great opportunity to incorporate a pedestrian / cycle /public
	transport orientated route, as an alternate to the faster Waikuku Beach Road. Therefore I advocate for a
	30km/h limit that will enhance safety, whilst dissuading discretionary vehicle use.
38	80kmph maximum. I would be happy with 60 or 70, but the people who live on that road should have the
	most say.
39	80kmph.
41	Yes maybe 60 km
42	Ideally 60
43	A speed limit of 80kph the same as Waikuku Road would also be a good idea.
44	Yes
45	Yes, its a gravel road
46	I would imagine, given the shape of the road and its intended main purpose, 50 kph.
47	Yes
48	Yes, to discourage State Highway use and safer for pedestrians, children and cyclists
50	Yes.
56	I would expect that it would be 80km or less.
57	Speed limit I suggest the same limit as Waikuku Beach road
58	Definitely a lower limit (70kph would be plenty)
59	yes
60	Yes! Absolutely, there is no question in my mind particularly with horse traffic
62	Yes, 50km. I feel putting a 50km speed limit on the road, leaving as a gravel road but still connecting it to
	the Pegasus road would do a great job of keeping it from becoming a racetrack and also encourage it to
	continue to be used in the manner it currently is by the people who live here.
63	Yes, 70 or 80km/h
64	Yes
65	If the cyclists are to share the road this should be 50 km/hr, if it is separate then 70km/hr should be the
	limit.
66	No more than 50
67	The CDHB supports a speed limit appropriate to the road classification and its use. As this is a local road
	intended for use by school buses, public buses, local traffic, cyclists and walkers, the CDHB recommends a
1	speed limit low enough to ensure the safety of all road users.
68	Yes 70 to 80Km/h

69	Yes - 70km max particularly if a cycle lane is included to keep it safe
70	Yes
71	Yes - maybe 70kmh
72	Yes
73	50Km
74	As with the above comments the limit should be set in regards to the cycles and pedestrians. In line with Waikuku this should be 30km/hr
75	I am strongly opposed to through traffic. I do appreciate however that should the road open/upgrade a 30km speed limit (with any additional speed bumps, judder bars etc.)
76	Yes
77	60km/h speed limit
78	Our main priority is safety. We have young children who will soon begin biking etc so want to see that the intersection where it joins Beach Road, remains safe. As such we believe a 70 km speed limit on the Kaiapoi Pa Road to be adequate, with much warning given before the proposed giveway sign, that it is a 50 km zone from there onwards. Even a stop sign instead of a giveway sign may be better. Signage that indicates that a school bus travels that way would be appropriate too.
79	Yes
80	The speed limit should match the existing speed limits on Waikuku Beach Road and Tiritiri Moana Drive which are both 50km/hr.
83	50kph
85	Yes, this is also an imperative. The point that the road enters Waikuku and Pegasus is 50km, so it is reasonable that the short distance along Kaiapoi Pa Road should be the same to ensure safety. It will need speed bumps as well as signs to enforce this. Your job, in designing the road, is to ensure the safety of those that use it and to protect the area it travels through. It will be used by children and adults walking and biking, as well as cars, buses and farm vehicles. A bus blundering down the road at 80km per hour will have a significant impact on anyone else travelling along the road. It will also have an impact on the local birds and wildlife in the area, and the farm animals there. You must also consider that there is a one lane
	bridge along that road, the speed limit needs to be such that traffic approaching from either way is able to slow to give way, or cross it safely.
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	bridge along that road, the speed limit needs to be such that traffic approaching from either way is able to slow to give way, or cross it safely. What landscaping would you like to see on the roadsides? Summary • 27 ask for native plants – one specifying groupings of taller natives making a mini bus setting intermittently along the road (light green shading) • 7 mention retaining clear sight lines for traffic and cyclists (light yellow shading and among other comments) • Several references are made to other roadside planting in Pegasus, on Waikuku Beach Road etc • Several request that planting is appropriate to the area, two referring to maintaining the rural nature of the existing road and two specifying the cultural significance of Kaiapoi Pa. • Two say grass, one asks for hedges, and others say that landscaping is not a priority, that money
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16	d) predominantly natives given proximity to Pa site.
21	Native planting roadside or trackside is always a great enhancement.
23	Always a fan of the natives due to less requirement for water (once established) and upkeep. Would tie in
	nicely with planting at wetlands
32	native
37	I would like to see landscaping consistent with the native plantings on the eastern section of Waikuku
	Beach Road. However, consideration of the future land use to the east of Kaiapoi Pā Road, which I believe
	is largely part of the Te Kōhaka o Tūhaitara trust owned lands, should be considered essential. Given the
	prevailing winds at that location any planting inconsistent with the trust's vision would effectively be a
	source of weed to the park.
38	Tussock, flax and toi toi.
41	Natives
42	Natives
43	Native grasses as used on other berms would be my choice.
44	Natives
48	Native wetland planting (cabbage tree's, flax & Toi Toi along the roadsides as a continuation of the
	Pegasus & Waikuku environments.
50	Natives planting similar to that along the beach end of beach road in Waikuku next to the farm where the
	footpath is protected from the cars on the road.
51	NZ natives to link with the historic Maori Pa.
56	Native planting.
59	Any appropriate native planting included.
64	Native flaxes
65	Keep to the surrounding country side with low growing natives. So long as they don't reduce visibility for
	the road users.
69	Natural native plants to fit in with the area
70	Low maintenance, native plants.
79	Native plantings
83	native grasses
	Planting that will retain good safe visibility
58	Just the usualgood visibility, plants to suit the conditions, speed reduction but maintaining safe space for
	cycles and pedestrians.
67	The CDHB does not have any preference for landscaping of the roadside but recommends that planting
	around the intersection be chosen carefully so as not to obscure the view of any road users.
68	Grass, open and wide so it offers a clear view of the roadsides to road users = improved safety for all.
71	low maintenance and not blocking views of oncoming traffic.
80	The landscaping needs to be carefully planned so that the plantings do not initially or at a later date after
	growth, impact on the sight distance from and to the intersection. This is particularly important since small
	children on foot and on bikes will potentially be using this intersection and due to their small size are
	particularly at risk of being obscured by vegetation at intersections so that oncoming traffic cannot see
16	them.
46	The most important aspect in planting consideration is that clear vision, especially approaching corners, is
	carefully thought out. It would be wonderful to see some fruit trees planted along the way to help children
	appreciate and connect with Nature, it's bounties and its seasons.
17	Grass A grass strip between road and feetnath would be a good barrier. Other than that I think it should be left
''	A grass strip between road and footpath would be a good barrier. Other than that, I think it should be left
62	as is it naturally - it's a rural road and should look like one as much as possible. Grass is fine, there are already lovely views of farm land and stock
- 52	No preference
2	Landscaping, no preferences.
18	Landscaping should be low priority, low growth, low maintenance. We pay enough rates and don't always
	see the results of this. No money should be spent on fancy landscaping by landscape architects while there
	is no money to maintain. There is enough nature around to create a interesting environment.
	Culturally in keeping with the area and nature
L	Constrainty in Recepting with the area and nature

45	Appropriate for the area
46	I've just returned from cycling Waikuku Beach to Pegasus via the Pa Road (then back through Pegasus via
	our bike track alongside the pine plantation/treatment ponds). Mindful of the intended project as I
	travelled, I would like to add a couple of observations for consideration. As noted, the intention is "to
	retain the rural nature" a very important experience in a world where landscapes have come second to
	vehicle roading dictates and younger people have less opportunity to interact with the countryside as part
	of their everyday lives.
47	All earthworks that may occur need to ensure that the correct protocols are adhered to given the cultural
	significance of the site.
57	4. Landscaping. Easy! Existing strategy applied in this rural coastal area as per Waikuku Beach road.
	Potential features associated with the Kaiapoi Pa would be interesting.
74	Some soft planting to improve the pedestrian feel of the access and not that typically seen on a roadside.
	Something similar to Pukeko walk in Waikuku. I would like to note that this is a transition to/from
	Waikuku Pegasus. It is neither Pegasus nor Waikuku and in this regard the design of planting should be
	sympathetic to this and reflect the transition rather than just being an extension of the Landscaping
	already seen in Pegasus
85	It is a rural road and should keep that natural beauty as much as possible.
27	Miscellaneous West land on house a surface at he
33	Would rather have a cycle path.
60	Make landscaping looking natural, and clear of pathways.
00	None if it precludes me and others on horse back from getting down the road to the beach or to
72	neighbours places.
73	Hedges Change and the first law assistances.
	Cheap landscaping will be fine, low maintenance
75	I do not see this as very important. I believe the current unspoilt look has its own rural charm and
	appreciation for the fields and its history.
76	
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Also there needs to be a stronger consideration for the identified route given the immense historical and cultural significance of the site - I am yet to receive confirmation from the runaka that correct consultation protocols have been followed. 51 I would like to strongly recommend that the Waimakariri Council requests that Ngai Tahu upgrades and maintains their Pa site...it is extremely disappointing to see this historic site in such a dilapidated state. As a primary school child, growing up in the community, we visited the Pa site on many occasions where we studied local Maori history. Recently I visited the site with overseas visitors ...what a disgrace to our culture and nation. Please liaise with Ngai Tahu to have this site resurrected to its former very tidy and informative state. Thank you. Hoons Summary One response expressing concern that this change will attract hoons, and whether the police have been asked for their opinion. 38 My concern is that this stretch of road will become a target for hoons. I would like to know the Police have been informed about this proposal, and if this starts to become a problem they would be prepared to do something about it to nip it in the bud. ID Road width # **Summary** Why widen – and accommodate two way traffic when traffic volume will be low? A 6 metre wide road not wide enough Five metres wide would be sufficient and would reduce traffic speed, maintain the rural environment, discourage short cutting to SH1. 15 The main aim of the project is to allow the use of traffic (including cyclists) between Waikuku Beach and Pegasus town to make their journey off of SHW1. I would assume the expected traffic numbers to be low, so why the need for two way traffic for the entire length of roadway? The "narrow winding nature of Kaiapoi Pa Rd" should be considered one of its positive attributes and enhanced where-ever possible. 21 A 6 metre road, for 2 way traffic, including a bus service will not adequately address the safety requirements of either pedestrians/cyclists or horses. Cyclists should legally be passed with a 1.5 m clearance. Despite good intentions of use of public transport, I suspect the convenience to pick-up/drop off by parents especially the younger children will add to traffic, which on a 6m road with bus and car traffic will deter the school children that could ride to school from doing just that. 46 Given the expectation is this lane will be mainly intended for a few buses (on an hourly rate) and to encourage cycling into Pegasus and the school, it would seem excessive to create a sealed surface six metres wide, as this will "flatten out" and create a conventional road, encouraging conventional driving attitudes (speed, lack of any different approach, awareness, preparedness to accept the car is not the ruling mode of transport but just one of several, equally). I think five metres would be more than adequate in that it would: 1. Automatically slow vehicles (the accepted psychology of traffic speeding up as soon as a road is widened; as in passing bays) and thus the experience and minimise accident opportunities. 2. Maintain the rural lane experience, rather than just a short cut from A to B. 3.Discourage people from using it as a shortcut out to the Main road along the continuation to Preeces road. Five metres allows a metre wide cycle/walking track alongside the lane, except for crossing the Taranaki, where there is room behind the barrier (with a little work) especially if the bridge is left at four metres for traffic, reinforcing it is still a country lane, rather than a motorway. Five metres and a cycleway, still retains the ambience of the countryside, without having to remove natural contours and vegetation/trees and allows the possibility for planting more trees, possibly as a visual "safety barrier" between the cycleway and the lane. You may be well aware there have been many studies in Europe, of the immediate change in driver habits, when roads are narrowed and little delineation between the surface for cars, buses, cycles or pedestrians, resulting in a more observant and

respectful approach.

Kaiapoi Pa Road /Waikuku Beach Road crossing

ID

Summary

- Consider a designated crossing point or facility across Waikuku Beach Road.
- Consider STOP controls rather than GIVEWAY controls at this intersection.
- As far as the junction of Pa & Beach Road is concerned, it is currently quite a difficult intersection to traverse on a bike, given cyclists returning to the village (either turning right to the beach, or across to King's Avenue) must all cross somewhere at that point. It may require a designated crossing, either further to the West across Beach Road and then consideration be given to encouraging those heading East (along the "Pukeko Walkway") towards the beach, to travel a little further North, along King's Ave (away from the intersection) before crossing Kings Ave and entering the walkway.
- I would like to propose a Zebra crossing where Kaiapoi Pa Road crosses Waikuku Beach Road onto Kings ave to enable a safe crossing for children as cars tend to speed over Waikuku Beach Road.
- Additional feedback Installation of Give Way at intersection with Waikuku Beach Rd as per point #8 of the Project Features. The Council should consider installing STOP signs at this intersection and upgrading the Waikuku Beach Rd/Kings Ave intersection directly across from it to STOP also. The sight distance from the Kaiapoi Pa Rd/Waikuku Beach Road is not great and may not meet the visibility requirements for a Give Way. STOP control at both legs of this intersection will help reduce traffic speed and will also help to decrease the risk of conflict between vehicles at the intersections and on-coming traffic on Waikuku Beach Rd and also conflict between vehicles at the opposing legs of the intersection.

Stokes Road

Summary

- One asking how Stokes Road 'fits' into the proposal, and the other wondering if people will use Stokes Road as a short cut to SH1
- Also keen to know how Stokes Road fits into these plans.
- I'm wondering if there is potential for a problem with increased usage of Stokes Road by people wanting a short cut to the state highway or from there into Pegasus?

Pegasus Bay School

Summary

- Two comments that the school was not consulted prior to the leaflet being distributed
- It is interesting to note on your flyer that you reference the school bus route and the relocation of Waikuku school to Pegasus bay as your rationale this is concerning as a trustee of the school when we have received no consultation regarding this.
- Being involved in the school community I would like to say that I am disappointed that the literature that has been given out has inferred that this has been influenced by demand from school, when the school has not been consulted at the time when the literature was released.

Horses

Summary

- A request for a dedicated horse path, and suggesting that it would be better to improve the SH1
 Waikuku Beach Road intersection.
- I would like to see a dedicated horse path from Kaiapoi Pa Road to the beach. Horses are often considered as afterthoughts in traffic management and should be considered at the forefront here. There are major safety concerns when large numbers of cars, buses and trucks interact with horses when adequate space is not provided by drivers. In my experience when riding many drivers are not courteous drivers. I think more cars will be travelling from Pegasus Town to Waikuku rather than vice versa. In my opinion the better option is to increase access to and from the state highway at the Waikuku Beach Road connection.

Consultation

Summary

- One criticism of the framing of questions in the leaflet, such that they imply that the decision to open Kaiapoi Pa Road has already been made, and the decision was due to increased demand as a result of the school being moved.
- Furthermore, I would like to make a comment regarding the way the questions have been framed. I believe this inferred that it has already been decided that the road will go ahead and the questions relate to the nature of upgrade. This is a very sensitive and emotive subject when considering the connection of two quite different communities in this way. We have experienced this directly when transitioning from Waikuku School to Pegasus School. Any communication to the communities must therefore be

i	
	approached in a way that is sensitive to this. I don't believe this to currently be the case. There seems to
	have been a distinct breakdown in communication, inferring that the road is likely going ahead due to
	increased demand from Pegasus Bay school when the school and parents have not yet been consulted and
	no clear evidence of demand has been presented.
85	There needs to be full and thorough consultation with local iwi. This process needs to be made public.
	There must be a guarantee that all of the recommendations in the cultural impact report will be followed.
	A clear timeline needs to be issued so that everyone is clear on where we are currently in the process and
	what the next steps and timelines are. Consideration also needs to be given to local wildlife, the birds in
	particular, who live along that stretch of road.
	Other comments in general
	15 closing comments in favour of this proposal – tow of these have a proviso – one that it must include a
	cycle path and a low speed limit, and the other that all motor vehicle traffic should be restricted
	Support for the project
2	Looking forward to having the two townships linking up. Good for the school kids too. Thanks for the
	opportunity to comment.
12	Waikuku Beach is quite isolated, would be helpful to have a road through to Pegasus
13	This is an excellent move in the right direction in bringing our together local communities and is long
	overdue, thank you well done.
14	We ride bikes along Kaiapoi pa road a lot this will make it safer.
18	Other than the above: we are really in favour of the connection.
35	I think this is a fantastic idea and fully support this proposal!
37	Overall I emphatically SUPPORT this proposal subject to the considerations provided.
41	If funding is limited, prioritise school traffic non vehicles
42	Safety is paramount for all road users
43	I hope this change will be implemented before too long.
65	This is a great concept to reduce the amount of traffic having to drive out onto state highway 1 to travel
	between the 2 beach suburbs. It just needs to be done right from the start and having the opportunity to
	have a say has been great. Thanks
68	Why are we waiting for this, just get on with doing it.
69	I am hugely in favour of this roadway and cycle way, will bring Pegasus and Waikuku communities better
	connected, save time travelling via the SH1 and be a lot safer option.
71	Bring on the cycle walkwaythe sooner the better!
	In support but with a proviso
32	I support it if there is a separate cycle way and a low speed limit
74	I am generally in support of this access, providing the priority be given to cyclists and pedestrians. As
	mentioned in my previous notes other vehicles, namely motorised vehicles should be restricted. I am
	cautious that the very process of upgrading including widening and or straightening the road, will
	encourage more traffic not less as it should be.
85	There needs to be full and thorough consultation with local iwi. This process needs to be made public.
	There must be a guarantee that all of the recommendations in the cultural impact report will be followed.
	A clear timeline needs to be issued so that everyone is clear on where we are currently in the process and
	what the next steps and timelines are. Consideration also needs to be given to local wildlife, the birds in
	particular, who live along that stretch of road.
	* We will only support this proposal if: • there is a separate cycle track; • the speed limit is defined and
	measures put in place to ensure it is adhered to (e.g. speed bumps); • if the local iwi are also in support of
	it - following their consultation and the cultural impact report.
	0 · · · · · · · · · · · · · · · · · · ·

Pegasus Bay School Submission in full

ID#85

Kaiapoi Pa Road feedback from Pegasus Bay School Questions with an asterisk (*) require an answer. Note: There is no public hearing available for this submission.

Your name *: Pegasus Bay School

Your address *: 5 Solander Road, Pegasus Your postal code *: 7612

Your phone number *: 039207000

Your email: principal@pegasusbay.school.nz

Would you like an email copy of your submission Yes, I have kept a copy of this document.

Please note: This submission is made on behalf of the school and takes into account feedback we have received from our school parents as well as the wider Waikuku and Pegasus community via a survey we did (attached for your information). Our primary priority is the safety of our school children. Individual staff, parents and board members hold their own views on matters relating to Kaiapoi Pa Road, and have submitted their feedback to you separately.

What do you think about giving preference to farm vehicles, stock, pedestrians and horses on Preeces Road, and discouraging through traffic to State Highway 1?

We agree that access to Preeces Road from State Highway 1 should be discouraged. Also, traffic should not be able to exit Pegasus and enter State Highway 1. The current exit routes from Waikuku and Pegasus to State Highway 1 should be the only ones able to access the main road.

What do you think about including a shared cycle and pedestrian path, either separated from the road itself or an on-road cycle lane?

This is imperative. We will strongly object to the road being built if the cycle track is not built at the same time. Our survey also enforces this view. Today we have 119 children currently living in Waikuku who would potentially use that access way to bike to and from school each day. In addition there would be many children travelling back and forth along that road after school and in the weekends to visit friends, this number will increase as the houses are built in Pegasus and more families move in. Not having a cycle path would make it extremely dangerous for cyclists. Please see our attached survey. Of the 187 respondents: • 99.5% want to see a cycle track included; • 90% of respondents want a cycle track separate to the road, similar to the one on Waikuku Beach Road; • 81% of respondents want the cycle track at the same time as the road is constructed, 14% want the cycle track first and only 5% would be happy to have the road first and the cycle track in the future.

Do you think there should be a lower speed limit on Kaiapoi Pa Road?

Yes, this is also an imperative. The point that the road enters Waikuku and Pegasus is 50km, so it is reasonable that the short distance along Kaiapoi Pa Road should be the same to ensure safety. It will need speed bumps as well as signs to enforce this. Your job, in designing the road, is to ensure the safety of those that use it and to protect the area it travels through. It will be used by children and adults walking and biking, as well as cars, buses and farm vehicles. A bus blundering down the road at 80km per hour will have a significant impact on anyone else travelling along the road. It will also have an impact on the local birds and wildlife in the area, and the farm animals there. You must also

Waimakariri District Council DRAFT Consultation Report 15 March 2016

consider that there is a one lane bridge along that road, the speed limit needs to be such that traffic approaching from either way is able to slow to give way, or cross it safely.

What landscaping would you like to see on the roadsides?

It is a rural road and should keep that natural beauty as much as possible.

Any other comments?

There needs to be full and thorough consultation with local iwi. This process needs to be made public. There must be a guarantee that all of the recommendations in the cultural impact report will be followed. A clear timeline needs to be issued so that everyone is clear on where we are currently in the process and what the next steps and timelines are. Consideration also needs to be given to local wildlife, the birds in particular, who live along that stretch of road.

Would you like written feedback on your submission? Yes, I would like written feedback on my submission

Overall, do you support this proposal?

* We will only support this proposal if: • there is a separate cycle track; • the speed limit is defined and measures put in place to ensure it is adhered to (e.g. speed bumps); • if the local iwi are also in support of it - following their consultation and the cultural impact report.

Notes from the Drop In session 10 February 2016

In attendance

Barbara and Edgar Brown Preeces Road

Nicky Shelley (Tull)

Brian Stokes

Bruce Carter, 56 Rotten Row, Waikuku Beach brucejencarter@xtra.co.nz

Tania Turia

Kay Wenham Pegasus

Caroll Keenan 68 Preeces Road carake@xtra.co.nz

Kevin Weet 66 Preeces Road

Rhonda Mather 60 Infinity Drive

Marten Uph??? 36 Queens Ave 0276751459

Issues raised and discussed

- Waikuku and Pegasus people will take a short cut to SH1 to go south
- How to prevent access to Preeces Road

Nancy Stanton 183 Rangiora Woodend Road 312 7096

- o A chain and key farmers have the key
- o A gate
- o A sign saying no thoroughfare
- o Retractable bollards, barrier arm
- Kerb build out, chicane, farmer doesn't want to have to bother with keys or auto opening devices
- Preeces Road /SH1 intersection
 - o NZTA intend to put in a right turning bay. Will this attract people to turn thre
 - o Preeces Road is not a full road reserve not wide enough as a propoer road.
 - Making Preeces Road safer gives mixed messages when combined with Kaiapoi Pa Road opening so need some more clarity to deter new users.
 - Waikuku Beach Road/SH1 intersection is not good for a left turn. Preeces Road will be attractive as a short cut, not for Pegasus people but for Waikuku beach people
- Kaiapoi Pa Road
 - o Brian Stokes concerned that he will be asked to cut back his trees
 - o Mentioned owls, pheasants etc that must not be disturbed
 - o Hoons will the seal increase or reduce the honing
 - o Lower Speed limit is important
 - Ease the bends will this encourage speeding or make it safer Ken explained side friction
 - o Cycle path must be included at the same time or it wont be worth doing
- School survey to be done

Cycling

- School has 50 60 cycling children (Roger)
- O DO we just need an upgraded cycleway on the forest route instead of upgrading the road?
- This path has the children out of sight for 20minutes surveillance on KP Road is superior and safer
- One lane bridge is a concern for cyclists is there an option for a separate bridge for cyclists?
- o If the cycle track were on the east (sea) side, ther are some places where the fence is on top of a bluff
- o Essential to have the whole cycleway integrated int tohe plan for the road from the
- Want to see a master plan for the whole project to understand feasibility of the whole project
- Are Pegasus Town roads safe for cyclists? The whole route to school needs to be set now
- Could be a shared footpath to the school
- Crossing Kings Ave is dangerous could there be a zebra crossing over Waikuku Beach
 Road

Bus

- o WDC should tell Dave Stenhouse that the bus should go in a loop to include Waikuk town and back on KP Pa Road.
- o Is there a commuter service to Amberley
- Tiritiri Moana Drive/Kaiapoi Pa Road intersection
 - Need imagination to make it safe for buses
- Pegasus Roundabout
 - Has been audited Brian Stokes wants to see the Safety Audit report ask Colin Mackay
 - o Drivers are treating the roundabout as a passing lane
 - Speed limits
 - on KP Road should be 70 as there are blind corners, a one way bridge,
 - Or should be 50kph to be safe for children. Important to get the speed limit correct
 - We want traffic to go slower

From http://libraries.waimakariri.govt.nz/heritage/places-of-the-waimakariri/kaiapoi/history-of-the-maori-pa

Kaiapoi means 'to swing the food in' as the Pa was quite isolated and food had to be swung across the lagoon. **Kaiapohia** means 'the piling up of bodies to eat' - an insult since this is what the Ngati Toa did.



Te Ngāi Tū Āhuriri Rūnanga Inc.

219 Tuahiwi Road RD1 Kaiapoi Phone 03 313 5543 Fax 03 313 5542 Email: tuahiwi.marae@ngaitahu.iwi.nz

17 June 2016

Tēnā Koe,

At the Kaitiakitanga Portfolio Committee hui for Ngāi Tūāhuriri Rūnanga held on the 16th June 2016, the committee on behalf of Te Ngāi Tūāhuriri Rūnanga moved to endorse the recommendations contained from the Cultural Impact Assessment report, titled; Kaiapoi Pa.

Therefore, this letter confirms that Te Ngāi Tūāhuriri endorse the recommendations contained within this report prepared by Joseph Hullen.

If you have any queries or would like further clarification please don't hesitate to contact Mahaanui Kurataiao directly on 03 377 4374.

Ngā Mihi

Chairperson

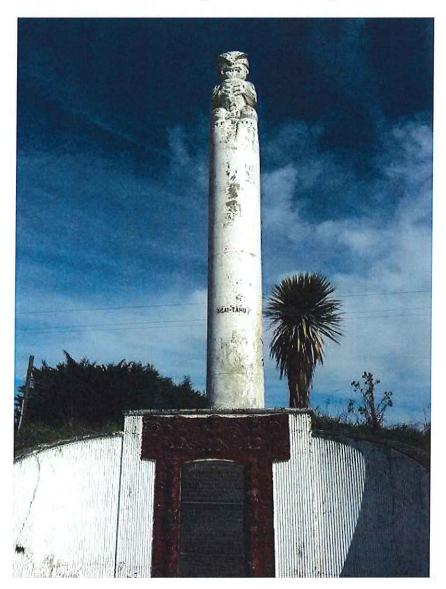
Lom Williams

Kaitiaki Portfolio Holder

H.M. Bugma

KAIAPOI PĀ ROAD UPGRADE CULTURAL IMPACT ASSESSMENT REPORT.

