

Canterbury Mayoral Forum

BOARD PACK

for

Canterbury Mayoral Forum

Friday, 18 February 2022

8:30 am

Held at:

Zoom

Meeting ID: 881 3031 6568 Passcode: 546866

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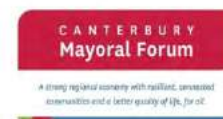
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AGENDA

CANTERBURY MAYORAL FORUM



Name:	Canterbury Mayoral Forum
Date:	Friday, 18 February 2022
Time:	8:30 am to 2:30 pm
Location:	Zoom, Meeting ID: 881 3031 6568 Passcode: 546866  https://us06web.zoom.us/j/88130316568?pwd=OGhvVi9sK3gxVnJCvVZ5MnV0dEttQT09 Remote Meeting only - Please join this meeting via the link above.
Board Members:	Sam Broughton (Chair), Craig Rowley, Craig Mackle, Dan Gordon, Gary Kircher, Graham Smith, Jenny Hughey, Marie Black, Neil Brown, Nigel Bowen
Attendees:	Alex Parmley, Angela Oosthuizen, Bede Carran, Dawn Baxendale, Hamish Dobbie, Hamish Riach, Jim Harland, Stefanie Rixecker, Stuart Duncan, Will Doughty, Amanda Wall, Maree McNeilly, Rosa Wakefield, Sean Tully
Apologies:	Lianne Dalziel, David Ward
Guests/Notes:	Andrew Turner (Deputy Mayor, Christchurch City Council, for Lianne Dalziel); Minister David Parker (Item 2.2); Arron Cox, Private Secretary to Minister for the Environment (Item 2.2); Janine Smith, Deputy Chief Executive, Ministry for the Environment (Item 2.2); Caroline Hart, Director, Ministry for the Environment (Item 2.2); John Blincoe, Senior Ministerial Advisor Minister Parker's office (Item 2.2); David Falconer, Chair Canterbury Planning Managers Group (Item 2.2); Hamish Barrell, Canterbury Planning Managers Group (item 2.2) Ben Clark, Regional Public Service Commissioner (Item 2.4); Peter Bramley, Chief Executive, Canterbury District Health Board (Item 2.5), Marlon Bridge, Acting Director Three Waters Transition Unit (Item 2.6); Mike Reid, Principal Policy Advisor, LGNZ (Item 2.8).

1. Opening meeting

1.1 Mihi, welcome, introductions and apologies

8:30 am (5 min)

Sam Broughton

Canterbury Mayoral Forum mihi

Ko Ngā Tiritiri o te Moana ngā maunga

Ko ngā wai huka ngā awa i rere tonu mai

Ko Ngā Pākihi Whakatekateka o Waitaha te whenua

Ko Marokura, ko Mahaanui, ko Araiteuru ngā tai

Tihei mauri ora!

The Southern Alps stand above

The snow-fed rivers continually flow forth
The plains of Waitaha extend out
To the tides of Marokura, Mahaanui and Araiteuru
Behold, there is life!

1.2 Confirmation of agenda

8:35 am (5 min)

Sam Broughton

1.3 Minutes from the previous meeting

8:40 am (5 min)

Sam Broughton

Supporting Documents:

1.3.a	Minutes : Canterbury Mayoral Forum - 19 Nov 2021	8
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1.4 Action List

8:45 am (5 min)

Sam Broughton

Supporting Documents:

1.4.a	Action List	18
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2. For discussion

2.1 CREDS update

8:50 am (10 min)

Craig Rowley

Supporting Documents:

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2.1.c	CMF CREDS update Feb 2022 Attachment 1b - Leftfield Berryfruit Report.pdf	51
2.1.d	CMF CREDS update Feb 2022 Attachment 2 - Canterbury Mobile Black Spots Phase 2 Final Report Final.pdf	80
2.1.e	CMF CREDS update Feb 2022 Attachment 3 - Draft mobile blackspots advocacy letter.docx	128

2.2 Resource Management Reform - Minister Parker

9:00 am (60 min)

Sam Broughton

Supporting Documents:

2.2.a	CMF Resource Management Reform Feb 2022 - Briefing note Minister Parker.docx	130
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2.3 Morning Tea

10:00 am (20 min)

2.4 Regional Public Service Commissioner update

10:20 am (10 min)

Ben Clark

Supporting Documents:

2.4.a	CMF Regional Public Service Commissioner update Feb 2022.docx	132
2.4.b	CMF Regional Public Service Commissioner update Feb 2022 Attachment 1 Rural Trust announcement.pptx	135

2.5 COVID-19 response and health reforms - Peter Bramley 10:30 am (30 min)

Peter Bramley

Supporting Documents:

2.5.a	CMF COVID-19 response and health reforms - Briefing note Peter Bramley Feb 2022.docx	144
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2.6 Three Waters transition - Marlon Bridge 11:00 am (30 min)

Sam Broughton and Marlon Bridge

Supporting Documents:

2.6.a	CMF Three Waters transition Feb 2022 - Briefing note Marlon Bridge.docx	145
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2.7 Canterbury Water Management Strategy update 11:30 am (10 min)

Jenny Hughey

Supporting Documents:

2.7.a	CMF Canterbury Water Management Strategy update Feb 2022.docx	146
2.7.b	CMF Canterbury Water Management Strategy update Attachment 1 Zone Committee Action Plans 2021-2024.pdf	152

2.8 Future for Local Government update 11:40 am (30 min)

Sam Broughton

Supporting Documents:

2.8.a	LGNZ - An empowered integrated public service - Retreat A3 - 2022.02.05 - for screen.pdf	170
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3. Lunch

3.1 Lunch 12:10 pm (60 min)

4. For information

4.1 Climate Change Steering Group update 1:10 pm (5 min)

Dan Gordon

Supporting Documents:

4.1.a	CMF Climate Change Steering Group update Feb 2022.docx	172
4.1.b	CMF Climate Change Steering Group update Feb 2022 Attachment 1.docx	174

4.2 Chief Executives Forum report

1:15 pm (5 min)

Hamish Riach

Supporting Documents:

4.2.a	CMF Chief Executives Forum report Feb 2022.docx	182
4.2.b	CMF Chief Executives Forum report Feb 2022 Attachment 1 - Regional Forums Three Year Work Programme.pdf	184

4.3 Mayoral Forum activities and engagements

1:20 pm (5 min)

Maree McNeilly

Supporting Documents:

4.3.a	CMF Activities and engagements Feb 2022.docx	186
4.3.b	CMF Activities and engagements Feb 2022 Attachment 1a - Ministry for Environment meeting notes 20 December 2021.docx	188
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4.4 Council updates

1:25 pm (40 min)

Mayors/Chair to update forum members on state of your LA, what would your request of the Forum be to end the term on a winning note

5. For information

5.1 General business

2:05 pm (10 min)

6. Close Meeting

6.1 Close the meeting

Next meeting: Canterbury Mayoral Forum and Papatipu Rūnanga Chairs - 25 Mar 2022, 10:00 am

MINUTES (in Review)

CANTERBURY MAYORAL FORUM



Name:	Canterbury Mayoral Forum
Date:	Friday, 19 November 2021
Time:	8:30 am to 11:46 am
Location:	Rydges Latimer, 30 Latimer Square, Christchurch Central
Board Members:	Sam Broughton (Chair), Craig Rowley, Craig Mackle, Dan Gordon, Gary Kircher, Graham Smith, Jenny Hughey, Lianne Dalziel, Marie Black, Neil Brown, Nigel Bowen
Attendees:	Alex Parmley, Bede Carran, David Ward, Dawn Baxendale, Hamish Riach, Hamish Dobbie, Jim Harland, Stefanie Rixecker, Will Doughty, Amanda Wall, Maree McNeilly, Rosa Wakefield, Sean Tully
Apologies:	Stuart Duncan, Angela Oosthuizen
Guests/Notes:	Dr Tim Davie, Jesse Burgess, Tumu Taiao Yvette Couch-Lewis (Environment Canterbury) - item 2.1; Fabia Fox and Lan Pham (Biodiversity Champions) - item 2.2; Paul Stocks (Regional Economic Development Senior Official) - item 2.5; Jim Palmer (Independent Chair, Greater Christchurch Partnership) - item 3.3; (Chair Future for Local Government Review) – item 3.4

1. Opening meeting

1.1 Mihi, welcome, introductions and apologies

The chair welcomed everyone to the meeting with the Canterbury Mayoral Forum mihi.

1.2 Confirmation of agenda

The agenda was confirmed, with one item of general business:

- regional leadership and a strong social policy network for Canterbury.

1.3 Minutes from the previous meeting

Canterbury Mayoral Forum 20 Aug 2021, the minutes were confirmed as presented.

1.4 Action List

Due Date	Action Title	Owner
17 Feb 2022	Arrange meeting with Minister of Transport Status: In Progress	Maree McNeilly
31 Mar 2022	Set up a visit to Kiwirail Status: On Hold	Maree McNeilly
31 Mar 2022	Visits to tertiary campuses Status: In Progress	Maree McNeilly

Updates were provided on the three outstanding actions:

- arranging a meeting with Minister Wood: we have received a response to our letter and this has been shared with members. Members agreed that a visit to Wellington should be arranged to meet with the Minister, with other transport-related meetings scheduled to coincide.
- site visit to KiwiRail: this was scheduled for 22 November, but has been postponed until early 2022 due to Alert Level 2.
- visit to Lincoln University: this is scheduled for 4 March 2022.

Members discussed Covid-19 vaccinations, and agreed to make a statement encouraging second vaccinations to the public following the meeting. All members have had both vaccinations.



Action

Draft a press release from the Mayoral Forum encouraging Canterbury to get their second Covid-19 vaccination.

Due Date: 22 Nov 2021

Owner: Maree McNeilly

2. For discussion and decision

2.1 Climate Change Risk Assessment final report

Dan Gordon spoke to the paper, with support from Dr Tim Davie, Tumu Taiao Yvette Couch-Lewis and Jesse Burgess from Environment Canterbury. Dan noted that the technical report is now complete, and shows that climate change risk is increasing in likelihood between now and 2100.

Discussion included:

- that this is a pioneering piece of work for New Zealand, with the connectedness between climate risks and Ngāi Tahu values and mātauranga a key focus
- that the name Te Tutei o Te Hau sets the foundation for the framework, as the surveillance of the wind is in alert system in Te Ao Māori
- that the framework uses an integrated approach, which can be taken by each council and embedded within integrated planning processes to identify threats and opportunities across their communities
- the importance of council building on relationships with their papatipu rūnanga
- the impact of climate change on at-risk taonga species
- that mana whenua are committed to this document and to using an integrated framework
- that the challenges introduced by climate change will impact in different ways across the region
- that climate change opportunities are included in the report but must be considered in relation to the broader report
- that delays to the report caused by mid-year floods and COVID-19 have caused a reduction in scope, with some of the urgency and consequence piece having been descoped
- that Canterbury is well-placed to integrate this report into planning and action, including engaging with councils, rūnanga and communities, and some councils are already working to build this technical work into their own planning work
- work on the snapshot report is continuing as it needs more technical detail to make it valuable to the community. This will go back through the Climate Change Steering Committee once changes are complete
- the significance of the work with Ngāi Tahu and the gifted name were noted.

Once it has been endorsed by the Forum the technical report can be released to the public. It will be shared through the It's Time, Canterbury website, the Mayoral Forum website, and councils. Concerns were raised about publicly releasing the technical report before Christmas, due to the lack of focus it would attract. The possibility of a soft launch was raised, where information is shared with community groups who are already doing work in this area. This could be followed in early 2022 by a series of workshops with external speakers and video material to share online.

Gary Kircher noted that Waitaki is cut in half by the report. Waitaki would prefer for the whole district to be included before the report is released. Members agreed that the technical report should be reviewed to consider how to ensure Waitaki is appropriately represented, and to note challenges of the regional boundary cutting across the Waitaki District. The NIWA data the study was done on covers the whole South Island. Stefanie suggested a follow up conversation with Gary around how he would like to do this.



Decision

The Forum agreed to:

1. endorse the Te Ao Māori integrated risk assessment framework and the gifted Ngāi Tahu name 'Te Tutei o Te Hau – Surveillance of the Wind'
2. endorse the Canterbury Climate Change Risk Assessment technical report for public release
3. delegate to the Canterbury Climate Change Steering Group the finalisation of the communications and engagement plan for the release of the technical report, including approval of the press release and public-facing snapshot report
4. note that the Canterbury Climate Change Working Group will develop further advice in early 2022 regarding the next steps for the Canterbury Climate Change Risk Assessment Project
5. request that the Climate Change Steering Group update the report to include the whole of the Waitaki District, and note that the Waitaki District sits across the Canterbury boundary.

Decision Date: 19 Nov 2021
Mover: Dan Gordon
Second: Lianne Dalziel
Outcome: Approved

2.2 Biodiversity Champions: shared regional approach

Jenny Hughey spoke to the paper with support from Fabia Fox and Lan Pham, and a handout showing some key biodiversity habitats and initiatives across the region was shared. Discussion included:

- the enthusiasm the Biodiversity Champions have to address issues the region faces currently, and their hope to share this enthusiasm with their colleagues and get biodiversity woven back through communities and landscapes
- that the group has done a stocktake of all projects planned, underway and completed across the region, as this was not well understood at a regional level
- that biodiversity is a positive action space and this work gives visibility and connection to work already underway, and highlights shared outcomes across climate change and freshwater work at a regional level
- the opportunities present for the region and how connectedness enables these; for example Waimate and Environment Canterbury are working on employing a joint staff member for biodiversity and climate change
- that the NPS Biodiversity is due out imminently, and a key driver for the Biodiversity Champions was to get ahead of incoming legislative requirements.

**Action**

Fabia Fox to arrange for biodiversity stocktake information to be shared with members.

Due Date: 30 Nov 2021

Owner: Rosa Wakefield

**Decision**

The Forum agreed to:

1. note that the next briefing from the Canterbury Biodiversity Champions will provide options for progressing shared regional approaches to address biodiversity roles, responsibilities and action in Canterbury
2. acknowledge an increase in focus and resources is required by councils to address ongoing biodiversity decline and implement national direction and shared regional approaches.

Decision Date: 19 Nov 2021

Mover: Jenny Hughey

Seconder: Nigel Bowen

Outcome: Approved

2.3 Meeting structure 2022

The chair spoke to the paper, and asked members to discuss the timing of meetings, including the other meetings held across two days, and how time is used.

Members agreed that:

- having the meetings over the same two days works well in reducing travel time.
- noting papers should be included in the meeting pack as a separate section, and approved as a single block during meetings, to reduce transactional time taken and allow more time for discussions
- it would be valuable to have more time for fulsome discussion of in-depth topics, e.g. the Biodiversity Champions paper which was presented to this meeting
- that longer meetings are required to allow for this.

It was suggested that the CDEM JC move to Thursday, prior to RTC, allowing the Mayoral Forum to run until 3pm, with guests in the morning and members discussion after lunch.

Some councils meet on Thursdays. Including Christchurch, Environment Canterbury and Hurunui. Christchurch keeps the third Thursday of each month free so an earlier start would work on those dates. Dates also need to align with the LGNZ calendar.

**Action**

Work with councils to finalise the 2022 meeting calendar.

Due Date: 3 Dec 2021

Owner: Maree McNeilly

2.4 Mayoral Forum Economic Development Group update

The paper was taken as read. Marie Black noted the group has held its inaugural meeting. The group are compiling a list of regional development initiatives across Canterbury, including both work that may be eligible for Kānoa funding and work which isn't but is relevant at a regional level. The group plans to meet again in February.

**Regional economic development initiative reminder**

Send a reminder about getting information on potential regional economic development initiatives back to the Economic Development Group as soon as possible.

10/02: Feedback due from councils by 14 February, and the Economic Development Group is meeting on 21 February.

Due Date: 21 Feb 2022

Owner: Maree McNeilly

**Decision**

The Forum agreed to:

1. endorse the attached terms of reference for the Canterbury Mayoral Forum's Economic Development Group
2. agree that all Canterbury councils be asked to assist the Economic Development Group in compiling a list of current and potential projects from across the region for the Group's consideration at its next meeting.

Decision Date: 19 Nov 2021

Mover: Marie Black

Seconder: Graham Smith

Outcome: Approved

2.5 Regional Economic Development Senior Official update

Paul Stocks joined the meeting to speak about his role as Regional Economic Development Senior Official (REDSO). He spoke about:

- the evolution of Kānoa, noting that the Regional Development Fund is \$200m over three years and is focused on work that is regionally aligned
- the role of the REDSO as an advocate for the region in Wellington
- his support for the Forum's Economic Development Group and work on food and fibre and the South Island Destination Management Plan
- his plans to visit the region regularly, although COVID-19 has made this less possible, and his intention to meet with each TA.

Members discussed the role of the Regional Public Sector Commissioner (Ben Clark), noting that he has presented to this group, but that there are challenges around the integration between local authorities and central government agencies and local authorities tend to work individually with the regional commissioners for each agency.

**Action**

Provide contact details for TAs to Paul Stocks to enable him to set up meetings with each.

Due Date: 30 Nov 2021

Owner: Maree McNeilly

2.6 Morning Tea**2.7 Three Waters**

The chair spoke to the paper. Ashburton District Council has written to the Mayoral Forum asking if the Forum has any plans or intentions to examine the legal remedies in relation to the mandating of the Three Waters reform. This letter has also been sent to LGNZ, although there has not yet been a response.

The Mayoral Forum does not have a joint view on seeking a legal challenge, so will not be exploring this, but members agreed to write to the Minister of Local Government expressing disappointment and frustration at the three waters mandate.

Dan Gordon is leading a group of councils seeking engagement with the Prime Minister and exploring a legal challenge.

Lianne Dalziel is a member of DIA's three waters working group, which is focused on governance, accountability and community voice. Members were selected to represent the nature of their respective councils, rather than the specific councils, so the group represents metro, rural and provincial. Lianne is happy to hear from anyone around particular issues. Members noted that it is good to have Canterbury on the group.



Action

Draft and circulate a short letter to the Minister of Local Government around the Forum's disagreement and frustration with the three waters mandate.

Decision made by Chair on 6 December not to send this letter.

Due Date: 30 Nov 2021

Owner: Amanda Wall



Action

Draft a letter to Ashburton District Council noting that the Mayoral Forum is not seeking a legal opinion on the three waters mandate.