An assessment of effects on Ngāi Tūāhuriri and Ngāi Tahu Values.



MAY 2016.

INTELLECTUAL PROPERTY.

The cultural information in this Cultural Impact Assessment report is the intellectual property of Ngāi Tūāhuriri and Ngāi Tahu whānui and/or Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Ngāi Tahu. Cultural information in this report therefore is to be used only for the purposes of the design and construction of the including all associated resource consent applications.

Use of this report by the requiring authority or any other party in any other circumstances (e.g. subsequent resource consent applications for other projects) shall be with the written approval of Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Ngāi Tahu.

AFFECTED PARTY ENDORSEMENT.

The Cultural Impact Assessment has been prepared by Joseph Hullen (Ngāi Tūāhuriri) on behalf of Ngāi Tūāhuriri and Ngāi Tahu whānui. This document has been prepared to identify and explain related cultural values, practices, policies and recommendations so that they can recognised and provided for, as per the obligations contained within relevant Acts of Parliament, Local Government plans and policies, rules and regulations. The recommendations in this report were initially endorsed by way of a motion moved and seconded, accepted and recorded in the minutes of the General Meeting of Te Ngāi Tūāhuriri Rūnanga held on the 1st day of May 2016 at Tuahiwi Marae, and confirmed and approved by the Te Ngāi Tūāhuriri Environment Committee on the 16th day of June 2016

Joseph Hullen on behalf of Te Ngāi Tūāhuriri Rūnanga.

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- 8 CONSULTATION WITH AFFECTED PARTIES.

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Te Rūnanga o Ngāi Tahu.

New Zealand Heritage New Zealand Pouhere Taonga.

- 9 CULTURAL IDENTITY.
- 13 EFFECTS ON SIGNIFICANT SITES AND NATURAL RESOURCES.

Wāhi Taonga.

Wāhi Tapu/Urupā.

20 CULTURAL VALUES TO CONSIDER.

Whakapapa.

Rangatiratanga.

Taonga.

Kaitiakitanga.

Mauri.

Wāhi Tapu/Wāhi Taonga and Urupā.

26 LEGISLATION TO CONSIDER.

Resource Management Act 1991.

Canterbury Regional Policy Statement. (RPS)

Proposed Canterbury Natural Resources Regional Plan. (NRRP)

Waimakariri District Plan.

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INTRODUCTION.

"Waimakariri District Council is investigating the potential benefits of providing a direct link to Pegasus at Tiritiri Moana Drive from Kaiapoi Pā Road. Waikuku Beach and Pegasus have populations of 900 and 1,050 respectively based on 2013 census data. The local primary school was relocated to Pegasus in 2014, currently the school bus from Waikuku Beach transports approximately 80 students to the school. It is estimated that a further 10 students are driven to school each day and 5-6 students cycle to school from Waikuku Beach during fine weather via the Pegasus Bay Walkway.

Currently three bus routes service the Pegasus and Waikuku Beach areas; 95, 951 and 952 Services. Environment Canterbury (Ecan) have advised that a connection via Kaiapoi Pā Road between Pegasus and Waikuku Beach would allow the 951 and 952 services to be combined into a single service with a higher frequency. Routes 951 and 952 connect to the Blue Line, a service to Christchurch and Rangiora with 30 minute headways (in the Waimakariri) across the majority of the day. Allowing a connection to every Blue Line bus will increase the attractiveness of public transport for Pegasus and Waikuku Beach residents and provides an opportunity to reduce traffic accessing Christchurch from the north.

The existing road reserves on Kaiapoi Pā Road and Tiritiri Moana Drive are connected therefore no land purchase is required to achieve this connection, reducing the costs and risks of the proposal. Currently a fence and embankment impede all users from accessing Pegasus from Kaiapoi Pā Road. The upgrade of Kaiapoi Pā Road to connect Waikuku Beach with Pegasus is listed as a short term activity (2015-2016) in the Waimakariri Long Term Plan (LTP). Council consider that the upgrade is a potential candidate for funding under the road improvements category for the purposes of improving road safety."

¹ Stevenson K, 2016. Waimakariri District Council Memo-Business Case Point of Entry-Kaiapoi Pā Road Upgrade.

OBJECTIVES.

The objectives of this report will be to:

- 1. Collate information concerning the cultural significance of the proposed project area:
- 2. Review key Ngāi Tūāhuriri and Ngāi Tahu values attached to this land and waterways and natural resources contained within;
- 3. Assess how the proposed project might affect those values;
- 4. Identify affected parties in terms of cultural matters and the consultation process involved in compiling this report;
- 5. Identify appropriate measures to avoid, remedy or mitigate any such adverse effects; and
- 6. Present the above in a clear, concise and professional report for due consideration by the requiring authority as well as other interested parties.

METHODOLOGY.

The preparation of this report primarily involved a review of existing information complimented with ongoing communications with members of Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Ngāi Tahu. This Cultural Impact Assessment report has been prepared therefore in accordance with the information researched and the feedback received from the aforementioned sources.

KEY AFFECTED PARTIES IN TERMS OF CULTURAL MATTERS.

Ngãi Tahu.

The Ngāi Tahu people have their origins in three main streams of migration. The first of our people to arrive in the southern islands migrated here under the leadership of Rākaihautū on the waka (canoe) Uruao. They arrived in Whakatū, Nelson and proceeded to explore and inhabit the South Island. This is the origin of the Waitaha iwi, who named the land and the coast that borders it.

The plentiful resources of Te Waipounamu called others to abandon their Northern homes and move southward. The second wave of migration was undertaken by the descendants of Whatuamāmoe who came down from the North Island's east coast to claim a place for themselves in the south. These descendants came to be known as Kāti Māmoe and through inter-marriage and conquest these migrants merged with the resident Waitaha and took over authority of Te Waipounamu.

Tahupōtiki's descendants who formed Ngāi Tūhaitara and Ngāti Kurī moved south travelling first to Wellington. Ngāi Tūhaitara and Ngāti Kurī settled in Te Whanganui-a-Tara (Wellington) under the respective leadership of Tūāhuriri and Maru Kaitatea. Ngāti Kurī and Ngāi Tūhaitara migrated to Te Waipounamu. Maru Kaitatea established Ngāti Kurī at Kaikōura. Tūāhuriri's son, Turakautahi, placed Ngāi Tūhaitara at Kaiapoi Pa. With Kaikōura and Kaiapoi Pā established, and through intermarriage, warfare and political alliances, Ngāi Tahu interests amalgamated with Ngāti Mamoe and Waitaha iwi and Ngāi Tahu iwi established manawhenua or pre-eminence in the South Island. Subtribes or hapū became established around distinct areas.

Ngāi Tūāhuriri.

Ngãi Tūāhuriri is one of the five primary hapū of Ngãi Tahu whānui, whose takiwā (territory) centres on Tuahiwi and extends from the Hurunui, south to the Hakatere and west to the Main Divide. It was after all Tūāhuriri's son, Turakautahi who we acknowledge as the founder of Kaiapoi Pā and the consequent widespread settlement of the surrounding district.

Te Rūnanga o Ngāi Tahu.

Te Rūnanga o Ngāi Tahu is a body corporate established under section 6 of the Te Rūnanga o Ngāi Tahu Act 1996, to act as the central representative body of Ngāi Tahu whānui . It is the governing body that oversee's the tribes activities and is made up of democratically elected representatives from the 18 Papatipu Rūnanga whose role it to administer the assets and liabilities of Te Rūnanga o Ngāi Tahu as kaitiaki (guardian) for Ngāi Tahu whānui.

Te Ngāi Tūāhuriri Rūnanga.

Te Ngāi Tūāhuriri Rūnanga Incorporated Society is the modern day representative of Ngāi Tūāhuriri and is one of 18 Papatipu Rūnanga of Ngāi Tahu whānui recognised in the first schedule of Te Rūnanga o Ngāi Tahu Act 1996.

Te Ngāi Tūāhuriri Rūnanga is governed by its own constitution, managed by an executive and compromises a number of sub-committees that report back to its members, on the first Sunday of every month at the Tuahiwi Marae.

CONSULTATION WITH AFFECTED PARTIES.

During the compilation of this report, the following consultation and discussions have occurred:

Te Ngāi Tūāhuriri Rūnanga.

Discussion with Ngāi Tahu historian, Dr Rawiri TeMaire Tau.

Discussions with Te Ngāi Tūāhuriri Rūnanga Executive Committee members at Tuahiwi Marae.

Presentations to members at the Te Ngãi Tūāhuriri Rūnanga General Meeting at Tuahiwi Marae.

CULTURAL IDENTITY.

Ko Maungatere te maunga ki runga, Waimakariri te awa, Tū-āhu-riri te tangata.

Maungatere (Mt Grey) stands above, Waimakariri is the river, Tū-āhu-riri is the man.

"Thus runs the saying of Ngãi Tūāhuriri, the Ngãi Tahu hapū based at Kaiapoi-Tuahiwi, whose traditional rohe extends from the Hakatere (Ashburton) and Waikirikiri (Selwyn) Rivers to the Hurunui."²

"The arrival of Ngāi Tahu around 1700AD saw the establishment of a network centred on Te Pa o Turakautahi, "Kaiapoi". The pā was built on dunes virtually surrounded by a deep lagoon and accessible by large waka (canoe) from both the Rakahuri (Ashley) and Waimakariri Rivers."³.

The migration story of Ngāi Tahu from the east coast of the North Island to Canterbury is often told through the oral tradition of the accounts of Moki and his elder brother Tūrākautahi. Moki was the war chief and the youngest son of Tūāhuriri the senior Ngāi Tahu chief of the Ngāi Tūhaitara hapū (later to become Ngāi Tūāhuriri).

Word eventually got back to Tū-āhu-riri in Hataitai that Tutekawa was living at Waikakahi, and so Tū-āhu-riri summoned a war party, Te Taua-Tua-Whiri, comprising his sons and other leading chiefs; Hamua who with his father Tū-āhu-riri drowned in Te Moana a Raukawa/Cook Strait, Tāne-Tiki, Turākautahi, Moki, Hika Tūtae, Maka, Huikai, Mōkai, Whākuku and Turakipō.

Moki led the war party south to avenge the death of his father's wives at the hands of Tutekawa. The reason for the migration of Ngai Tuhaitara to Te Waipounamu was to search for Tutekawa who was responsible for the death of two of Tu-ahu-riri's wives Hinekaitaki and Tuarāwhiti.

"With Tūtekawa killed, Moki ordered Tūtekawa's children to build a pā at Kaikai a Waro for his elder brother Tūrākautahi. Moki returned to his village at Kahutara. Tūtekawa's descendants built the pā at Kaikai a Waro and it was named Kaiapoi by Tūrākautahi". 4

² Evison HC. 1993 Land of Memories. Tandem Press, Auckland. At p19.

³ Allingham BJ, 2005. Retracing the 19th Century Landscape around Kaiapoi Pa.: Unpublished Report for Te Ngai Tuahuriri Runanga Inc. Kaupapa Taiao, Office of Te Runanga o Ngai Tahu.

⁴ Tau RTM. 2003 Ngā Pikituroa o Ngãi Tahu. University of Otago Press, Dunedin. At p194.

"Moki returned north to Kaikōura, where he explained to his older brother Tūrākautahi what he had done, what lands he had conquered, and what foods were available from the area we know as Canterbury. He suggested to Tūrākautahi that he should go there and live, instead of staying among his relatives already settled in Kaikōura.

Go down to Paparoa and build yourself a maimai said Moki, and Tūrākautahi, who saw the chance to establish himself and his hapū in the status it should have, accepted his younger brother's offer. Moki went south with him and together they constructed a strong pā in the Taerutu lagoon".⁵

"Tūrākautahi was badly wounded in the assault on Pariwhakatau Pā, and was carried in stages from there to a small village called Te Kohanga-a-Kaikaiawaru, which was on the site or close by where Kaiapoi Pā was soon after built. I am not quite sure if there was not already a fortified place called Te Kohanga and that Tūrākautahi merely took it and remodelled and strengthened it, and re-named it Kaiapoi".

"Kaiapohia was one of the early ancestral villages of Waitaha. With the demise of Waitaha, Ngāi Tahu created a pā there and it became their southern citadel. Moki made that fortress of the warrior peoples;

"Moki reached Kaikoura and made a report of his adventures. To his elder brother Tūrākautahi he said; Go down there and build yourself a mae mae, and he went on to tell of the abundant food and the safety in which he could live. The chiefs and their families lived within the pā, the lesser people living in the kaingas on the Sandhills amid the lagoons and swamps, or in the clearings in the bush".

The demise of Kaiapoi Pā began with the visit of the Ngāti Toa rangatira Te Rauparaha following the sacking of the Takahanga and Omihi Pā's. The sacking of these pā was in response to a foolish boast made by 'Te Rerewaka' who was at that time domiciled in Kaikōura.

"Te Rerewaka who was half Rangitāne and half Ngāi Tahu, was the chief at Kaiköura. Te Rerewaka said, after the attack on Wairau, 'Had he come here I should have split him open with a shark's tooth (niho mangā)'. This curse fell in admirably with the plans of Te Rauparaha, who sailed south with a force of about seven hundred men."

⁵ Tau, RT, Anderson A. 2008 Ngäi Tahu: A Migration History. The Carrington Text. Bridget Williams Books, Wellington. At page 117

⁶ Beattie H.1990 Tikao Talks. Penguin Books NZ Ltd, Auckland. At p123.

⁷ Brailsford B.1997, A Tattooed Land. A.H & A.W Reed Ltd, Auckland. At p181.

⁸ Tau, RT, Anderson A. 2008 *Ngāi Tahu: A Migration History. The Carrington Text.* Bridget Williams Books, Wellington. At page 174.

Aided by a case of mistaken identity Te Rauparaha and his men would manage to dupe the people of Kaikōura and eventually sack and slaughter the inhabitants of Takahanga and later repeat the slaughter on the flat of Tāhunatōrea.

"At this stage Te Rauparaha wanted to return to Kapiti to complete his arrangements to colonise the land he had won, thus by occupation after conquest confirming title to it. His plan to return was strongly opposed by his friends, particularly Te Pēhi, who had returned from England, and who wanted to go onto Kaiapoi at once. Te Rauparaha agreed, and the prisoners and a large portion of the force were left at Goose Bay, while he and his principal chiefs went southwards to Kaiapoi. They landed at the mouth of the Ashley River, where they left their canoes, and arrived outside the pā where they pitched camp."

"Communication with the pā was opened at once, under the pretext that they had come in peace, intending to trade muskets for greenstone in which Kaiapoi was said to be relatively wealthy. They were visited by the chief Tamaiharanui, and to him Te Rauparaha after professing his peaceful intentions recited a puha (chant). A report was then brought to Tamaiharanui that the grave of his grandmother, had been desecrated by Ngāti Toa on their way to the pā. And finally, refugees from Kaikōura and Goose Bay who had made their way down the coast brought news of the slaughter in those places." 10

Tamaiharanui wished to make an attack on the them immediately but was dissuaded from this taking this course of action, however the news from Kaikōura roused the whole pā against the their guests. Inevitably an attack on the Ngāti Toa chiefs present inside the pā led to the deaths of Te Pēhi, Te Aratangata, Te Rangikatua, Te Kohi, Te Ruatahi, Te Huapiko and Te Kōhua. The attack was a terrible blow for Te Rauparaha who lost no time in leaving.

While he would later exact his revenge on Tamaiharanui in the 'Elizabeth' incident, and the wanton slaughter of the various kainga around the Akaroa harbour, Te Rauparaha was still determined to destroy Kaiapoi and, if possible bring to a successful conclusion his plan for the conquest of the whole of the South Island.

In 1831, about a year after the capture of Tamaiharanui, Te Rauparaha collected a force of about six hundred fighting men and sailed south. The fleet landed near the mouth of the Waipara River, where the canoes were drawn up on the beach and the war party made their way through the swamp and bush towards the pā.

⁹ Tau, RT, Anderson A. 2008 Ngāi Tahu: A Migration History. The Carrington Text. Bridget Williams Books, Wellington. At page 175.

¹⁰ Tau, RT, Anderson A. 2008 Ngāi Tahu: A Migration History. The Carrington Text. Bridget Williams Books, Wellington. At page 176.

"Te Rauparaha saw that bold assaults would be expensive failures, and set about regular siege operations which in the end lasted nearly six months.

The pā was surrounded by water for all of its perimeter except for a short space on the south side. Here Te Rauparaha pitched his camp behind the low sand hills and dug zigzag trenches forward towards the wall of the pā. Sniping between the besiegers and the besieged accounted for a few casualties.

After a few months Te Rauparaha thought that he could burn down the palisade of the pā if he sapped up close to it and deposited bundles of manuka and other flammable material against it. Day by day the heap of brushwood grew higher although at great cost, for Ngāi Tahu had built a high tower which overlooked the Ngāti Toa trenches, and from which they could shoot down at the men working in them.

Then for days it was necessary to wait for a suitable wind that would take the flames over the palisade and the pā. The easterly wind that prevailed at last turned to the north-west, which gave the defenders the chance to light the heap of brushwood themselves and let the strong wind take the flames away from the pā. This was done, and the smoke and flames roared over Te Rauparaha's head.

But the weather on the Canterbury Plains is fickle, and suddenly, without warning, the wind veered to the opposite quarter and what Te Rauparaha had desired for so long came to pass. Through the dry timbers of the palisade the hot flames roared, and the flying sparks, carried to the thatch of the whare within, spread the fire. Through the flames and smoke came the warriors of Ngāti Toa, all the fiercer on account of their long wait.

Some of the thousand people who were then in the pā escaped by scaling the walls in the rear and making their way through the swamps; a few were taken prisoner, and about six hundred were killed. Many of the prisoners were massacred on the little sand-hill now occupied by a cow shed just opposite the junction of the road to the pā and the main road.³¹¹

"When the Reverend John Raven, one of the Canterbury pilgrims took possession of the land in the neighbourhood of this knoll, the whole surface of the ground between it and the lagoon was strewn with human remains and weapons of all sorts. Mr Raven caused the bones to be collected and about two waggon loads were buried by his orders in a pit at the base of the sand-hill. The remains of the houses and fortifications were destroyed in the fires lit to clear the land for farming purposes."

¹¹ Tau, RT, Anderson A. 2008 Ngãi Tahu: A Migration History. The Carrington Text. Bridget Williams Books, Wellington. At pages 184-185

¹² Travers, WTL. Stirring times of Te Rauparaha. Wilson and Horton Ltd, Auckland. At page 229.

EFFECTS ON SIGNIFICANT SITES.

Following discussion and a review of previously recorded policies, plans and reports, Ngāi Tūāhuriri and Ngāi Tahu have identified the following values of particular cultural significance, for consideration and appropriate provision.

Wāhi Taonga.

The modern day Kaiapoi Pā complex is now divided into two parts by Preeces Road. The palisaded section of Kaiapoi Pā is situated on the northern side of Preeces Road and is approximately 2.4 hectares in size. Immediately opposite on the southern side of Preeces Road the walls and structures of an earlier pā site occupy approximately 0.8 hectares.

Tony Fomison's 1964 site record for the Kaiapoi Pā site records the following: "The main transverse earthworks of the pā have been modified by the erection of the monument and the approaching road while field evidence recorded by the 1872 survey has been obliterated by Petrie's house and farm. Within, stock grazing are gradually levelling the sand-sided pits and earthworks". 13

"The earliest recorded reference to archaeological material being found during an excavation at the pā was in 1898 when "an opening was dug out of the rampart" of the pā wall for the foundation stone of the monument that was to be erected on the southern defensive wall. This revealed "several of the old totara palisades, which were in a wonderful state of preservation". 14

"In 1939 Roger Duff, then ethnologist at Canterbury Museum, visited Kaiapoi Pā with J Gibbs Stanton, then aged 82, who had been employed sixty years earlier by the adjacent land owner, M Burton to cut the first drainage ditches.

Duff recorded in his field book that Stanton and another man had commenced the drain five or six chains (100-120 metres) beyond Cabbage Tree Island [north of the pa] and worked in both directions, using hay knives and long handled drags.

A wattled manuka track under the water had been found on the western side of the pā opposite one of the openings of the defensive wall, with another to the north east of the site. A shaped post, a "black flint mere" and three blackened human skulls had been found by the workmen, and the land owner obtained a number of artefacts from the material removed from the ditches". 15

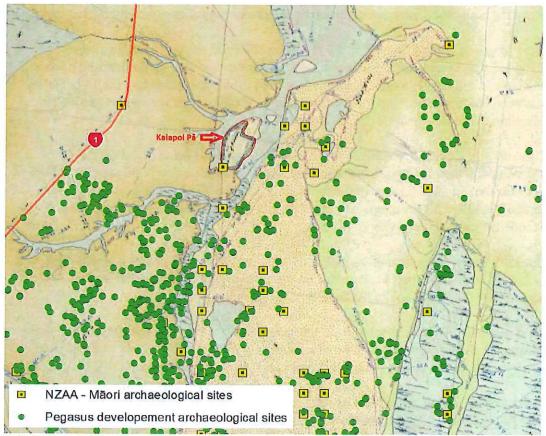
¹³ https://nzaa.eaglegis.co.nz/NZAA/Map. Accessed 6th January 2016.

¹⁴ Trotter M. 2010. Kaiapoi Pa Archaeological Assessment. At p8.

¹⁵ Trotter M. 2010, Kaiapoi Pa Archaeological Assessment. At p8.

"In 1946 Duff made a "reconnaissance trip" to the site this time in the company of J.R Eyles and E.Harvey, recording the following narrative (Duff 1943-47: 97-98): "Arrived, contacted M Petrie to find that he had not found any artefacts when recently clearing a sandhill south of his house for setting up an outdoor sawmill. Inspected his very poor collection - a few sandstone cutters, some lead ?cast for moulding bullets during Siege, and two much battered fragments of large completely ground adzes of baked argillite.

Dug for about half an hour on edge of swamp in Petrie's garden, finding a broken bone toggle, and a reject of sawn greenstone, but too wet in swamp proper, and Petrie obviously unhappy about encroaching on his harder ground". ¹⁶



Black Map of Kaiapoi Pā and surrounding areas showing the distribution of pre-Pegasus and post-Pegasus Archaeological sites.

There have doubtless also been a number of illicit excavations carried out on the pā and surrounding areas, for instance the NZAA site record form "Artefacts, Excavations 2" for the Kaiapoi Pā M35/7 records the following:

¹⁶ Trotter M. 2010. Kaiapoi Pa Archaeological Assessment. At p9.

"...In August 1958 some boys from Papanui High School were digging within the pā, and by the time they were stopped had collected a few interesting items such as trade beads and pig bones".¹⁷

Meanwhile an the NZAA site record form for site M35/8 records the following: "...Russell Spense and David Laird excavated in August 1958 several adzes, including two that according to R S Duff were Chatham Islands types, probably left by Te Rauparaha's occupation". 18

As a result of the earthworks associated with the Pegasus Town residential subdivision located immediately to the east and south of the Kaiapoi Pā several complex archaeological sites were located and recorded before their destruction or burial under landscaping features:

M35/1109 Midden, Oven stones. Shell was scattered about 20 metres of the dune ridge, probably re-deposited from the insitu deposit on top of a knoll next to Preeces Road which was about 3 x 4m. The shell was very compact and bunched and was probably a "rourou" basket disposal. This was sampled and consisted mainly of cockles, some very large (over 55mm), but also a few which were very small. Pipi were present as well as mud snails, no artefacts found. A concentration of fire cracked rock from a disturbed oven was associated.

M35/1110 Midden/Oven. This midden was exposed during the removal of an immense pine tree stump on the ridge next to Preeces Road. The site was a layer about 60 to 130 cm below the surface and consisted of small sized pipi some of which had been burnt.

Also present were occasional cockles and concentrations of mud snails. A marine mussel shell was found and there were a few fire cracked rocks, but no artefacts. It contained a substantial amount of fish bone, and rat bone was present. The site was about 7 x 5m and the insitu layer was about 10 to 20 cm thick. The pipi shells were laying flat, and not compacted.

M35/1112 Midden, Oven (Intact), Working area/flaking floor. This site consisted of an oven with fire cracked rock and charcoal and had a scatter of shell and a greenstone flake nearby on the southern slope of the dune ridge. About 20m on the top of the dune ridge to the north east was a greenstone workshop in a 8x 2m area. The workshop material consisted of about 100 small flakes of fully felted greenstone. There are possibly more greenstone flakes remaining.

¹⁷ https://nzaa.eaglegis.co.nz/NZAA/Map. Accessed 6th January 2016.

¹⁸ https://nzaa.eaglegis.co.nz/NZAA/Map. Accessed 6th January 2016.

At various times during the Pegasus bulk earthworks phase the author observed a cultural layer exposed by traffic activities on the western side of Kaiapoi Pā Road immediately opposite Tiritiri Moana Drive.

"Archaeological evidence shows the area in and around the Waimakariri was settled from times when moa were hunted. Distinctively early styled taonga are recorded from the banks of the Waimakariri, in keeping with river systems of all sizes around Canterbury. Relatively early C14 dates are recorded for the inner dune system at Kairaki, while a 5 ¾ inch long stone minnow lure shank of the style found in Moa-hunter sites "was found at the Waimakariri River" (JPS Vol 38 No.4;Dec.1929, p272)." 19

"These and other archaeological sites lie on a narrow coastal strip up to five kilometres wide that extends from the Avon estuary north to the sand dunes between the mouth of the Waipara River and the Teviotdale Stream.

The landscape in this strip mostly comprises Quarternary sand-dunes which run parallel with the coast, and between which originally lay swampland of varying depth - now largely drained as a result of natural river meanderings and European farming developments."²⁰



Disturbed shell midden and oven stones, Kaiapoi Pā Road 24 April 2016.

Allingham BJ, 2005. Retracing the 19th Century Landscape around Kaiapoi Pa.: Unpublished Report for Te Ngai Tuahuriri Runanga Inc. Kaupapa Taiao, Office of Te Runanga o Ngai Tahu.
Trotter M. 2009 Archaeological Assessment of Kaiapoi Pā, North Canterbury.