Due Date: 30 Nov 2021

Owner: Amanda Wall



Decision

The Forum agreed to ask the secretariat to draft a response to Ashburton District Council based on the outcome of the discussion at the Mayoral Forum meeting.

Decision Date: 19 Nov 2021

Mover: Sam Broughton

Seconder: Nigel Bowen

Outcome: Approved

3. For information

3.1 Ashburton Essential Freshwater paper

Neil Brown spoke to the paper, noting the impacts of the worst case scenario, and that the solutions are time and science. A previous report, which was not commissioned by Ashburton, gathered information prior to the floods based on the 6.9mg target. The author can present to the Forum if wished. There are concerns around younger farmers, who are doing biodiversity work and don't feel it is recognised.

Members discussed the paper, including:

- that some would like to have the author of the report present to the Forum
- the need to think seriously about the economic direction of our region in coming years, and whether there is a need for a wider piece of work around the future for our economy
- the need to consider the impact of regulation, the positive impacts of this and how we will leverage this. Some of this sits with the regulators, some in the development of science, some with land use change
- that a regional approach would be helpful

- that the paper doesn't include the costs caused by decreasing water quality of waterways, the drinking water and public health costs, and financial benefits from improved waterways, or land use interventions which may provide greater values.



Decision

The Forum agreed to receive the reports Freshwater Nitrate – 2.4mg and Economic Impact for Ashburton District Council and Essential Freshwater Social Impact Report: Ashburton District.

Decision Date: 19 Nov 2021

Mover: Neil Brown

Seconded: Marie Black

Outcome: Approved

3.2 Canterbury Water Management Strategy update

Jenny Hughey spoke to the paper, with support from Stefanie Rixecker, noting that this intersects with the previous agenda item. Discussion included:

- Environment Canterbury's responsibility as the water regulator and its consideration of the impacts on people when setting policy
- that a lot of work is being done by both Environment Canterbury and TAs and the need to ensure people are aware of this work
- the need to stick together in making action plans, and work with central government on legislative sticking points, and the need for policy to not alienate young farmers
- Jane Demeter's appointment as co-chair of the CWMS Regional Committee and Tumu Taiao laean Cranwell as interim Ngāi Tahu co-chair
- that Canterbury's work in this space substantially informed the new essential freshwater policy statement
- that the NPS Freshwater process for Environment Canterbury is first to korero with mana whenua, which was intended to be done by the end of 2021 but has been delayed by COVID-19, and then work with communities and zone committees
- that the 2024 timeframe is a deadline for policy, not implementation, noting that it took over a decade to land the previous plan
- the need for understanding of what land use change might look like
- that Canterbury has more educational facilities and CRIs dedicated to food and fibre than any other part of the country so the ability to be innovative is strong, and we need to work to retain these in our region
- Dan Gordon commended Environment Canterbury for their process around Plan Change 7
- the possibility of having a presentation to the Forum around essential freshwater to hear from next generation farmers, noting that Dave Ashby has some great reflections in this space from his experience in Waimakariri
- that the Forum's discussion with Minister Parker was encouraging, with the Minister seeking a partnership model.

Dawn Baxendale left the meeting.



Decision

The Forum agreed to:

1. receive the CWMS update report
2. note Councils will need to approve an extension for some CWMS community representatives by December 2021.

Decision Date: 19 Nov 2021
Mover: Jenny Hughey
Seconder: Craig Rowley
Outcome: Approved

3.3 Greater Christchurch Partnership update

Jim Palmer, Independent Chair of the Greater Christchurch Partnership, joined the meeting to speak to the update from the Partnership. He noted four critical pieces of work currently underway:

- GCP 2050 – thinking about the next 30-100 years for greater Christchurch and how we create the environment, lifestyle and place we need considering all four wellbeings. Creating a framework for this, which will anchor a number of other pieces of work
- spatial planning – how and where greater Christchurch should grow in the next 30+ years, incorporating the NPS-UD and SPA. This includes:
 - considering projected populations, or example what needs to happen if population exceeds 1 million.
 - decarbonisation of transport; a requirement to reduce vehicle distance on local roads across the country by 20% may have policy set by mid-2022 to take effect by 2035
 - the ultimate urban form; having a green city that meets environmental challenges
 - the boundary of greater Christchurch and relationships with Ashburton, Hurunui
- partnership with government; the GCP is waiting for Cabinet confirmation of their proposed urban growth partnership. This will see two Ministers sitting as part of the committee
- relationship with iwi and mana whenua, and continuing to strengthen the relationship particularly with three rūnanga based in and around Christchurch.



Decision

The Forum agreed to note the contents of the paper and the briefing provided by the GCP Independent Chair.

Decision Date: 19 Nov 2021
Mover: Graham Smith
Seconder: Craig Rowley
Outcome: Approved

3.4 Future for Local Government update

Jim Palmer gave a verbal update, noting that the interim report, Ārewa ake te Kaupapa, has been released. The panel is now thinking about what the key big shifts that need to be seen in the system of local governance and local government over next 20-30 years and what we need this to look like, then will look at the options that give support to these shifts. The panel will have a roadshow in March and April 2022 and will visit every council. This will enable the panel to test their thinking with elected members and senior executives in a workshop style session. A key challenge is how to partner with central government and iwi.

Local government's growing frustration that work being done is overlooked by central government was noted. The panel is acutely aware of these factors.

3.5 Resource Management Reform update

The paper was taken as read. David Ward noted that there has been good success following correspondence with government agencies around appointment of Canterbury people to working parties.

Members discussed their disappointment with the MfE workshop held on 18 November.



Action

Write and circulate a draft letter to MfE noting the disappointment and lack of understanding of Canterbury and who we are.

26 November - draft letter circulated to CMF & CE for their review and comment by COB 29 Nov

Due Date: 30 Nov 2021

Owner: Maree McNeilly



Decision

The Forum agreed to note the update provided on the progress on the Government's resource management reform process.

Decision Date: 19 Nov 2021

Mover: Gary Kircher

Second: Lianne Dalziel

Outcome: Approved

3.6 CREDS update

The paper was taken as read. Craig Rowley noted that work is progressing well, and noted the supportive letter from CIP on the mobile blackspots work.



Decision

The Forum agreed to note the updates on CREDS projects.

Decision Date: 19 Nov 2021

Mover: Craig Rowley

Second: Graham Smith

Outcome: Approved

3.7 Climate Change Steering Group update

Dan Gordon spoke to the paper, noting that the guest speaker at the recent Climate Change Councillor Workshop was Dr Trevor Stuthridge from AgResearch and it was a very good session.



Decision

The Forum agreed to note the update in the report.

Decision Date: 19 Nov 2021

Mover: Dan Gordon

Second: Neil Brown

Outcome: Approved

3.8 Chief Executives Forum report

The paper was taken as read. Hamish Riach noted that the regional leadership framework may be where decisions around the Covid Protection Framework might sit. He also noted that the CEs Forum is reviewing the use of time in their meetings, and are intending to move to a peer-led supportive network model to create broader value for the group. A strategic workshop is being held on this early in 2022.

**Decision**

The Forum agreed to receive the quarterly report from the Chief Executives Forum and note updates to the three-year work programme.

Decision Date: 19 Nov 2021
Mover: Marie Black
Seconded: Gary Kircher
Outcome: Approved

3.9 General Business

It was noted that Canterbury used to have a strong social policy network environment, but this was taken over by the earthquake. There is a need for good structures, and the regional leadership group needs to recognise the role of local government.

**Action**

Lianne, Sam, Hamish, Dawn and Jim Palmer to meet with Ben Clark to discuss how to rebuild a strong social policy network for Canterbury.

20/12 Meeting scheduled for 31 January

Due Date: 31 Jan 2022
Owner: Maree McNeilly

4. Close Meeting**4.1 Close the meeting**

Next meeting: Canterbury Mayoral Forum - 18 Feb 2022, 8:30 am

Meeting close followed by lunch with Canterbury MPs

Signature: _____

Date: _____

Action List

Canterbury Mayoral Forum



As of: 16 Feb 2022

Arrange meeting with Minister of Transport

In Progress

Follow up with Minister of Transport's office around arrangements for meeting with the Forum.

19/11: we have received a response to our letter and this has been shared with members. Members agreed that a visit to Wellington should be arranged to meet with the Minister, with other transport-related meetings scheduled to coincide.

20/12: Paper being prepared for February RTC meeting to outline the plan of attack for the meeting with the Minister - proposed that RTC secretariat lead this engagement.

Due Date: 17 Feb 2022

Owner: Maree McNeilly

Meeting: 20 Aug 2021 Canterbury Mayoral Forum, 3.8 General Business

Set up a visit to Kiwirail

On Hold

Set up part two of the freight tour, part of a day at KiwiRail.

19/11: this was scheduled for 22 November, but has been postponed until early 2022 due to Alert Level 2.

18/01: made contact with John Gousmett around rescheduling.

Due Date: 31 Mar 2022

Owner: Maree McNeilly

Meeting: 28 May 2021 Mayoral Forum, 4.1 Action List

Visits to tertiary campuses

In Progress

Explore options for visits to Canterbury tertiary campuses in September or October.

19/11 Plans have been developed to visit Lincoln and learn about their energy farm and peri-urban farm initiatives; this is scheduled for 4 March 2022.

7/01: Rescheduled for Friday 29 April to avoid clash with LGNZ Rural & Provincial - calendar invites have been sent.

Due Date: 31 Mar 2022

Owner: Maree McNeilly

Meeting: 28 May 2021 Mayoral Forum, 4.1 Action List

Regional submission on National Adaptation Plan

On Hold

Climate Change Steering Group to develop a regional submission on the National Adaptation Plan.

5/10 Consultation expected May 2022.

Due Date: 1 May 2022

Owner: Dan Gordon

Meeting: 28 May 2021 Mayoral Forum, 4.1 Action List

Canterbury Mayoral Forum

Date: 18 February 2022

Presented by: Craig Rowley, FFIP and Digital Connectivity lead mayor

CREDS update

Purpose

1. This paper provides an update on CREDS activities including the completion and proposed next steps for phase two of the Digital Connectivity – Mobile Blackspots project.

Recommendations

That the Canterbury Mayoral Forum:

1. **note the updates on CREDS projects**
2. **receive the Digital Connectivity – Mobile Blackspots phase 2 final report**
3. **receive the reports from Leftfield Innovation on vegetables and berry fruit**
4. **endorse the proposed approach for advocating for remediation of the identified mobile blackspots.**

Background

2. The CREDS programme comprised several projects funded by the Provincial Growth Fund.
3. This paper provides an update on the Food and Fibre Innovation Programme (FFIP), including reports from Leftfield Innovation, and on the completion of the second phase of the Digital Connectivity – Mobile Blackspots project, along with next steps for this work.

Food & Fibre Innovation Programme

4. The Food and Fibre Innovation Programme (FFIP) continues to progress well.
5. The draft visual industry ecosystem roadmap created by the University of Canterbury and ChristchurchNZ was shared with stakeholders in December, and consultation is nearing completion, with constructive feedback incorporated into the design. This will be finalised by the end of February.

6. Once this has been finalised an interactive directory using the roadmap data will be developed in conjunction with Callaghan Innovation and KiwiNet. This will be completed by 30 June 2022.
7. The pipelines with FoodSouth and Te Ohaka continue to support new food businesses into operation. One of the businesses funded by the Forum in the Te Ohaka incubator is MenuAid, a meal planning service which is enjoying early success including substantial media coverage.
8. ChristchurchNZ continues to support and grow agri-biotech, and food and beverage clusters. ChristchurchNZ is continuing to facilitate meetings and is currently researching how a shared equipment facility for agri-biotech could be supported. Some meetings have been delayed due to COVID-19 but engagement remains strong.

Leftfield Innovation vegetable and berryfruit reports

9. Work by Leftfield on land-use transformation has completed. This work explores land-use transformation opportunities for vegetables and berry fruit.
10. The original scope also reported on an opportunity with high value grains. However, the specific grain opportunity Leftfield was hoping to advance was not possible to complete due to restrictions from the Ministry for Primary Industries that made the species prohibitive to import. Leftfield reallocated these funds towards expanding the vegetable report.
11. Both reports explore opportunities for existing Canterbury farms to diversify to include a range of sustainable land uses.
12. The vegetable report focuses on fresh durable products which can be sea freighted to export markets while staying in good condition. It evaluates seven potential new vegetable crops, as well as value-added opportunities, in relation to demand and supply conditions both in New Zealand and in the target overseas markets.
13. Since the vegetable report was published work with NZTE to short-list potential export destinations has continued, with further evaluation work to follow this. Updates will be provided to the Forum as this work progresses.
14. The berryfruit report was co-funded by The Canterbury Grower Group. It addresses catalysts for change in the sector, including the growth of low-tech tunnel house production, and increasing land values in traditional growing areas. The report explores the existing market and notes that 25% of New Zealand's fresh berries are consumed in the South Island, but almost all of these are produced in the North Island, incurring significant freight costs.
15. The berryfruit report also provides detailed economic models for growing blueberries, raspberries and strawberries. Since the berryfruit report was published Leftfield has been working closely with the key marketing companies in this space; MG Marketing, T&G Fresh, and The Fresh Berry Company (Driscoll's). The companies have provided

market confidence that Canterbury could supply the 25% of New Zealand berry production currently consumed out of the North Island. They also support future export opportunities.

16. The berryfruit report, including full financials, was presented to a group of irrigated mixed system and dairy farmers in November. Farmers attended a follow up discussion with MG Marketing on Friday 4 February, providing farmers with detailed insight into their cover crop operation, genetics, market access, and the support provided by MG Marketing. The farmers who attended are now considering their next steps.
17. The Fresh Berry Company (Driscoll's) is also keen to meet with interested farmers. Leftfield is working with them to schedule this. T&G Fresh is currently focusing on genetic trials in Canterbury so is not a near term opportunity. Leftfield will stay connected with them and introduce them to farmers when they have completed trials.
18. The reports are attached as Attachment 1.

Digital Connectivity – Mobile Blackspots

19. The Mobile Blackspots project was funded under the CREDS Digital Connectivity programme and mapped mobile blackspots on Canterbury state highways. The first phase identified the ten most significant blackspots and advocacy was undertaken with the Minister for Digital Economy and Communication, Crown Infrastructure Partners, and telecommunication companies.
20. In August 2021 the Mayoral Forum agreed to commission a second phase of work, mapping other roads of interest, including major roads which are not state highways and smaller local roads and roading networks. Beca was engaged to deliver this work, using the same methodology as phase one.
21. Kaikōura, Hurunui, Waimakariri, Selwyn and Ashburton District Councils, Christchurch City Council, and Environment Canterbury submitted areas of concern to be included in the mapping, and committed resource to do the drive-testing. More than 50 roads across the region were driven and analysed.
22. A stakeholder workshop was held in November 2021, with representatives attending from Waimakariri District Council, Selwyn District Council, Hurunui District Council, Kaikōura District Council, Christchurch City Council, Environment Canterbury, Timaru District Council, Ashburton District Council, Mackenzie District Council, St Johns, Fire and Emergency NZ(FENZ), Fonterra, Federated Farmers and Enterprise North Canterbury.
23. Stakeholders discussed key drivers for improving coverage, which include reducing response time to emergency incidents, improving safety in transit for farm workers and council staff, improved coverage of Civil Defence emergency messaging, improving councils' ability to gather information about assets and incidents across the region and supporting community connectivity. Stakeholders then discussed the priority areas for advocacy.

24. Beca then completed analysis and produced a report summarising their findings, which is attached here (Attachment 2). Ten priority blackspots have been identified from the areas mapped. Three of these – the Kaikōura alternative route, Okains Bay campground and Purau to Port Levy – are already on Crown Infrastructure Partners' work programme and are expected to be resolved by the end of 2022.
25. The secretariat will draft advocacy letters on behalf of the Chair to the Minister for Digital Economy and Communication, Crown Infrastructure Partners, Ministry of Business, Innovation & Employment (MBIE)'s Communications Policy team and telecommunication companies seeking information on the work planned or under way to address these blackspots.
26. The Ministry of Business, Innovation & Employment (MBIE)'s Communications Policy team is currently considering a long-term connectivity infrastructure strategy which may inform future funding in this space.

Next steps

27. If the Forum endorses the approach, the secretariat will send advocacy letters to the Minister for Digital Economy and Communication, Crown Infrastructure Partners, Ministry of Business, Innovation & Employment (MBIE)'s Communications Policy team and telecommunication companies on the digital connectivity – mobile blackspots project.
28. The secretariat will continue to support progress on the Food and Fibre Innovation Programme and will publish the Leftfield reports and ensure these are shared appropriately with industry groups. Leftfield will provide an update on progress to the next Mayoral Forum meeting.

Attachments

- Attachment 1: Leftfield Innovation vegetable and berry fruits reports
- Attachment 2: Mobile Blackspots phase 2 final report
- Attachment 3: Proposed mobile blackspot advocacy letter



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1.0 Executive Summary

The Canterbury Mayoral Forum are looking to activate sustainable land use opportunities that are market led across Canterbury. This short report serves as the initial overview of vegetable products, markets and higher value uses and is the basis on which further work will continue to determine potential export opportunities for those vegetable crops identified.

The report analyses a range of vegetables for opportunities in sale, value added production and waste/co-products. This included analysing existing vegetables and vegetable products; assessing market size and existing processing capability and the potential for higher value uses for either current or new vegetable crops.

The ultimate goal of this report is to support the preparation of a strategic business case for new vegetable and/or value add vegetable opportunities in Canterbury.

Local processed vegetable opportunities were identified as a replacement for imported vegetables such as 'riced' formats of broccoli, cauliflower and carrots. It was established that investment in smaller scaled 'ricing' capability could open up this opportunity for local producers.

Expansion of fresh vegetable categories with various colour and formats of existing vegetables such as tomatoes and carrots to include multi-colour packs, heritage varieties with multi-colour to get your range of coloured food for health. There are opportunities for snack packs in vegetables, health-conscious teenagers looking for alternative snacking options that are gluten free, and allergen free. Our research signalled that many of the large vegetable producers are already exploring these opportunities to diversify their existing offerings.

Leftfield looked at a range of fresh durable products that could be grown sustainably and were durable enough to reach export markets in good condition after being sea freighted for a ~40 day period; and/or have potential for value to be added in New Zealand before exporting.

The vegetables identified that are of interest include:-

- Daikon Radish in the format of fermented products such as Kimchi
- Fermented Garlic; and fresh vegetables including kohlrabi, yams, white asparagus, green beans, and Jerusalem artichokes.