Archaeological excavations at Pegasus and Sovereign Palms have shown that undisturbed archaeology can remain in areas where crop or livestock farming has taken place. During a period of dune building, compacted wind blown sand can cover archaeological deposits completely in a relatively short period of time.

The number of archaeological sites recorded in the Pegasus Town area went from less than one hundred, to in excess of several hundred during the course of the development.

"These were sites with insitu deposits intact below the plough zone, about 20-30 cm in depth. There had been no previous evidence that there would be any archaeology in this area." ²¹

"Ngāi Tahu whānui have a personal relationship with the land which extends beyond mere occupation. This relationship begins at birth with the placenta, like the land, being called whenua. Traditionally, when a child is born the placenta is buried in the earth which expresses the belief that humankind originates from Papatūānuku and returns to her. This is an example of an individual's close relationship with the land, and the loss of land is the loss of self." ²²

"Archaeological sites exist not only as entities in their own right, but as part of a much larger Ngāi Tahu identity. Some areas must be considered in light of the contribution they make to the greater picture, not merely on the basis of their individual and isolated attributes. Ngāi Tahu concern with archaeological sites extends beyond that of ancestral connection alone. They are also valuable sources of information on the activities of their Tupuna which those in the present world know little about."²³

²¹ Witter D. 2006 *Pegasus Town Interim Archaeological Report October 2006*, Witter Archaeology, Taumutu. At p1.

²² Tau RT, Goodall A, Palmer D, Tau HR. 1990 Te Whakatau Kaupapa: Ngai Tahu Resource Management Srategy for the Canterbury Region. Aoraki Press, Wellington. At p4-30, 4-31.

²³ Tau RT, Goodall A, Palmer D, Tau HR. 1990 Te Whakatau Kaupapa: Ngai Tahu Resource Management Srategy for the Canterbury Region. Aoraki Press, Wellington. At p4-31.

Wāhi Tapu/Urupā.

"There were two burial grounds within the pa."24

"In his text Stack suggests that the garden for the pā was outside the walls and the burial ground within it. A.V MacDonalds 1870 map states it (the garden) was the burial ground for the two hapū within the pā.

"A wattled manuka track under the water had been found on the western side of the pā opposite one of the openings of the defensive wall, with another to the north east of the site. A shaped post, a "black flint mere" and three blackened human skulls had been found by the workmen, and the land owner obtained a number of artefacts from the material removed from the ditches."²⁵

"When the Reverend John Raven, one of the Canterbury pilgrims took possession of the land in the neighbourhood of this knoll, the whole surface of the ground between it and the lagoon was strewn with human remains and weapons of all sorts. Mr Raven caused the bones to be collected and about two waggon loads were buried by his orders in a pit at the base of the sand-hill. The remains of the houses and fortifications were destroyed in the fires lit to clear the land for farming purposes."

"Some of the thousand people who were then in the pā escaped by scaling the walls in the rear and making their way through the swamps; a few were taken prisoner, and about six hundred were killed."²⁷

"Of all wāhi tapu the urupā is the most significant. They are important to Ngāi Tahu as in these areas lay the bones of celebrated ancestors who are gone but never forgotten.

To identify the location identifies the funerary places which Ngāi Tahu are less than anxious to do. Ngāi Tahu require some restriction on the information about these sites, and they are therefore identified in silent files."²⁸

The dead are a link to the past and to the land. By protecting the urupā, the mana of the ancestors and their descendants is also remembered.

Of all the wāhi tapu in the Ngāi Tūāhuriri takiwa, the Kaiapoi Pā site is easily the most significant. The Kaiapoi Pā was the scene of a massacre the scale of which was not likely seen before or after in the Ngāi Tūāhuriri takiwa.

²⁶ Travers, WTL. Stirring times of Te Rauparaha. Wilson and Horton Ltd, Auckland. At page 229.

²⁴ Stack, JW. 1906 The sacking of Kaiapohia Pa. Whitcombe and Tombs, Christchurch. At page 180.

²⁵ Trotter M. 2010. Kaiapoi Pa Archaeological Assessment. At p8.

²⁷ Tau, RT, Anderson A. 2008 Ngāi Tahu: A Migration History. The Carrington Text. Bridget Williams Books, Wellington. At page 185

²⁸ Tau RT, Goodall A, Palmer D, Tau HR. 1990 Te Whakatau Kaupapa: Ngai Tahu Resource Management Srategy for the Canterbury Region. Aoraki Press, Wellington. At p4-15.

"Knowledge of urupā is often retained by certain individuals within iwi, hapu and whanau. These individuals are not always willing to divulge the locations of urupā for fear of them being disturbed."²⁹

Urupā can have statutory protection under the following Acts:

- i) The Historic Places Act, 1993;
- ii) The Māori Affairs Act, 1953.

Urupā are a sensitive issue. Ngāi Tahu believe they should be strictly left alone. In some instances it may be desirable to re-inter the skeletal remains, for example perhaps the site was known to contain only one ancestor and it is deemed necessary by the Rūnanga and connected interests to be necessary to give way to development.

As stated previously, regardless of the methodology used, the construction of a road to sealed road specifications along the proposed short eastern alignment will involve the disturbing or removal of top soil and sub soils during bulk earthworks. This will raise the possibility of discovery of further burial sites.

²⁹ Tau RT, Goodall A, Palmer D, Tau HR. 1990 *Te Whakatau Kaupapa: Ngai Tahu Resource Management Srategy for the Canterbury Region*. Aoraki Press , Wellington. At p4-25.

CULTURAL ISSUES TO CONSIDER.

Following discussion and a review of previously recorded policies, plans and reports, and Ngāi Tahu have identified the following values of particular cultural significance, for consideration and appropriate provision within the design and development of the .

Whakapapa.

The central element of Māori culture is whakapapa³⁰, the genealogical relationships that stretch across and between both human and non human worlds. Whakapapa establishes the origins and creation of all things and connects people to their ancestors as well as to the land and natural resources around them.

Human relationships with their environment were traditionally reciprocal in nature and carried with them the essential responsibility embodied by the notion of Kaitiakitanga.³¹ This inextricably and inter-dependent relationship is reflected in the following proverb:

Toi t**ū** te marae o Tāne Toi t**ū** te marae o Tangaroa Toi t**ū** te iwi.³²

How to recognise and provide for Whakapapa?

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi Pā.

³⁰ "Papa" is anything broad, flat and hard such as a flat rock, a slab or a board. "Whakapapa" is to place in layers, lay one upon another. Hence the term Whakapapa is used to describe both the recitation in proper order of genealogies, and also to name the genealogies.

³¹ Kaitiakitanga is an integral aspect of Rangatiratanga and entails an active exercise of authority in a manner beneficial to the resource in question.

³² "If the domain of Tane survives and the domain of Tangaroa does too, the people live on". That is to say, if we look after the natural resources of earth and water, then they in turn will look after you.

Rangatiratanga.

The traditional personal authority of chiefs (rangatira) over the assets of an iwi/tribe or hapū/sub-tribe (land, forests, fisheries, etc.)

Rangatiratanga³³ is embodied within the concept of mana whenua³⁴ and defines the ability to exercise and manage the relationship between ourselves, our culture and traditions and our environment.

Rangatiratanga incorporated the right to make, alter and enforce decisions pertaining to how a resource was to be used and/or managed, and by whom. This was carried out in accordance with tikanga and kawa³⁵ and is akin to the modern day functions of Local and Central Government agencies and authorities.

Contemporary and practical expressions of Rangatiratanga would include the active involvement of Tāngata Whenua in resource management decision making processes (e.g. Te Kohaka o Tuhaitara Trust) and/or the implementation of iwi management plans over particular resources or localities (e.g. Te Waihora/Lake Ellesmere Management Plan).³⁶

How to recognise and provide for Rangatiratanga?

Appropriate participation by tangata whenua whether that be on any Board, Trust or Committee set up for the purpose of managing the natural or physical resources, and/or through "on the ground" maintenance and monitoring of those sites and resources within the project area affected by the activities presently under application.

Outcomes sought:

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi $P\bar{a}$.

35 The Māori equivalent of Pakehā law.

³³ The traditional personal authority of chiefs (rangatira) over the assets of an iwi/tribe or hapū/sub-tribe (land, forests, fisheries, etc.)

³⁴ means customary authority exercised by an iwi or hapu in an identified area.

³⁶ Lenihan TM, 2006 Statement of Evidence, Application for Resource Consent by Pegasus Town Ltd.

Taonga.

In the management of resources it is important to Ngāi Tahu that the habitats and wider needs of taonga are protected and sustainably managed and enhanced.

All natural resources such as air, land, water are taonga; (i.e. tangible or intangible treasures that are highly valued by tāngata whenua for their capacity to provide, sustain and shape the quality of life (e.g. *tikanga* or customs, *te reo* or the Māori language)). The protection of the relationship of tāngata whenua is included in Article II of the Treaty of Waitangi, the Resource Management Act 1991 section 6(e), and more recently the Ngāi Tahu Claims Settlement Act 1998.

To ensure taonga are available for future generations, Ngāi Tahu consider that resource management decision making processes need to recognise tikanga Māori (protocols and customs) and have the conservation and sustainability of resources as its focus.

The Crown's settlement with Ngāi Tahu (Ngāi Tahu Claims Settlement Act 1998) included recognition of the special relationship Ngāi Tahu has with taonga species.

Ngai Tahu participates in the management of those species in many ways including representation on species recovery groups.

Through the Crown's Settlement Offer, the special relationship Ngāi Tahu has with fourty nine bird species, fifty four plant³⁷ species and 6 marine mammal species was recognised and acknowledged.

Outcomes sought:

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi Pā.

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³⁷ a list of taonga plant species is attached as Appendix G.

Kaitiakitanga.

Kaitiakitanga is an integral aspect of Rangatiratanga and entails an active exercise of authority in a manner beneficial to the resource in question. The rights and responsibilities of kaitiaki derive from mana whenua, and this has been reflected in the definition of kaitiakitanga in the Resource Management Act 1991 where it is made clear that only tangata whenua of an area are able to exercise kaitiakitanga.

Traditionally speaking kaitiaki were spiritual guardians associated with particular resources and locations. Their essential function was to indicate the well being of their environment thereby warn local human guardians accordingly. Those that claim mana whenua have a responsibility to maintain natural and physical resources within their rohe³⁸ and as such are considered kaitiaki.

How to recognise and provide for Kaitiakitanga?

Appropriate participation by tangata whenua whether that be on any Board, Trust or Committee set up for the purpose of managing the natural or physical resources, and/or through "on the ground" maintenance and monitoring of those sites and resources within the project area affected by the activities presently under application.

Outcomes sought:

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi $P\bar{a}$.

-

³⁸ tribal territory

Mauri.

In Māori thought all things are believed to have a mauri, or vital essence. It is this mauri which provides all living things and every place with a unique personality. The key to the traditional Māori view towards environmental issues is the importance of not altering a mauri to the extent that it is no longer recognisable.

How to recognise and provide for Mauri.

Appropriate input or involvement - whether in person or via plans and policies- in the management, maintenance and monitoring of culturally significant sites or resources affected by the activities presently under application.

Outcomes sought:

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi $P\bar{a}$.

Wāhi Tapu/Wāhi Taonga and Urupā.

In modern terms - in the Ngāi Tahu rohe - the term wāhi tapu refers to places held in reverence according to local tribal custom and history. Some wāhi tapu are important to the Iwi while others are important to individual hapu or whānau. Of all wāhi tapu, urupa (burial sites) are considered to be the most significant.

How to recognise and provide for Wāhi Tapu/Wāhi Taonga and Urupā.

"It is important for Ngāi Tahu that wāhi tapu sites are protected from inappropriate activity; and there is continued access to such sites for Ngāi Tahu.³⁹

Outcomes sought:

a.) Give effect to the relevant policies of the Waimakariri District Plan that relate to Ngāi Tūāhuriri and the Kaiapoi Pā, specifically;

Policy 2.1.3.6

- b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
- c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi $P\bar{a}$.

³⁹ Natural Resources Regional Plan, Chapter 2 (Ngāi Tahu and the Management of Natural Resources) 2.3.6 page 2-8.

LEGISLATION TO CONSIDER.

Resource Management Act 1991.

Section 5, 6, 7, and 8 of the Resource Management Act 1991 prescribe what all persons exercising functions and powers under the Resource Management Act need to consider in relation to managing the use, development and protection of natural and physical resource.

Section 6.

Matters of national importance.

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (e) The relationship of Māori (in this instance Ngāi Tūāhuriri and Ngāi Tahu) and their culture and traditions with their ancestral lands, water sites, wāhi tapu and other taonga.
- (f) The protection of historic heritage⁴⁰ from inappropriate subdivision, use, and development.

Section 7.

Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to:

- (a) Kaitiakitanga:
- (aa) The ethic of stewardship:
- (b) The efficient use and development of natural and physical resources:
- (c) The maintenance and enhancement of amenity values:
- (f) Maintenance and enhancement of the quality of the environment:
- (g) Any finite characteristics of natural and physical resources:

(a) means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities:

- (i) archaeological:
- (ii) architectural:
- (iii) cultural:
- (iv) historic:
- (v) scientific:
- (vi) technological; and
- (b) includes-
- (i) historic sites, structures, places, and areas; and
- (ii) archaeological sites; and
- (iii) sites of significance to Maori, including wāhi tapu; and
- (iv) surroundings associated with the natural and physical resources.

historic heritage

Section 8.

Treaty of Waitangi/Te Tiriti o Waitangi.

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Canterbury Regional Policy Statement.

The Canterbury Regional Policy Statement 2013 provides an overview of the resource management issues of Canterbury and the objectives, policies and methods to achieve integrated management of natural and physical resources. The following chapters are of particular interest to Ngāi Tahu:

- Chapter 2 contains issues of Resource Management Significance to Ngāi Tahu.
- Chapter 4 contains provision for Ngai Tahu and their relationship with resources.

Natural Resources Regional Plan.

The Natural Resources Regional Plan consists of eight chapters of which the following are of particular interest to Tāngata Whenua:

- Chapter 2: Ngāi Tahu and the Management of Natural resources.

Waimakariri District Plan.

- Chapter 2: Maori
- Policy 2.1.1.1 In identifying tangata whenua, Te Rūnanga o Ngāi Tahu is recognised as the iwi authority and Ngāi Tūāhuriri as manawhenua.
- Policy 2.1.3 Recognition and protection of wāhi taonga that is culturally, spiritually and/or physically important to Ngāi Tūāhuriri.
- Policy 2.1.3.2 Avoid, remedy or mitigate adverse effects on the cultural and traditional values associated with wāhi taonga identified in this District Plan.
- Policy 2.1.3.3 Protect koiwi tangata (human bones) and Māori artefacts from violation and desecration.
- Policy 2.1.3.6
 - b.) To avoid, remedy or mitigate adverse effects of the subdivision of Pegasus on the cultural values and wāhi taonga, wāhi tapu and urupā of Ngāi Tūāhuriri and Ngāi Tahu, and
 - c.) To ensure that the subdivision and development of Pegasus does not adversely affect the setting and significance of Kaiapoi $P\bar{a}$

Mahaanui Iwi Management Plan.

This plan has the mandate of the six Paptipu Rūnanga across Ngã Päkihi Whakatekateka o Waitaha and Te Pätaka o Räkaihautü and is endorsed by Te Rūnanga o Ngãi Tahu, as the iwi authority. As such it is applicable to policy and planning processes under the Resource Management Act (RMA) 1991. The following policies are of particular interest to Tāngata Whenua.

Section 5.4 of the Mahaanui Iwi Management Plan "Papatūānuku" outlines objectives, policies and processes that Ngāi Tūāhuriri consider addresses issues of significance relating to land subdivision and development including;

Issue P11: Earthworks. Earthworks activities need to be managed to avoid damaging or destroying sites of significance, and to avoid or minimise erosion and sedimentation.

Policy 11.1: To assess proposals for earthworks with particular regard to:

- a) potential affects on wähi tapu and wähi taonga, known and unknown;
- b) potential affects on waterways, wetlands and waipuna;
- c.) potential effects on indigenous biodiversity;
- e.) proposed erosion and sediment control measures and;
- f.) rehabilitation and remediation plans following earthworks.

REFERENCES AND SOURCE INFORMATION.

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WAITANGI TRIBUNAL EVIDENCE.

Ngāi Tahu Claim - Wai 27. Mahinga kai (Tuahiwi) Evidence of Rawiri TeMaire Tau (NGAI 9/B)

Ngāi Tahu Claim - Wai 27. Mahinga kai (Tuahiwi) Evidence of Henare Rakiihia Tau (NGAI 15/B)

ACTS, PLANS, POLICIES and REGULATIONS.

Historic Places Act 1993.

Resource Management Act 1991.

Canterbury Regional Policy Statement 2013.

Natural Resources Regional Plan 2011.

Ngāi Tahu Claims Settlement Act 1998.

Ngāi Tahu Deed of Settlement Act 1998.

Ngāi Tahu Deed of Settlement 1998.

Ngāi Tahu Claims Settlement (Resource Consent Notifications) Regulations 1999.

Te Rünanga o Ngāi Tahu Freshwater Policy (1999).

Te Ture Whenua Act 1993.

Waimakariri District Plan.

WEBSITES.

http://www.ngaitahu.iwi.nz

http://www.landcareresearch.co.nz

http://www.treatyofwaitangi.govt.nz

http://www.ecan.govt.nz

SUMMARY.

Given the significant cultural value attached to Silent File areas and the potential impacts to archaeological sites of significance, Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Ngāi Tahu wish to acknowledge and endorse the relevance and application of the following Acts, Plans and Policies.

Te Ture Whenua Act 1993.
Historic Places Act 1993.
Resource Management Act 1991.
Canterbury Regional Policy Statement 2013.
Natural Resources Regional Plan 2011.
Ngāi Tahu Claims Settlement Act 1998.

Ngāi Tahu Deed of Settlement Act 1998.

Ngāi Tahu Deed of Settlement 1998.

Ngāi Tahu Claims Settlement (Resource Consent Notifications) Regulations 1999.

Te Rūnanga o Ngāi Tahu Freshwater Policy (1999).

Waimakariri District Plan.

Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Ngāi Tahu would accordingly like to encourage the requiring authority to consider in good faith the relative sections of the aforementioned Acts, Policies, Plans and Regulations, and in consultation with representatives of Te Ngāi Tūāhuriri Rūnanga and Te Rūnanga o Ngāi Tahu, provide for them within the design and construction where this is both reasonable and practicable.

RECOMMENDATIONS.

The division of the Kaiapoi Pā precinct by Preeces Road has long been a sore point with members of Ngāi Tūāhuriri. Moreover the neighbouring Pegasus subdivision has also significantly eroded the values of the wider cultural landscape.

The remaining Kaiapoi Pā precinct faces ongoing pressure from vandals and inappropriate activities inconsistent with the wāhi tapu status of the site.

In the early stages of planning of Pegasus, Ngāi Tūāhuriri understood that Kaiapoi Pā Road was never going to be used as an northern access route to Pegasus for any reason.

Consequently Ngāi Tūāhuriri does not support the proposed upgrade of Kaiapoi Pā Road as an entry point to Pegasus via Tiritiri Moana Drive.

Ngāi Tūāhuriri considers the relatively minor safety gains for traffic travelling between Waikuku Beach and Pegasus is not considered relative to the damage caused by further encroachment of a widened Kaiapoi Pā Road on known and unknown archaeological sites and potential burial sites.

Te Ngāi Tūāhuriri Rūnanga have identified the following issues with regards to the potential for adverse effects on Ngāi Tūāhuriri values:

a.) Wāhi Tapu/Urupā, Wāhi Taonga.

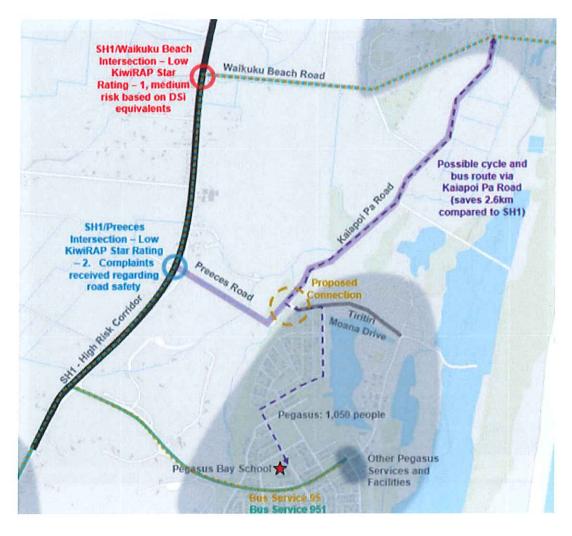
A further objective of this report is to provide recommendations to avoid, remedy or mitigate adverse effects on tangata whenua values. To this end, Te Ngāi Tūāhuriri Rūnanga have provided the following recommendations to assist the New Zealand Transport Agency to respond to Te Ngāi Tūāhuriri Rūnanga concerns;

a.) Te Ngāi Tūāhuriri Rūnanga recommend that Waimakariri District Council and NZ Transport Agency further investigate the implementation a revised traffic layout⁴¹ at the intersection of State Highway 1 and Waikuku Beach Road.

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⁴¹ a roundabout installation or traffic lights

APPENDIX A. PROPOSED PROJECT AREA.



APPENDIX B. ARCHAEOLOGICAL SITES IN THE PROJECT AREA.



WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: CON201152 / 160714067865

REPORT TO: Utilities and Roading Committee

DATE OF MEETING: 16th August 2015

FROM: Greg Bennett, Land Drainage Engineer

SUBJECT: Renewal of Drainage Maintenance Contract 11/52

SIGNED BY:

(for Reports to Council or

Committees)

Department Manager

hief Executive

1. **SUMMARY**

1.1. The purpose of this report is to seek approval from the Utilities and Roading Committee for the renewal of the Drainage Maintenance Contract 11/52 with Michael Stopforth Contacting Ltd for a further year.

Attachments:

i. Evaluation of contractor's performance against partnering charter objectives.

2. RECOMMENDATION

THAT the Utilities and Roading Committee:

- a) **Receives** report 160714067865.
- b) **Approves** the renewal of the Drainage Maintenance Contract 11/52 to Michael Stopforth Contacting Ltd for a further one year from the 1st of July 2016.
- c) Notes that this is the final year of this contract.

3. <u>ISSUES AND OPTIONS</u>

- 3.1. The Drainage Maintenance Contract 11/52 commenced on the 1st of July 2012 for a term of 3 years with an option for two further 1-year renewals, subject to satisfactory performance of the contractor as assessed by the Council.
- 3.2. Michael Stopforth Contracting Ltd has performed well in carrying out the activities of this contract that greatly exceed the quantities originally tendered in the Contract.
- 3.3. Michael Stopforth Contracting Ltd has therefore met the minimum requirements in terms of performance to warrant renewal of the contract.
- 3.4. This is the final year of this contract and this year a new drainage contract will be tendered.
- 3.5. There is a separate report to be presented to the Utilities and Roading Committee with a review of future delivery options for drainage maintenance.

3.6. The Management Team has reviewed this report and supports the recommendations.

4. COMMUNITY VIEWS

4.1. The Community has not been consulted.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. The tender annual sum for this contract was \$324,430.32 back in 2012, with provision for annual increases based on CPI. The actual amount of work completed in any one year varies dependent on the weather. In the 2014/15 financial year a total of \$813,686.92 and in the 2015/16 at total of \$872,084.46 was spent on drainage maintenance which is high due to the works post June 2014 flood event and increased expected level of service.
- 5.2. The current total budget across the 12 drainage schemes in the District is \$858,065, which covers the maintenance work to be undertaken in 2016/17 year.

6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council's Significance Policy.

6.2. Legislation

Local Government Act 2002 requires under Section 17A that a review of the cost effective of the delivery of services is undertaken within 2 years of the expiry of any contract. A Section 17A review has not been undertaken at this stage for the drainage maintenance contract but will be undertaken in 2016 before the expiry of the contract in 2017.

6.3. Community Outcomes

- There is a safe environment for all
- Core utility services are provided in a timely, sustainable and affordable manner
- · Public effect is given to the spirit of the Treaty of Waitangi

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: STW-01/ 160722071262

REPORT TO: Utilities and Roading Committee

DATE OF MEETING: 16 August 2016

FROM: Janet Fraser, Utilities Planner

Greg Bennett, Land Drainage Engineer

SUBJECT: Waimakariri District Stockwater Race Users Customer Satisfaction Survey

SIGNED BY: (for Reports to Council or

(for Reports to Council of Committees)

Department Manager

1. <u>SUMMARY</u>

1.1. The purpose of this report is to present the findings of the *Stockwater Race Users Customer Satisfaction Survey* to the Utilities and Roading Committee.

hief Executive

- 1.2. The survey was undertaken in 2015 to provide information to improve the management of the stockwater race system and inform the upcoming review of the Stockwater Race Bylaw in 2017. The survey also provides an opportunity for the Council to obtain an indication of "customer satisfaction" with the stockwater race network. The findings of the survey are attached to this report (see TRIM 160329026818).
- 1.3. The survey was distributed to 1,477 property owners who pay the District stock water race rate. There were 616 survey forms completed and returned to the Council which is a response rate of 41.8%. The survey results can be viewed as an indication of levels of satisfaction with the stockwater race system.
- 1.4. The Stock Water Race Advisory Group, at their meeting on the 21st of July, approved the recommendations in this report to be presented to the Utilities and Roading Committee.
- 1.5. The attached survey report includes the following key findings:
 - There are 69% of respondents using the races for a combination of stock drinking water, domestic irrigation and/or amenity (e.g. ponds), whilst 31% are not using the stockwater.
 - There were 60% of respondents (369) that thought it was important to have a stockwater race on or adjacent to their property.
 - Overall, 79% of respondents are satisfied or had no response to the question about overall satisfaction with the stockwater race service, whilst 21% are dissatisfied.
 - A majority of respondents (88% or 542) are either satisfied with race operations, have not lodged a service request or have no opinion about the operation of the races.

- A slightly smaller majority (81% or 500) are satisfied with the amount of water available, or had no opinion on this issue.
- Almost 20% of respondents reported frequent unreliable flows, insufficient quantities of water available to them and/or blocked culverts and intakes.
- A majority of respondents (362 or 59%) know they are responsible for maintaining their water race and the majority of these (217 or 60%) experience no difficulty in undertaking the maintenance.
- Of the 362 respondents who indicated they were responsible for maintaining their stockwater race, a majority (238 or 66%) do not want the Council to become involved in maintaining their race, and would not want to pay the Council for this service if it was provided.
- 1.5 These findings show that there is general support among respondents for the water race maintenance arrangements that are currently in place. The report does not recommend any changes to these arrangements.
- 1.6 The responses to the questions on customer satisfaction indicate support for the continued provision of a stockwater race service and confirm the relevance of the service to customers. They also confirm that the current layout of the network is largely meeting the needs of the customers and no specific race closure proposals were identified as a result of the survey.
- 1.7 The survey shows that a small proportion of respondents (13.6% or 84) are uncertain about their race maintenance responsibilities. Therefore, circulation of an updated plan to spatially present races which are maintained by WIL and those maintained privately is recommended. The report also recommends circulation of an updated information flier advising of suitable methods for private race maintenance, and including contacts for further information and advice. In addition, improved reporting of the supply of stockwater is being developed and implemented in the service request system and information about this will be included in the proposed flier.
- 1.8 WIL has made recent changes to its network management to address the flow reliability concerns of some survey respondents. This includes managing the intakes and main races to achieve more consistent, reliable flows and undertaking maintenance and upgrades where required of the races, culverts and intakes.
- 1.9 Staff will prepare a further report on issues with stockwater race maintenance and outline proposals to address these.

Attachments:

 Waimakariri District Stockwater Race Users Customer Satisfaction Survey (TRIM 160329026818).

2. **RECOMMENDATION**

THAT the Waimakariri Water Race Advisory Group:

RECOMMENDS:

THAT the Utilities and Roading Committee:

(a) **Receives** report No. 160415033885

160722071262 Page 2 of 7 22/07/2016

- (b) **Approves** the *Stockwater Race Users Customer Satisfaction Survey* (TRIM 160329026818) for publication on the Council's website.
- (c) Notes the survey responses show, overall, that 79% are either satisfied or had no response to the question about overall satisfaction with the stockwater race service, whilst 21% are dissatisfied with the service.
- (d) **Notes** a majority of respondents (60%) think it is important to have access to a stockwater race on or adjacent to their property, and 69% are using the races for a variety of purposes.
- (e) **Notes** these responses indicate there is general support for the provision of a stockwater system in the District and that the service provided is still relevant to its customers.
- (f) Notes that there is general support among survey respondents for the water race maintenance arrangements currently in place, and notes no changes to the responsibility for race maintenance are recommended.
- (g) Notes that an information flier and other means of education covering maintenance responsibilities, methods for private race maintenance and reporting of supply issues via the Council's service request system will be prepared and circulated to all stockwater rate payers.
- (h) **Notes** specific issues with reliability and maintenance will be worked through with affected property owners".
- (i) **Notes** staff will prepare a further report on issues with stockwater race maintenance and outline proposals to address these.
- (j) **Notes** it is intended to repeat the survey every five years in order to continue to gauge the overall levels of customer satisfaction with the stockwater race system.

3. <u>ISSUES AND OPTIONS</u>

- 3.1. The Waimakariri District Council conducted a survey of property owners on its stockwater race scheme in 2015. This was undertaken to improve the management of the stockwater race system and inform the review of the Stockwater Race Bylaw planned for 2017. The survey also provided an opportunity for the Council to obtain an indication of "customer satisfaction" with the stockwater race network. The findings of the survey are attached to this report.
- 3.2. The survey was distributed to 1,477 property owners who pay the District stock water race rate. Although all rated properties were included in the survey, only one form was sent to each party that owns multiple properties. There were 616 responses received by the Council, which is a response rate of 41.8%. The survey results can be viewed as an indication of levels of satisfaction with the stockwater race system.
- 3.3. The survey report was endorsed by the Water Race Advisory Group during its 21 July meeting and is now recommended to the Utilities and Roading Committee for approval. The key findings of the survey are:
 - There are 69% of respondents using the races for a combination of stock drinking water, domestic irrigation and/or amenity (e.g. ponds), whilst 31% are not using the stockwater.
 - There were 60% of respondents (369) that thought it was important to have a stockwater race on or adjacent to their property.

- Overall, 79% of respondents are satisfied or had no response to the question about overall satisfaction with the stockwater race service, whilst 21% are dissatisfied.
- A majority of respondents (88% or 542) are either satisfied with race operations, have not lodged a service request or have no opinion about the operation of the races.
- A slightly smaller majority (81% or 500) are satisfied with the amount of water available, or had no opinion on this issue.
- Almost 20% of respondents reported frequent unreliable flows, insufficient quantities of water available to them and/or blocked culverts and intakes.
- A majority of respondents (362 or 59%) know they are responsible for maintaining their water race and the majority of these (217 or 60%) experience no difficulty in undertaking the maintenance.
- Of the 362 respondents who indicated they were responsible for maintaining their stockwater race, a majority (238 or 66%) do not want the Council to become involved in maintaining their race, and would not want to pay the Council for this service if it was provided.
- 3.4. The attached report includes a number of detailed findings from the survey. Of these, the key findings which may warrant a management response are highlighted here for further consideration.

3.5 Usage of the Water Races

3.6 The respondents were asked about their usage of the water races, and could indicate more than one response. Among the 616 respondents, the uses of the water races were as shown in the Chart 1 below.

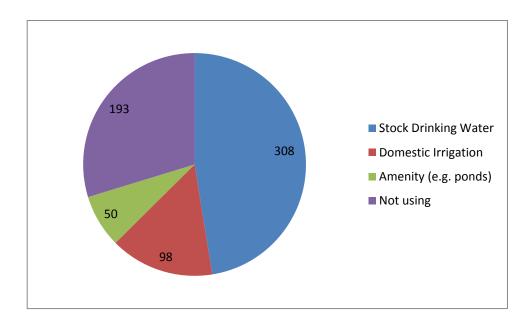


Chart 1: Usage of the Stock Water Races

3.7 The chart shows there are 31% of respondents (193) not using the stock water. The majority (69%) are using the stockwater for a combination of stock drinking water, domestic irrigation and/or amenity purposes.

3.8 Responsibility for Water Race Maintenance

- 3.9 The respondents were asked several questions about the maintenance of their water races. In response, the key survey findings were:
 - A majority of respondents (362 or 59%) were aware they are responsible for maintaining their water race; and of these:
 - A majority (217 or 60%) do not have any difficulty maintaining their race; and
 - A majority (238 or 66%) do not want to have the Council involved in maintaining their stockwater race or to pay an additional charge for this service if it was provided.
- 3.10 These responses show general support among respondents for the water race maintenance arrangements that are currently in place. The report does not recommend any changes to these arrangements.
- 3.11 A small proportion of respondents (13.6% or 84) were uncertain about the responsibility for maintaining the races on or adjacent to their property. To address this uncertainty, it is recommended that further information be made available to properties on responsibilities for race maintenance. This could include circulation of an updated plan which spatially presents the races which are maintained by WIL and those which are required to be maintained privately.
- 3.12 In addition, around a third of those responsible for maintaining their races (116, or 32%) had difficulty achieving this. To address this issue, it is recommended that an updated information flier advising on suitable methods for private race maintenance should be circulated to water race ratepayers. This could include contacts for further advice and maintenance assistance.

3.13 Reliability of Supply - Insufficient Water and Management of Culverts/Intakes

- 3.14 Respondents were asked several questions about the reliability of the supply of water to their property. From the responses, key findings are:
 - There are 81% of respondents (500) satisfied with the amount of water available, or had no opinion or experienced no issues with the reliability of their supply.
 - However 18% of respondents (110) reported the volume of water in the races was frequently insufficient to meet their needs.
 - 19% (116) are dissatisfied within the amount of water available in the races.
 - Similarly, 19% of respondents (118) indicated they frequently experienced issues such as blocked culverts or intakes on or adjacent to their property.
- 3.15 The survey shows almost 20% of respondents report frequent unreliable flows, insufficient water and/or blocked culverts and intakes. WIL has recently made a number of changes to respond to these concerns, by improving the reliability of the stockwater supply to all areas of the race network. This includes undertaking identified maintenance and upgrading culverts as required, and managing the intakes and main races to ensure consistent flows and prompt response to service requests. In addition,

improved tracking of service requests through the Council's service request system is being implemented and details of how to use the upgraded system will be advised to customers through the proposed flier.

3.16 Satisfaction with Race Operations and the Water Race Service

- 3.17 Respondents were asked several questions about their satisfaction with the operation of the races, and with the overall race service. In response to these questions, key findings are:
 - A majority of respondents (88% or 542) are either satisfied with race operations, have not lodged a service request or have no opinion about the operation of the races.
 - 11% of respondents (66) are dissatisfied with the race operations.
 - Overall, 79% are satisfied or had no response to the question about overall satisfaction with the stockwater race service, whilst 21% were dissatisfied.
- 3.18 The responses indicate general overall satisfaction with the water race service provided and with the race operations.
- 3.19 Specific issues with reliability and maintenance can be worked through with the affected property owners, as noted above. As private race maintenance is an issue identified in some respondent's comments, a proactive management approach with individual owners to remove blockages and clean races is recommended. This will include circulation of an updated information flier on suitable maintenance methods and advice.

3.20 Importance of the Water Race System

- 3.21 Respondents were asked how important they considered it was to have a stockwater race on or adjacent to their property. Key findings are:
 - A majority of respondents (60% or 369) thought it was important to have a stockwater race on or adjacent to their property.
 - There were 27% of respondents (166) who felt the provision of this service is not important.
- 3.22 The responses indicate general support for the continuation of the stockwater race service.

4. COMMUNITY VIEWS

- 4.1. This survey indicates the views of property owners with access to a stock water race. It gauges the satisfaction of stockwater race users and provides information to update the next review of the Stockwater Race Bylaw in 2017.
- 4.2. Once the survey report has been adopted by the Utilities and Roading Committee of Council it is recommended the survey be published on the Council's website.
- 4.3 Staff will prepare a further report on stockwater race maintenance issues and will outline proposals to address these.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. This survey is a component of the ongoing asset management of the stockwater race network.
- 5.2. It is intended to repeat the survey every five years in order to gauge the overall levels of customer satisfaction with service delivery.

6. CONTEXT

6.1. Policy

This is not a matter of significance in terms of the Council's Significance Policy.

6.2. Legislation

The provision of stockwater to properties in the district is mandated through provisions of the Local Government Act 2002.

6.3. Community Outcomes

There is sufficient clean water to meet the needs of communities and ecosystems.

Core utility services are provided in a timely, sustainable and affordable manner

There are wide ranging opportunities for people to contribute to the decision making by local, regional and national organisations that affects our District

WAIMAKARIRI DISTRICT STOCKWATER RACE USERS CUSTOMER SATISFACTION SURVEY



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1 Introduction

The Waimakariri District Council conducted a survey of the owners of all the properties on its rates data base that were being charged for the District's stockwater races in mid-2015.

The stockwater race in the Waimakariri District carries water from an intake at Browns Rock just east of the Waimakariri River gorge bridge across the Waimakariri/Ashley plain. The stockwater race system was constructed in the late 19th and early 20th Centuries.

For many years the stockwater race system was managed by the Waimakariri Ashley Water-Supply Board, a body created by the *Waimakariri Ashley Water Supply Act 1961*. This legislation has been superseded by the *Local Government Act 2002*, so the District Council is now formally responsible for the stockwater race system. The *Waimakariri Ashley Water Supply Act 1961* was repealed in 2015.

In the 1990s the stockwater race system on the upper plain provided the basis for the Waimakariri irrigation scheme, a "run of the river" scheme which commenced operation in the summer of 1999-2000. The irrigation scheme now delivers irrigation water to approximately 18,000 hectares within a command area of some 40,000 hectares. While a significant proportion of the stockwater races to the west of the District were widened to carry irrigation water, many of the races continue to provide stockwater to properties (a number of which are not on the irrigation scheme).

Waimakariri Irrigation Limited (WIL), the company that operates the irrigation scheme, also manages the stockwater race system on contract for the District Council.

2 The stockwater race survey

The Waimakariri District Council decided in 2015 to conduct a survey of property owners on its stockwater race scheme. This was primarily undertaken to provide information to improve the management of the stockwater race system and to inform the review of its Stockwater Race Bylaw. The survey also provided an opportunity for the Council to obtain an indication of "customer satisfaction" with the stock-water race network. The survey gauged satisfaction with parameters of the stock-water supply such as function, reliability and the effectiveness of race maintenance.

The survey questionnaire is attached to this report as Appendix 1. The survey included a number of questions about the water race services, including:

Topic	Questionnaire question number(s)
Location of the water/ irrigation race on or adjacent to the property	1-2
Area of the property	3
The farming activities undertaken on the land	4-5
The use that customers were making of the stockwater	6
Livestock access to the stockwater and alternative access options	7-8
Stockwater race maintenance	9-11
Satisfaction with the race network/ level of service	12-16
Importance of having a stockwater race on or adjacent to the	17
property	
Final comments	18

Initially the Council sent letters to all those on the rates data base inviting them to go on line and answer a web based questionnaire. There was only a limited response to this approach, so it was decided to send out hard-copy questionnaires to those who had not completed the on-line survey. The covering letter with the questionnaire gave the property owners the opportunity to complete and return a hard-copy questionnaire or to follow a web link and complete the survey on-line.

The initial list of land owners with properties rated by the Council for the stockwater race service, identified in excess of 1,700 land parcels. A significant number of these had the same owner and it was decided that it would be inappropriate to send multiple questionnaires to the same person or company. Every effort was made to limit the circulation of invitations to participate in the on-line survey and, if they had not responded, to the subsequent correspondence and accompanying hard-copy questionnaire. The Council, nevertheless, received indications that despite the efforts to remove duplicates a few people did receive multiple letters.

A total of 616 questionnaires were completed from the 1,477 invitations to participate that were sent out, giving a response rate of 41.8 percent. As this survey did not involve the drawing of a sample it is not appropriate to calculate a sampling error. It is important to recognize that there may be differences of views between those who chose to respond to the survey and those who did not. The overall distribution for size of property for those on the stockwater race system is not available.

The results of the survey can be viewed as an indication of levels of satisfaction with the stockwater race system among the customers paying for the stockwater supply.

Respondents were asked if they had a stockwater or irrigation race on or adjacent to their property (questions 1 and 2). In response, of the 616 respondents, 482 of them (78.2%) had a stockwater race or races on their property, while 74 (12.0%) had a stockwater race adjacent to their property.

Of those 74 respondents with an adjacent stockwater race, 39 of them had their race in the road reserve and 35 in a neighbour's property.

A further 24 (3.9%) noted they had access to an irrigation race (hereafter referred to as a stockwater race within the survey report). It appears that references within the survey questionnaire to "stockwater races" also incorporate use of irrigation races and therefore these are treated as one race system in terms of the analysis of the responses throughout the survey.

There were 36 respondents (5.8%), who completed the balance of the survey that did not indicate whether they had access to either type of race.

The questionnaire invited comment after each section of the survey. There were some comments that did not pertain to the specific questions and therefore were not included in this report. Some relevant comments have been provided verbatim and some have been summarized where there was a common theme from respondents.

3 Size of respondents' properties and farming activities undertaken

Respondents were asked to indicate the size of their property (see question 3). The distribution of responses is set out below:

96	(15.6%)	Less than 1 hectare
294	(47.7%)	1 hectare and less than 5 hectares
63	(10.2%)	5 hectares and less than 10 hectares
45	(7.3%)	10 hectares and less than 20 hectares
56	(9.1%)	20 hectares and less than 50 hectares
15	(2.4%)	50 hectares and less than 100 hectares
45	(7.3%)	100 hectares or more
2	(0.3%)	Property size not stated

The sizes of two respondents' properties could not be ascertained.

When asked to indicate the farming activities that are being undertaken on the land with stockwater races (see question 4), respondents gave a wide range of activities and in many instances on smaller holdings, gave multiple uses.

Table 1 indicates the number of respondents who were undertaking each of the various activities.

Table 1 Farming activities/use of stockwater race water				
Activity	Number	Percentage*		
Sheep	239	38.8		
Beef cattle	174	28.2		
Dairy cattle	67	10.9		
Horses	81	13.1		
Cropping	50	8.1		
Poultry (housed and free range)	46	7.5		
Horticulture	43	7.0		
Hay and silage	39	6.3		
Alpaca/llamas/goats	21	3.4		
Forestry	18	2.9		
Pigs (housed and free range)	17	2.8		
Garden/amenity only	12	1.9		
Deer	7	1.1		
Do not use 105 17.0				
* Percentage total more than 100	as respondents gave mult	iple uses		

When viewing the percentages for the various farming activities/use of stockwater race water, it is important to appreciate that many of the respondents indicated that they were making a range of uses of their land, for the overall percentage totals more than 100.

Table 1 nevertheless shows that a high percentage of respondents grazed sheep followed by beef cattle only or in conjunction with another use.

Table 2 shows the distribution for respondents grazing sheep or sheep and beef cattle and the size of their property.

Table 2 Sheep and beef grazing and size of property							
Size of property	Sheep	only	Beef	only	Sheep and beef		
	Number	Percent	Number	Percent	Number	Percent	
Less than 5	83	58.1	45	57.8	46	48.0	
hectares							
5 & less than 10	21	14.7	11	14.1	7	7.5	
hectares							
10 & less than 20	11	7.7	9	11.5	12	12.4	
hectares							
20 & less than 50	13	9.1	10	12.8	16	16.7	
hectares							
50 & less than 100	3	2.0	2	2.5	3	3.0	
hectares							
100 hectares or	12	8.4	1	1.3	12	12.4	
more							
Total	143	100.0	78	100.0	96	100.0	

Table 2 shows that for the properties of less than 5 hectares with sheep and/or beef cattle, higher percentages reported either sheep or beef rather than both. Of the larger properties relatively few had either sheep or beef.

Among the 67 properties reporting involvement with the dairy industry, the following activities were undertaken (noting many respondents indicated they were undertaking multiple forms of dairy farming activities on their property):

- 22 Dairy milking platform (stock wintered off property)
- 15 Dairy cattle (stock on property all year)
- 28 Dairy grazing (stock wintered on property)
- 36 Dairy support (stock on property all year)
- 101 Total (including multiple) activities undertaken by respondents

The responses indicate the potential high demand for stockwater among respondents with diary milking platforms and/or with cattle on the property all year.

Among the other farming activities reported by respondents, some were only involved with one activity while others had a number of activities. While many of the smaller holdings had various combinations of horses, poultry, pigs and sheep and beef cattle, a few of the larger holdings also combined sheep and beef cattle with dairy grazing, cropping and even deer.

Respondents were also asked if they were contemplating changing the use that they were making of their land (question 5).

Of the respondents, 455 (73.9%) indicated that they were not very likely or not at all likely to change their farming activities. There were 47 respondents (7.6%) that were very likely or quite likely to change their farming activities. A further 57 (9.3%) did not know or had no opinion and another 57 (9.3%) did not choose to answer the question.

Of those who commented on likely changes to the use of their land, a few indicated that their land was to be sold relatively soon. Also, some mentioned increasing the number of animals on their land while others were going to reduce their stock and change to cropping and or hay/baleage.

4 Use of stockwater races

Respondents were asked (question 6) to indicate which ways they used stockwater race water on their property (noting that respondents could indicate more than one response).

Among the 616 respondents, the rates of use were:

- 308 for stock drinking water
- 98 domestic irrigation
- 50 amenity use (e.g. ponds)
- 193 did not use

Table 3 sets out the number and percentages of respondents with various sized properties that used their stockwater race water as drinking water for livestock:

Table 3 Responsive stores		ater race water as drink	ing water for
Size of property	Total number of respondents	Number using water for livestock	Percentage of total using water for stock
Less than 1 hectare	96	11	11.5
1 hectare and less than 5 hectares	294	141	48.0
5 hectares and less than 20 hectares	108	73	67.6
20 hectares and less than 100 hectares	71	51	71.8
100 hectares or more	45	32	71.1
Total	614	308	50.0
Total Missing cases 2	614	308	50.0

Table 3 shows that higher percentages of those with properties of 5 hectares or more are using the stockwater race water to provide water for their livestock. Significantly lower percentages of those with properties of less than 5 hectares used the stockwater race water for this purpose. Very few of those with properties of less than 1 hectare used the water for this purpose (these were mainly residential properties in Cust and Residential 4 properties in Mandeville).

Of those 96 respondents with properties of less than 1 hectare a total of 38 (39.6%) indicated that they were using stockwater race water, and of these respondents:

- 9 were using it for livestock only
- 22 were using it for domestic watering only
- 2 were using it for amenity purposes only
- 2 were using it for livestock and domestic watering
- 3 were using it for domestic watering and amenity purposes

Of those 294 respondents with properties of 1 hectare and less than 5 hectares a total of 167 (56.8%) were using stockwater race water, and of these respondents:

94 were using it for livestock only

16 were using it for domestic watering only

8 were using it for amenity purposes only

23 were using it for livestock and domestic watering

17 were using it for livestock and amenity purposes

2 were using it for domestic and amenity purposes

7 were using it for livestock, domestic and amenity purposes

Of those 108 respondents with properties of 5 hectares and less than 20 hectares a total of 76 (70.4%) were using stockwater race water, and of these respondents:

63 were using it for livestock only

1 was using it for domestic watering only

2 were using it for amenity purposes only

9 were using it for livestock and domestic watering

1 was using it for livestock, domestic and amenity purposes

Of those 71 respondents with properties of 20 hectares and less than 100 hectares a total of 55 (77.5%) were using sockwater race water, and of these respondents:

45 were using it for livestock only

1 was using it for amenity purposes only

6 were using it for livestock and domestic watering

3 were using it for domestic and amenity purposes

Of the 45 respondents with properties of 100 hectares or more a total of 32 (71.1%) were using stockwater race water, and of these respondents:

26 were using it for livestock only

3 were using it for livestock and domestic purposed

1 was using it for livestock and amenity purposes

2 were using it for livestock, domestic and amenity purposes

Respondents also offered a range of comments, and this included approximately six respondents who indicated that they regarded the water in the stockwater race as an emergency source of water for livestock, in the case of extended power outage or problems with the pump supplying water to their water troughs. Some of these people were not currently using the stockwater race water for livestock.

In terms of the use of stockwater race water, one respondent noted that this water was valuable for the bees that pollinated their 5,500 lavender plants. Mention was also made of the stockwater race water being valuable for firefighting.

Among those who did not use race water for livestock, a few indicated that they were not so doing because it was not sufficiently reliable. Concerns included whether the supply could be cut off without notification, or shut off for race cleaning in the late winter/spring when stock were lactating.

The respondents were also asked about the method(s) used to give their livestock access to the stockwater race water, if any (question 7). Respondents could provide more than one response to the question.

As a proportion of the 308 respondents using stockwater race water for livestock, the responses to question 7 were:

125	(40.6%)	had races fenced – with direct stock access
173	(56.2%)	had races unfenced – with direct stock access
51	(16.6%)	had formed drinking station(s)
51	(16.6%)	pumped and piped water from the race(s)
8	(2.6%)	piped water from the race(s)

Among the respondents who indicated that their races are fenced, 20 had created formed drinking stations, and of those who had not fenced their races, 18 had formed drinking stations.

In addition, of the respondents who indicated that their races were fenced, 80 (64.0%) had sheep on their properties, and of the respondents whose races were unfenced 123 (71.1%) had sheep on their properties.

Respondents were asked to indicate if they had an alternative source(s) of drinking water for livestock, within the area serviced by the stockwater race system (question 8). The respondents were able to indicate more than one alternative drinking water source for their livestock. As a proportion of the 308 respondents who used their stockwater race water for their livestock:

83	(26.9%)	had a reticulated trough system
94	(30.5%)	had a private well but no reticulated system
24	(7.8%)	had a Council reticulated supply
118	(38.3%)	did not have an alternative supply

Table 4 sets out the options for alternative supply and size of property for these respondents.

Table 4	Table 4 Alternative supplies and size of property									
Size of	Less	& 1 ha	1 ha &less than 5 ha		5 ha & less than 20 ha		20 ha & less than 100 ha		100 ha or more	
property	N	%	N	%	N	%	N	%	N	%
Reticulated trough system	2	16.7	32	22.9	18	24.3	20	33.9	11	32.3
Private well no reticulation	1	8.3	42	30.0	28	37.8	15	25.4	8	23.5
Council reticulated supply	4	33.3	17	12.1	2	2.7	1	1.7	0	0.0
No alternative supply	5	41.7	49	35.0	26	35.1	23	39.0	15	44.1
Total	12	100.0	140	100.0	74	100.0	59	100.0	34	100.0

Table 4 shows that relatively low percentages of the respondents using stockwater race water for livestock had a reticulated trough system or a Council reticulated supply.

If those with private wells with no reticulation are added together with those that indicated no access to an alternative supply, then 50% or more of the respondents with properties in each size bracket have no immediate replacement for the stockwater race system as a source of water for their livestock.

5 Stockwater race maintenance

The questionnaire prefaced the section about stockwater race maintenance with the comment that some races are being maintained by WIL, and that property owners needed to maintain the other races.

When asked about whether they were responsible for maintaining the stockwater race on or adjacent to their property (question 9), the responses showed:

362	(58.8%)	indicated that they were responsible;
119	(19.3%)	indicated that they were not responsible;
84	(13.6%)	did not know; and
51	(8.3%)	did not respond to the question

The 362 respondents who indicated that they were responsible for the maintenance of the stockwater race on their property were then asked (question 10) if they encountered any difficulties maintaining it. Of these:

116	(32.0%)	had difficulties maintaining it;
217	(60.0%)	did not have difficulties maintaining it; and
29	(8.0%)	did not know or did not respond to the question.

Respondents were also asked (question 11) whether they would be interested in having the Council organise to have their stockwater race maintained for an additional charge.

Of the 362 respondents who indicated that they were responsible for maintaining their stockwater race:

68	(18.8%)	would like to have the Council involved;
238	(65.7%)	did not want to have the Council involved; and
56	(15.5%)	did not know or did not respond to the question.

Of the 84 respondents who did not know if they were supposed to be looking after the stockwater race on their property, and who chose to answer the question regarding whether they wanted the Council involved:

18	(21.4%)	would like to have the council involved;
33	(39.3%)	did not want to have the Council involved; and
33	(39.3%)	did not know or did not respond to the question.

A few of the respondents commented that they would need to know what it would cost before they made a commitment to having the work done by the Council.

Respondents were also invited to comment about any difficulties they were having with maintaining their stockwater races, and this prompted a wide range of views. The main themes were:

Private Race Maintenance

 Respondents reported significant problems being created by those not maintaining races. Lack of maintenance downstream meant that water would bank-up when there was a surge in the volume of water in the race or during heavy rain. If the problem was upstream, it meant that the water did not get through and for some respondents the flows brought through rubbish and/or weed seeds including gorse.