To activate these opportunities, Leftfield are continuing to work with NZTE to complete an export market screen of the vegetable opportunities identified and will narrow down the options as we go through the validation process.

There are some significant challenges that will need to be overcome with any of these opportunities. Key challenges include undefined markets, distance from market (including freight), seasonal labour, commodity production mindset, low value of current activities, quarantine requirements of importing countries and a lack of enthusiasm for change. However, there are many who are motivated, enthusiastic to support interesting vegetable and processing opportunities for Canterbury, and interesting career pathways via the Primary ITO outdoor vegetable production courses and Lincoln University Diploma in Horticulture.

These opportunities need to be carefully considered and well-co-ordinated with support and involvement from the Canterbury Mayors.

1.1 Next steps

This Report has identified some exciting opportunities that should be explored further and validated.

Updated 31 Jan 2022	
NZTE LED MARKET INSIGHTS	Since the conclusion of the Report at the end of November 2021, work has continued with NZTE to evaluate the market potential of the vegetable crops identified. It is expected that this work will be completed by the end of Q1 2022. Subject to findings, the goal is to engage with the key commercial vegetable growers in Canterbury to assess interest in forming partnerships with new growers and leverage existing capability and links to markets. This work is ongoing and may lead to detailed business case(s), supported by NZTE. LFI will continue to update the Mayoral Forum as this work progresses.
PROVENANCE & BRANDING	<p>For any new market opportunity, look to incorporate provenance and branding to capture more value. An understanding of which markets value NZ provenance will be established via the NZTE market insights work currently underway.</p> <p>Explore the potential for establishing the provenance credentials of vegetables using some form of shared brand that links our sustainable growing systems to high quality produce. Work with vegetable growers to develop a sustainability dashboard for consumers and a QR code-based app to link produce provenance to consumers.</p>
PROCESSING	Subject to market insights (go-no go decision) investigate potential for investment in small to medium scale processing (i.e., to develop riced vegetable lines).
VALUE ADD - SECONDS	<p>Value-add for seconds produce and/or peak periods of production over supply (e.g., asparagus, 3 weeks oversupply Oct – Nov either requires export or processing such as juice, snap frozen or nutraceuticals).</p> <p>Value add vegetable products:- Build from the FoodStarter experience and develop a VegeUP Shark Tank event, with commercial vegetable company sponsorship, for teams of entrepreneurs (with market, food tech, packaging etc expertise) to pitch ventures to sponsors. Sponsors bid on propositions they wish to fund to the next stage (an IP/sharing agreement developed in advance of event). Explore the potential to partner with the UC Entrepreneurs course. ChristchurchNZ is a suggested host of this event and could leverage off the food and fibre agri-tech cluster network.</p>
BIODIVERSITY	Glasshouse for native seedling opportunity - engage in further discussion to develop a ~60,000 conservation planting programme via Leaderbrand – work with Iwi and catchment groups to develop a Canterbury wide plan.
REGIONAL CONNECTIVITY	Engage across Canterbury regions to establish linkages between current and planned projects that can leverage land use and value add opportunities, starting with the North Canterbury Value-add Economic Hub project (Business case commenced Jan 2022 includes 10ha glass house vegetable production) and Venture Timaru's Sustainable is Attainable initiative for sustainable waste and bi-product management.

Table 1 – Recommendations

2.0 Purpose

This project is part of a package of work, funded by the Canterbury Mayoral Forum, to look at opportunities for existing Canterbury farms to diversify to include a range of sustainable land uses, collectively or individually, to make their businesses more resilient economically and environmentally.

3.0 Project Scope

This report aims to:

- Provide a high-level assessment to showcase a range of fresh durable vegetables, such as root crops, which have a longer shelf/transit life, a high-water demand (when exporting to countries that are water scarce), and where there is potential market demand either for domestic or export markets.
- Identify potential new market opportunities for Canterbury Growers where they could capture more value in the near term from what they are currently producing, and
- Identify new market opportunities or links to other projects or initiatives at various stages (planned or operating) in Canterbury that may create future value add opportunities for Canterbury vegetable production.
- Describe how a mixed farm system can provide opportunities for intensified, higher value land uses on parts of a farm to provide sustainable economic and environmental outcomes.

The outcomes of this project will be recommendations of key next steps to validate and /or activate the opportunities identified.

4.0 Background

Leftfield Innovation Ltd (LFI) completed the [Report](#) *Near-term Opportunities Feasibility study for Sustainable Land-use Options* in January 2019 to identify land use opportunities for Canterbury. The scope of the report covered milling wheat, cereal grains, pulses, fresh and processed vegetables, and plant-based oils. The vegetable focus in that report looked at a range of vegetables for the Australian, Dubai and Japan markets. The most interesting opportunity from this analysis was Dubai, given it is a pro-business gateway to the Middle East, a market of 350 million consumers, and that it was underutilised by New Zealand producers at that time. LFI assessed vegetables that were available on three prominent on-line vegetable stores Aweermart, Kibsons and Luluwebstore, where consumers buy direct. The vegetables assessed had a significant water demand, were durable, may command a sufficient value proposition to New Zealand and could be grown under New Zealand conditions. The list included: beans, beetroot, bok choy, brussel sprouts, carrot, celeriac, celery, fennel, Jerusalem artichokes, kohlrabi, leeks, parsnips, radicchio, radish, sweetcorn, swiss chard, sweet potato and zucchini.

A short market-scoping trip to Dubai enabled LFI to establish that while the opportunity was evident, further work was required to develop relationships in Dubai to ensure that a reliable transition of the landed product from the port to the retail warehouse was secured. NZTE has a good presence in the market there which is a key advantage.

4.1 Attributes of Canterbury for vegetable production



The Canterbury Region has an abundance of natural attributes and infrastructure that is suited to growing, processing and delivering vegetables to domestic and export markets: -

- Growing Attributes:
- Temperate climate
 - Quality soils
 - Water
 - Enabling irrigation schemes (from a land use consenting perspective)
- Infrastructure and logistics attributes:
- Skilled food producers
 - Access to a good labour supply
 - Existing vegetable processors
 - Christchurch International Airport
 - Lyttelton Port, Selwyn Inland Port, Timaru Port
 - State Highway 1
 - Rail network
 - Local contractors (transport in particular) who understand the processes and value of export crops to the district.
 - Christchurch City, the largest South Island City with key events and tourism venues committed to a local food procurement strategy, expand this approach to other Canterbury towns.

Canterbury Region Map

5.0 Capturing value – the opportunity for New Zealand Agriculture

There are many studies and reports that advocate for seeking higher value from the raw materials grown in New Zealand. Coriolis 2019 Land-use Report shows us that increasing output per hectare and value added per tonne are the two ways in which we will see an increase in both revenue and jobs in the agri sector.

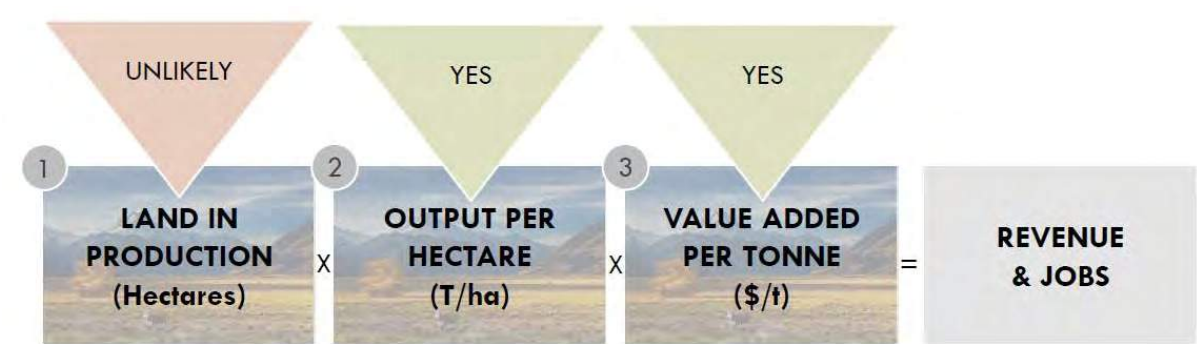


Diagram 1: Strategies for increasing value from agriculture in New Zealand

Output per hectare can be one of the highest due to many factors such as climate, soils, expertise, technology, and varieties. Value added per tonne needs to be carefully considered in Canterbury. What is our differentiation? What is our story? Can we process/add value closer to the consumer (eg transition from selling cabbages to selling bagged coleslaw with tasty dressings)?

Going forward, growth will come from creating more output from less land and selling it as complex products at higher prices (Coriolis 2019 Land-use Report).

The Coriolis discussion document 2019 *'Is this the beginning of the end or the end of the beginning? Finding the future of the New Zealand food and beverage industry'* provided a very clear and compelling case for improving output per hectare and value add per tonne, and benchmarked New Zealand with key overseas peers to demonstrate the opportunity. The challenges facing New Zealand agriculture require a system change that considers land use based on its suitability within a sustainable mixed farm system and its value per hectare.

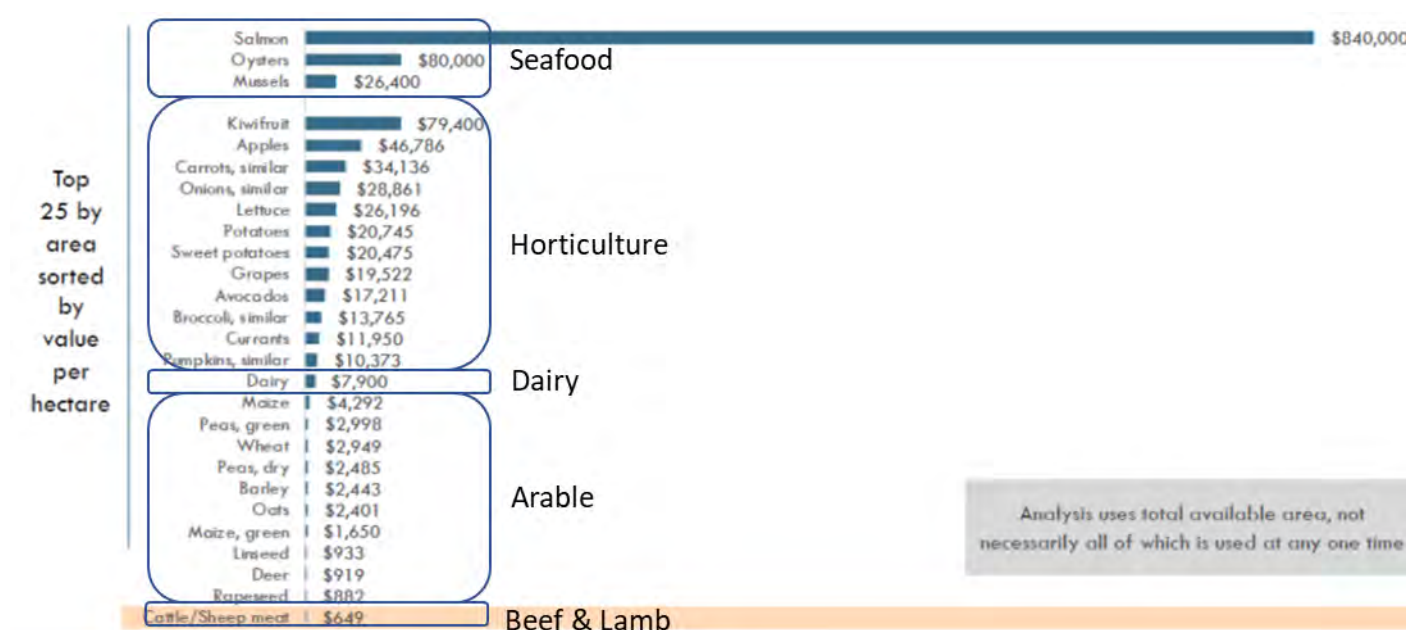


Diagram 2: Realised New Zealand 'Farmgate' value per hectare of total space (NZ\$/hectare; 2017 or as available (Coriolis discussion document, 2019)

Products produced vary dramatically in terms of value created per hectare. When based on per hectare per year the value created increases as some crops are only in the ground for a short period of time i.e. 90 to 100 days and can be followed by other crops.

Canterbury growers have always produced a wide range of quality vegetables. 2020 FreshFacts data [based on planted area (ha) in 2017 and therefore somewhat out of date], illustrates the proportion of vegetable production across a range of crops where Canterbury contributes to around 50% of NZ production and is the largest vegetable production area in New Zealand.

Key Canterbury Vegetable Crops	Ha	% of the NZ production
Potatoes	4,332	46
Onions	1,001	17
Carrots	814	44
Peas and beans	2702	57
Other Veges including parsnips (South Canterbury) and Beetroot	727	57

(FreshFacts 2020)

Table 3: Canterbury Vegetable Crops, percentage of NZ production

Distribution of vegetables by Regional Councils (area planted ha)

Regional Council Year ended 30 June 2017	Asparagus Cab & Caulis	Broccoli	Carrots	Peas & Beans	Lettuces	Onions	Potatoes	Squash	Sweet corn	Other Veg.	Total Veg.
Northland	0	29	3	3	1	2	8	8	84	1,223	1,361
Auckland	1	1111	255	51	625	1,919	2,242	300	29	1,400	7,933
Waikato	425	236	192	1	16	1,733	1,280	84	83	760	4,809
Bay of Plenty	4	10	0	1	0	0	0	0	14	28	57
Gisborne	1	482	0	167	263	C	C	1,920	1,893	353	5,081
Hawke's Bay	53	78	61	1,360	12	963	236	3,388	872	1,234	8,256
Taranaki	0	16	C	0	0	0	10	0	10	17	53+
Manawatu-Wanganui	191	695	191	224	315	281	984	6	25	735	3,647
Wellington	0	46	0	2	16	1	2	1	C	86	154+
Tasman-Nelson	2	292	13	6	136	46	9	1	32	490	1,027
Marlborough	1	8	92	184	0	33	1	0	637	165	1,120
West Coast	0	1	0	0	0	0	0	0	0	1	3
Canterbury	58	422	814	2,702	110	1,001	4,332	87	188	727	10,441
Otago	7	164	3	0	14	0	196	0	C	43	428+
Southland	0	12	226	0	1	0	140	0	0	314	693
Other	0	30	1	5	22	30	11	0	5	37	141
Total 2017	744	3,632	1,851	4,705	1,532	6,009	9,450	5,794	3,871	7,613	45,202
2012	820	3,622	2,047	7,858	1,250	5,718	11,578	6,837	4,664	5,313	49,707
2007	871	3,875	1,320	7,515	1,309	4,594	10,050	7,774	6,210	6,261	49,779
% change (2007 to 2017)	-15%	-6%	-40%	-37%	17%	31%	-6%	-25%	-38%	22%	-9%

For more information visit www.statistics.govt.nz

See above notes

(2020 FreshFacts)

Table 2: Distribution of Vegetables by Regional Councils (Ha)

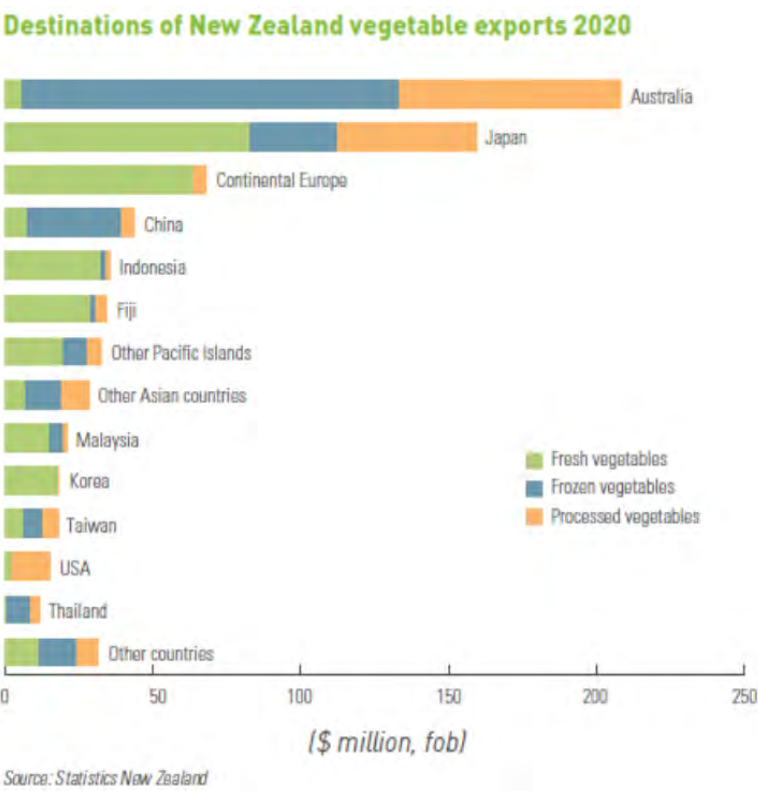
6.0 New Zealand Export – Vegetables

New Zealand vegetable exports are reliant on a few species which are predominantly exported as a commodity fresh vegetable or processed as a frozen product. Thus, our ability to either capture value or target higher value parts of the market is very limited and has generally not been the focus of exporters.

- **Potatoes** – NZ Export value in 2020 \$126.5m; fresh \$19.6m, frozen: \$97.3m (Australia \$58.4m. Asian countries \$58.4m), and other processes \$9.6m. Most opportunities are being scoped already by current growers and large industry players. A new large international processor scoped the opportunity in Canterbury two – three years ago and at this stage have not progressed either with securing growers or processing capability. – An area left to consider for value add would be potato starch made from waste potatoes as an ingredient for sustainable polylactic acid (PLA) packaging as there is a massive demand on corn starch globally to meet the need for synthetic polymer alternatives.
- **Onions** – NZ Export value in 2020 \$147.6m, with \$94m/64% exported to two markets: Continental Europe \$61.8m and Indonesia \$32.2m. Red onions has recently entered as a very viable additional economic rotation for growers due its demand for export through current markets. As opportunities are covered very well by the growers, exporters and the industry body, it will not be further discussed here.
- **Carrots** – orange carrots are the norm worldwide, much of NZ exported carrots are in the form of carrot juice. There may be an opportunity in the carrot pomace (left overs after juicing) following conversations with NZTE Singapore. However, the missing element is an entrepreneurial lead locally.
- **Squash** – NZ export around \$80m. While squash could be grown in Canterbury the infrastructure, processors, export companies and the growers are in the North Island. Any activity in the South Island would probably erode the North Island markets at least in the short term. Thus, squash are not discussed in detail here.
- **Green Beans** – NZ export value in 2020 \$24-32M including frozen. Hawke's Bay is the main growing region in NZ, Canterbury supplies for frozen bean market. Fresh is only a small portion of the market due to the high labour cost. Green beans are imported from Australia in the off-season.

6.1 Market performance - export vegetables

Exports are dominated by commodity vegetable products. Fresh vegetable exports increased \$216M in 2015 to \$301 million in 2020, and processed vegetables increased from \$375m in 2015 to \$424m in 2020. Although both fresh and export increased from 2000 the exports of processed vegetables doubled in dollar value compared to a 50% increase for fresh exports. Our top processed vegetable exports were potatoes processed (\$106.9 million) and frozen peas (\$115.4 million) both of these have increased steadily from 2000. Fresh exports of onions have increased since 2000 while squash exports had a significant increase 24% in the past year to \$79 million in 2020 but have been relatively static in dollar value since 2000. Vegetable seed export earnings have increased by 95% over the last decade to \$112 million, predominantly due to increased demand for carrot and radish. While seeds are considered under arable, the opportunity for growing radish is discussed later in this report. [Source Plant and Food Research]



Source: Statistics New Zealand

Diagram 3: Destinations of NZ vegetable exports 2020

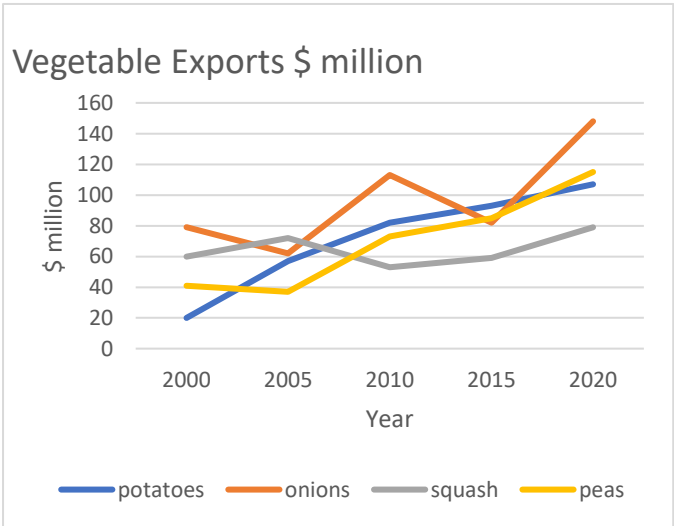


Diagram 4: Vegetable Exports \$ million

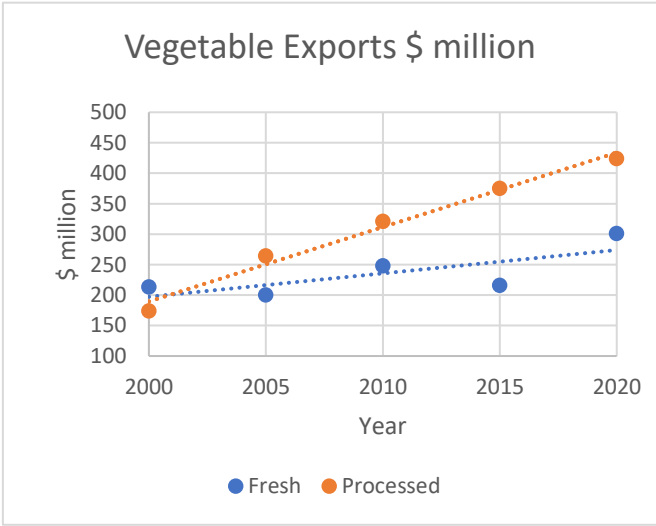


Diagram 5: Vegetable Exports \$ million

New Zealand has not had a strategic approach to export vegetable markets but has responded to the immediate market demand. This has often been short term and overseas importers have sourced product elsewhere often based on price and New Zealand exports of a product have stopped or been erratic.

China has been a target market for many other primary industry products, but vegetables are not seen as being a valuable export and China is already the largest vegetable producer globally. Vegetables are not seen as part of the gift market as they don't show wealth or good luck for the coming year. Gifts are generally Gold, and Red. Vegetables are included in dishes made for the Chinese New Year but are not the main ingredient that is celebrated. It's more about the method of cooking, the shape of the food, and the symbolism behind the food. The daikon radish represents good fortune for the new year in both China and Korea.

High value propositions could be aimed at Taiwan, South Korea, Thailand, Malaysia and Vietnam, but generally price point makes fresh vegetable exporting a difficult option. Time to market is a big risk thus airfreight vs sea freight is a significant consideration in the price viability.

New markets are difficult to enter as import requirements are difficult and complicated, [HEA 2020 Trade Barrier Report](#) highlighted the 10 year process of accessing new export opportunities. As well as requiring an up-front investment of \$50- 100K.

One of the key challenges New Zealand faces with fresh produce exports is the distance/time to market even for durable vegetables. Current supply-chain challenges under COVID-19 highlight the importance of logistics and the need to ensure the end product reaches the market in expected condition. The ability to extend the shelf life of vegetables by various forms of processing, including freezing, provides opportunities for more diverse products to be delivered into markets in greater volumes without the same timeframe concerns.

Canterbury has the opportunity to build on existing capabilities and develop a strategic approach to vegetable exports. Such an approach would need to be market led and utilise attributes such as supplying to highly populated areas in water scarce countries that value high quality, safe, nutritious food and build on our reliable access to water, soil and skilled farmers and availability of the necessary infrastructure. Canterbury has the further advantage of existing vegetable processors, although these are currently focussed on commodity vegetable lines. Further engagement is required to establish opportunities for new varieties, or new formats of processed vegetables for either the domestic or export markets.

6.2 Exports of other vegetable crops

New Zealand exports small volumes of a range of other crops that could be grown in the Canterbury region. For example, kohlrabi exports have been around NZ \$2.2m per year for a number of years, yam and Jerusalem artichoke exports have grown to around NZ \$19,000 and \$176,000 respectively in the last two years. The world exports for kohlrabi, yams, celeriac and Jerusalem artichoke are around NZ\$2.5b, \$220m, \$513m and \$198m respectively <https://www.tridge.com/intelligences/export>.

7.0 Domestic Market

Domestic fresh vegetable sales are dominated by the duopoly of the supermarket chains Woolworths New Zealand and Foodstuffs. The chains decide what shelf space is available per product and, as large quantities are required to supply, growers need to be of a certain size and capability.



Vegetable marketer companies, T&G (varietals), MG Marketing (fresh market branding and varietals), Leaderbrand, and a small number of larger privately owned farms, have direct contracts to supply fresh vegetables to supermarkets.

The number of suppliers has significantly contracted over the years with small growers exiting. For example, T&G Canterbury has gone from obtaining produce from 90 growers 30 years ago to now predominantly only 9 growers. Supermarket house brands may constrict the grower to certain standards and supply contracts, leaving little room to move, and reduce their ability for risk taking.

Supermarkets do seek to encourage innovation; however, it takes time for the consumer to adopt new vegetables and or how the vegetables are packaged. NZ Consumers tend to stick to their normal purchasing decisions and will add only small changes to the grocery list, so new vegetables are difficult to establish as a regular contribution. Supermarkets also require their checkout staff to identify the product, therefore bar-coding is the easiest way to ensure the correct product is charged for. In the case of Jerusalem Artichoke or different varieties of Asian vegetables this can be a challenge.

Growers have the expertise and can adapt their production methods to grow any produce. Pak choi was a new product for NZ consumers and supermarkets 10 years ago and has now only just managed to meet all the requirements to become a regular entry on the produce shelf. When trialling a new product, smaller areas can easily swamp a market due to low demand, an extra 2 ha can change the sales profile, swamp demand and drop the price.

On the supermarket shelf **diversification** in the fresh categories has been mainly into new varietals, higher value leveraged off volume lines. For example:

- Tomatoes have diversified into vine tomatoes and branded multi-coloured packs (e.g., Beekist)
- Potatoes have diversified from loose varietals into many more different varieties and colours, with dominant branding and packaging, but this category needs to be careful not to swamp consumers with too much variation as generally the consumer use varieties they are familiar with and do not fully understand the attributes of each different option.
- While baby carrots have a place in the market, diversification has not yet occurred in the carrot category into different colours.
- Purple cauliflowers have only just been added to supermarket shelves to diversify this category, and broccolini is only available for short periods. Both are very low volumes that could/are supplied by one grower.
- Vegetable.co.nz tries very hard to get consumers to focus on eating more vegetables. However, it is the Supermarkets that decide in the end what goes onto the produce shelves.

- United Fresh 5+ a day campaign
- Dr Curran-Cournane & Dr Rush also mentioned in their recent report for MfE that there is plenty more scope for the domestic production of dark-green-leafy vegetables, as they currently only sit at 0.03 servings/day/NZ person (silverbeet and spinach) and is not adding adequately to the 5+ a day requirement. The bigger question will be how to increase the consumption of this vegetable as production can easily be adjusted by growers.
- Educating the consumer of new varieties, formats and packaging, which are value-add options for the producer take time. An example is loose lettuce to bagged lettuce to prepared bagged salad. It can take a long time for consumers to come on board and can be costly. Using influencers could be a strategy to help consumer uptake and adoption of new products/formats/packaging faster.

7.1 Produce grading

Not all produce grown in Canterbury will meet the first-grade target required for supermarket supply.

Potato, Onion and Carrot rejects were much higher 10-15 years ago, but constant seed and grower operational improvements have reduced the volumes of second and third grade produced. There are some options for these second and third grades such as juicing, odd bunch sales, stock feed etc, which now provide opportunities to sell just about all 'rejects'. Stock feed is the lowest return with values around \$350/20T (wet weight). There are opportunities to look at higher value uses for these grades.

Typically for carrots you would expect 15% rejects for January - Feb 25-30% for March -July and 40% for July - November. In a bad year an average of 50% could be rejected throughout the year. Most of this would be for cosmetic defects such as shape or blemishes.

In Auckland there is a larger proportion of the crop going to market for second and third grade as more resident's shop at outdoor markets and independent retailers. This provides an opportunity for growers in Pukekohe to not be completely reliant on supermarket chains, get extra value from product that doesn't quite meet the target due to growing conditions, and thereby have a lower risk profile economically. Unfortunately, during Covid-19 lockdowns these outdoor markets and independent retailers (across NZ) did not have the essential service status and thus a significant volume of produce was wasted.

Currently New Zealand imports a range of durable vegetables of species that could be grown in Canterbury. While imports maybe required to ensure year-round supply of these vegetables, opportunities may exist to supply some products. For example, \$950k of Jerusalem artichoke and \$303k of yams.

8.0 Branding

Grower branding of produce takes time and investment to create a good following and enough produce to fulfil the demand. For some commodity products, this investment in developing a brand has taken up to 12 years. It is challenging to get new vegetables on the supermarket shelves, and what should be premium doesn't move as consumers stick to what they know. Several people indicated a "chicken and egg", which made it difficult to enter the market with a new product in the NZ supermarket environment.

However, brands are seen as very important and there is an opportunity to take a consumer centred approach to brand development by understanding the changing preferences of the conscious consumer and packaging those attributes accordingly.

9.0 Consumer centred opportunities

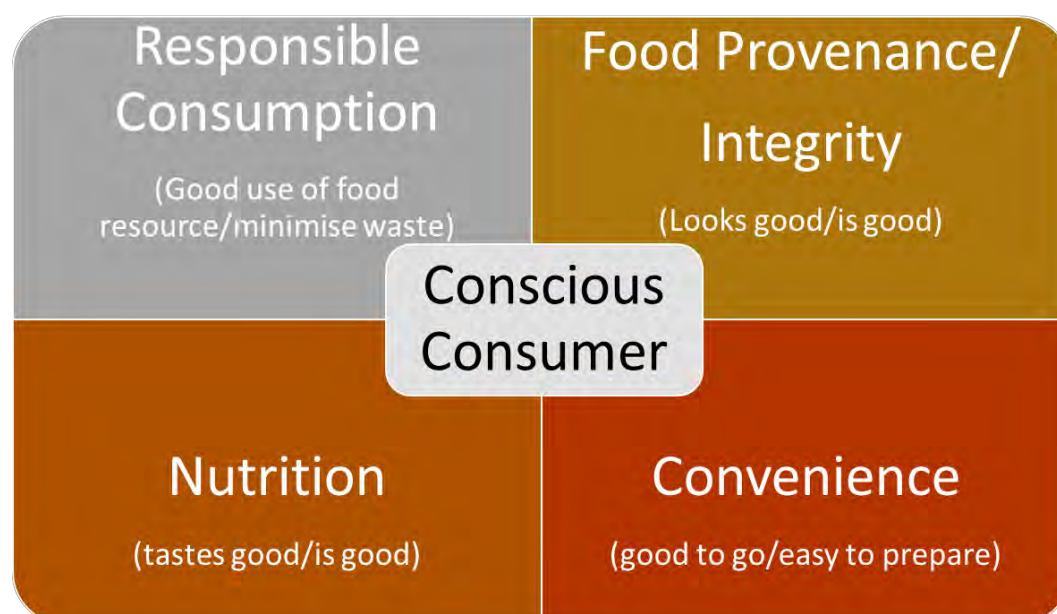


Diagram 6: Conscious consumer driving changes in food format, function and integrity

The conscious consumer is looking for food products that meet their expectations and preference for nutrition, convenience, and ethical and sustainable production. Understanding these consumers more deeply could provide opportunities for Canterbury growers

Consumers that care about food provenance – where the food is produced, an authentic provenance story, that the food is produced using sustainable farming practices – transparency in relation to the GHG footprint, impacts on water quality and soil health.

Opportunity 1: Grower provenance data: Growers currently capture performance data for regulatory reporting and industry standards (NZ Gap, Global Gap, Approved Supplier Programmes etc) and crop production metrics including fertilisers, agri chemicals, irrigation efficiency, nitrate leaching and greenhouse gas emissions; researchers are advancing crop science, farming practices and environmental performance measuring tools. Canterbury growers have the ability to tell an authentic food provenance story.



Opportunity 2: Influencers to convey food provenance: Christchurch is the largest city in Canterbury, and key entertainment businesses are working hard to tell the local food provenance story. The 10 years since the Christchurch earthquakes has seen a phenomenal rebuild (and repair) of many key venues that host thousands of visitors to Canterbury. While Covid-19 has impacted this, 2022 looks to kick start larger scale entertainment and sporting events in the city. Venues Ōtautahi (formerly V Base) manages and operates the key venues in Christchurch: The Town Hall, Christchurch Arena, the Airforce Museum, OrangeTheory Stadium, Hagley Oval/Pavilion and once constructed, the Canterbury Multi use Arena.

These venues could attract around ~500,000 visitors per year. Of significance to local producers is Venues Ōtautahi commitment to a local procurement strategy - celebrating and sourcing local food and beverage products. Visitors to the venues are introduced to local produce by head chefs and provided detail as to where the exquisite produce has been sourced (vegetables, grains, pulses, cheeses, beef, lamb, venison, seafood etc). This celebration of and commitment to provenance provides opportunities for Canterbury vegetable producers to grow a range of interesting vegetables, a demand for which we can expect to continue to expand in the future.

The opportunity to celebrate traditional produce, cooking methods, tastes and stories through working with local Kai chefs, foodies, producers will add a deeper sense of provenance to food. There is an opportunity to collaborate with Eat New Zealand, a movement initiated by chefs and people in the business of food with the aim of highlighting the quality and vast array of edible resources available in New Zealand. The movement seeks to provide a forum to encourage and enable collaboration between all levels of the culinary chain and move towards more sustainable food systems. EatNZ website has a portal for each region to showcase food and food experiences to locals and tourists interested in what each region has to offer.



Discover what
each region has
to offer.

Consumers that care about Responsible Consumption – care that all food grown is consumed, in the first instance by people, then animals – thereby reducing food waste. Feedback from growers was that capturing more value from the 10% to sometimes 50% of a crop that is classified as ‘seconds’ (often referred to as Tag 2 and Tag 3) would have a significant economic impact on their farming businesses. This produce does not usually make the supermarket grade (Tag 1).

Opportunity 3: Higher value uses - Explore higher value options for the second graded produce – such as innovative food products, high value pet food, or biodegradable packaging.

While seconds are not ‘food waste’ we do know that some of this grade will become food waste, which contributes to 10% of the Greenhouse gases (methane). An astounding fact, if food waste was a country, it would be the third largest emitter of GHG after China and the USA. Capturing more value from as much of the crop as possible has both economic and environmental benefits and could be the difference between a crop being grown or not.

Value add products recommendation - Build from the Canterbury based FoodStarter event experience to develop a VegeUP Shark Tank event with commercial vegetable company sponsorship for teams of entrepreneurs (with market, food tech, packaging etc) expertise to pitch ventures to sponsors. Sponsors would bid on propositions they wish to fund to the next stage (an IP/sharing agreement developed in advance of event). Explore the potential to partner with the UC Entrepreneurs course. ChristchurchNZ is a suggested host of this event and could leverage off the food and fibre agri-tech cluster network.

Consumers want convenient formats:

Opportunity 4: Fresh options: –Consumers want food that is easy to prepare and fits their dietary needs, can offer various snacking options, and is easy to consume ‘on-the-go’. Vegetarianism and veganism are the main trends currently dominating the grocery aisles, are we forgetting the easy options in the produce section?

- Opportunity for multi-colour packs?
- Heritage varieties with multi-colour to get your range of coloured food for health.
- Opportunity for snack packs in vegetables, health-conscious teenagers looking for alternative snacking options that are gluten free, and allergen free.

Opportunity 5: Processed options: Moving up the value chain Product Complexity

The New Zealand food industry has a clear strategic direction towards greater product complexity (Coriolis 2019 Land-use Report). However, transforming our raw materials/commodity style products is limited to the processing capability that exists in regions across New Zealand. Food processing can both capture and create value.



Diagram 7: Product Complexity examples – (Coriolis 2019 Land-use Report)

Import replacement - Riced vegetables + frozen modern formats – currently riced vegetable options such as cauliflower and broccoli are popular as a low carbohydrate option to rice. Brands such as Birdseye, Countdown's own brand and Pams have a range of riced vegetables. Our enquiry has led us to believe that these products are either imported, or vegetables are imported and processed in New Zealand. The increasing preference of conscious consumers to include more plant food in their diets offers an opportunity for Canterbury grown riced vegetables.