- One respondent explained: "a neighbour's gum tree causes some issues with bark strips constantly entering the race." Others mentioned problems with reeds and bamboo being grown in the race up-stream from their properties.
- Silting and the growth of weeds including oxygen weed were seen as problems which were worse since the commencement of the irrigation scheme. Some respondents commented that this meant that they had to clean their stockwater races more frequently because the build-up of silt was impeding the flow. One respondent explained his/her situation "As at beginning of race, when river floods [the] main WIL irrigation race full, silt ends up in stock race and our pond. Builds up very quickly and a cost to clean."
- There were also respondents who commented that they were having no problems maintaining their stockwater races. At least one respondent commented that he/she had a small digger for the work. Another commented "no difficulty it is a pleasure to maintain it and support the biodiversity that exists because of it. Herons, ducks, kokako, eels, mudfish, dragonflies, skinks etc. Native vegetation DOC would be proud of us!!

Reliability of Supply

- There was concern that the unreliability of flow meant that the stockwater race water could not be relied upon to provide water for livestock. Some complained that the stockwater race water was being cut off for considerable periods, while another asked to receive notification when supply was cut off during the winter. One respondent commented "several periods of time when no water is in the stockwater race. Especially during peak hot summer months ... When paying for the water race we expect water to be flowing and not see our animals looking for water. We are charged but never given any rebate for the several days in a year mounting to weeks that it is not running."
- The irregular flows were causing flooding problems on some properties as the water from the stockwater races was damaging trees and pasture.

Water Race Operations

- Comments from a few respondents were provided with respect to the operational management of the system. One respondent argued that WIL should be responsible for the race that runs along Stephens Road to Harewood Road and then to Boundary Road, as this race is not used for stockwater. Another commented "As the race that comes onto my property is a dead branch and the fall is marginal we have had difficulty with blockages further up-stream. WIL [officer named] has provided excellent service in dealing with this ongoing problem.
- Where the races in the road reserve were being cleaned by others, respondents were concerned that the material being taken out of the races was left beside the races "leaving heaps of mudhills" which look very untidy and cannot not be mowed thus presenting a fire risk when it

- dried out in summer. Another respondent commented "It clogs up with weed, when a digger cleans it out we end up with a big pile of mess."
- Another respondent commented "WIL comes onto property, used to be unannounced but they have got better. They leave all the dirt on the side what builds up against the wire fence and reduces the effectiveness of the fence."
- The deepening and widening of the races was a concern when it was damaging, or threatening to damage, adjoining fences.

Water Race Function and Value

- Towards the east of the scheme it was noted that to achieve "fall" the races are now very deep and too dangerous for livestock.
- It was suggested that attention could be paid to coordinating the cleaning
 of races in areas where people did not have the machinery required or
 found it hard to do the work physically. This was seen as a way of
 reducing the cost of bringing in a contractor for a small amount of work.
- There were a number of comments about the lack of value in having the stockwater race, that it was a nuisance or posed a risk to young children. There were also calls for it to be removed from respondents' properties as it was not meeting their needs. Among those calling for the closure of races was one from an Oxford road property, where the respondent stated "We feel very strongly that the stock race that runs through our property ... should be cut off as the area is being developed for residential use all around our boundaries and the maintenance of this water race system is becoming increasingly difficult."

6 Satisfaction with levels of service

Respondents were asked a series of questions about their general satisfaction with the level of service provided by the water race network. They were also asked about the frequency with which they had encountered difficulties with the supply and/or blockages at culverts.

6.1 Amount of water available

In response to a question about general satisfaction with the amount of water that they had access to from the stockwater race system (question 12), of the 616 respondents:

86	(14.0%)	were very satisfied
234	(38.0%)	were satisfied
67	(10.9%)	were dissatisfied
49	(8.0%)	were very dissatisfied
180	(29.2%)	had no opinion or did not respond to the question

Of the 116 respondents who were dissatisfied with the amount of water that they had access to from the stockwater race system:

16	(13.8%)	had properties of less than 1 ha
65	(56.0%)	had properties of 1 ha and less than 5 ha
21	(18.1%)	had properties of 5 ha and less than 20 ha
8	(6.9%)	had properties of 20 ha and less than 100 ha
6	(5.2%)	had properties of 100 ha or more

The respondents with properties of less than 5 hectares represented a higher proportion of those that were dissatisfied with the amount of water they had available, when compared with the wider survey population.

For instance, the smaller properties (less than 5ha.) comprised 70% of all those dissatisfied within the amount of water available, but comprised a relatively smaller share (63%) of all the survey responses. This means that, among all those dissatisfied with the amount of water available, those on smaller properties are overrepresented.

Of the 116 respondents who were dissatisfied with the amount of water that they had access to from the stockwater race system, 64 (55.2%) were using the race system to provide water for livestock. Further, 11 (9.5%) were using it for domestic and amenity purposes only. There were 41 (35.3%) that did not indicate that they were using water from the race system.

As 55.2% of those that are dissatisfied with the amount of available water are using the water for livestock, these respondents are slightly over-represented when compared to the total survey population (noting 308 (50%) of the 616 respondents from the total survey use the race water for livestock).

This indicates those using the race water for their livestock are more likely to be dissatisfied with the amount of water available than are those undertaking other farming activities not involving livestock.

6.2 Frequency of insufficient water

In a further question about how frequently the amount of water that the respondent has access to falls below the level that meets their needs (question 13), of the respondents:

31	(5.0%)	indicated this occurs very frequently
79	(12.8%)	indicated this occurs frequently
143	(23.2%)	indicated infrequently
114	(18.5%)	indicated very infrequently
67	(10.9%)	indicated not at all
182	(29.5%)	had not opinion or did not respond to the question

Of the 110 respondents (17.8%) who indicated that the level of water available frequently did not meet their needs:

16	(14.5%)	had properties of less than 1 ha
54	(49.1%)	had properties of 1 ha and less than 5 ha
22	(20.0%)	had properties of 5 ha and less than 20 ha
11	(10.0%)	had properties of 20 ha and less than 100 ha
7	(6.4%)	had properties of 100 ha or more

In contrast to the distribution for respondents not satisfied with the amount of water, those with properties of less than 5 hectares are not over represented among those reporting that they frequently had less water than they require.

Of the 110 respondents who reported that they frequently had less water than they required, 72 (65.5%) were using stockwater race water for livestock, 13 (11.8%) were using if for domestic or amenity purposes only, and 25 (22.7%) were not using the water.

The responses to the question about the frequency with which the amount of water available is inadequate shows that the fluctuation in the amount of water available in some parts of the system is of most concern to those using the water from the stockwater races for livestock. These respondents represented 65.5% of those who frequently encountered flows which did not meet their needs, while they comprised around 50.0% of the total respondents.

In this context, one respondent noted that although the instances where there was insufficient water were infrequent, they tended to occur at critical times for stock requirements or during the irrigation season when WIL was also using the waterway.

6.3 Blocked culverts or intakes

Respondents were also asked (question 14) about the frequency that they had experienced problems such as blocked culverts or intakes on their property or adjacent to their property. Of these:

33	(5.4%)	indicated very frequently
85	(13.8%)	indicated frequently
127	(20.6%)	indicated infrequently
113	(18.3%)	indicated very infrequently
147	(23.9%)	indicated not at all
111	(18.0%)	had no opinion or did not respond to the question

There were 118 respondents who frequently experienced problems with blocked culverts or intakes, and of these:

17	(14.4%)	had properties of less than 1 ha
51	(43.2%)	had properties of 1 ha and less than 5 ha
26	(22.0%)	had properties of 5 ha and less than 20 ha
13	(11.0%)	had properties of 20 ha and less than 100 ha
11	(9.3%)	had properties of 100 ha or more

Of the 118 respondents who frequently experience problems with blocked culverts or in takes, a majority (57.6%) of them were properties of 5 hectares or less. However, people with smaller properties on the stockwater race system were under represented among those encountering this problem when compared with the total survey response (as the properties of 5ha. or less comprise 63% of the total survey population).

Also, of these 118 respondents, 61 (51.7%) were using stockwater race water for livestock, 14 (11.9%) were using it for domestic and amenity purposes, and 43 (36.4%) were not using stock water race water. The limited differences between the distribution for farming activity and for the difficulties with blocked culverts suggests that this is a more general problem with the system and not one that is linked with either property size or use of stockwater race water.

There were also indications that some culverts under roads are not sufficiently large enough to carry the high flows associated with surges in supply or during periods of high rainfall.

6.4 Satisfaction with race operations

In addition, respondents were asked (question 15) about how satisfied they were with the response to calls that they had made concerning problems with the operation of the stockwater race on or adjacent to their property. Of respondents:

90	(14.8%)	were very satisfied;
146	(24.0%)	were satisfied;
37	(6.1%)	were dissatisfied;
29	(4.8%)	were very dissatisfied;
120	(19.7%)	had no opinion or did not respond to the question; and
186	(30.6%)	had not found it necessary to lodge a service request.

The responses show 38.8% of respondents were satisfied with the operation of the water races and 10.9% were dissatisfied. The majority of respondents had no response or no opinion on this issue, or had not found it necessary to lodge a service request for assistance with the race operation.

There was no apparent link between the percentages dissatisfied and either the size of the respondent's property or the use being made of stockwater race water.

6.5 Satisfaction with the stockwater race service

Finally respondents were asked to assess their overall level of satisfaction with their stockwater race service (question 16). Of the responses:

96	(15.6%)	were very satisfied;
226	(36.7%)	were satisfied;
67	(10.9%)	were dissatisfied;
60	(9.7%)	were very dissatisfied; and
167	(27.1%)	had no opinion or did not respond to the question.

Of the 127 respondents dissatisfied with the stockwater race service overall:

19	(15.0%)	had properties of less than 1 ha
69	(54.3%)	had properties of 1 ha and less than 5 ha
24	(18.9%)	had properties of 5 ha and less than 20 ha
9	(7.1%)	had properties of 20 ha and less than 100 ha
6	(4.7%)	had properties of 100 ha or more

If viewed in terms of the proportion of the respondents from each size of property, there are substantially lower levels of dissatisfaction among those with properties of 20 hectares or more, than for those with smaller properties.

6.6 Views about satisfaction with stockwater race service

Overview

Respondents commented extensively on the service that they were receiving. In general terms 30 of those who commented indicated that they were satisfied with the general service provided by the water race network. However, 42 commented on the fluctuations in supply and the impact that this has on their farming operations or other domestic use, and a few indicated concern about the impact of the fluctuation on fish/eels in the races.

Some respondents commented on the amount of water available in the system, highlighting the problem this poses for those using the race water for livestock. If the flows are not reasonably reliable then it is not feasible to continue to rely on race water, and some indicated that they had installed reticulated systems for this reason.

A few respondents indicated that they appreciated that there would be reduced flows when the intake closes because of flood flows in the Waimakariri, and others noted that the difficulties with reliability had become worse since the commencement of the irrigation scheme.

Private Race Maintenance

Problems with the maintenance of the races attracted a good deal of attention. Again neighbours were identified as creating problems by not maintaining their races, with those upstream seen as denying those downstream access to water, and those downstream creating difficulties when there were surges in the flow often because of rainfall.

Tampering with the races to divert the flow was noted by a few respondents. This presents problems for some because they do not get the water that they are entitled to, and in other instances it is resulting in flooding.

There were also comments suggesting that if everyone fulfilled their responsibilities with respect to the maintenance of races the system should work well. Some respondents thought that more monitoring or review of race maintenance could be undertaken. One suggestion was the "land holder should be put on notice to improve the condition of their water race or be quoted a fee if they do not, in a similar way that MainPower puts landholders on notice for trees that are too close to power lines."

Network/ System Performance

There were some comments regarding over cleaning races. At least one respondent reported that they lost water from their race because when cleaned the level in the race upstream had been lowered.

The issue of obtaining sufficient fall to keep the races flowing has also resulted in some cases where the races become too deep and dangerous for sheep. A similar situation was reported where an irrigation race doubles as a stockwater race, and a respondent noted that when the water level is low in the irrigation race sheep were unable to get access safely.

This respondent commented:

"As our race was converted to an irrigation race ([of] which we are not a shareholder it is difficult for the sheep to get water when flows are low and we also have difficulty filling our troughs when flows are low."

While some were concerned about the lack of water, others were concerned about flooding from stockwater races.

One respondent indicated that the Council should recognise that towards the east of the District the stockwater races were also drains. Another attributed the flooding of their property from a stockwater race to the way in which the Council maintained the road reserve and the run-off from the roadway.

Water Race Operations

Some respondents indicated that they were thoroughly satisfied with the response received when they asked for service. A few commented on the service that they had enjoyed in the past from the recently retired officer responsible for the races, and one or two noted that they had not asked for help since he retired. In terms of the general comments, it appears that the service provided by WIL may have improved recently.

In one instance, a respondent had approached the Council about getting the mud out of the water race and the WIL officer introduced he/she to a dedicated rake which is manufactured by Wormersley Engineering in Oxford, and he/she has had "no trouble keeping it clean since."

While some respondents recognised that the amount of water in the races will fluctuate, because it is necessary to shut the intake when there is a high flow in the Waimakariri River, other were less tolerant. A few respondents felt it would be

beneficial to have a system for letting the owners of properties on the stockwater race system know when water is being shut off. Another respondent noted the need to check the irrigation company's website to see whether any races were closed for maintenance.

A few respondents were unclear whether their concerns were being given the same priority when compared with the service provided to farmers. For example, it was considered that if there was a problem with the irrigation system it would be addressed immediately, but if it was a stockwater race problem it would not be seen as urgent.

Maintenance Responsibility

There would also appear to be some uncertainty about responsibilities with respect to maintaining races. Some respondents stated that they did not know who was responsible for the race through or adjacent to their property. One or two others commented that in the past either WIL or the Council had maintained their race but did not do so now. A few mentioned that they did not think that they should be charged a stockwater rate and then have to maintain their races.

In addition to those who commented about problems with the system there were 20 respondents who stated that they did not use the system and should not have to pay for it, wanted it diverted, piped or otherwise removed through their property as it was of no value to them.

Race Water Quality

A number of respondents considered that they had encountered more difficulties with their stockwater races since the development of the irrigation scheme. Most prominent among the concerns are increases in the amount of weed growing in the races, an increase in the amount of silt needing to be removed and a decline in the quality of the water. A respondent who reared alpacas noted: "alpacas need clean water." Another commented that the water was being "fouled by livestock upstream".

A further respondent indicated that he/she had complained to the Council about the quality of the water in the races on a number of occasions but had not had a satisfactory response, so had turned to the Regional Council for help. A report was prepared and sent to this Council indicating that the race water had E.coli among other pollutants, but nothing was done about the situation.

7 Importance of having the stockwater race system to property owners

7.1 Overall importance

Respondents were asked (question 17) how important they considered it was to have a stockwater race on or adjacent to their property. Of the respondents:

254	(41.2%)	considered it very important
115	(18.7%)	considered it important
62	(10.1%)	considered it not important
104	(16.9%)	considered it not at all important
81	(13.1%)	had no opinion or did not answer the question

The results show that 60% of respondents consider it important to have a stockwater race on or adjacent to their property.

Table 5 sets out the frequencies for importance for respondents with different sizes of properties.

Table 5 Importance of having stockwater race(s) on property and property size										
Importance	Less & 1 ha		1 ha &less than 5 ha		5 ha & less than 20 ha		20 ha & less than 100 ha		100 ha or more	
_	N	%	N	%	N	%	N	%	N	%
Very important	13	13.5	116	39.5	57	52.7	45	63.4	23	51.1
Important	22	22.9	60	20.4	14	13.0	13	18.3	6	13.3
Not important	13	13.5	33	11.2	10	9.3	3	4.2	3	6.7
Not at all important	31	32.3	45	15.3	17	15.7	4	5.6	7	15.6
No opinion	3	3.1	11	3.7	1	0.9	2	2.8	2	4.4
No response	14	14.6	29	9.9	9	8.3	4	5.6	4	8.9
Total	96	100.0	294	100.0	108	100.0	71	100.0	45	100.0

In terms of the level of importance attached to having a stockwater race on their property, table 5 shows respondents with the largest properties placed a higher level of importance on the stockwater races than the smaller properties. For instance, of the properties that are between 20 and 100 hectares in size, the highest relative importance was placed on the stockwater races.

For those who thought that it was not important to have a stockwater race on or adjacent to the property, those with properties of less than 1 hectare recorded the highest percentage.

7.2 Views of Respondents who considered it very important

Respondents were also invited to comment on the issue of importance of having a stockwater race on their property.

The following comments indicate the approach adopted by people who considered it was very important to have a stockwater race, which include complete reliance on the system for livestock, an alternative in the case of loss of power or well failure, a source of water for fire-fighting, amenity and habitat value.

"A stockwater race not only provides water for farm livestock but also the birds, bees and other insect populations. I feel very strongly that the current water-race system should be maintained at its current level for this reason alone."

"Due to the low output from our bore, it is imperative we have access to the stockwater race."

"A significant part of the value of our property is the established gardens. The race is very important to us to maintain the gardens and orchard."

"Given the small amount of wetland habitat in and around the area any habitat is improvement even it if is heavily impacted on by adjoining activity."

"I love the water on the property and it was the deciding point when I purchased the property."

"In the more isolated part of the property it is the only water stock have."

"No other source of stockwater"

"Our stockwater race is a multi-use race. We rely upon our stockwater race to provide us with both stockwater and also irrigation water as per our WIL shareholding. We also see our stockwater race as a feature on our property and it is one of the reasons we purchased it originally."

"We have a very long boundary and trying to get water to stock without a water race would be expensive and difficult."

"Stockwater races also drain water from surface flooding after heavy rain. We find we have a huge catchment of surface water after heavy rain so it makes its getaway eventually via the stockwater races."

"The race is an important alternative source of stock drinking water in summer and winter when trough water is either subject to algae or frozen solid in hard frosts."

"[It] would be uneconomic to farm our properties without stockwater races."

"We rely on it entirely, we would be lost without it."

"We find it a very important service and would find it extremely difficult without it. Overall we think it works very well. It does need maintenance but we do what we can and WIL are very good at keeping a check on things and are happy to arrange the services of a contractor should we need one to give an annual clean."

"This also gives us another option if we lose power – we can cart water to the rest of our stock that rely on well water."

"Essential for stock farm management and for the greater good of the district i.e. fire services and habitat/ecological balance with increased monoculture."

7.3 Views of respondents who thought it was important

Comments from respondents who considered that it was important to have a stockwater race on their property included its value as a back-up supply when power supply is cut or during times of dry weather, a source of water for domestic irrigation and for fire-fighting, for some the only source of water for stock. This issue of lack of reliability was also raised.

"Back up supply during droughts"

"Although we have a well that has not run dry on us yet, any source of water in Canterbury is valuable."

"Because there may be other farmers below me who want access to the stockwater race."

"Good as a backup system if troughed system fails (power cut)."

'It is important to have a water source for fire-fighting and some domestic irrigation in high summer."

"The stockwater race is part of the garden and has some aesthetic value. There is also an historic value too."

"Only sources of water for stock."

"We have for a long time now paid for a lot of money each year for stockwater race system. Since the start of irrigation it has changed the flows, sometimes very high and in dry conditions very low. I have had to cart water to my stock and when you are paying for a service you like to think you can get when you want it."

"We consider the stockwater race very important. It is cool clean water that is very difficult to achieve with troughs. We applaud the pioneering farmers of the Waimakariri who built the system for the good of all."

"When I moved here, I had reticulated troughs put in the rest of my property. I did not put them in the 2 front paddocks as there was a water race. I did not know at the time that it would be dry so frequently. I have to use buckets now when the race is dry."

"I believe it is important but only if it is reliable."

7.4 Views of respondents who thought it was not important or not at all important

The range of issues canvassed by respondents who considered it not important or not at all important to have a stockwater race on their property included the view that people should not have to pay for a system that they cannot use, and in this case it was because the race was on an adjacent property and across a shared driveway from the respondent's paddocks. Also the lack of reliability means that respondents had found that they had to install a trough system. Others saw it as presenting a

danger to stock and health or summed the system up as being more trouble than it is worth.

"... [S]houldn't be paying for a system we can't use."

"For farming operation [which] is not allowed to give their stock free access to the race it is nothing more than a hindrance to the farming operation."

"Cannot use it for stockwater as it has dried up at times, so cannot rely on it. Would prefer not to have it on our property."

"Except for maintaining aquatic life ... and I know that it is not the reason for the waterway scheme."

"I don't think the race itself is very important, and it seems to incur more problems and maintenance than the benefit it provides. It would be better to have a higher allocation of domestic water to include use for irrigation and stock purposes. Or to have a well-supplied for stock and irrigation independent of domestic (potable) water."

"I have reticulated trough water from our well and have only once or twice needed stock to drink from the race. I would be happy if it was no longer my problem on our block."

"Important if you are relying on it not important if you can't rely on it and are forced to install alternative water systems."

"It causes us constant concern and worry about how to manage it and keep it clean and clear."

"More trouble than it is worth – danger to stock and it floods in winter."

"Over the last couple of years the service is so unreliable we now supply the water in troughs."

"Until recently the stockwater race was very important to us. Because of the unreliability of flow we invested in a bore so the race is no longer important to us."

"With current state, not enough flow to use the water but requires ongoing maintenance to keep clear – a lot of work for no gain."

"For a dairy platform – as sole SW race not important at all. For two support blocks we currently pump water from galleries to reticulated system. The sole SW races could be closed on both these properties as water accessed from alternative SW/irrigation race."

"I find it a nuisance with both having to clean them out and stock health."

"It was of no importance to us at all and while it did not stop us purchasing the land we have always seen it as a danger and would prefer it if it wasn't there."

8 Conclusion

8.1 Summary of final comments

Respondents were also invited to provide concluding comments about the stockwater race system or service that concerned them. Many respondents' comments reiterated points that had been made in response to earlier questions, while some introduced additional issues. The comments have been sorted and summarised by the themes each addresses.

8.2 Impact of the irrigation scheme

One respondent set out their recommendation for the network:

"I think this system needs to be rationalised. The complication is when the network is integrated with WIL. As a rate payer with a dairy platform- I would like to think I wasn't subsidising someone else. Many SW races flow along natural water paths - so become drainage systems in storm events. This would have to be considered if races where to be closed. Who pays! In this day and age, direct stock access should not be necessary. Reticulation of water from alternate sources encouraged and where SW supply is needed the user should pay charges that reflect upkeep of the system. Better monitoring and enforcement around domestic irrigation takes and allowing direct access of stock is essential, as responsible folk have to ""pay "" [sic] for poor quality /quantity issues that result. As all dairy platforms have to fence stock out- SW races are obsolete as main source of water. Many SW races have been shifted to cater for pivots /irrigators etc. and also so they are not in way/at risk of effluent irrigators."

Other respondents who had reticulated their properties in response to the irregular supplies of water via the stockwater races also considered that it was not important to have races on their properties and/or wanted them removed.

"Having this small section of race on a residential quarter-acre section is to us a nuisance and a danger when children are visiting. In fact if we were to install a swimming pool and not fence it we would be prosecuted. We have, in fact, erected a temporary netting fence around the race, which only acts as a deterrent to young children. Because it runs inside our boundary fence and we have the netting fence it is quite a nuisance to clean it out, but we are definitely not interested in paying someone else to clean it out when there is no benefit at all to us by having it on our land."

A number of those who had lived in their properties prior to the introduction of the irrigation scheme commented that the service had deteriorated since the integration of the irrigation scheme with the stockwater race system. The amount of water coming through the races fluctuated more widely, and the length of periods when there was no water was longer. The quality of the water was viewed as having deteriorated and an increase in the amount of weed in the races was observed. Also the level of silting meant that races have to be cleaned more often. As one respondent stated:

"The volume of water that flows through the system can vary dramatically. From very low that means silt build up is easier through to almost flooding. Both extremes cause concern, from a dry water race and stock without drinking water, to flooding across paddocks and through farm buildings."

Also other respondents stated:

"We have been on this property for 20 years until the advent of cows further up the race we have noticed a change in fouling of the stock race with clogging of weed."

And:

"Used these water races for 20 years and water level is generally a lot lower since irrigation scheme came in. Means that sediment remains and races have to be cleaned more often with more expense. Also turned off when rivers are high and more sediment and risk of sand colic for horses. Also concern that all chemicals used on dairy farm paddocks are being carried in water race."

It would appear that not all those on the system are approaching WIL when their races are dry.

"The water does dry up frequently in summer, but we aren't sure if this is due to it blocked purposefully or if someone else using the race before our property is blocking it to stop it coming through to our property. We haven't made contact with anyone to advise that this happens, we just wait for it to start flowing again which can take a couple of weeks."

Another respondent commented on the problem of declining water quality and highlighted the value of stockwater race water for stock health from his/her perspective:

"Having farmed in this area all of my life some 30 odd years and also my father and grandfather before me, we see the importance of fresh running stock water an absolute necessity for healthy stock. My main concern now since dairy farming has become wide spread throughout the district is that the water is never totally clean anymore due to cows having access! this causes more silting up of the race therefore more cleaning is required, as a result the races are getting lower therefore water flow is lower which makes some areas where water is turned down secondary races through pipes almost impossible and very frustrating. More needs to be done to make sure Dairy Farmers are accountable for fencing off stock races, I fear it's almost too late in some places."

Another respondent commenting on the growth of weed in the system noted:

"During the last year or so, we have had very heavy weed growth in the race and pond. I don't know if this is a common problem. We have been told that the weed growth has been made possible by increased nitrogen levels in the water via dairy farms."

8.3 Communications and service delivery

The issue of whether people purchasing properties with stockwater races really understand how they are expected to manage their races and what water is available was raised by a number of respondents. For example:

"I guess overall, we are not sure what we can and can't use it for, so would be interested to know. Also we are not sure about planting our boundary because of it i.e. how close to the race can we plant trees."

And

"I couldn't tell you if we have a stockwater race or a WIL irrigation race, in all the 12 years we have been at this property, we have never had anyone asking about it."

One respondent suggested information about the race network should be circulated to new residents purchasing a property with a stockwater supply.

"I purchased my property four years ago. It would be nice perhaps if when a new owner moved onto a property with an irrigation race or similar that someone from the company/council visited them and explained some of the aspects of having a race on the property and the best/correct ways to look after and utilise it. It seems like lifestyle block owners with irrigation races are not of priority and more attention is paid to the larger farms, which is fine, however, farmers are more likely to have the associated knowledge and be dealing with irrigation staff more often. changes around the number of shares that can be held which seem to target lifestyle block holders reinforce this view."