Frozen 'Riced' vegetable (cauliflower) and mixes (cauliflower, broccoli, carrot) that offer low carbohydrate alternatives to rice, and are quick and easy to prepare. Riced vegetables could also be an opportunity to utilise the second-grade vegetables.

The Riced Veggies products are vegetable-based alternatives to traditional rice and contain 70% to 85% fewer calories per serving than the leading brand of prepared white rice, according to the company. The products contain all vegetables with no sauce or seasoning.” (<https://www.bakingbusiness.com/articles/30847-b-g-foods-unveils-green-giant-innovation>)

“Made with cauliflower or broccoli instead of potatoes, Veggie Tots are positioned as a healthy alternative to traditional tater tots and french fries. Varieties include cauliflower, broccoli, and broccoli and cheese.





Opportunity 6: New Vegetable Crops: - High level market insights indicate that there are some options worth exploring, that can be grown in Canterbury. These crop options will create value for farmers.



Daikon Radish (Kimchi)

NZ exports of Daikon radish seed have doubled since 2010 from 21.4m to 40.6m in 2020 (FreshFacts 2020). Daikon radish can be grown in Canterbury, and it is worth exploring the opportunities to export the radish, and/or processed (fermented) Kimchi to Asian markets.



There looks to be an opportunity to export fresh and process the second grade in NZ into Kimchi.

Kimchi is a fermented food made using a variety of vegetables such as daikon radish, cabbage, and cucumber with a combination of seasoning including red pepper powder, garlic and ginger.



The global kimchi market is moderately competitive with only few vendors in the global market. CJ CheilJedang Corp., Cosmos Food Co. Inc., Daesang Corp., Dongwon F&B and Elaia Holdings (Hong Kong) Ltd. are some of the key players in the market. Daesang and CJ are the key leaders of the South Korean Kimchi industry, with these two accounting for almost 85 percent of the market. Daesang was South Korea's largest Kimchi manufacturing company in 2019, with a sales volume of about 116.2 billion won from South Korea. With around 104.45 billion South Korean won, it was closely followed by CJ. The popularity of kimchi is increasing in western countries which offers huge opportunities for the key players in the global kimchi market.

Fermented food such as kimchi enhances immunity to disease and has therefore gained popularity during the current covid-19 crisis. According to South Korean Ministry of agriculture the kimchi was the top grower during the pandemic with its export value rising by 40% and hitting US \$97.9 million in starting 6 months of the pandemic. During the pandemic year 2020, Kimchi imported to South Korea was about USD 152.4 million worth. South Korea's exports of kimchi are at a record high — they have increased nearly 14% year-over-year in 2021. (Global Kimchi Boom <http://koreabizwire.com/s-koreas-exports-of-kimchi-up-13-8-pct-in-jan-aug/201454>)

Fresh kimchi is highly valued, and is fermented for only 72 hours, so requires year-round supply of daikon radish. Some kimchi contains lesser volumes of daikon radish and is diluted with cabbage to reduce the cost, but the original recipes contain exclusively daikon radish, garlic, spring onions, and a hot pepper paste (Gochugaru).

	<p>In 2019, 886 tons of Kimchi products were exported to the UK, worth over £2.5 million. So far this year (January to September 2020) 656 tons have been imported, showing that Kimchi continues to tickle the tastebuds of discerning Brits.</p> <p>Daikon radish may last the 40 days for transport to get into South Korea. Current exporters to South Korea are those focussed on the squash market, but maybe in a position to sidestep. (e.g., Brownrigg, Bostock, Cox)</p> <p>Main NZ kimchi processor is Living Goodness, based in Helensville Auckland is the brainchild of Peter Kearns and his partner Fiona Dykes.</p>																								
	<p>Yams</p> <p>Yam statistics are difficult to decipher as they contain worldwide a mix of different species. Sweet potatoes can be classified as yams, therefore kumara is sometimes included.</p> <p>NZ yams are from South America, otherwise known as Oca (<i>Oxalis tuberosa</i>) can be grown very well in Canterbury climate, as well as currently being grown in Southland and Fielding. Yams are one of the highest vegetable sources of carbohydrate and energy (kilojoules), a good source of folate, a source of vitamin A (from beta-carotene) and vitamin B6 and contain potassium at levels of dietary significance.</p> <p>Yams are also the main staple in many African countries and are a different genetic family (<i>Dioscorea spp</i>), e.g., Taro and ube (<i>Dioscorea alata</i>) or Purple Yam is a favourite of Filipino deserts. Over 600 species are known, but only a hand-full are suitable for temperate regions, selections maybe possible.</p>																								
	<p>Kohlrabi</p> <p>Kohlrabi is a low glycaemic index food. As a result, it can help improve satiety and glycaemic control. As part of a healthy diet, kohlrabi can help improve overall metabolism and aid with weight loss. Because kohlrabi is high in calcium and magnesium, it contributes to stronger bones. Kohlrabi is an excellent source of vitamin C. One cup of raw kohlrabi provides 140% (83.7mg) of your recommended daily intake. Kohlrabi is also a good source of vitamin B6, a water-soluble vitamin that plays an important role in helping the body convert the food we eat into energy.</p> <p>Kohlrabi has been grown in Canterbury and performed extremely well, is a very durable product to store and ship to overseas markets. Leaderbrand exported Kohlrabi to Korea, but a local crop of poor quality flooded the market and undercut the viable price point for NZ produced crop. Kohlrabi remains a very good export crop and should be further explored.</p> <table border="1"> <tr> <td>Jan</td><td>Feb</td><td>Mar</td><td>Apr</td><td>May</td><td>Jun</td><td>Jul</td><td>Aug</td><td>Sep</td><td>Oct</td><td>Nov</td><td>Dec</td> </tr> <tr> <td>P</td><td>P</td><td>P</td><td>P</td><td>P</td><td></td><td></td><td>P</td><td>P</td><td>P</td><td>P</td><td>P</td> </tr> </table> <p>(Best months for growing Kohlrabi in <i>New Zealand - temperate regions</i>)</p>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	P	P	P	P	P			P	P	P	P	P
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec														
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	P = Sow seed, harvest in 7-10 weeks.
	<p>White Asparagus</p> <p>White asparagus is not well known in NZ but is hugely popular in Northern Hemisphere (especially Germany and USA). White asparagus has been successfully grown in Canterbury and Waikato in a niche market targeted to restaurant trade. Asparagus is a perennial plant, coming into production after 2 yrs. of crown development, white asparagus are grown underground/in the dark and is harvested as the first tips pop out of the ground, they can also be grown in dark tunnelhouses. The timing is even more crucial than with green asparagus. Domestic consumption would be required to support any export opportunities and will require reasonable work for consumers to become familiar with it.</p> <p>Global asparagus production is at 9.4 MT, although only 6% is traded across international borders. All asparagus figures do not separate the three colours, White, Green and Purple. Peru is NZ's dominant competitor (exporting 166,000 T in 2019, vs NZ total production stabilising at around 2000 T) and produces asparagus year-round by forcing the plants into a dormant period not by temperature (cold) but by drought. Their production has expanded over the last 10 years, especially into the November window, coinciding with NZ. UK production has been extended into the off-season where spears are left to fern in their Spring-Summer and harvested in Autumn.</p> <p>Currently green asparagus export production has come to a stand-still, as growers have been out-competed by Peruvian production and increasing airfreight, the Pacific Rim was the main focus of the export market (Japan was the biggest value market for NZ). The Middle East has not been on the radar for green asparagus exports and could be explored.</p> <p>MPI report to be published in Dec 2021 also scoped possible exporting opportunities for asparagus.</p> <p>The quality of NZ grown white asparagus is superior, and we should be looking for an elite niche market that would value (NZ/Canterbury) quality and provenance.</p>
	<p>Green beans</p> <p>Green beans are a popular vegetable in NZ consumed both fresh or from frozen. The NZ season is relatively short thus there are significant imports of fresh beans and exports of frozen product. Imports into NZ\$8.7M (Tridge), mostly as fresh from Australia in NZ's off-season at \$1.47/kg. Exported from NZ \$24M for 20M tonnes, mostly as frozen and primarily to Australia and at a lower price.</p> <p>Lighter Touch SFF project may open opportunities into Thailand and China possibly for frozen product, by using softer chemicals and biological approaches. Canterbury has a tighter window than Hawke's Bay for production so needs to target a higher value product to make this a better</p>

	<p>proposition. There may be an opportunity to mechanically harvest green beans, select off the best for fresh production and remainder could go to frozen. A similar method is used for blueberries in USA to manage high labour cost of picking.</p> <p>Dubai opportunity: Current exporters into this region have been asked about other vegetable opportunities into the region and have on occasions been asked about fresh vegetable supply. The NZTE study as a next step to this report will be able to give more depth to this.</p>
	<p>Jerusalem Artichokes</p> <p>This root vegetable has been grown successfully in Canterbury some years ago. Similar growing season as potatoes, when soil temperatures are above 15 deg, with the tubers being ready in autumn once tops die back. Similarly used in cooking as potatoes but as the carbohydrate is stored as inulin it has a lower starch content. Are from the Asteraceae Family of composite flowers such as sunflowers, which would mean they will be a great as a beneficial plant for insect predator populations in a farm crop rotation.</p> <p>Nutritional information: An untapped health food, the Inulin fibre in Jerusalem Artichokes is very beneficial for gut health, as well as helping with blood glucose metabolism and therefore diabetes. Contains high Potassium (433mg/100g raw DW) which counteracts the negatives of sodium intake and therefore aids cardiac health.</p> <p>Processed formats: The inulin from Jerusalem artichokes is utilised in food manufacturing as dietary fibre and can be 6-10% of the content in some processed foods.</p> <p>Exports were \$119k in 2020 up from \$10k in 2019 almost all to Singapore. Imports were around \$3mill in 2017 (mostly from Fiji) and dropped to \$950K in 2020 from a wide range of countries.</p>
	<p>Garlic (fermented)</p> <p>The garlic market in NZ is very tight and in direct competition with imported Chinese Garlic. Total Export of NZ Fresh Garlic \$1M, Total Domestic production \$4.5M, Total NZ production in 2020 was 1200 T across 4 growers, majority was grown in Marlborough but as grapes has made productive land scarcer, last 5 years have seen an increased production into Canterbury.</p> <p>Imported Chinese Garlic poses significant biosecurity risks, and it is only price that enables imports as quality is inferior. NZ garlic is favoured over imported garlic to its high quality and superior taste and could benefit from provenance data. Current garlic producers are happy with their level in the domestic market and would not want to upset the status quo of price stability, but fermented Black garlic is valued like the truffle, very little is produced so far, and is a premium niche product. Current growers only utilise less than 1% of their total production into this niche product. Black Garlic is a specialised fermented process, using high heat and is added to dishes for its umami flavour and can be added to vegan dishes.</p>

9.1 NZTE supported export market insights (activities from Dec 2021, updated end January 2022)

Following identification of the 7 vegetables (fresh and/or processed) LFI engaged with NZTE to scope up the export market assessment, which included the following:-

- 2-5 Southeast Asian Countries
- Where the products are being consumed
- In-bound and out-bound trade enquiry/data
- Existing market insights including consumer spending on vegetables
- Counter seasonal supply

NZTE presented their initial data matrix mid-January to LFI. At that time, it was agreed that North America, America, Indonesia, India, and the UAE should be added as it is easier for NZTE to add countries into the assessment now, rather than later. Further, it was agreed that NZTE would evaluate the bio security requirements for each of the countries to eliminate any that were particularly constraining for NZ exports. LFI are expecting this work to be submitted mid-February.

Following the evaluation of the NZTE data, a short list of 2-4 countries would be confirmed and a second evaluation step will be undertaken that will include the following:-

- Market size
- Distribution channels
- Quantitative lens – trends, additional markets opps
- Form of the product, including the packaging.
- Customs, tariffs and regulations
- Current NZ exporters into those markets

Based on the preferred markets, NZTE will then engage their in-market teams to support any future detailed market evaluation work.

Once the market insights work is completed, any interesting opportunities will be advanced through to a go-no-go decision stage. For any opportunity that shows a high degree of market potential a business case(s) will be developed with NZTE's support in conjunction with market partners.

LFI will continue to keep the Mayoral Forum Secretariat updated on the progress of this work by way of a memo submitted prior to each Mayoral Forum meeting.

10.0 Canterbury Processors

Heinz Watties

Heinz Watties factory in Hornby is at capacity and Kraft makes the decisions on diversifications. Peas, green beans, and sweetcorn are the dominant products, only frozen. Any canning is done in Hawke's Bay. The growing window for green beans is shorter in Canterbury so is a smaller category than in North Island.

Watties has tried frozen cauliflower 5-10 years ago, but growers contracted have not always stuck to the crop as prices on the local fresh market became too enticing, thereby affecting continuity of supply. All frozen spinach and silverbeet is currently imported.

Talleys

Talleys has just purchased the Freezing works in Ashburton and will be expanding production, but specifics are not available. Talleys have their own farms, innovations and alternative crops are trialled there first. Cauliflower and courgettes for the stir-fry mixes are such an example. Ten hectares grown once every 3 years meets that demand. Meeting the NZ market with home-grown product means there is probably more room for innovation.

Frozen peas and bean pricing worldwide means only small gains for the grower can be made by improved production methods, including softer pest and disease controls, reduced nitrogen usage through Rhizobia inoculation, and improved germination.

Fresh produce not meeting Tag1 requirements, has a limited market, Tag3 is currently either stock feed, or composted/ploughed back in. Is there no processing into alternative ingredients opportunity? Is there an ingredient supplier worldwide who is looking for a cleaner product?

Juice Products NZ

Established in Timaru in 2008, currently requires 50-70,000 T of carrots per year for its carrot juice factory. Much of which is utilised as a sweetener ingredient utilised domestically and exported to Australia, Cameroon, China, Japan, Malaysia, Singapore, Taiwan, Thailand and the USA. Export figures 2020 for single-vegetable juice (primarily of carrot): \$32.9m (Japan \$27.2m).

Price point can mostly be the driving force in the ingredient area. Many areas outside of Canterbury can produce at a cheaper cost due to their size. Large areas in Canada and USA dominate this market, but there may be room for premium niche products or innovations. Whole crop and By-passed peas were assessed as an ingredient by Process Vegetables NZ and could have been a feasible product but required a modification to the pea harvesters, only one manufacturer globally, and Canterbury only has seven so was not an option in the end.

Frozen Chip Processing

Frozen chips are a major processor in the region, McCains, Talleys and Makikihi Fries all take a large portion of the potato crop, while another large volume is shipped to Auckland processors (including Mr Chips, Fresher Foods) from Canterbury. Shipping costs are prohibitive and tend to push prices down for Canterbury growers. Kumara chips have increased their share of the frozen chip aisle already, although kumara cannot be grown in Canterbury due to the climate being too cold, there may be other chip options not yet explored.

Heartland

Timaru based family owned and operated Heartland Chips specialised in fried crisps, and retails via both supermarket chains, and have their own on-line sales channel. They have remained focused on potatoes as their base with a range of seasonings and potato chip cut formats.

11.0 Future focused approach to unlocking vegetable production opportunities in Canterbury

Horticulture New Zealand Chief Executive, Nadine Tunley says it is great that the horticulture industry has continued to grow despite COVID-19.

"Horticulture has the potential to lead New Zealand's economic recovery and play an important role in climate change mitigation. However, if horticulture is to reach its true potential, government policies around seasonal labour, highly productive land and freshwater, investment in research and development, and compliance must be supportive. At the moment, there is a disconnect between what is being said about our industry's potential and central and local government decisions that affect growers on the ground."

Not wanting to waste a good crisis, the time is right to explore new vegetable opportunities for Canterbury over the next 12 to 18 months, develop a deeper understanding of the market opportunities relating to the vegetable crops we have identified in this report, look to partner with existing exporters and supply chains to those most viable markets.

11.1 Licence to Operate

Current focus of the industry is on with the Sustainable Vegetable Systems project as part of the “Lighter Touch” MPI SFFF - Sustainability Funded Project:

Feedback from Canterbury growers and producer group leaders is that the tightening of the regulatory environment for commercial vegetable production in Canterbury (Plan Change 7) that limits where vegetables can be grown, caps the nitrogen baseline of that land to the 2009-2015 baseline period, which needs to be reduced over time. Their focus right now is on retaining and maintaining the licence to operate. The lack of a robust measurement tool to model and measure with a high degree of confidence the impacts of crop management and nitrogen lost below the root zone is a challenge the horticulture sector is currently tackling via the Sustainable Vegetable Systems project. This work will ensure that the industry has access to land, water and nutrients through national, regional and farm programs in order to achieve industry growth.

Fresh food that is healthy for you and the environment

Sustainable Vegetable Systems (SVS) is a four-year project focused on improving crop nutrient management for the growing of potatoes, onions, brassicas, butternut squash, carrots, and leafy greens. The project has nine commercial field sites across the country and has \$7.5 million in backing from MPI and industry.

Some of the ways the project plans to assist growers to operate efficiently while reducing their impact on the environment include accurate managing of nutrient flows, robust tools to measure their environmental impact and the development of decision tools to support sustainable growing practices.



11.2 Labour - career and career development in Farming in Canterbury.

Covid-19 has highlighted the vulnerability of the NZ hort sector labour pool, and the reliance on RSE workers. For new vegetable opportunities to occur a secure labour resource will be required, thus a coordinated approach will be important to address procurement, training, staff retention and accommodation.

Re-thinking how Canterbury positions employment opportunities will be important. A multi industry coordinated approach may result in a job being advertised in a broader category of Land Management and offer the person a role that works across a range of enterprises in the region. This will take investment at a regional level to coordinate and optimise the outcomes for businesses and staff. A suggestion that growers outsource this opportunity to expert labour procurement and training companies such as Canstaff who have the expertise could achieve a more coordinated and appealing outcome for staff, and employers.

Vegetable production – Labour at harvest is high (spring, summer, autumn). The timing of harvest depends on the crops grown, but this is largely compatible with the grape peak requirements (North Canterbury).

Arable production - Wheat, peas, ancient grains and pulses - arable crops that are likely to be grown in a cropping rotation on the same land units. Canterbury data indicates that the skilled labour requirement for cropping farms is around 1FTE per 120ha with limited seasonal labour demands (roguing and harvest). The extent of cropping in Canterbury could offer an opportunity for shared seasonal labour units.

Meat – approximately 1 FTE per 250ha, and one FTE extra per 1000 ha of finishing farm. Finishing could result in longer term employment and greater opportunity for development of skills.

Biodiversity and conservation planting – major labour inputs for biodiversity plantings during the establishment years. Planting is a significant labour input but weed management is also required through the first few years depending on plant and tree development.

12.0 Framing the case for intensified, high value land uses

12.1 A Sustainable whole farm system

Canterbury's landscape will not look like it currently does in the future. A wider range of land uses will occur, and a more integrated mix of land uses that benefit soil health and reduce impact of nitrate leaching on water quality. The focus on biodiversity will be important. We expect to see areas of farms being retired into conservation areas, farmers may be rewarded for retiring some poorer but productive land to achieve GHG reduction and improved water quality. Increasing biodiversity across our Canterbury landscape is critical if we want to see a sustainable agricultural landscape in the future.

Developing a sustainable whole farm system requires integration of the land use activities into an operational framework that effectively considers the environmental, economic, cultural, and social parameters. Successful farm systems are enduring, deliver ongoing benefits for this and future generations and ensure that options for future changes to land use are preserved.

The FAO have a definition of an agricultural system which describes a whole farm system –

“An agricultural system is an assemblage of components which are united by some form of interaction and interdependence, and which operate within a prescribed boundary to achieve a specified agricultural objective on behalf of the beneficiaries of the system.”

12.2 Crop rotation

Crop rotation is the practice of growing a series of different types of crops in the same area across a sequence of growing seasons. These rotations reduce reliance on one set of nutrients, pest and weed pressure, and the probability of developing agrichemical resistant pests and weeds. It is also critical to maintaining and improving soil structure, and possibly organic matter, through using crops with different rooting structures which reduce erosion and increase farm system resilience. Using legume plants between crops provides a natural source of nitrogen which is required for plant growth, thus reducing the need for artificial sources of nitrogen. Animal grazing in rotations has the important function of removing weeds, pests and diseases from the system and returning nutrients to the soil. The reduction in agrichemicals from employing these types of farming practices increases the environmental credentials of the final product, which is more attractive to discerning consumers and can command a premium.

In developing a suitable crop rotation, it is important to carefully consider meeting each crop's needs in the cropping sequence. For example, the late autumn harvest of maize means there is a very limited window to establish a viable crop option prior to the winter and in many areas, land remains unused over winter, reducing overall benefit. In developing vegetable crops for Canterbury, it is critical to define how they fit into a long-term crop rotation and that any negative environmental impacts of the crop can be balanced by the future crops in the system. The market requirement for some crops may be small so the area in some of these high value crops may be small and it is therefore important to define where they best fit in the crop system to get the best returns.

12.3 Biodiversity planting to support healthy vegetable production

Biodiversity is important for a wide range of reasons in our farm systems. Providing a range of plant species that support beneficial insects and microbes can be important to ensure pollination, reduce pest and diseases and have effective breakdown of organic matter, provides shelter and is aesthetic. These plantings could be around the paddock perimeter and also in areas of the farm which are less productive and, if of sufficient scale, provide some income from carbon credits.

Nursery production of native seedlings could be a business opportunity on its own for the likes of Leaderbrand, who have expressed an interest to expand their glass house capability to support this sort of initiative, particularly if it is to supply substantial land area with native plantings.

Biodiversity planting leads into IPM production systems (low inputs). IPM programmes have been researched and developed by Crop & Food now Plant & Food for many vegetable crops over the past 20 years. These are scientifically proven and work on the basis of 'crop scouting'. The introduction of beneficial insects and parasitoids is key to making this work. More parasitoids are available and could be introduced to Canterbury. These programmes greatly reduce the amount of agrichemicals applied and therefore also a large cost savings and are great for the environment and 'our story'. Leaderbrand has participated in research projects in Canterbury, e.g., 'Hedging your bets' quantifying pests and beneficial insects in hedge lines. Currently this work is continuing in native plantings that resulted from the initial project. We have native trees that produce 20 times more protein in their nectar than many flowering plants. These also flower over winter when food supply is short for bees. Leaderbrand have also planted trees at their site from the seed of only six trees left in the whole of NZ found on Rakaia Island.

13.0 Value Creation

The opportunities covered in this report have focused on how to capture more value from what is currently grown via innovating higher value products from second and third grade produce, adding value to produce by utilising existing processing capability – freezing, or the likes of vegetable ricing to replace equivalent imported products, and high value pet food. Further, we have looked at vegetables that can be grown in Canterbury [some of which have been grown in the past], and how these can be produced in a format that the consumers in Asian markets want.

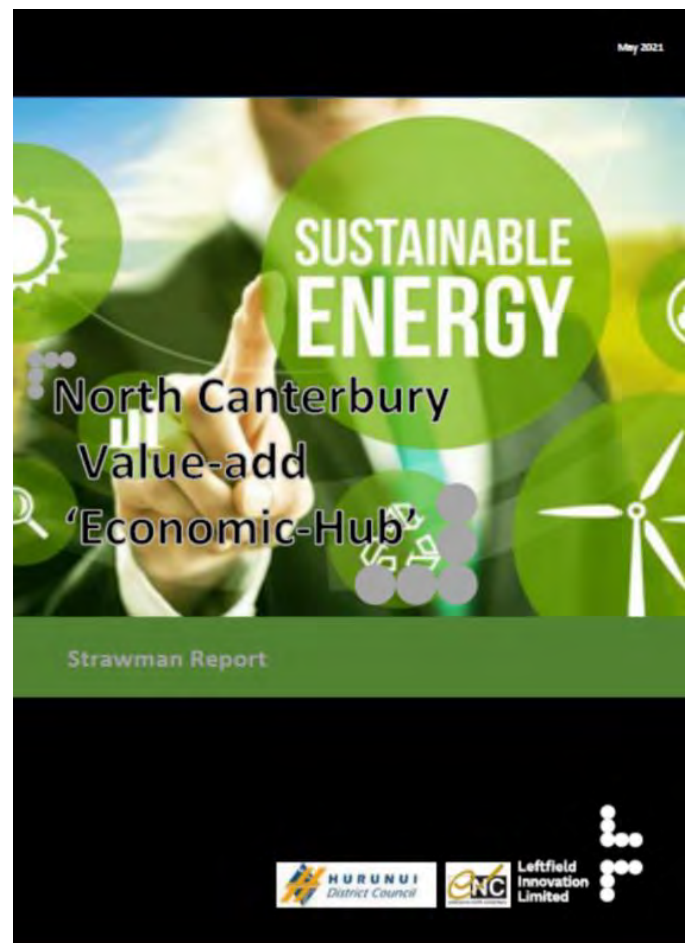
For individual farmers, value creation in terms of bringing new industries/processing capability to the region is largely outside of their control. However, improving prosperity, demonstrating potential and optimising existing infrastructure becomes an attractive basis for potential future investors and businesses to consider Canterbury as an ideal region to establish new capability.

13.1 Potential value-add in Canterbury (North) Hub/Strawman Report

The final opportunity in this report is to link Canterbury vegetable production to an early-stage initiative being explored for North Canterbury. Enterprise North Canterbury commissioned a Strawman report in April 2021 (funded by ENC, MainPower, Transwaste and other key stakeholders in the community) to investigate the concept of a new industrial multi nodal hub that could potentially be powered by the natural resources unique to Hurunui being methane (from Kate Valley) and wind from the 22 new turbines planned by MainPower at Mt Cass [construction to commence Q1 2022], both within a kilometre of each other, and Hydrogen to expand a national transport network into the South Island.

This renewable energy ecosystem could provide economically viable value-add processing capability to the region with the potential to create jobs.

The hub concept is unique in that it provides an **opportunity to design a circular ecosystem** where energy, waste and infrastructure functionality and interdependencies are full integrated. It would transform the utility of Kate Valley as 'landfill' to 'landfill and bio-digestion' of green waste streams from the hub uses. The bio-digester could also receive any surplus green waste from wider Canterbury.



The Hub would be a fully serviced modular concept with shared users/services including science and innovation partners. A base for learning, developing, and supporting the growth of agriculture sector of North Canterbury.

The Hub would provide an excellent opportunity for horticulture, namely glass house production that could utilise CO₂ for ripening, and other higher value processing capability.

Green Energy Ecosystem – Value-add opportunities (North Canterbury Value-add Economic Hub: Strawman Report May 2021)

The business case is in progress and will include:

1. The land development platform with shared services (including the energy model), develop in stages (20-25 years).
2. Up to 3 'modules' that demonstrate the economic viability of individual commercial opportunities which could in themselves each attract investment. These could include:



Diagram 8: Value-add ecosystem capability

- Large scale horticulture under glass and tunnel structure, combined with established horticulture marketing presence. Energy for heating, CO₂ for ripening.
- Hydrogen manufacturing plant using methane from Kate Valley
- Farming Enterprise
 - Sheep Milk processing (also engage with Henry Pinckney)
 - Pip Fruit – cool store, pack house
- Land Developer
- Data Warehouse

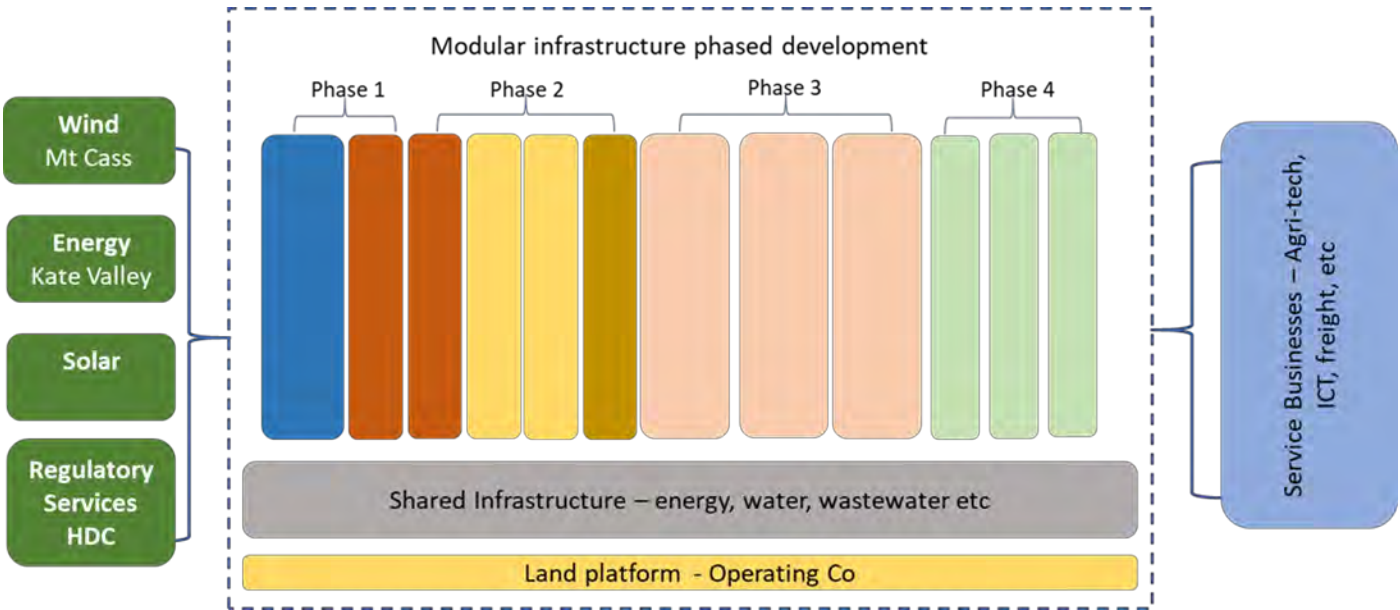


Diagram 9: Modular Infrastructure phased development

The North Canterbury Value-add Economic Hub project has been included in this report to highlights the importance of connecting opportunities that are going on across the Canterbury region to ensure each can be optimised where those opportunities arise. Venture Timaru have a very successful ‘Sustainable is Attainable’ programme established in South Canterbury that is a collaborative approach to sustainable waste and by-product management within the food and manufacturing industry in South Canterbury. Through the process of engaging with various businesses, growers, and organisations, we discussed the opportunity to look at how the Sustainable is Attainable concept could be adopted in other Canterbury regions so that as an overall region, opportunities for producers, manufacturers and processors were optimised. Further engagement is required to develop this conversation.

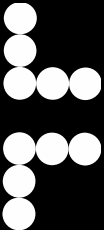
14.0 Recommendations

This Report has identified some exciting opportunities that need to be explored further and validated. Funding support for this work is required, next steps include:

MARKET INSIGHTS	(work in progress, Commence Dec 2021) Engage with NZTE to complete export market insights for the list of vegetables identified. Based on the outcomes of this insights work, form partnerships between key Canterbury commercial vegetable producers investigate options and leverage existing capability and links to markets.
PROVENANCE & BRANDING	Explore the potential for a vegetable branding initiative that links our sustainable growing systems to high quality produce. work with vegetable growers to develop sustainability dashboard for consumers and a QR code-based app to link produce provenance to consumers.
PROCESSING	Subject to market insights (go-no go decision) investigate potential for investment in small to medium scale processing (i.e., to develop riced vegetable lines).
VALUE ADD - SECONDS	Value add for seconds produce – Build on the FoodStarter annual event and develop a VegeUP Shark Tank event with commercial vegetable company sponsorship for teams of entrepreneurs (with market, food tech, packaging etc) expertise to pitch ventures to sponsors. Sponsors bid on propositions they wish to fund to the next stage (an IP/sharing agreement developed in advance of event). Explore the potential to partner with the UC Entrepreneurs course and the Lincoln University food technology course. ChristchurchNZ is a suggested host of this event and could leverage off the food and fibre agri-tech cluster network.
BIODIVERSITY	Glasshouse for native seedling opportunity - engage in further discussion to develop a ~60,000 conservation planting programme via Leaderbrand – work with Iwi and catchment groups to develop a Canterbury wide plan.
REGIONAL CONNECTIVITY	Engage across Canterbury regions to establish linkages between current and planned projects that can leverage land use and value add opportunities, starting with the North Canterbury Value-add Economic Hub project and Venture Timaru's Sustainable is Attainable initiative for sustainable waste and bi-product management.



The Canterbury
Berryfruit
Report



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1.0 Executive Summary

Food production is changing with increasing pressures from consumers who care about reducing the impacts of food production on the environment. They are demanding food products that are nutrient dense, can demonstrate provenance and have low production impacts.

The opportunity for producers to consider high value / low impact crops such as covered berryfruit, namely blueberries, strawberries (for both domestic and export), and blackberries and raspberries (for the domestic market) fits well with the concept of a mixed farm system, where producers can look to diversify 1 to 5 hectares of their farm to include covered crop(s) to enable the overall farm system to achieve the economic and environmental outcomes desired, and regulatory outcomes required.

The up-front capital costs for covered berryfruit production systems are between \$310,000-320,000/ha for Blueberries and Raspberries, to \$470,000/ha for Strawberries. However, the rate of return is between 19% for Strawberries to 38% for Blueberries, giving a payback period of around 5 years for Strawberries, 9 years for Blueberries and just 3 years for Raspberries.

New Zealand has a well-established berryfruit market that has largely transitioned from field crop production to covered crop/hydroponic production. Leftfield Innovation Ltd engaged with 3 key marketers, MG Marketing, T&G Fresh and The Fresh Berry Company. Each group has rights to unique germplasm and varieties and operate in a range of export markets, in addition to supplying domestically. Their role is securing the plant variety rights, marketing the products and taking care of logistics, leaving the producer to focus on growing, picking and packing high quality berryfruit.

The South Island consumes around 25% of the berryfruit crops produced annually. However, most of the crop is produced in the North Island for local supply, and some freighted to South Island supermarkets. All companies interviewed raised the issues of speed to market and the impacts this had on freshness and quality. Producing quality, fresh berries for the domestic market in the first instance opens up opportunities for expansion of covered berry crop production in Canterbury to meet the South Island market needs. Further, with the proximity to Christchurch International Airport, and to a lesser extent Lyttelton Port, export markets could be further expanded out of Canterbury. Diversifying supply from just the North Island also reduces supply risk.

Post-harvest packing and cool store facilities for berryfruit and processing for seconds are currently lacking in Canterbury. However, some of the existing marketers have expressed an interest in expanding or modifying current facilities to enable this capability to be developed.

Recommended next steps would be to engage with Canterbury growers to establish interest in producing berryfruit, and to introduce interested growers to each of the marketers for them to provide detail on their value proposition. This will enable interested growers to undertake due diligence in relation to specific opportunities. Berryfruit marketers should assess the South Island market opportunities further; and where appropriate, develop small trial sites for key varieties to scale up as the market develops.

Given the different berry types, there is potential for each of the berry marketers in a Canterbury berryfruit opportunity.

Leftfield Innovation Ltd. would be prepared to coordinate further steps as a commercial project.

2.0 Acknowledgements

Leftfield Innovation Ltd would like to thank all those that have contributed their time to be interviewed for this project. In particular, staff at MG Marketing, T&G Fresh (New Zealand and Australia), The Fresh Berry Company, and Berryworld (NZ).

3.0 Purpose

This project is part of a package of work funded by the Canterbury Mayoral Forum, and a group of central and mid Canterbury growers (The Canterbury Grower Group) to look at opportunities for existing Canterbury farms to diversify to include a range of sustainable land uses collectively or individually to make their businesses more resilient economically and environmentally.

4.0 Project Scope

This report aims to:

- Highlight the importance of consumers who care about sustainable food production and what this means to New Zealand's future.
- Highlight the opportunity for New Zealand producers to increase intensive higher value land uses that are sustainable.
- Identify how intensified land uses could be part of an overall more sustainable diversified farming system; and how covered crops, planted in above ground mediums, can utilise the less productive areas of a farm.
- Present an overview of the business case for various covered berry crops including a market opportunity assessment, covered crop infrastructure and capital investment, operating requirements, and costs, return on investment and payback period.
- Overview the key berryfruit companies in New Zealand and their potential to establish and/or expand their operation in the Canterbury Region.
- Develop an implementation plan for covered berryfruit cropping in Canterbury.

This report and business case overview will be presented to the Canterbury Grower Group in the first instance to establish interest in participating in berryfruit production.

5.0 What will drive land use change – regulation or the consumer?

The future of food production around the world is changing. There are increasing pressures to change how food is produced and what is produced to reduce the impacts of production on the environment while continuing to feed a growing global population with healthy nutrient dense food.

Consumers are leading much of the change, demanding transparency of where and how the food they are consuming is produced. New Zealand's reputation globally has rested on the 'clean green image', and that food produced in New Zealand is safe and of high quality. New Zealand producers and processors will need to prove the safety and quality of food.