A further comment about the network service delivery is:

"This System was put in place over 150 years ago for stock purposes, and ever since has been paid for in our rates. In the late '80's early'90's it was adapted for irrigation and shares were offered in the system. Now it would appear that the emphasis is in the irrigation side (where the money is) and not on its original purpose. But we are still paying for it in our rates even though [sic] we are considered secondary users. I understand the financial implications but I do think the original purpose should either come first or a lowered rate input for a remarkably intermittent supply due to irrigation pressures. As I think it unfair to pay full price for a very second rate product."

8.4 Maintenance of races and a race cleaning service

In the view of many respondents the level of service provided in terms of the flow of water though the race system is linked with the maintenance of races, and a number of respondents addressed this issue in their final comments. For example:

"A race cleaning system will be a good option, but this would have to depend on costs etc. Also there needs to be some controls put in place when neighbouring properties trim hedges/trees and leaves and the debris lying around blows into and clogs up the water race, then this becomes my problem to clean and pay for the race being cleaned, very frustrating due it not being my properties mess."

And:

"I would like to see annual ditch-cleaning carried out by one organized cleaner, so that the whole ditch is done at one time from start to finish. When it is left to each individual owner some lengths can remain cloqued and blocked for years, which affects those upstream and downstream. This would apply to my answer to Question 14: - usually it is because neighbours do not maintain their section often enough."

In reply to question 14 this respondent indicated that he/she had received prompt attention to any problems from WIL, and saw the source of the problem as being the failure of neighbours to clean out their ditches, or allowing cows to cause pugging and blockages.

There would also appear to be some issues associated with the operation of races.

For example:

STW-01

"Have owned this property for 5 years, it seems that the powers that be can do what they like with water when it suits, i.e. have had ditch diggers on my property without my consent, have never had any contact from anyone in authority to do with these stockwater races, do not have any idea where I stand as far as what I can do and can't do in relation the water races."

Others have mentioned difficulties created by the material taken out of races during cleaning being left on the side of the races. This is either impeding stock access to the races or making it difficult for adjacent landowners to maintain their road reserve, resulting in turn in the development of a fire hazard from the long grass that cannot be mowed.

The issue of the respective responsibilities of all parties undertaking water race operations and maintenance was raised on a number of occasions. For instance, one respondent commented:

"We feel that the Council staff are the custodians of the Council's assets and it is their task to manage these assets efficiently, effectively and economically on behalf of the rate payer. The stockwater races is [stet] one of these assets and should be regularly maintained and inspected to ensure maintenance is being carried out. Records of these inspections should be recorded and made available for public viewing. The maintenance of the stock water races may be contracted out, but it remains the Council's responsibility to ensure the maintenance is being carried out and records produced. Under the existing bylaw, private land owners, whose land the stock water races run through, have a responsibility to maintain them, however, it remains the council's responsibility to ensure the maintenance is being carried out. Should a contractor be made responsible for inspecting water races on private land, he must have the council's authority under the bylaw, to enter private property to carry out the inspection."

In response to an earlier question a respondent suggested that the Council's position with respect to the maintenance of stockwater races should parallel that of MainPower which when it identifies problems advises the land owner to rectify the situation or it will undertake the work and recover the cost form the owner of the property. At least one respondent in his/her concluding comments advanced the same approach:

"Having the races cleaned by the council would be a good idea to protect the races for all but the costs passed on to land owners needs to be a reasonable one or the option to opt out and clean your own."

Another respondent commented:

"I take care of the water race at considerable expense. I have been told by several of your staff that it is one of the cleanest water races in the District. It would be appreciated if you would consider providing some type of weed spray or financial recompense for my efforts."

8.5 Drainage and access to water

When assessing the overall value of the stockwater race system, one respondent noted that these races also have a drainage function and the cost of maintaining them could be shared across all property owners. This idea was also promoted by a respondent from the Ohoka Mandeville area.

"My concern is that I do pay a water rate for water race but a rate no paid by all with boundary access. With the increase in residential areas in Ohoka Mandeville the race has become very much a storm water escape. Therefore should be funded by a general drainage rate."

"The water race system helps act as a drainage system when there are large amounts of rain or a snow event when it melts."

Others also referred to flooding associated with the race system, including irrigation races when it rains heavily, and attributes this to the limited size of a culvert not able to accommodate the increased flow:

"Occasionally in heavy rain the culvert under the road does not cope with the flows causing flooding. When the water race was converted to an irrigation race, the culvert was not upgraded. The last time flooding was severe with up to eight inches of water around the house. Luckily our house is on piles but we had water through all of our sheds."

8.6 Support for the stockwater race system

Some of the respondents reaffirmed their support for the stockwater race system, for example:

"I believe it is a fantastic asset, and is needed in dry summers to help fight fires also."

"Great Scheme."

"Do not remove water race please. The water race serves a huge purpose in Fernside. It waters stock all year round and keeps plants alive in summer."

"Do not touch it, I have no other available, if you did I would need to destock property."

Please consider the indirect value of the network of waterways and the long term health and sustainability of the region. Natural waterways and sustainable systems have been reduced, and these at least provide possibly of some practical and alternative environmental asset.

The issue of the amount of water being taken by people using water from the stockwater race system for irrigation was also discussed by some respondents. For example:

"I'm happy with the system and appreciate that flow rates adjust according to the conditions. However it only takes one uncooperative property owner in the chain to upset the apple cart. Being an irrigation shareholder I have no issue in taking my allocation when available. I'm not against domestic irrigation from the system but some push the boundaries to what some might consider as acceptable when they are not entitled to the additional benefit."

And a further observation:

"I think the Council, in conjunction with WIL, should look seriously in freeing up the ability of life-stylers to use water for irrigation purposes. As a stock agent I see a lot of properties in this area who are missing out from the lack of irrigation. It is the way of the future, dairy farmers have benefited, so why not the small land owners."

Appendix 1. Stockwater Race Users Survey

WAIMAKARIRI DISTRICT COUNCIL

STOCKWATER RACE USERS SURVEY

We would like to find out if the stockwater race that you have access to is meeting your needs. We also wish to know about the area of land served by the stockwater race system, and the current and future farming activities on that land. In addition, the questionnaire asks about how you are using stockwater race water, your satisfaction with the stockwater race service, and how important you consider it is to have a stockwater race water available to your property.

1	Is a stockwater race that you have access to located on your property or adjacent to it?
	On my/our property Adjacent to my/our property on the road reserve Adjacent to my/our property on a neighbour's property I/We do not have access to a stockwater race
2	Is a Waimakariri Irrigation Limited (WIL) irrigation race located on your property or adjacent to it?
	On my/our property Adjacent to my/our property on the road reserve Adjacent to my/our property on a neighbour's property I/We do not have access to an irrigation race
	If you have answered "no" to questions 1 and 2 you should not answer the balance of the survey, but should check with the Waimakariri District Council to clarify why your property has been identified as having either a stockwater race or WIL irrigation race located on or adjacent to your property.
3	Please indicate the area of your property that is supplied with stockwater race water?Hectares
4	Please indicate the main farming activities that are being undertaken on your property being supplied with stockwater race water. (Please tick all options that apply)
	Dairy milking platform (stock wintered off property) Dairy cattle (stock on property all year) Dairy grazing (stock wintered on property) Dairy support (stock on property all year) Sheep Beef cattle Deer Pigs (free range) Pigs (housed) Poultry (free range) Poultry (housed) Horses Alpacas/Lamas Cropping Forestry Horticulture Hay/silage only Other (please specify) I/we do not use our property for any agricultural/horticultural activity
5	How likely is it that you will change the farming activities on your property being supplied with stockwater race water, in the future?
Very ikely	Quite Not very Not at all No opinion/ likely likely likely Not applicable

	In what were decreased by a factor of the second of the se
	In what ways do you use the stockwater race water available to your property? (Pleatick all options that apply)
	Stock drinking water
ŀ	Domestic irrigation
	Amenity (e.g. ponds) Other (please specify)
	I/we do not use stockwater race water
	What method(s) do you use to give livestock access to stockwater race water, if all (Please tick all the options that apply)
	Direct stock access - fenced
	Direct stock access - unfenced Pumped take
	Piped take
	Formed drinking station
	Other (please specify) I/we do not use to stockwater race water for livestock
	Do you have an alternative source(s) of stockwater on the area that is serviced by stockwater race system, and if you do please indicate the type of source(s)? (Please all the options that apply)
	Reticulated trough system
_	Private well but no reticulation Stream – continuous flow
	Stream – intermittent flow
	Council reticulated supply
	Other (please specify)
	STOCKWATER RACE MAINTENANCE
	Some of the races are maintained by WIL and some of the races are to be maintained property owners.
	Are you responsible for the maintenance of the stockwater race on or adjacent to y property?
	Yes
	No I/we do not know
	If you answered "yes" to question 9 would you please answer question 10, if you answe "no" to question 9 would you please go to question 12.
	Do you encounter any difficulties maintaining the stockwater race that you are respons for?
	Yes
	No 1/we do not know
	If "yes" please comment on the difficulties that you are having maintaining the stockwa
	race that you are responsible for?

11	The Council is considering service to help property or adjacent to their properties would you like to have this s	wners who are responsit and charging a fee for t	ole for looking after the	races on or				
	Yes No I/we do not know							
	SATISFACTION WITH LEV	EL OF SERVICE						
12	How satisfied are you in ge the stockwater race system		of water that you have a	ccess to from				
Very [Satisfied	Quite Satisfied	Not very satisfied	Not at all satisfied	No opinion				
13	How frequently, if at all, does the amount of water that you have access to from the stockwater race system fall below the level that meets your needs ?							
	Very frequently Frequently							
	Infrequently Very Infrequently							
	Not at all							
	No opinion							
14	How frequently, if at all, have you experienced any problems such as blocked culverts or intakes associated with the stockwater race on or adjacent to your property?							
	Very frequently							
	Frequently Infrequently							
	Very Infrequently Not at all							
	No opinion							
15	How satisfied have been w problems with the stockwate			le concerning				
	Very satisfied							
	Satisfied Dissatisfied							
	Very dissatisfied No opinion							
		t necessary to lodge a ser	vice request with WIL					
16	Overall, how satisfied are yo	ou with your stockwater ra	ce service?					
Very [Satisfied	Quite Satisfied	Not very satisfied	Not at all satisfied	No opinion				
	Please comment, if you wish about your level of satisfaction with the stockwater race service that you are receiving that concern you.							

17	How important do you consider it is to have a stockwater race(s) on or adjacent to your property?							
Very important	Quite Not very Not at all No opinion important important							
	Please comment, if you wish, about the importance or otherwise that you attach to having a stockwater race(s) on or adjacent to your property							
18	Please comment, if you wish, about any other aspect of the stockwater race system or service that concerns you.							
	Thank you for your assistance by completing this questionnaire							

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: WAT- 03 / WAT -10 / 160805076724

REPORT TO: Utilities & Roading Committee

DATE OF MEETING: 16th August 2016

FROM: Sean de Roo, Utilities Engineering Officer

SUBJECT: Designated Fire Hydrant Filling Points for Contractor Water Tanker

SIGNED BY:

(for Reports to Council or

Committees)

Department Manager

1. **SUMMARY**

- 1.1. The purpose of this report is to inform the Utilities and Roading Committee and Community Boards of the new Designated Fire Hydrant Filling Points that have been installed around the district and what purpose they serve to our district.
- 1.2. The eight Designated Fire Hydrant Filling Points are located at the following sites around the district:
 - Williams Street, Kaiapoi North of the corner of Old North Road
 - Adderley Terrace, Kaiapoi Just east of the Christchurch Northern Motorway bridge (currently being constructed)

Chief Executive

- Marsh Road, Rangiora Just east of the Council's Water Unit Depot access way
- Cones Road, Rangiora Just north of the Cones Road/River Road intersection
- School Road, Woodend On the southern berm just east of the Rangiora Woodend Road/School Road intersection
- Atkinsons Lane, Pegasus At the end of the cul-de-sac on the southern berm close to the Pegasus water headworks
- McHughs Road, Mandeville On the northwest berm of the McHughs Road/Mandeville Road intersection
- High Street, Oxford On the western berm opposite the Council's Oxford Transfer Station (currently being constructed).
- 1.3. The Designated Fire Hydrant Filling Points are only to be used by contractors for filling their water tankers, no other fire hydrants within the district are to be used by contractors unless approved under special conditions by the 3 Waters department. This will mean only the Council's Water Unit and the Fire Brigade should be using other fire hydrants around the district. This meets the requirements set under the Council's Water Supply Bylaw 2012 under clause 13.2.

- 1.4. The public will not be allowed to use these Designated Fire Hydrant Filling Points due to the high pressure from the large size diameter pipe creating potential health and safety risk and they typically do not have the equipment to operate the fire hydrant to draw water. The Council has campervan waste dumping sites around the district that equipped with hose tap filling points with a backflow preventer that the general public can fill from.
- 1.5. A permit is required to use a Designated Fire Hydrant Filling Point, which is obtained from the 3 Waters department by filling out a 'Permit to use Fire Hydrant' application form. The contractor is to note within the permit application form how much water they will approximately be using and where they are working. Permits are usually only issued up to maximum 12 months unless approved on special case basis, where they will have to reapply when permit expires.
- 1.6. Drivers for having Designated Fire Hydrant Filling Points are as follows;
 - Makes easier to monitor contractors filling from fire hydrants to ensure they are permitted to do so.
 - Contractors have been filling directly outside residential property without a permit
 creating potential health and safety issues, leaving mess behind or damaging
 the berm outside resident houses and causing a disruption to the public. We
 have received a number of service request complaints lodge from the public on
 this matter.
 - Contractors have been using fire hydrants around the district without permits or a traffic management plan in place, putting them and the public at risk especially when operating fire hydrants within the road. One incident occurred approximately a year and half go, where a contractor filling a tanker from a fire hydrant within the road was hit by a car and hospitalised.
 - Contractors were filling from fire hydrants without a backflow device on the hydrant upstand, which is required by the current permit system. This puts the Council's water supply at a risk contamination through backflow from the tanker to the water supply, creating a health risk to the community.
- 1.7. Next step is to educate the public and contractors what Designated Fire Hydrant Filling Points are and what purpose they serve. Also this helps for the public to inform the 3 Waters department that contractors are filling from hydrants that are not the Council's Designated Fire Hydrant Filling Points. This will be achieved by working with the Communications department by;
 - Installing signage on the Designated Fire Hydrant Filling Points as per attached.
 - Put information on the website as well as putting information on social media

Attachments:

- i. Designated Fire Hydrant Filling Point locations and photos
- ii. Proposed Signage for the Designated Fire Hydrant Filling Points

2. RECOMMENDATION

THAT the Utilities and Roading Committee:

- (a) **Receives** report No. 160805076724.
- (b) Notes that eight Designated Fire Hydrant Filling Points have been installed across the district to provide a safe means for contractors to fill tankers, reduce disruption and damage caused by contractors using existing fire hydrants and to ensure backflow prevention is in place to protect the community water supply.
- (c) **Notes** that an education programme will be undertaken to inform the public and contractors on the purpose of the Designated Fire Hydrant Filling Points by erecting signs at the sites and also information on the Council's website.
- (d) **Circulates** this report to all community and advisory boards for their information.

3. ISSUES AND OPTIONS

- 3.1. The eight Designated Fire Hydrant Filling Points are located at the following sites around the district;
 - Williams Street, Kaiapoi North of the corner of Old North Road
 - Adderley Terrace, Kaiapoi Just east of the Christchurch Northern Motorway bridge (currently being constructed)
 - Marsh Road, Rangiora Just east of the Council's Water Unit Depot access way
 - Cones Road, Rangiora Just north of the Cones Road/River Road intersection
 - School Road, Woodend On the southern berm just east of the Rangiora Woodend Road/School Road intersection
 - Atkinsons Lane, Pegasus At the end of the cul-de-sac on the southern berm close to the Pegasus water headworks
 - McHughs Road, Mandeville On the northwest berm of the McHughs Road/Mandeville Road intersection
 - High Street, Oxford On the western berm opposite the Council's Oxford Transfer Station (currently being constructed).
- 3.2. The Designated Fire Hydrant Filling Points are only to be used by contractors for filling their water tankers, no other fire hydrants within the district are to be used by contractors unless approved under special conditions by the 3 Waters department. This will mean only the Council's Water Unit and the Fire Brigade should be using the other fire hydrants around the district.
- 3.3. Contractors are required to carry the permit with them when filling from these fill points to provide evidence that they have permission to use the Designated Fire Hydrant Filling Points when audited by the Councils 3 Waters Department or the Water Unit.
- 3.4. This meets the requirements set under the Councils Water Supply Bylaw 2012 under clause 13.2. 'The right to gain access to, and draw water from a water supply for uses other than firefighting (for example, flow testing or pipe flushing) shall be restricted to:

- a) The Council and its authorised officer or agents;
- b) Water abstraction consent holders during the period for which the consent has been issued, and only for the specified fire hydrant or filling point.'
- 3.5. The public will not be allowed to use these Designated Fire Hydrant Filling Points due to the high pressure from the large size diameter pipe creating potential health and safety risk and are not usually be equipped to operate the Fire Hydrant to draw water. The Council has Camp dumping sites around the district that are equipped with a hose tap filling point with a backflow preventer that the general public can fill from, permit not required.
- 3.6. It is expected that the Designated Fire Hydrant Filling Points will be used on a frequent basis depending on what's going on in the district in regards to construction work activity.
- 3.7. The drivers behind creating Designated Fire Hydrant Filling Points was based on a number of factors.
 - Makes easier to monitor Contractors filling from fire hydrants to ensure they are permitted to do so
 - Contractors have been filling directly outside residential property without a permit
 creating potential health and safety issues, leaving mess behind or damaging
 the berm outside resident houses and a disruption to the public, with number of
 service request complaints lodge from the public on this matter. One complaint
 was made due to contractor in Silverstream, Kaiapoi filling outside a residential
 property 2am in the morning on two different occasions without a permit.
 - Contractors have been using fire hydrants around the district without permits or traffic management in place, putting them self and the safety of the public at risk especially operating fire hydrants within the road. One incident a year and half go a contractor working under these conditions was hit by a car and hospitalised.
 - Contractors where filling from fire hydrants without a backflow device within their
 fire hydrant upstand to draw water as required by the current permit. This puts
 the Council's water supply at a risk contamination through backwash from the
 tanker to the water supply, creating a health risk to the community. Some
 contractors tankers that fill up from fire hydrants carry chemicals for spraying or
 sewer flushing trucks, which oppose a high risk on Council
- 3.8. The design and location of these Designated Fire Hydrant Filling Points took into factor these drivers and ensured we achieved the following outcomes;
 - Not to be directly outside a berm of a residential property as to minimise disruption to the public.
 - Had to have space available for a pad to be constructed or in some was already
 in place where the contractors could pull off the road and safely fill there tankers.
 - Pad was also constructed or in some sites already existed so that the contractors tanker trucks didn't damage corresponding area when filling from the fire hydrant
 - The Designated Fire Hydrant Filling Points where located in position as to not disrupt pedestrians walking down footpaths or berms.

- A High Risk RPZ (Reduce Pressure Zone) backflow is to be installed before the fire hydrant of Designated Fire Hydrant Filling Point to protect the communities water supply from backflow from the tankers to protect the public's health.
- The High Risk RPZ is to be installed above ground to meet Public Health Act, New Zealand/Australian Standards and the Council's adopted Backflow Policy.
- Size of the water main was considered to connect the Designated Fire Hydrant Filling Point into to ensure obtain enough pressure for the Contractors to fill there tankers in a timely manner.
- The size of the water main was also considered to ensure the tankers filling from the Designated Fire Hydrant Filling Point were not going to create pressure losses to adjacent residents every time contractor filled from the hydrant.
- Pick sites that don't have a kerb channel to save on costs on kerb realignment and be able to move complete off the road to filler there tankers from the Designated Fire Hydrant Filling Point.
- Picked locations that are either easily accessible to Contractors to ensure they
 use them and don't get tempted to use other hydrants due to being more
 covenant to their work site. Also some have been positioned as to be accessible
 where development is occur or may occur in the future.
- 3.9. 3 Waters department is currently working through the next step by educating the public and contractors what Designated Fire Hydrant Filling Points are and what purpose they serve. Also this helps for the public to inform the 3 Waters department that contractors are filling from hydrants that are not the Councils Designated Fire Hydrant Filling Points. This will be achieved by working with the Communications department by;
 - Installing signage on the Designated Fire Hydrant Filling Points as per attached.
 - Put information on the website as well as putting information on social media
- 3.10. Currently completing the last two Designated Fire Hydrant Filling Points at Adderley Terrace, Kaiapoi just east of the Christchurch Northern Motorway bridge and High Street, Oxford on the western berm opposite the Council's Oxford Transfer Station.
- 3.11. When corresponding to residents service request complaints on Contractors filling outside their property they were supportive of the Designated Fire Hydrant Filling Points when it was noted this help to prevent these issues happening
- 3.12. A number of contractors are on board with using the Designated Fire Hydrant Filling Points, with the Contractors seeing the benefits, as while as not wanting to disrupt the public.
- 3.13. Each Designated Fire Hydrant Filling Point has provisions to install a water meter within the RPZ backflow manifold above ground if the Council decides in the future to track the exact amount of water that is drawn from each fill point or decided to charge the contractor to draw the water from the Designated Fire Hydrant Filling Points.
- 3.14. There is no justification to charge the contractors to draw the water from the Designated Fire Hydrant Filling Points at this stage as the amount of water been drawn by contractors is not enough to justify charging them. If you base this on the proposed cost of water per litre this cost would be less than the cost of administration for the Council to monitor this and send out invoices to the contractor.

3.15. The Management Team has reviewed this report and supports the recommendations.

4. **COMMUNITY VIEWS**

- 4.1. The property owners immediately adjacent to where the filling points were placed were consulted prior to undertaking the works. The reasons given to the landowners for undertaking the works were to:
 - Minimise disruption to the general public from contractors previously filling directly outside residential properties without a permit.
 - Minimise the risk of fatality or health and safety risks to contractors themselves or the general public when contractors are filling from Fire Hydrants within the road.
 - Avoid damage to the berm caused by contractors tanker trucks by placing a pad beside the Designated Fire Hydrant Filling Points.
- 4.2. There are currently no plans to construct any further Designated Fire Hydrant Filling Points, but if further filling points are proposed they will be referred to the relevant community/advisory board for feedback prior to construction.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. All budgets have already been assigned as part of the Annual Plan process for the Designated Fire Hydrant Filling Points that have been completed in the 2015/16 financial year and the two Designated Fire Hydrant Filling Points currently being completed this new financial year.
- 5.2. There is no apatite to charge the contractors to draw the water from the Designated Fire Hydrant Filling Points at this stage as the amount of water been drawn by contractors is not enough to justify charging them. If you base this on the proposed cost of water per litre from each affected scheme, this cost would be less than the cost of administration for the Council to monitor this and send out invoices to the Contractor.

6. <u>CONTEXT</u>

6.1. Policy

This matter is not a matter of significance in terms of the Council's Significance Policy.

6.2. Legislation

The following legislation is relevant to the project:

- 6.2.1. The Health (Drinking Water) Amendment Act 2007, via the Drinking Water Standards for New Zealand 2005 (Revised 2008).
- 6.2.2. The Local Government Act makes provision for Council to establish and protect assets for the purpose of providing community water supplies.
- 6.2.3. The Public Health Act
- 6.2.4. The Health and Safety Act
- 6.2.5. The Waimakariri District Council's adopted Backflow Policy
- 6.2.6. Waimakariri District Council Water Conservation Strategy

6.3. Community Outcomes

This project is aligned with the following Community Outcomes:

- 6.3.1. There is a safe environment for all.
- 6.3.2. There is sufficient clean water to meet the needs of communities and ecosystems.
- 6.3.3. Core utility services are provided in a timely, sustainable and affordable manner.

Rangiora Designated Fire Hydrant Filling Point on Cones Road





Rangiora Designated Fire Hydrant Filling Points Marsh Road



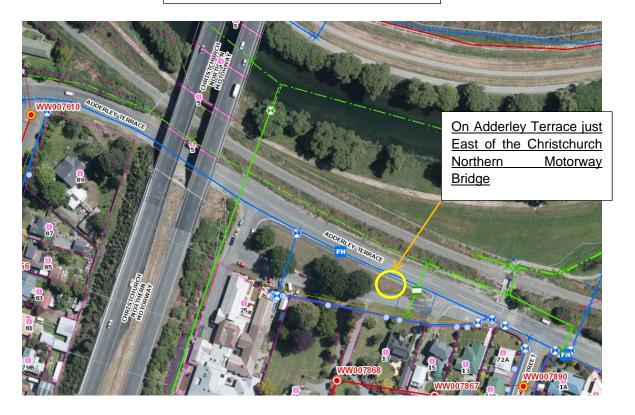


Kaiapoi Designated Fire Hydrant Filling Point Williams Street





Kaiapoi Designated Fire Hydrant Filling Point Adderley Terrace Under Construction



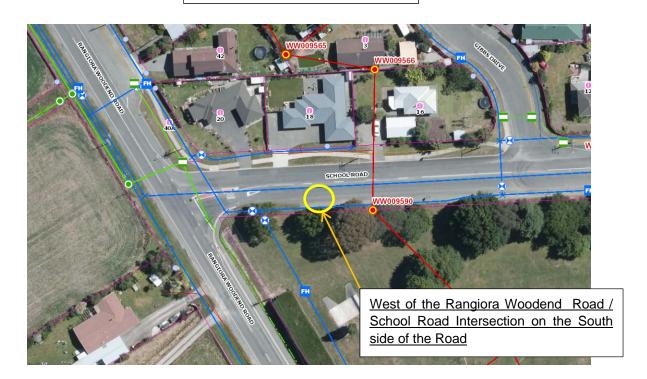


Oxford Designated Fire Hydrant Filling Point High Street Under Construction



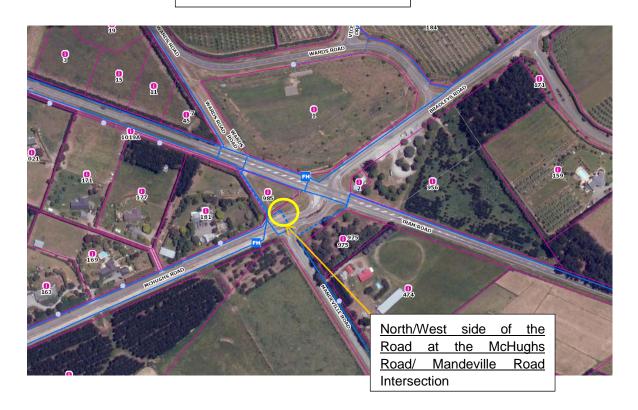


Woodend Designated Fire Hydrant Filling Point



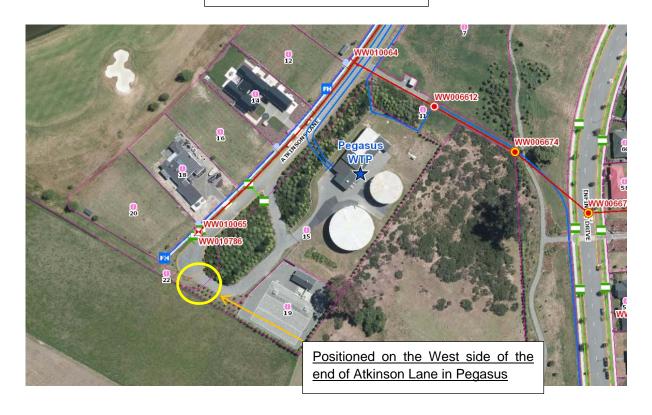


Mandeville Designated Fire Hydrant Filling Point





Pegasus Designated Fire Hydrant Filling Point Atkinson Drive





Fire Hydrant Tanker Filling Point

Permit required

Please contact Waimakariri District Council Phone 03 311 8900



waimakariri.govt.nz

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: CON201637-01 / 160801074771

REPORT TO: Utilities and Roading Committee

DATE OF MEETING: 16 August 2016

FROM: Colin Roxburgh, Water Asset Manager

SUBJECT: Request for Additional Budget for Mandeville Water Renewals

SIGNED BY:

(for Reports to Council or

Committees)

Department Manager

Chief Executive

1. **SUMMARY**

- 1.1. The purpose of this report is to request additional funding to complete the first stage of the Mandalea Road water main renewal project that is programmed for the 2016/17 financial year.
- 1.2. There is currently \$30,000 of funding allocated for Mandeville water main renewals for the 2016/17 financial year.
- 1.3. The Mandalea Road water main has been identified as the highest priority main to be replaced on the Mandeville scheme due to a history of bursts and leaks in recent years.
- 1.4. A design has been carried out by the Project Delivery Unit, a tender document produced and a price received from the Water Unit to carry out the works.
- 1.5. The tender price received from the Water Unit was for \$37,179.74. An engineer's estimate was produced for the work that was within 2% of the Water Unit price, indicating that it represents good value and is comparable to other similar works carried out.
- 1.6. Taking into account construction contingency and engineering fees the total required budget to complete the work is estimated at \$44,000. Therefore it can be concluded that an additional budget of \$14,000 is required to cover the shortfall.
- 1.7. Consideration has been given to reducing the scope of the project in order to work within the allocated budget, however this is not considered to be feasible.
- 1.8. It is noted that the allocated budget for the 2017/18 water renewals will be reviewed to ensure that appropriate funding is allocated in the future.

2. **RECOMMENDATION**

THAT the Utilities and Roading Committee recommends:

THAT the Council:

(a) Receives report No. 160801074771.

- (b) **Approves** an additional \$14,000 of funding to be allocated to the Mandeville Water Main Renewals budget (100627.000.5104) to bring the total budget to \$44,000, and notes that this will be depreciation funded.
- (c) **Notes** that this will allow the first stage of the Mandalea Road water main renewal to be completed to reduce the risk of ongoing leaks and bursts on this part of the scheme.
- (d) **Circulates** this report to the Oxford Eyre Ward Advisory Board for their information.

3. ISSUES AND OPTIONS

- 3.1. The Mandalea Road water main is currently a 50mm diameter PVC main. There is a history of bursts and leaks on this main, which has meant that it has been identified as the highest priority main on the Mandeville scheme for renewal in the 2016/17 financial year.
- 3.2. It is noted that the existing main was installed in 1991, and that it would be expected to have a significantly greater serviceable life than it has had. The reason for the poor performance of this main is due to glued PVC joints which are no longer an approved method of jointing PVC pipe.
- 3.3. The Project Delivery Unit has carried out a design for the first stage of the replacement main (on Mandalea Road from Pattersons Road to Cameo Drive). The second stage of the main is due to be replaced next financial year (from Cameo Drive to McRoberts Road).
- 3.4. The Water Unit has given a tender price of \$37,179.74 to carry out the work. An engineer's estimate was produced for the work that was within 2% of the Water Unit price, indicating that it represents good value and is comparable to other similar works carried out previously.
- 3.5. Taking into account construction contingency and engineering fees the total required budget to complete the work is estimated at \$44,000. Therefore it can be concluded that there is a budget shortfall of \$14,000.
- 3.6. Consideration has been given to reducing the scope of the project in order to work within the allocated budget. However, this is not considered to be feasible given the design constraints presented by the site.
- 3.7. It is noted that the allocated budget for the 2017/18 water renewals will be reviewed to ensure that appropriate funding is allocated in the future.
- 3.8. The Management Team has reviewed this report and supports the recommendations.

4. **COMMUNITY VIEWS**

4.1. The community has not been specifically consulted with regard to this project.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. The cost estimates presented in this report are considered to have a high degree of accuracy given that a tender price has been received for the works.
- 5.2. The rating implications of the requested budget increase are minimal (calculated at approximately \$1/unit/year increase due to increase in budget).

6. <u>CONTEXT</u>

6.1. Policy

This matter is not a matter of significance in terms of the Council's Significance Policy.

6.2. Legislation

NA

6.3. Community Outcomes

This project is linked to the following community outcomes:

- There is sufficient clean water to meet the needs of communities and ecosystems.
- Core utility services are provided in a timely, sustainable and affordable manner.

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: WAT-05-01-03 / 160608053802

REPORT TO: Utilities & Roading Committee

16 August 2016 **DATE OF MEETING:**

FROM: Gary Stevenson, Utilities Projects Team Leader

Colin Roxburgh, Water Asset Manager

Department Manager

SUBJECT: Fernside Water Supply Upgrading & Funding Option

SIGNED BY:

(for Reports to Council or

Committees)

1.

SUMMARY

1.1. The purpose of this report is two-fold:

> 1. To update the Utilities and Roading Committee on options to upgrade the Fernside Water supply scheme, and to obtain approval to proceed with the recommended upgrade option of joining Fernside to the Mandeville scheme.

Chief Executive

- 2. To obtain Utilities and Roading Committee approval to proceed with community consultation for the project.
- 1.2. Five options to upgrade the scheme have been assessed. The recommended option is Upgrade Option A - Connect Fernside Headworks to Mandeville (Lilly Road to Fernside Headworks). This option would meet the requirements of achieving compliance with the DWSNZ, and ensuring that the scheme is resilient with a back-up source being provided.
- 1.3. **Funding Options**
 - Three funding options were considered for how to fund the joining of the schemes as per Upgrade Option A, and how to apportion ongoing operating costs for the new joint Fernside / Mandeville scheme.
 - 1.3.2. Funding Option 2 is the recommended funding option. This involves the schemes financially joining, but Fernside covering the capital cost of the upgrade (i.e Fernside would pay the Mandeville rate of \$424/year plus capital repayments of \$399/year giving a total rate of \$823/year). There is a moderate increase in both the Fernside and Mandeville water rates as a result of the upgrade, however, this is seen to be justified by the benefit received by both schemes and noting that Mandeville gains an additional back-up source.

1.4. Consultation Strategy:

It is proposed to consult with the Fernside and Mandeville communities on the basis that Council staff have identified the joining of the two schemes as the best option to upgrade the Fernside water supply, and that feedback is sought as to how to fund the upgrade. Feedback will be sought from the public as to which of the three funding options they support.

1.4.2. The consultation period is proposed to run from the 20th of August to the 17th of September. The feedback received will then be collated, summarised and presented to Council at their meeting on 4 October 2016 to make a decision as to how to fund the upgrade.

Attachments:

- Fernside Water Supply Upgrading Options Options Overview Map
- ii. Draft Consultation Flyer Fernside and Mandeville Proposed Connection of Water Supplies (Trim 160805076680)
- iii. Draft Feedback Form Fernside and Mandeville Proposed Connection of Water Supplies (Trim 160805076681)

References:

i. Fernside Water Supply Upgrade Options Report (Trim 151007139087)

2. **RECOMMENDATION**

THAT the Utilities and Roading Committee:

- (a) Receives report No.160608053802.
- (b) **Notes** that Staff have considered a number of options to upgrade the Fernside Water Supply and that Upgrade Option A Connect Fernside to Mandeville (Lilly Road to Fernside Headworks) has been identified as the recommended upgrade option.
- (c) **Endorses** the joining of the Fernside and Mandeville Water Supply Schemes as per Upgrade Option A (new pipe from Lilly Road to Fernside headworks).
- (d) **Receives** for comment the proposed consultation flyer and feedback form (Trim 160805076680 & 160805076681) which are proposed to be mailed to Fernside and Mandeville water supply scheme customers on 19 August 2016.
- (e) **Instructs** Council staff to consult with the Fernside and Mandeville communities to inform them of the preferred upgrade option for the Fernside scheme, and to seek feedback from the communities on their preferred funding option to fund the upgrade.
- (f) **Notes** that public consultation will be under taken from 20 August to 17 September 2016 and that the feedback received will be collated and presented to Council on Tuesday 4 October for consideration in order for Council to make a decision on which funding option to adopt.
- (g) **Circulates** this report to the Rangiora Community Board and the Oxford Eyre Ward Advisory Board for their information.

3. ISSUES AND OPTIONS

- 3.1. Background
 - 3.1.1. The Waimakariri District Council Long Year Plan 2015-2025 (LTP), allows for the Fernside Water Supply Scheme to be upgraded in 2016/17 to provide for growth, improve resilience and provide a scheme that meets the water quality requirements of the Drinking Water Standards for New Zealand 2005 (Revised 2008) (DWSNZ).
- 3.2. Five upgrade options were assessed for the Fernside Water Supply Scheme. Also included for completeness was a 'do nothing' option, giving six options in total. These options are as follows:

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- Option A Connect Fernside to Mandeville (Lilly Road to Fernside Headworks) recommended option.
- Option B Connect Fernside to Mandeville (Lilly Road to Johns Road).
- Option C Connect Fernside to Rangiora (Acacia Avenue to Fernside Headworks).
- Option D Upgrade Fernside Treatment (Filtration & UV).
- Option E Drill a new well at Fernside.
- Option F Do nothing.
- 3.3. Each of the upgrade options was evaluated based upon the following factors:
 - 1. Compliance with DWSNZ requirements in terms of water quality.
 - 2. Cost analysis considering capital costs, operation and maintenance and twentyyear net present value (NPV).
 - 3. Risk and resilience.
- 3.4. Option A Connect Fernside to Mandeville (Lilly Road to Fernside Headworks):
 - 3.4.1. This option would involve the construction of a new 100mm diameter pipe from the corner of Lilly Road and Swannanoa Road to the Fernside Headworks (1.8 km) to form a connection between the two schemes. The existing Fernside headworks would be retained to provide additional storage, and to distribute water to the existing Fernside properties. The Fernside well would be maintained so it could operate as an emergency back-up supply for Fernside and to a limited extent Mandeville (up to 2.5 L/s). The estimated capital cost including professional fees and contingencies for this option is \$386,600. The twenty-year net present value is \$618,400.
 - 3.4.2. The risks associated with this option include the following:
 - Contamination of the scheme due to contamination at the Mandeville headworks. This risk is considered low with the Mandeville headworks programmed to have a UV unit installed this financial year to achieve full compliance with the DWSNZ.
 - Loss of supply due to delivery main break or failure at Mandeville supply well. The risk of loss of supply is considered low as the existing well would be retained as a back-up supply.
 - 3.4.3. This option was previously identified as the preferred solution to upgrade the Fernside Water Supply Scheme when options were assessed to serve the water supply requirements of the Evansdale development. This was identified as project AMP0054 within the Long Term Plan 2015 2025 (LTP) and \$255,000 of funding was allocated as the extra-over contribution by Council to the total cost of the project. This budget was later revised to \$395,000 as part of the 2016/17 Annual Plan given that the project is now to be funded solely by Council. It is noted that this has been identified as a partially growth driven project, and as such some of the project costs will be recovered through development contributions as new properties connect to Fernside.
- 3.5. Option B Connect Fernside to Mandeville (Lilly Road to Johns Road)
 - 3.5.1. This option would require construction of a new 100mm diameter pipe from the corner of Lilly Road and Swannanoa Road to connect the Mandeville scheme directly into the existing Fernside reticulation (800 m of new pipe required). Fernside's water would be sourced from the Mandeville water headworks on Two Chain Road. The key difference between this option and Option A, is that in Option A the connection from Mandeville is into the existing Fernside headworks, which would be retained to act a pressure booster station to distribute the water through the Fernside scheme. Under this option, in order to

form the connection from Mandeville directly into the Fernside reticulation, the operating pressure at the Mandeville headworks would have to be increased. This increase in pressure in Mandeville would result in an increased risk of fittings in the eastern part of the Mandeville either leaking or failing. In order to mitigate this risk caused by the increased delivery pressure, approximately five pressure reducing valves (PRV's) would need to be installed at key points on the Mandeville reticulation. The Fernside well and headworks would need to be retained so it could operate as an emergency back-up supply for Fernside and to a limited extent Mandeville. The estimated capital cost including professional fees and contingencies for this option is \$369,100. The twenty-year net present value is \$568,300.

- 3.5.2. The risks associated with this option include the following:
 - Contamination of the scheme due to contamination at the Mandeville headworks. This risk is considered low with the Mandeville headworks programmed to have a UV unit installed this financial year to achieve full compliance with the DWSNZ.
 - Loss of supply due to delivery main break or failure at Mandeville supply well. The risk of loss of supply is considered low as the existing well would be retained as a back-up supply.
 - Risk of breaks or leaks on the Mandeville scheme. As noted this risk
 would be increased due to the increased Mandeville operating pressure,
 however mitigated by the proposed PRVs. There would however still be
 some increased risk of leaks or breaks in Mandeville relative to Option
 A.
- 3.6. Option C Connect Fernside to Rangiora (Acacia Avenue to Fernside Headworks)
 - 3.6.1. This option would require construction of a new 100 mm pipe from the corner of Acacia Ave and Oxford Road to the Fernside headworks (3.4 km). Water would be pumped from the Rangiora reticulation into the Fernside headworks. The Fernside headworks would be retained to deliver water to the Fernside community. The Fernside Well would be retained so it could operate as an emergency back-up supply for Fernside. The estimated capital cost including professional fees and contingencies for this option is \$950,600. The twenty-year present value is \$1,274,500.
 - 3.6.2. The risks associated with this option include the following:
 - Contamination of the scheme due to contamination in the Rangiora supply. This risk is considered to be very low due to the secure status of the Rangiora water.
 - Loss of supply due to delivery main break or failure at Rangiora source.
 The risk of loss of supply is considered low as the existing well would be retained as a back-up supply.
- 3.7. Option D Upgrade Fernside Treatment (Filtration & UV)
 - 3.7.1. This option looks at upgrading the treatment system at the Fernside water headworks in order to meet the requirements of DWSNZ. The treatment system considered is filtration and UV disinfection which would meet the requirements for both bacterial and protozoan compliance, provided that the turbidity of the water remains within the limits of the UV equipment. The estimated capital cost including professional fees and contingencies for this option is \$124,900. The twenty-year net present value is \$478,800 which includes replacing the filtration and UV system after a twenty-year operating life.
 - 3.7.2. The risks associated with this option include the following:

- The reliability of the proposed UV treatment system. Water sampling has been undertaken which indicates the water does not always meet the requirements to be satisfactorily treated using the proposed treatment system. During periods where the raw water has elevated turbidity the quality of the treated water would not be compliant with the DWSNZ.
- Loss of supply due to failure at Fernside source or headworks. Under this option Fernside would have no back-up water supply meaning that the risk of a loss of supply due to a failure at the headworks would be significant.

3.8. Option E – Drill New Well at Fernside

- 3.8.1. This option would involve drilling and developing a new deep well at Fernside with the aim of obtaining a secure water supply source. The estimated capital cost including professional fees and contingencies for this option is \$704,400. The twenty-year net present value is \$1,033,500.
- 3.8.2. Option E has the risk that the well may be unsuccessful (i.e. a secure groundwater source may not be found). Thus as well as having a high cost this option has a large degree of uncertainty as to whether it would achieve the required outcome.

3.9. Option F – Do Nothing

3.9.1. This option is not considered acceptable. The Health (Drinking Water) Amendment Act 2007 requires that drinking-water suppliers to take all practicable steps to ensure they provide an adequate supply of drinking water that complies with the Drinking Water Standards New Zealand (2008). As Fernside is currently non-compliant with these standards, it is required that an upgrade be undertaken to achieve compliance. The Fernside Water Safety Plan which has now been approved by Community and Public Health also states that the water supply is due to be upgraded.

3.10. Evaluation of Upgrade Options

- 3.10.1. The preferred option is Upgrade Option A Connect Fernside Headworks to Mandeville (Lilly Road to Fernside Headworks). This has an estimated capital cost of \$386,600 and twenty-year net present value of \$618,400. This option would meet the requirements of achieving compliance with the DWSNZ, and ensuring that the scheme is resilient with a back-up source being provided.
- 3.10.2. Option B (Connect to Mandeville Lilly Road to Johns Road) is not recommended as it carries a greater level of risk of leaks due to the scheme being required to operate at a higher pressure. Operating the scheme at a higher pressure would also increase the ongoing operating costs.
- 3.10.3. Option D (Upgrade Fernside Treatment) is not recommended as there is uncertainty as to the suitability of the existing source water to be treated using UV treatment (meaning DWSNZ compliance may not be achieved). In addition to this, this option does not provide a sufficient level of resilience to the scheme with no back-up source being provided.
- 3.10.4. Options C and E are not financially viable alternatives when compared to Option A, and do not offer any benefits in terms of risk or resilience to justify additional expenditure.
- 3.11. Note in the 2016/17 Annual Plan for Fernside Water Supply, \$395,000 has been budgeted to implement Upgrade Option A.

3.12. Funding Options

- 3.12.1. As described above, Upgrade Option A is the recommended upgrade option. Three funding options were considered for how to fund the joining of the schemes as per Upgrade Option A, and how to apportion ongoing operating costs for the new joint Fernside / Mandeville scheme. These three funding options are described below:
- 3.12.2. Funding Option 1 Schemes remain financially separate: Under this option Fernside would pay all capital costs associated with the upgrade (estimated at \$395,000) over a 25 year loan in addition to paying all of its own operational costs (i.e. no sharing of costs with Mandeville).
- 3.12.3. Funding Option 2 Schemes join financially but Fernside covers capital cost of connection: Under this option Fernside would pay all capital costs associated with the upgrade (estimated at \$395,000) over a 25 year loan in addition to paying the Mandeville water rate. Once the capital cost of the upgrade is paid off Fernside would pay the Mandeville water rate only. The ongoing operating costs of the new joint scheme would be shared between Fernside and Mandeville.
- 3.12.4. Funding Option 3 All costs shared between schemes: This option would involve a full financial amalgamation of the Fernside and Mandeville Schemes, with all costs (capital cost of upgrade and ongoing operating costs) being shared between Fernside and Mandeville.
- 3.12.5. For all funding options Table 1 below provides the rating impact and a comparison to the current 2016/17 and projected rates for a standard 2 unit connection for both Mandeville and Fernside.

Table 1: Funding Options

	Existing 2016/17 Rate		nnect to Mandeville Upgrade Option A	
Funding Options	(No Connection Between Schemes)	Funding Option 1 – Schemes Financially Separate	Funding Option 2 – Schemes Financially Joined but Fernside pays Capital Cost of Upgrade	Funding Option 3 – Schemes Completely Joined Financially
Description	The rates below are existing rates for the 2016/17 financial year.	Fernside physically joins to Mandeville. Fernside pays the capital cost of connection and remains a separate scheme paying its own costs.	Fernside physically joins to Mandeville. Fernside pays the capital cost of connection to the Mandeville scheme as a separate loan. Mandeville and Fernside share proportionally all combined OPEX costs.	Fernside physically joins to Mandeville. Full financial amalgamation of Fernside and Mandeville schemes. All costs shared between schemes by Total Units.
Payment of Capital Cost		Capital cost of upgrade covered by Fernside only	Capital cost of upgrade covered by Fernside only	Capital cost of upgrade shared between Fernside and Mandeville
Fernside Water Rate per 2 units	\$786	\$1,072	\$823	\$559
Mandeville Water Rate per 2 units	\$379	\$403*	\$424	\$559
Advantages		No increase to Mandeville water rate as result of schemes joining	Only marginal rate increase to both Fernside and Mandeville schemes as a result of schemes joining. Administrative costs minimised due to efficiencies of joining schemes financially.	 Rate reduction to Fernside as a result of schemes joining. Administrative costs minimised due to efficiencies of joining schemes financially.
Disadvantes		 High increase to Fernside water rate Higher administrative costs due to complexity of separate schemes financially Benefit of emergency back-up supply to Mandeville not reflected in rates. 	Marginally higher water rate to Mandeville relative to Option 1.	Significant rate increase to Mandeville scheme relative to both Option 1 and Option 2.

^{*}Note future rates are shown are projected 5 year average rates for comparison of funding options.

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^{*}Mandeville 5 year average rates increase from existing rates due to UV and other treatment plant upgrades.

3.1. Funding Options Discussion:

- 3.1.1. Funding Option 1 involves the schemes remaining financially separate. There is no change in the Mandeville rate as a result of the joining of the schemes, while there is a significant increase in the Fernside water rate. This option is not preferred due to the high increase in the Fernside rate, and the fact that there is no increase in the Mandeville water rate to reflect the benefit of adding the existing Fernside headworks as an additional back-up source.
- 3.1.2. Funding Option 2 involves the schemes financially joining, but Fernside covering the capital cost of the upgrade. There is a moderate increase in both the Fernside and Mandeville water rates as a result of the upgrade, however this is seen to be justified by the benefit received by both schemes. This is the preferred funding option.
- 3.1.3. Funding Option 3 involves the schemes being completely joined financially with both the capital cost of the upgrade and the ongoing operating costs being shared between Fernside and Mandeville. This would result in a significant increase to the Mandeville water rate which is not seen to be justified by the benefit that they would receive by the joining of the schemes. This option is not preferred.

3.2. Consultation Strategy:

- 3.2.1. It is proposed to consult with the Fernside and Mandeville communities on the basis that Council staff have identified the joining of the two schemes as the best option to upgrade the Fernside water supply, and that feedback is sought as to how to fund the upgrade. Feedback will be sought from the public as to which of the three funding options they support.
- 3.2.2. The consultation period is proposed to run from the 20th of August to the 17th of September. The feedback received will then be collated, summarised and presented to Council at their meeting on 4 October 2016 to make a decision as to how to fund the upgrade.
- 3.3. The Management Team has reviewed this report and supports the recommendations.

4. **COMMUNITY VIEWS**

- 4.1. It is proposed to consult with the Fernside and Mandeville communities on the basis that Council staff have identified the joining of the two schemes as the best option to upgrade the Fernside water supply, and that feedback is sought as to how to fund the upgrade. Feedback will be sought from the public as to which of the three funding options they support.
- 4.2. The consultation period is proposed to run from the 20th of August to the 17th of September. The feedback received will then be collated, summarised and presented to Council at their meeting on 4 October 2016 to make a decision as to how to fund the upgrade.
- 4.3. The key project dates, including the consultation period are summarised on Table 3 below.

Table 2: Key Project Dates (incl. consultation period).

Item	Description	Complete by	Agendas Close
1.	Workshop consultation material with the Rangiora Community Board (email consultation material prior).	10 August 16	
2.	Consultation material considered by Utilities and Roading Committee at its meeting of 16 August 2016.	16 August 16 5 Aug16	
3.	Report to U&R and consultation material considered by the OEWAB.	17 August 16	5 Aug16
4.	Consultation commences – 1 month period (Facebook, Website, Outlook, Twitter).	20 Aug 16	
5.	Updated Flyer with Rangiora Community Board, U&R and OEWAB comments mailed out to ratepayers.	24 Aug 16	
6.	Mandeville community drop-in session at Mandeville Sports Ground.	7 Sep 16	
7.	Fernside community drop-in session at Fernside School.	8 Sep 16	
8.	Submissions close.	17 Sep 16	
9.	Update Rangiora Community Board with recommendations from Staff.	28 Sept 16	
10.	Council consider recommendations from Staff.	4 Oct 16	23 Sep 16

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. Refer to Table 2 for the rating impact of the proposed upgrade, based on the three funding options identified.
- 5.2. It is noted that this project has been identified as a partially growth driven project. As such the capital costs will be recovered by the existing Fernside scheme members, as well as future connections to the scheme over the next ten years through development contributions (DCs). The DCs are currently being revised by Council staff to ensure that they are up to date.
- 5.3. Once the Fernside and Mandeville schemes are joined Fernside would become its own Development Contribution Area (DCA), connected to the Mandeville scheme. Any new connections to Fernside would then be required to pay both the Mandeville and Fernside DC to cover their share of infrastructure built on both schemes to accommodate growth. The Fernside DC is calculated at \$1,839 + GST per unit, and the Mandeville DC is calculated at \$943 + GST per unit giving a projected total water DC for new connections to the Fernside scheme of \$2,782 + GST per unit.

6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council's Significance Policy.

6.2. Legislation

The Health (Drinking Water) Amendment Act 2007 requires drinking-water suppliers to take all practicable steps to ensure they provide an adequate supply of drinking water that complies with the Drinking Water Standards New Zealand (2008).

6.3. Community Outcomes

This report relates to the following community outcomes:

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- > There is sufficient clean water to meet the needs of communities and ecosystems
- Core utility services are provided in a timely, sustainable and affordable manner.