The past 20-30 years has seen an intensification of ruminant animals and increased application of nitrogen fertilisers which has resulted in adverse impacts on water quality, and increased greenhouse gas emissions. While the issues relating to nitrates and phosphates have been recognised for some time, and for many regions, and regulatory plans have been put in place to reduce the harmful effects of nitrogen and phosphates at the farm level, the regulations to account for and manage the reduction of GHG emissions are only now being formed.

New Zealand agriculture has come under criticism on the global stage over the past few years, and this scrutiny continues to increase due to greater awareness of climate change and environmental issues. An export nation that depends on the primary industries for economic prosperity, it is essential that agri food producers pay attention to what consumers think of New Zealand and the messages they are hearing.

For example, Aljazeera media network published an article in August 2017 - What is the problem with New Zealand’s water sources? A look at how water pollution has become a major concern for the country and included this graphic depicting Nitrate levels in New Zealand rivers. Selecting ‘exceeds legal limit’ and ‘within legal limit’ can be misleading. However, this is one of many examples of communications by global media about New Zealand.

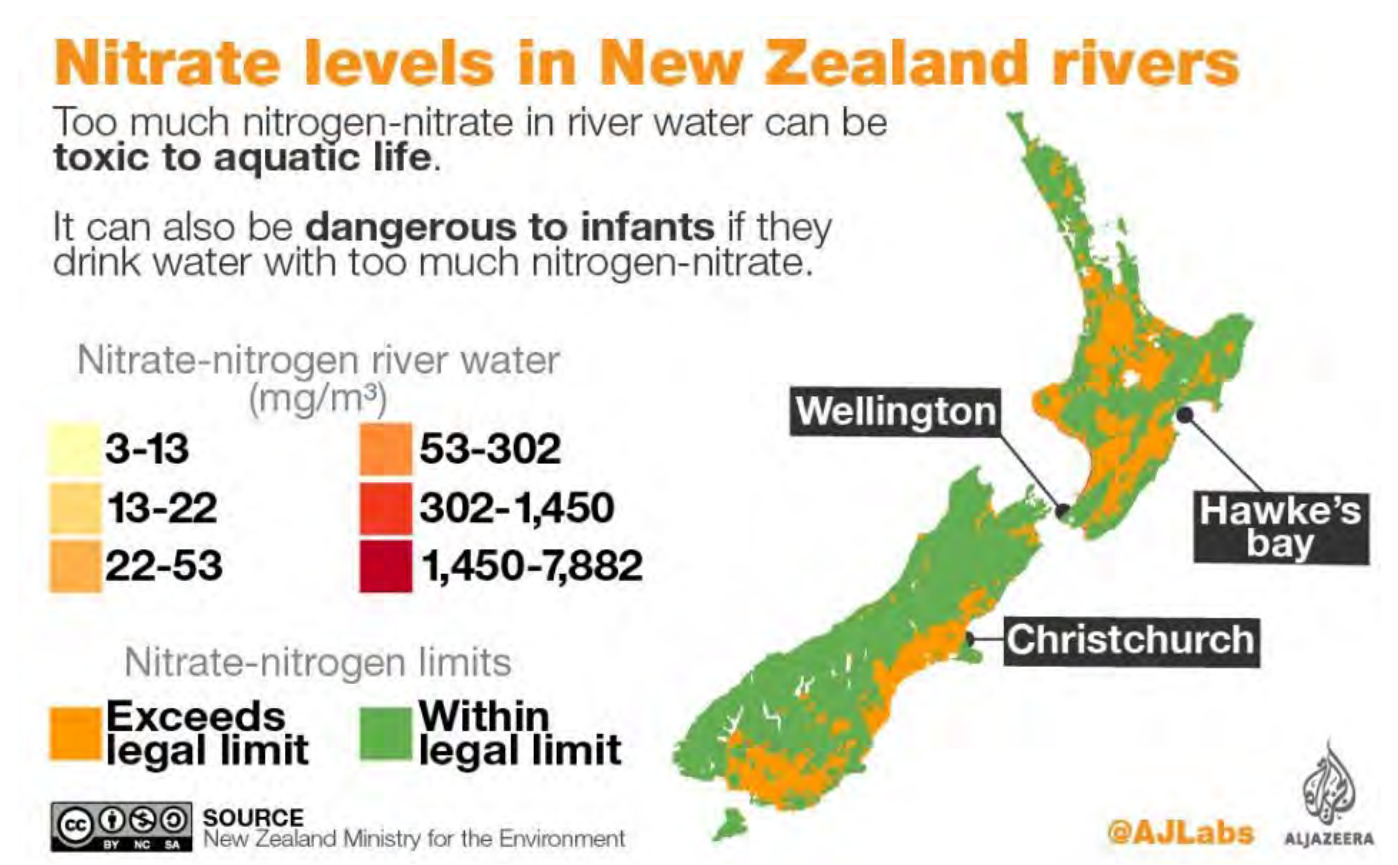


Diagram 1: Nitrate Levels in New Zealand Rivers

Recently, Swedish environmental activist Greta Thunberg has shared an article from The Guardian headlined *'Emissions from cows on New Zealand dairy farms reach record levels'*. She also pulled a quote from the story to tweet alongside it that says: *"New Zealand is one of the world's worst performers on emission increases. Its emissions rose by 57 percent between 1990 and 2018 - the second greatest increase of all industrialised countries."*

Thunberg’s tweet enraged Kiwi farmers. However, regardless of what we think of either of these articles, they both reflect the messages consumers globally are hearing about New Zealand. The risk to our image for producing safe, healthy, and environmentally friendly foods is significant.

While regulations may be important to provide certainty that farming is not exceeding certain losses to the environment these regulations are only in place to meet the demands of the customer or consumer and New Zealand farmers should focus their efforts on delivering to the customer whose demands, in many cases, will exceed the regulation.

Focusing on the consumer, whose values are changing from taste, convenience, and nutrition, to include the environmental impacts of, and how ethically food is produced.



Diagram 2: Consumer Values

Exploring a case for expansion for any land use option, including intensified horticulture, needs to consider the environmental impacts of the production system in tandem with the economic benefits. Decision to proceed cannot be made on an economic case alone.

6.0 Framing the case for intensified, high value land uses

The Coriolis discussion document 2019 *‘Is this the beginning of the end or the end of the beginning? Finding the future of the New Zealand food and beverage industry’* provided a very clear and compelling case for improving output per hectare and value add per tonne, and benchmarked New Zealand with key overseas peers to demonstrate the opportunity. As such, this section of the Berryfruit Report has drawn from the Coriolis discussion document to highlight the global context to support the opportunity for berryfruit expansion in Canterbury, and clearly other parts of New Zealand.

The challenges facing New Zealand agriculture require a system change that considers land use based on its suitability within a sustainable mixed farm system and its value per hectare.

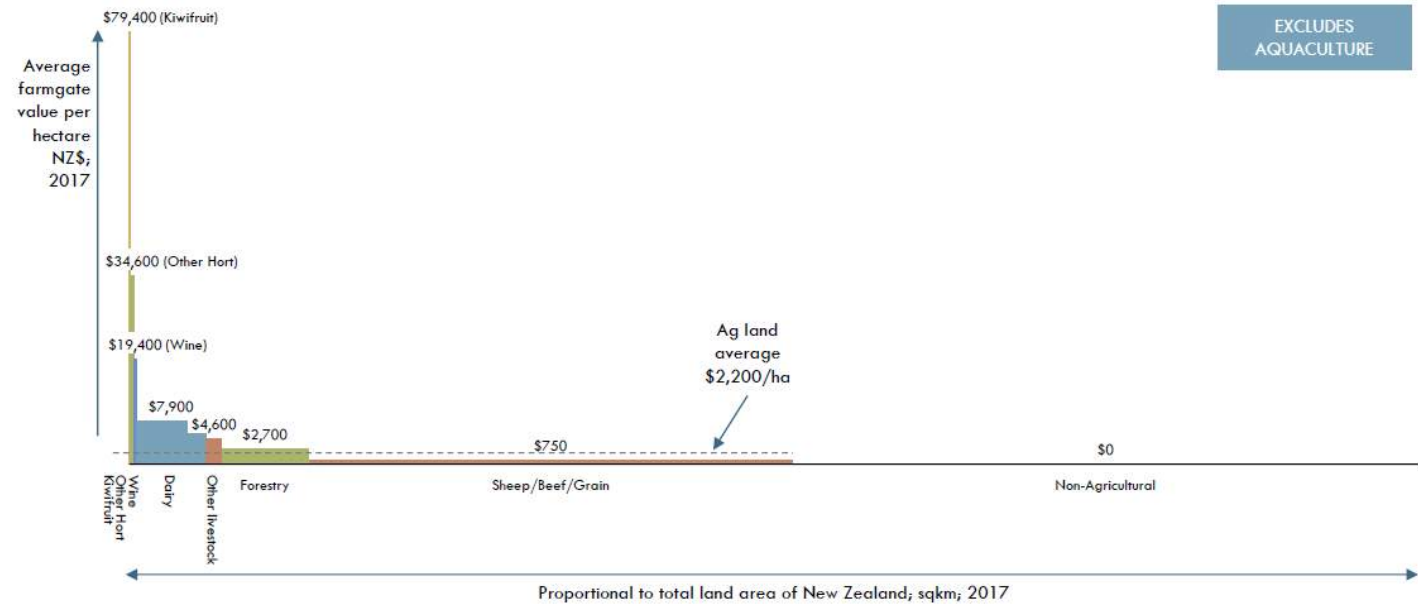


Diagram 3: New Zealand agricultural land use: Area vs Ag Value per hectare: NZ\$; actual; hectares 2017 or as available (Coriolis discussion document, 2019).

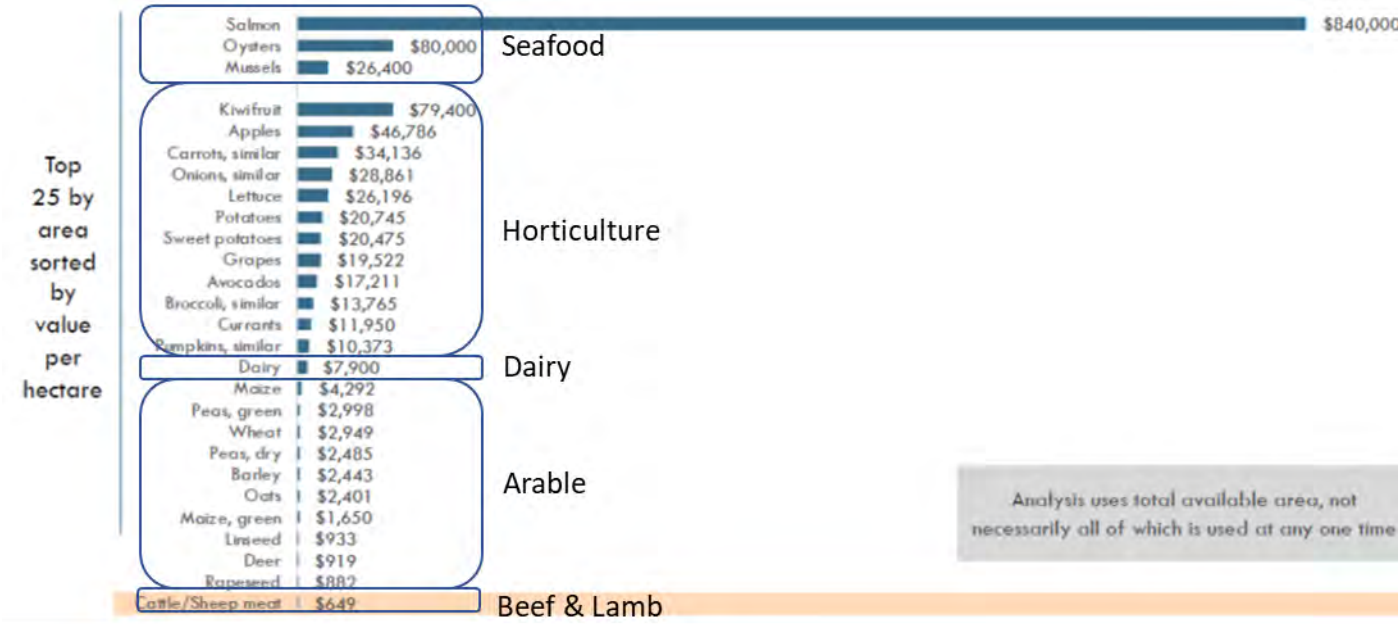


Diagram 4: Realised New Zealand ‘Farmgate’ value per hectare of total space (NZ\$/hectare; 2017 or as available (Coriolis discussion document, 2019)

Products produced vary dramatically in terms of value created per hectare. When based on per hectare per year the value created increases as some crops are only in the ground for a short period of time i.e. 90 to 100 days and can be followed by other crops.

This report looks to ask the question, can we expand production of higher value horticultural products in Canterbury, as part of a mixed farm system based on a domestic and export market demand?

There are three key drivers that have been identified to increase revenue and employment in the agri-food chain. Land production (hectares); output per hectare (t/ha); and value added per tonne (\$/t). It is widely recognised that growth will occur from creating more output from less, and selling it as complex products at higher prices. Increasing land in production is unlikely.

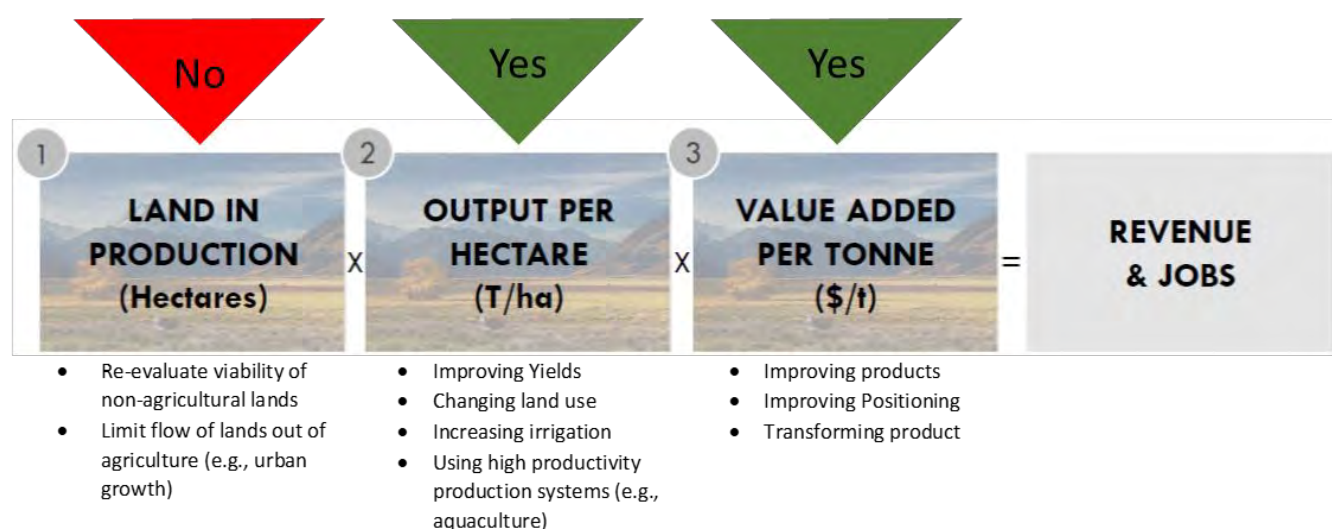


Diagram 5: Key drivers available to increase revenue and employment in the agri-food chain (Corilos discussion document 2019)

Changing land use is one of the key drivers to increasing output per hectare; coupled with using high productivity production systems that improve yields, and that are supported by the availability of reliable water for irrigation.

Unfortunately the Coriolis report does not recognise that for some of the products the output /hectare is only for part of the year and income occurs for other crops in other parts of the year. eg. Peas are only in the ground for 90 to 100 days and income will be generated from other crops outside that window. These numbers would be better expressed as output per hectare per day.

Research indicates that New Zealand is increasing the area of higher productivity plant production systems, and the horticultural sector is seeing a transition in some crops from field production to producing crops under cover.

The reasons for going to undercover production are:

- the productivity per unit area is increased dramatically
- production can be targeted at higher value market windows and markets
- the fruit quality is dramatically improved
- the labour inputs are less taxing on employees

This report focuses on protected cropping opportunities in the berryfruit sector.

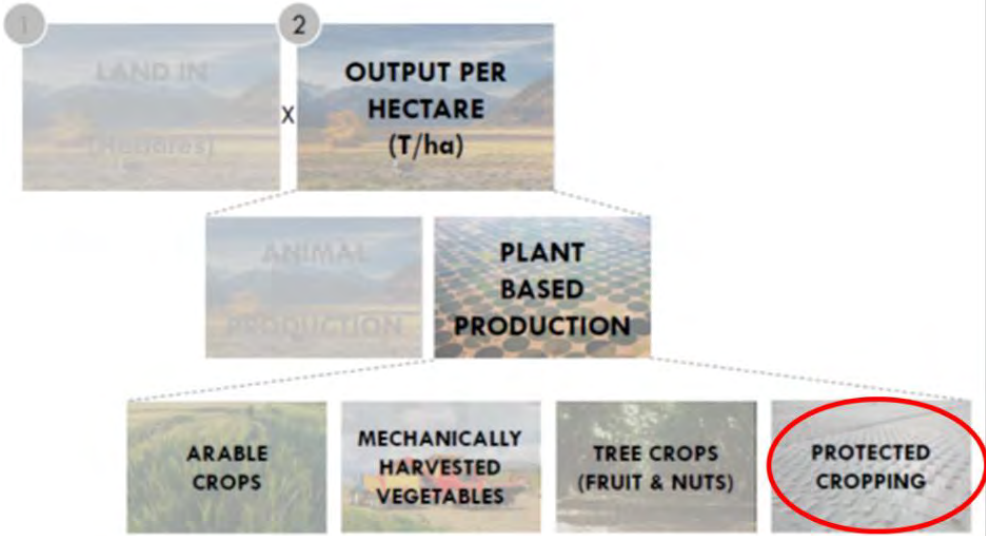


Diagram 6: Higher productivity plant production systems contributing to increased output per hectare (original diagram, Coriolis discussion document 2019)

6.1 Comparing New Zealand to our overseas peers

New Zealand is not constrained in terms of land area for production, which has largely led farming systems to be field based. The area under cover (at 2014) was 688ha which is 130 times smaller than the Netherlands at 89,600ha (largely climate controlled permanent glass houses).