Gary Stevenson
UTILITIES PROJECTS TEAM LEADER

Colin Roxburgh WATER ASSET MANAGER

Attachment i



160608053802

Attachment ii

FERNSIDE AND MANDEVILLE

CONSIDERATION OF FUNDING OPTIONS

New Zealand Drinking Water Standards and provide The Waimakariri District Council is proposing to upgrade the Fernside Water Supply to meet the a back-up source for the scheme.

join the Fernside water supply with the Mandeville water supply. the standards and allow for future population growth is to Our investigation indicates that the optimum way to meet

Council is considering funding options for this.

enclosed feedback form. More detailed information is available This information will help you in completing and returning the from waimakariri.govt.nz





Fernside

Mandeville

Backaround

The Fernside community currently sources its water from a non-secure shallow well on Swannanoa Road. Treatment, including chlorination, is provided at the Fernside Headworks before water is distributed to customers.

failure at the existing well. Therefore, an upgrade is needed to ensure the water supply is reliable and safe to drink. Additionally, the existing headworks has limited storage capacity and no back-up water supply source if there is a The Fernside source and treatment does not meet the requirements of the Drinking Water Standards for NZ.

The Mandeville community sources its water from two wells at Two Chain Road with an emergency back-up well at Tram Road. The water is treated at the Two Chain Road Headworks. This currently consists of chlorination. An Ultra-Violet (UV) disinfection system is to be added to the treatment process in the near future. Once this upgrade is complete the Mandeville supply will be safe and comply with the Drinking Water Standards for New Zealand.

Upgrading Options

Various upgrade options have been assessed for upgrading

- the Fernside Water Supply. These include:

 Joining Fernside to Mandeville.
 Joining Fernside to Rangiora.
- Drilling a new deep well in Fernside to find a secure groundwater source.

Additional treatment of the existing Fernside well and

drilling of a new back-up well.

Identifying Preferred Upgrade Option

optimum long-term upgrading option in terms of both cost and risk. This was identified in the Annual Plan 2016-17, Joining Fernside to Mandeville has been assessed as the and endorsed by the Council's Utilities and Roading Committee at their August 2016 meeting.

The Mandeville scheme currently has enough capacity to accommodate Fernside, meaning that the schemes can be joined by installing a water main from the corner of Lilly Road to the Fernside Headworks (length 1.8 km, estimated capital cost \$395,000 excl. GST).

used as the primary source for both Fernside and Mandeville. The existing Mandeville wells and headworks would be

The existing Fernside well would be retained as an emergency back-up supply for both schemes in case of a failure of the Mandeville Headworks.

Benefits

The Fernside Water Supply will be compliant with New Zealand Drinking Water Standards.

Both Fernside and Mandeville

The resilience of both communities to natural disasters or other unexpected events (i.e. power failures) will be increased by retaining the existing Fernside headworks as a back-up water source and as additional emergency storage.

Funding Options

Recognising that Fernside is the primary beneficiary of joining the two supplies, three funding options to join the schemes have been identified for consideration.

1) Schemes remain financially

costs associated with the upgrade (estimated \$395,000) in addition to paying all of its own operational costs. This process would be administratively schemes, so the overall costs with this more complex to split costs between option would be marginally higher. Fernside would pay all the capital

3) All costs shared between 2) Schemes join financially but Fernside covers capital cost of connection.

administrative efficiencies compared to Option 1. overall savings due to operational and (estimated \$395,000) and all ongoing operating costs would be shared between the Fernside and Mandeville schemes. As with Option 2, by joining the schemes financially there are Under this option all capital costs associated with the connection financially there are overall savings due to operational and administrative Fernside would pay all capital costs associated with the connection (estimated \$395,000) in addition to paying the Mandeville water rate. Once the capital cost is paid off (in 25 years) Fernside would then only pay the Mandeville water rate. The operational costs would be shared between Fernside and Mandeville residents. By joining the schemes

efficiencies compared to Option 1.

Rates Impact

Funding Options	Existing Rate (If No Connection	Funding Option 1 *		Funding Option 2 *
Fernside Water Rate per 2 units	Between Schemes) \$786	\$1,072		\$823
Mandeville Water Rate per 2 units	\$379	\$403 44	1000	\$424
Advantages		No increase to Mandeville water rate as result of schemes Joining	only marginal rate increase to both Fernside and Mandeville schemas a result of schemes joining. Admisistrative comminmised due to efficiencies of jois schemes financial schemes financial schemes financial rate in schemes financial schemes financial rate in scheme financial rate in schemes financial rate in scheme financial rate	Only marginal rate increase to both Fernside and Mandeville schemes as a result of schemes joining. Administrative costs minimised due to efficiencies of joining schemes francially, schemes financially,
Disadvantages		High increase to Fernside water rate Higher administrative costs due to complexity of separate schemes financially Benefit of emergency back-up supply to Mandeville not reflected in rates.	Marginally his water rate to Mandeville re Option 1.	Marginally higher water rate to Mandeville relative to Option 1.

Mandeville 5 year average water rates increase from existing rates due to UV and other treatment plant upgrades. *5 year average water rates given for future funding options analysis to show comparison between schemes.

Where to next?

We'll be holding drop in sessions to discuss issues and options from 4pm - 7pm

Day Date Month Year

Mandeville Sports Ground Day Date Month Year Fernside School Complete and return the attached form in the reply paid envelope by 17 September 2016.

After consideration of submissions Council staff will make a submission to Council.

The Council's decision will take into account the views expressed by you, the Oxford Eyre Ward Advisory Board and the Rangiora Community Board.

For more information

Please visit waimakairiri.govt.nz or call Gary Stevenson, Utilities Projects Team Leader, Ph. 03 311 8900, Email: gary.stevenson@wmk.govt.nz

Attachment iii

Proposed Connection of Water Supplies Fernside-Mandeville Funding Options

Feedback

To give us your feedback on the proposed connection of water supplies funding options please fill in the form below and drop in to any Council Service Centre (Oxford, Rangiora or Kaiapoi), Freepost it back in the envelope provided or email to records@wmk.govt.nz. Alternatively please feel free to submit your feedback online at our webpage:

www.waimakariri.govt.nz/have-a-say/lets-talk/fernside-and-mandeville-water-supplies

Please ensure your feedback is returned prior to 17 September 2016.

If you'd like more information before you respond, please visit the Waimakariri District Council website: waimakairiri.govt.nz call Gary Stevenson, Utilities Projects Team Leader on 03 311 8900, or email: gary.stevenson@wmk.govt.nz.

Name	
Signature	
Property Location	
Postal Address	
Phone (optional)	
Email (optional)	
\square I am connected to the Mandeville Supply and have \square units of water (if known)	
\square I am connected to the Fernside Supply and have \square units of water (if known)	
I support Funding Option (please tick 1, 2 or 3)	
☐ Options 1 ☐ Option 2 ☐ Option 3	
Comments: (Please continue on reverse page and/or add additional sheets if necessary)	

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WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO:

DRA - 12 / 160715068686

REPORT TO:

Management Team

DATE OF MEETING:

25 July 2016

FROM:

Land Drainage Engineer

SUBJECT:

Request to approve quote from Wai-Ora Forest Landscapes Ltd to plant

the banks of the Kaikanui Stream

SIGNED BY:

(for Reports to Council or

Committees)

Department Manager

Chief Executive

Approved by Margart 25/7/16

OPY FOR YOUR

INFORMATION

SUMMARY

1.1. The purpose of this report is to seek approval to engage Wai-Ora Forest Landscapes Ltd to carry out riparian planting of the Kaikanui Stream between Williams Street and the Motorway as per the supplied quote of \$32,188 excluding GST.

Attachments:

- i. Report to Kaiapoi Community Board 17 March 2014 TRIM:140307022311
- ii. Quote from Wai-Ora Forest Landscapes Ltd

2. RECOMMENDATION

THAT the Management Team:

- (a) Receives the report No: 160715068686
- (b) Approves the engagement of Wai-Ora Forest Landscapes Ltd to plant and maintain the Kaikanui Stream banks as described in the attached report to the Kaiapoi Community Board for a quoted price of \$32,188 excluding GST.
- (c) Notes that this work requires Management Team approval to comply with the Council's purchasing policy.
- (d) **Notes** that the project is funded from a budget allocation of \$35,000 for the 2016/17 financial year.
- (e) **Circulates** this report to the Utilities and Roading Committee and Kaiapoi Community Board for their information.

3. ISSUES AND OPTIONS

3.1. The Kaiapoi Community Board supported the allocation of \$63,600 from the South Kaiapoi Stormwater Project for the Kaikanui Stream enhancement at their meeting of 17 March 2014 (refer to the report in Attachment i). The project did not go ahead in 2014 and the budget allocation lapsed at the end of the 2014/15 financial year.

- 3.2. As part of the draft 16/17 Annual Plan a revised budget of \$35,000 was included to undertake the planting between the motorway and existing planting upstream of Main North Road (shown in yellow on the Kaikanui Stream Enhancement plan included in the report in Attachment i).
- 3.3. Future opportunities exist for further planting downstream of the railway as shown in blue and pink on the Kaikanui Stream Enhancement plan.
- 3.4. An updated quote (refer Attachment ii) has been received from Wai-Ora Forest Landscapes for \$32,188 for planting including 9 months maintenance. Wai-Ora have extended the 30 day quote for an extra 30 days to 3 August 2016. The quote lists the species and quantities to be used.
- 3.5. Only one quote from Wai-Ora Forest Landscapes Ltd was obtained for the work as they currently undertake work for the Council on stream side planting and maintenance projects and are sub-contractors to the current drainage maintenance contractor since 2012. Additionally they have already carried out riparian planting along various streams and drains within the District including projects along the Kaikanui Stream in 2008, 2009, 2011 and 2012 and currently carry out the maintenance of these planted stream banks.
- 3.6. Staff have reviewed the quote provided by Wai-Ora and consider it to be a fair price comparable to other work undertaken in the district.

4. **COMMUNITY VIEWS**

4.1. The Kaiapoi Community Board discussed this at their March 2014 meeting and are very supportive of projects to enhance the town's streams.

5. <u>FINANCIAL IMPLICATIONS AND RISKS</u>

- 5.1. The quote is for \$32,188 excluding GST.
- 5.2. The project is funded from a budget allocation of \$35,000 for the 2016/17 financial year.
- 5.3. This work requires Management Team approval in accordance with the Council's Purchasing Policy as only one quote was obtained for the work.
- 5.4. Wai-Ora are registered on Site Wise and have provided a specific health and safety plan for the project.

6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council's Significance Policy.

6.2. Legislation

N/A

6.3. Community Outcomes

- The air and land is healthy
- There are areas of significant indigenous vegetation and habitats for indigenous fauna
- Public spaces and facilities are plentiful, accessible and high quality

Greg Bennett Land Drainage Engineer

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: DRA-12 / 140307022311

REPORT TO: Kaiapoi Community Board

DATE OF MEETING: 17 March 2014

FROM: Greg Bennett – Land Drainage Engineer

SUBJECT: Kaikanui Enhancement Project

SIGNED BY:

(for Reports to Council or

Committees)

Department Manager

1. SUMMARY

1.1. The purpose of this report is to seek support from the Kaiapoi Community Board for the planting of native plants along the banks of the Kaikanui Stream as part of the final stage of the South Kaiapoi Stormwater project improvements.

2. RECOMMENDATION

THAT the Kaiapoi Community Board:

- (a) Receives report No. 140307022311
- (b) **Supports the proposed e**nhancement of the Kaikanui Stream and reallocation of \$63,600 from the South Kaiapoi Storm Water Project.
- (c) **Notes** that the upgrading works for the South Kaiapoi Stormwater project are now complete.

3. <u>ISSUES AND OPTIONS</u>

3.1. The South Kaiapoi Stormwater Project is a 3.9 m upgrade undertaken over 10 years and has been successfully completed below budget leaving a surplus of approximately \$105,000.

List of Projects:

Stage 1 - Bowler Street Pumpstation	Nov 2004	
Stage 2 - Williams Street Pipeline	Jun 2007	
Stage 3 - Kaikanui Treatment Pond	Dec 2007	
Stage 4 - Stone St Kaikanui Pipeline	May 2008	
Stage 5 - Stone Street Pumpstation	Dec 2009	
Stage 6 - Ohoka Road Pipeline East	May 2010	
Stage 7 - Ohoka Road Pipeline West	Apr 2011	
Final stage - To enhance the Kaikanui Stream		

Chief Executive

- 3.2. Planting of native species along the banks of Kaikanui will help to reduce the annual maintenance budget by providing shade, which inhibits the growth of aquatic species that would otherwise need clearing.
- 3.3. Similar riparian planting has been carried out successfully on the Kaikanui Stream in 2007, 2009 and 2012 using the drainage maintenance budget. (**Refer attachment 1**)
- 3.4. Drainage staff organised removal of a number of large inappropriate tree species in preparation for infill native planting. This has been undertaken in consultation with the adjacent landowners.
- 3.5. Native planting is known to encourage animal and bird life to return to the area by enhancing the available habitat.
- 3.6. The reach considered for enhancement is from Williams Street to the motorway, approximate length 1km. (Refer attachment 2)
- 3.7. Drainage staff have estimated that the project will cost \$63,600.
- 3.8. If the recommendation of this report is supported by the Kaiapoi Community Board, staff will prepare a report to the U&R committee seeking approval to reallocate the budget and to call for tenders from suitably qualified contractors, to carry out the work.

4. COMMUNITY VIEWS

- 4.1. No community views have been sought in relation to the proposed planting of the Kaikanui Stream.
- 4.2. If the recommendations in this report are approved staff will cooperate with the adjacent land owners to achieve the best outcome.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. If the recommendation in this report is approved, by the KCB and U&R Committees, \$63,600 will be spent from the South Kaiapoi Storm Water Project budget, towards the purchase and planting of approximately 1 kilometre of the Kaikanui Stream.
- 5.2. The table below shows what has been committed or spent from this budget to date.

Total South Kaiapoi Storm Water Project Budget	\$3.9m
Budget left unspent (available)	\$105,000
<u>Project</u>	<u>Price</u>
Estimated cost of planting (including plant purchase and 12 month maintenance period)	\$63,600
Total Remaining budget	<u>\$41,400</u>

7. CONTEXT

7.1. Policy

This matter is not a matter of significance in terms of the Council's Significance Policy.

7.2. Legislation

N/A

7.3. Community Outcomes

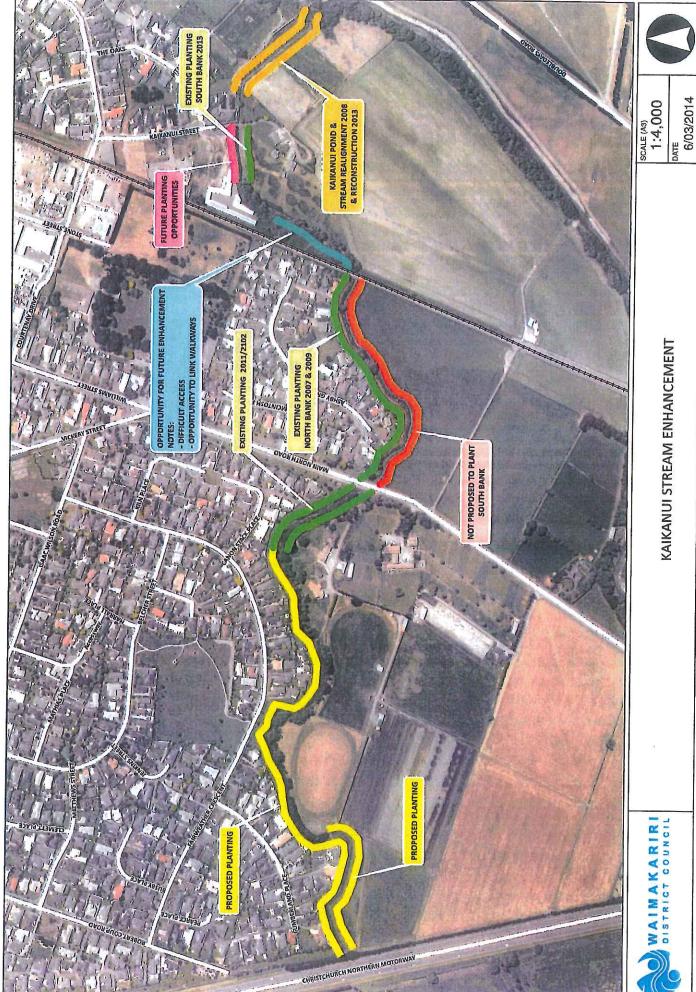
This report relates to the following community outcomes:

- There is a safe environment for all.
- Core utility services are provided in a timely, sustainable and affordable manner.

Greg Bennett Land Drainage Engineer

Attachment 1:

Planting Plan





Attachment 2:

Photos

Kaikanui Stream Enhancement



Photo 1: Planting undertaken in 2012 Looking West From Main North Road



Photo 2: Planting undertaken in 2008 West of Main North Road



Photo 3: Proposed Planting Site North Bank Only



Photo 4: Proposed Planting Site Looking East from Motorway

Quote no. 706257



Prepared by:

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Wai - ora Forest Landscapes Ltd 48 Watsons Road, Harewood, Christchurch

3rd June 2016	48 Watsons Road, Harewood, Christenur				
WORK ITEM	Qty	Units	Rate		

RKITEM	Qty	Units	Rate	Extn.
Kaikanui Stream Based on information in Gareth Harpers quote dated 22/09/2015				
1 Site Preparation				
Spot spray for 3065 plants	3065	no	0.40	1,226
2 Planting layout				
Supply and plant the following species on a 700m stretch of				
stream on the residental side. One row of carex sect @ 1m ctrs (rx90)	700	no	5.00	2 500
One row of Phormium cookianum @ 1m ctrs (2.5L)		no	10.80	3,500 7,560
One row of mixed plant @ 1m ctrs	700	110	10.60	7,500
Coprosma propinqua (2.5L)	175	no	10.80	1,890
Coprosma virescens (2.5L)		no	10.80	1,890
Muehlenbeckia astonii (2.5L)		no	10.80	1,890
Cordyline australis (2.5L)	175	no	10.80	1,890
Supply and plant the following species on a 200m stretch of				8
stream on the opposite side				
One row of carex secta @ 1m ctrs	200		5.00	1,000
One row of Phormium cookianum @ 1m ctrs (2.5L)	200		10.80	2,160
One row of mixed plant @ 1m ctrs				
Coprosma propinqua (2.5L)	50		10.80	540
Pittosporum eugenioides (2.5L)	50		10.80	540
Pittosporum tenuifolium (2.5L)	50		10.80	540
Cordyline australis (2.5L)	50		10.80	540
Supply and plant the following species as In-fill planting				
by residents	200		F 00	4 500
Carex secta (Rx90) Anemanthele lessoniana (1.5L)	300 50	i	5.00	1,500
One row of mixed plant @ 1m ctrs	50		8.20	410
Coprosma propinqua (2.5L)	5		10.80	54
Pittosporum eugenioides (2.5L)	10		10.80	108
Thiosporum edgemondes (2.52)	10		10.00	100
Aftercare Maintenance	0		550.00	4.050
	9	mths	550.00	4,950
uote is valid for 30 days from issue date.			Subtotal	32,188
			G.S.T	4,828
atement issued. Payment is due 20 days from invoice date.			TOTAL	37,016

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO:

SEW-03-09-13-01 / 160627061399

REPORT TO:

Management Team

DATE OF MEETING:

August 2016

FROM:

Ric Barber, Wastewater Asset Manager

SUBJECT:

Consultant Engagement for Oxford WWTP Aeration Renewal Design

SIGNED BY:

(for Reports to Council or Committees)

Department Manager

Chief Executive

1. SUMMARY

- 1.1. The purpose of this report is to seek approval from the Management Team to engage MWH as a consultant to undertake the design work for the Oxford WWTP aerator renewal project.
- 1.2. There are currently three existing aerators at the Oxford WWTP which are all at the end of their useful lives and are starting to require some expensive maintenance.
- 1.3. In April 2016 MWH carried out an options study to determine the optimum replacement strategy for the Oxford WWTP aerators (TRIM 160601051351). This study determined that fine bubble diffused aeration was the optimum renewal strategy for the Oxford WWTP.
- 1.4. There is a budget of \$360,000 in the 2016/17 financial year for the renewal of the existing aerators with diffused bubble aeration. This option was adopted by Council as the optimum renewal methodology as part of the annual plan deliberations.
- 1.5. MWH have proposed to carry out the design specification and scope and update the operation and maintenance manual for a lump sum of \$23,000.
- 1.6. This approach involves a design build contract where the Council's requirements are specified in the contract allowing a contractor to select equipment and materials that satisfy the specification at a competitive price. It is considered this method would be the most cost effective method for this project.
- 1.7. It is not thought that putting this work out to open tender will provide a better outcome as MWH have a good understanding of the Oxford WWTP operation and have proposed an innovative design-build approach for the work.

Attachments:

- i. MWH Proposal for Oxford WWTP aerator renewal design.
- ii. Consultant engagement form

2. RECOMMENDATION

THAT the Management Team:

- (a) Receives report No. 160627061399
- (b) Accept the price of \$23,000 from MWH to undertake the design scope and specifications for the Oxford WWTP aerator renewal.
- (c) Notes that only one consultant was invited to submit a proposal for this project as MWH has the best local recent experience of aerator installation at mechanical wastewater treatment plants such as Oxford and they also carried out the options study.
- (d) **Notes** that there is an approved capital budget for the aerator renewal of \$360,000 in the 2016/17 financial year. The MWH work is proposed to be funded from this budget.
- (e) Circulates this report to the Utilities and Roading Committee for their information.

ISSUES AND OPTIONS

3.1. The purpose of this report is to seek approval from the Management Team to engage MWH as a consultant to undertake the design work for the Oxford WWTP aerator renewal project.

3.2. Background

- 3.3. There are three existing aerators at the Oxford WWTP; two 9kW submersible aerators and one 11kW floating aspirator aerator. All of these were installed in 1997.
- 3.4. The useful life of an aerator is assumed to be 20 years for mechanical equipment, meaning all three aerators are due for renewal. On top of this, one of the submersible aerators and the floating aerator both needed to be removed for unplanned repairs last year.
- 3.5. All three aerators were proposed for renewal in the 2016/17 financial year, with an approved capital budget of \$360,000.
- 3.6. MWH carried out a study in 2009 outlining the development programme for the Oxford WWTP (TRIM 091120035435). As part of this study, the existing aerators were calculated to have sufficient capacity to transfer oxygen to the wastewater until 2015. It was also commented that the existing aerators are very inefficient and replacement by fine bubble diffused aeration should be considered.
- 3.7. A rough assessment of cost of \$294,000 was estimated for replacement by fine bubble diffusion.
- 3.8. In January 2014, Opus provided an updated Oxford Wastewater Treatment Plant master plan (TRIM 140123006156). The main driver behind this work was determining whether a new clarifier will be required in the next 50 years, however this master plan also covered the replacement of the aerators.
- 3.9. The main conclusion from this master plan regarding the aerators was that the existing aeration system does not have sufficient redundancy in the event of one of the aerators being taken out of service. In 2015, two of the aerators were out of service for a few weeks at a time for repair work which detrimentally affected the treatment plant.

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- 3.10. The recommendation from the Opus master plan for the aerators was to develop a replacement strategy whether to replace like for like or to switch to diffused aeration, with replacement work in 2017.
- 3.11. The Opus estimate for upgrading to diffused aeration in the master plan is \$318,000.
- 3.12. In April 2016, MWH undertook an options study to determine the optimum renewal strategy for the Oxford aerators. This study compared four different options for aerator renewal and carried out a multi-criteria analysis to determine the best option.
- 3.13. This study determined that fine bubble diffused aerators provided the best renewal strategy as they offer sufficient redundancy, a safer operation and maintenance regime and only a marginally higher NPV over 20 years.
- 3.14. The existing submerged aerators have also been highlighted by the Water Unit as being difficult to safely service. Operators have to work "blind" under the surface of the wastewater to undo bolts to remove the aerators for maintenance and servicing. The Oxford WWTP cannot be easily bypassed to enable "dry" working on these submerged aerators.

3.15. **Options**

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- 3.16. Three main options are available with regards to the aerator renewal design:
 - 1. Carry out the design work in-house
 - 2. Tender the project to the open market or selected consultants.
 - 3. Accept the proposal from MWH to carry out the design scope and specification for a design build contract.
- 3.17. Option one is not really feasible as PDU staff are already fully committed to other projects in the 2016/17 financial year.
- 3.18. It is not considered that option two would provide a better value outcome for the project than option three as MWH have a good understanding of the operation of the Oxford WWTP and have proposed an innovative design-build approach for this project.
- 3.19. Prices from three consultants have not been sought for this work for two main reasons:
 - MWH have the best recent track record of upgrading mechanical treatment plants in the local area with upgrades to The Pines treatment plant in Selwyn District and Greymouth treatment plant both undertaken in the last couple of years. Both of these plants have similarities to Oxford WWTP and aeration options were investigated, with diffused aeration being selected and implemented.
 - MWH represent the only Christchurch based team with the knowledge to carry out this work, meaning site visits are more easily undertaken. MWH have also just won the contract for the Rangiora aeration basin design on a selected tender basis, so there is the potential for some savings between these two projects as a similar study will need to be carried out to assess the optimum aeration for the Rangiora aeration basin.
- 3.20. Staff are of the opinion that this proposal represents fair value for the work and MWH are the best consultants to undertake this work.

3.21. There is the option to request proposals from other consultants, for example the Opus team in Hamilton that carried out the Oxford WWTP master plan would also be able to undertake this work.

4. COMMUNITY VIEWS

4.1. Community views have not been specifically sought in relation to this project. However the \$360,000 existing budget was consulted on as part of the Annual Plan process.

5. FINANCIAL IMPLICATIONS AND RISKS

- 5.1. The existing aerator renewal budget of \$360,000 is expected to be sufficient to carry out the design, construction and commissioning of a new fine bubble diffused aeration system at the Oxford WWTP. The cost estimate that MWH prepared as part of the options study provided a cost of \$296,000 for construction.
- 5.2. The table below shows the breakdown of projected project costs compared to budget.

Total Project Budget	\$360,000
Design Fees	\$23,000
Construction Cost Estimate	\$296,000
Project Contingency	\$41,000

5.3. Including the proposal from MWH of \$23,000 and the construction cost estimate, there would be a project contingency sum of \$41,000 or 13%, which is considered sufficient for this project.

6. CONTEXT

6.1. Policy

This requires Management Team approval in order to comply with the Council's Purchasing Policy.

6.2. Community Outcomes

This report relates to the following community outcomes:

- There is a safe environment for all.
- Core utility services are provided in a timely, sustainable, and affordable manner.

Written by

Ric Barber

Wastewater Asset Manager

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27/06/2016