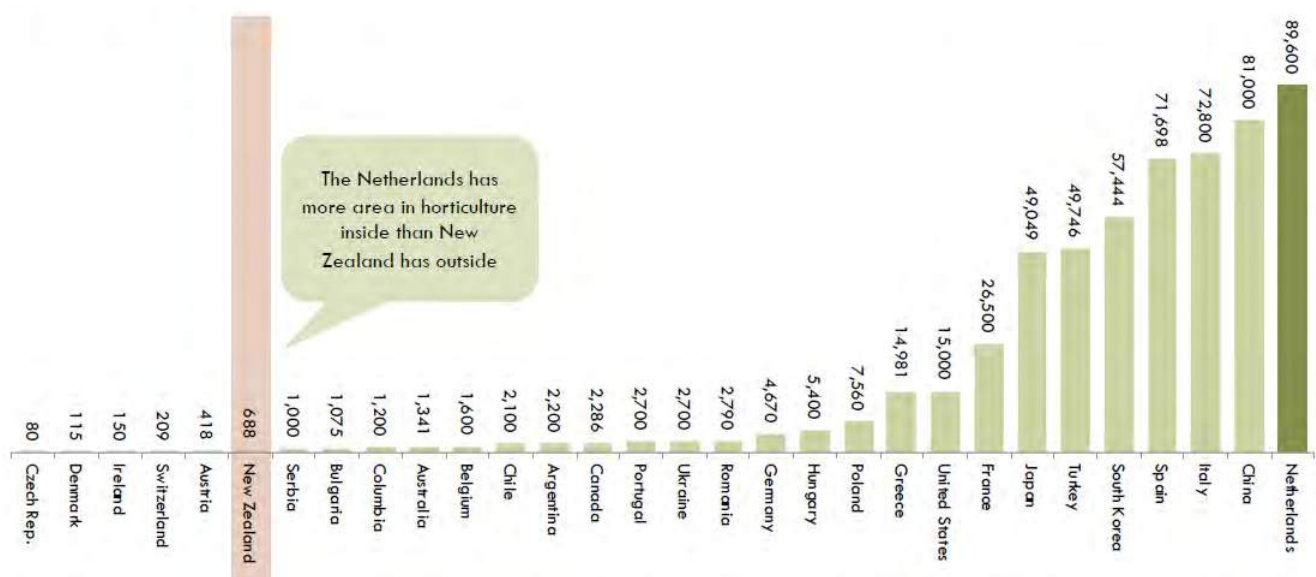


Diagram 7: Area in greenhouse/under cover: New Zealand VS select peers (hectare; 2014 or as available) (Coriolis 2019)

Intensive covered crop production provides a solution to Canterbury’s temperate climate and frequent weather events including hail, rain and wind events. Canterbury’s attributes include the reliable irrigation water in most Canterbury sub-regions; and the close proximity to Christchurch International Airport and Lyttelton Port.

7.0 Berryfruit - Industry Overview

Historically berryfruit production was in the North Island, predominantly South Auckland and the Waikato; however, this is changing with transition away from field grown crops to low-tech tunnel house production. It is generally expected that field growers are likely to exit these areas as land prices increase and field operations become less efficient compared to covered operations.

This emerging trend in New Zealand is led by a number of factors:

- Increasing pressures on suitable 'clean' land for production (Strawberries)
- Restrictions on using methyl bromide, which is used in field crops to control soil borne pathogens in strawberries
- Increasing urban expansion and thus increasing land values
- Challenges sourcing labour for field crop picking
- Changing climate and weather events causing more frequent damage to field crops
- New plant varieties suited to tunnel houses that produce higher yields and higher quality (size, taste)
- Under cover, fruit is kept dry and picked rain or shine
- Improved harvesting conditions for pickers (picking at waist height)
- Spraying is easier and less chemical is required due to little or no spray drift
- Pests and diseases can be controlled more effectively
- Water and nutrition can be managed to provide the highest yield and the best quality fruit, improving returns for the landowner
- Water and nutrient use efficiency are improved also. In good systems, there is no loss of nutrients or drainage water.

7.1 New Zealand berryfruit market size

The berryfruit market is dominated by blueberries and strawberries, both export and domestic, with blueberries leading in export value of ~\$80m, 56.5% export and 44.5% domestic supply.

The strawberry market value is less than half of the blueberry market at \$33.6m; and the majority of the supply, 81.5% is domestic supply, with only 18.5% making up the export value.

Fresh fruits (other)

Sales value (\$m)

	Growers ^a (no.)	Planted area ^a (ha)	Crop volume ^a (tonnes)	Domestic ^a 2019/20	Export ^a (fob) 2020
Avocado	1,034	3,937	39,079	50.6	100.1
Berryfruits	240	3,068	25,900	67.3	50.8
- Blackcurrants	32	1,636 ^b	8,915 ^b	1.0	
- Boysenberries	19	206 ^a	2,700 ^b	5.0 ^c	
- Raspberries	50	150 ^b	945 ^b	3.0	0.1
- Blueberries	80	680	3,640	35.3	44.4
- Strawberries	110	276	9,200	27.4	6.2
- Other berryfruits		120	500	0.6	0.1
Citrus	316	1,660	29,743	80.2	9.5
- Grapefruit	18	15	372	0.7	
- Lemons	75	257	6,999	10.8	7.2
- Limes	47	27	712	2.7	
- Mandarins	192	556	10,922	28.4	0.8
- Oranges	176	783	10,101	16.6	1.0

Processed fruits Sales value (\$m)

	Domestic ^a 2019/20	Export ^a (fob) 2020
Apple juice	80.0 ^a	16.8
Avocado oil	2.6	9.3
Blackcurrant concentrate		7.5
Other fruit juices	92.1 ^b	17.8
Other fermented beverages		11.1
Dried fruits		5.8
Frozen fruits		14.4
- Blackcurrants		3.6
- Blueberries	1.6	0.4
- Boysenberries	2.7	3.9
- Kiwifruit		5.0
- Raspberries		0.2
- Other		1.3
Fruit preparations		25.1

Table 1.0 Fresh and Processed Berryfruit – Domestic and Export values (FreshFacts 2020 Year end June (\$million fob))

Production by the current key growing regions, and value generated per grower has been assessed based on the FreshFacts 2020 data. Currently, there is very little berryfruit production in the South Island.

	Grower (no.)	Planted area (ha)	Crop Volume (t)	Domestic		Current Growing Regions
				2019/2020	Export (fob) 2020	
Blueberries	80	680	3,640	35,300,000	44,400,000	Waikato
	\$ average value generated per grower	\$/Hectare	\$/tonne		79,700,000	
	996,250	117,206	21,896			
Strawberries	110	273	9,200	27,400,000	6,200,000	Auckland
	\$ average value generated per grower	\$/Hectare	\$/tonne		33,600,000	
	305,455	123,077	3,652			
Raspberries	50	150	945	3,000,000	100,000	Does not specify in FreshFacts data
	\$ average value generated per grower	\$/Hectare	\$/tonne		3,100,000	
	62,000	20,667	3,280			
Boysenberries	19	206	2,700	5,000,000		Tasman/Nelson
	\$ average value generated per grower	\$/Hectare	\$/tonne		5,000,000	
	263,158	24,272	1,852			

Table 2.0 Production and value generated based on FreshFacts data.

7.2 Domestic market – in brief

The New Zealand berryfruit market should be driven by market forecast growth rather than speculation on planting more crop and looking for options to sell. While increasing berryfruit sales have occurred over time in New Zealand, it is still deemed by some marketers to be an underperforming category compared to the US, where berries have become the largest fresh fruit retail category, ahead of major staples such as apples and oranges.

The South Island accounts for around 25% of berryfruit consumed domestically. The majority of berryfruit is shipped from the North Island production regions to the South Island which incurs significant freight costs (around 10% of wholesale value, depending on the time of the season) and compromises quality.

The growth opportunity for New Zealand's domestic market is producing strawberries, raspberries, and blackberries via South Island production, provided prices can offset the cost of production.

7.3 Exports – in brief

Blueberries and strawberries are the main berryfruit export crops produced in New Zealand. Blueberries are exported to Australia (\$39m); and strawberries are exported to Asia (\$6m) via air freight. Due to the delicate nature of these crops, speed to market is a key factor driving quality.

The total domestic and export volume of blueberries at 2019/2020 was 3,640t, the domestic fresh demand at approximately 1,600tonnes, with 2040t being exported. The total New Zealand blueberry industry, including frozen and imports, has an estimated revenue of NZ\$70-80M.

Australia has a US\$1.4billion/NZD\$1.995billion berry category, which is now the single largest fresh fruit? produce category in Australia, and consumption is increasing across the country.

New Zealand being more proximal to Asian export markets, may have some advantages over other supply regions (e.g. South Africa, South America and the USA) in this regard.

7.4 Berryfruit market opportunities and issues

- **Blueberries**

Blueberries were established over 2 decades ago and are currently in a phase of growth. This growth has been particularly encouraged by significant positive research about the health benefits of blueberries.

MBIE commissioned the report by Coriolis Opportunities in the New Zealand Blueberry Industry (mbie.govt.nz) dated July 2020. This recent report provides an overview of the global markets, New Zealand's position within that context and the opportunities for New Zealand grown blueberry exports expansion.

The Report identified that four broad investment themes exist for driving export growth in the New Zealand blueberry industry.

1. First, there are opportunities to grow blueberry production.
2. Second, the supply chain can be improved to increase efficiency.
3. Third, the marketing of New Zealand blueberries can be improved.
4. There are opportunities to create value-added products. Blueberries are an extensible platform.

In their Executive Summary Coriolis state that *'Blueberries are still a young industry, both globally and in New Zealand. To date, New Zealand has achieved success primarily in the domestic market and in Australia, both markets are insulated from global pressures by biosecurity. Going forward, the New Zealand blueberry industry needs to transition from this "Walled Garden" into the fast growing, but more competitive markets of East and South East Asia if growth is to continue. The proven success of New Zealand apples and kiwifruit in highly competitive global markets shows what is possible. New Zealand growers have the skills and resources required to make the required transition and continue to grow.'*

The blueberry industry is represented by Blueberries NZ, and it states that *'the industry is currently in a phase of growth. Their objectives include importing new genetics for growers, export market access, promotion and development of the blueberry industry and promotion of blueberries both within New Zealand and overseas'*.

There has been an increase in blueberry growers in the North Island over the past 3 years largely in the Waikato and the Bay of Plenty. For expansion into Canterbury, further work would need to be done to determine where the fit was within the market window for both domestic and export supply.

- **Strawberries**

Strawberries is a growth industry for the covered cropping sector. At present many outdoor growers are erecting low-tech plastic tunnel houses. Growers are also using grow-gutters to lift the plants up higher. This is allowing for multi-level production, increased crops, and easier processing. New varieties will have a positive change in total production per square meter. In the future, building more medium-tech structures will help production during winter.

The opportunity to grow and supply closer to the South Island market presents an opportunity for Canterbury. Currently the berryfruit supply for the South Island is supplied largely from North Island growers. The product sold in the South Island could be in transit (cool chain) for multiple days before it lands on the supermarket shelf, therefore shelf-life quality issues can be problematic. Further, freight from the North to the South Island is expensive.

South Island based production, using new varieties that are flavoursome and fresher (picked-to-eating within 24 hours) has the potential to result in an improved consumer experience and therefore potential to drive an increase in berryfruit demand.

The order of importance of benefits for Canterbury are:

- Fruit quality - varieties that are suited to cover and the high chill environment such as the everbearing varieties that fruit constantly.
- Market window – supply windows outside of the peak supply.
- Increased production – covered cropping reduces environmental risks and increases viable high-quality product.
- Reduced disease and
- Reduced labour/unit sold.

Expansion plans will depend on producing new plant/runner stock which could take 2-3 years and would depend on using existing genetics. Modelling would be required for early and late shoulder windows and matching these with the genetics and growing areas.

It is expected that new genetics, like those being developed by The Fresh Berry Company, will be available by 2023.

Existing genetics, such as Monterey and Arabella, are potential varieties that could be successful in Canterbury. Arabella grows well in Tasmania which has a similar high chill environment to Canterbury and is an everbearing variety that fruits constantly.

Arabella is a new variety to NZ (exists overseas) – this is exclusively licensed via T&G as is the broader Plant Science Inc. strawberry programme.

For Canterbury, the market window is to produce outside of the main part of the market season (November to the end of February) as the domestic strawberry market is oversupplied at certain times of the year, pushing prices down. Covered crop operations have the ability to support production during the shoulders of this season, early September, or April onwards. The Canterbury climate is suited to later season varieties therefore could optimise supply from April.

- **Raspberries and Blackberries (Rubus)**

There is currently no industry body for raspberries and blackberries, unlike Strawberries (Strawberries NZ) and Blueberries (Blueberries NZ). The Fresh Berry Company are leading the market in the development of new genetics for raspberries and blackberries to produce high quality berries with superior shine, size, and taste. It is difficult to access good primocane outside of The Fresh Berry Company.

T&G through its subsidiary company Venture Fruit have acquired exclusive rights to genetics bred by Plant & Food Research Ltd. We are likely to see genetic stock available for trials and testing in the next 12-24 months.

MG Marketing have access to Berry World UK genetics and also have a North Island based development programme in the pipeline.

Fresh rubus are limited to the domestic market supply as phytosanitary regulations for most countries prevent export from New Zealand due to the risk of New Zealand native raspberry bud moth incursion.

8.0 Key Players

The sector is led by a model where the marketers are tied to exclusive access to certain berry genetics and supply direct to the domestic market (supermarkets, food service etc) and exports. Growers contract to the marketer who provide:-

- Plant variety access
- Sales and marketing
- Technical expertise

The key marketers and source of genetics in New Zealand are presented In Table 3.0










Marketer	Berryfruit	Source of Genetics
 The Fresh Berry Company	Strawberries	
	Raspberries	
	Blackberries	
	Blueberries	
 Turners & Growers (Fresh)	Strawberries	T&G and Plant Sciences Inc
	Blueberries Raspberries Blackberries	 T&G via its subsidiary Venture Fruit partnership with Plant and Food Research Ltd. Note, this partnership includes developing blueberry genetics bred in NZ with a trial of genetic stock currently underway.
 Venture Fruit	Raspberries	 Berry World (UK genetics)
	Strawberries	
	Blackberries	
	Blueberries	
 MG Marketing		
  Miro Blueberries (licences from BerryCo)	Blueberries	Berry Co – Licences IP from Mountain Blue Orchards (MBO) Australia; varieties selected to suit warmer climates; exports to Australia and Asia Brands:- Eureka; I luv berries R&D Centre in NZ

Table 3.0 Key Marketers and Genetic licensors in New Zealand

There are some cases where marketers have partnered with growers with some entering Joint Ventures where the marketer own's the land and infrastructure and enter a JV partnership with the grower for the growing and operating business. There appears to be an appetite from various marketers to support growers who have no prior experience in covered berryfruit production. Some feedback signalled that the most important factor in success is having the right mindset, listening to lessons learned and implementing 100% based on this learning; and using the right plant varieties suited to the growing region and conditions.

8.1 Premium product opportunities

Consensus is that genetics are the key opportunity to improve quality, consistency of berry products for both domestic and export. Quality requirements in key Asian markets are increasingly challenging. With ever increasing production of blueberries from South America, local production of strawberries within Asia, and berries coming out of Africa and Europe, superior quality is critical for success. For example, premium long stem strawberry returns are very attractive to growers being almost double that of the commodity product varieties. All of the NZ marketers have invested in high quality genetics across the berryfruit categories that offer different attributes for the consumer – quality, and consistency of taste, size, shelf life etc.

8.2 Contracting arrangement

Typically, growers are bound by terms and timeframes for supply to the Marketer. As a general rule, the contracting arrangement includes:

1. Supply of Plant Agreement
 - a. Annual supply for Strawberries
 - b. 4-5 years for Raspberries and Blackberries;
 - c. 6-7 years for Blueberries.
2. Supply Agreement to the Marketer company for sales and marketing.

8.3 Post-harvest Processing

There are currently little or no dedicated post-harvest packing and cool store facilities in Canterbury for berryfruit. A number of the marketers operate sites in Canterbury (T&G Fresh, MG Marketing) that could be modified to support this. Significant investment by growers or investors would be required to operate at scale and bring product to market.

9.0 Economic models

Berryfruit Economics section has been prepared by **The AgriBusiness Group Ltd** (Stuart Ford), along with the full models included in **Appendix 1** of this report.

9.1 Introduction

The three economic models represented here have been modelled to represent viable alternatives along with the other considerations of the market potential and the Canterbury growing environment. The data that has been modelled should be considered as a general indication of their financial costs to grow and the likely returns that can be gained from growing them rather than a specific growing proposition.

The data presented for each crop is as follows:

- Total Revenue which reports the gross revenue received for each crop.
- Total Working Expenses which report all of the costs of growing the crop including labour expenses, growing expenses and overhead expenses.
- Earnings before interest, tax, depreciation, and amortization (EBITDA). This is effectively total revenue minus total working expenses.
- The minimum land area required has been put at 1 ha, but all of the models are calculated on 5 ha which means that overhead costs such as managerial rewards are spread over a larger area.
- The time to achieve 100% yield is reported as is the time to become cash positive and the time to recover the original cash investment.
- The initial capital investment is reported.
- The annual returns of growing each of the crops is projected out for 20 years and from this we have reported the net present value of the income stream, at a 4.5% discount rate and both the internal rate of return and the return on investment which is calculated at the point where the return is at a maximum.
- We have also reported the sensitivity of the two key productive factors of yield and return.

The full models can be found reported in Appendix 1.0 of this report.

The data that has been used in creating these models has been gained from various industry experts across a range of purposes and is in the opinion of The AgriBusiness Group sufficiently accurate to be used for gaining an understanding of the likely economic performance of Blueberries, Raspberries and Strawberries in a covered growing environment in Canterbury.

9.2 Economic Performance

Table 1: Economic performance of three covered crop berryfruit options in Canterbury.

	Blueberries	Raspberries	Strawberries
Total revenue per ha.	300,000	450,000	522,000
Total working expenses per ha.	203,425	366,125	430,375
EBITDA.	96,575	83,875	91,625
Minimum Land Required (ha)	1 ha	1 ha	1 ha
Time to 100% Yield (years)	6	4	1
Time to Cash Positive (years)	6	3	1
Initial Capital Investment (\$) per Ha.	310,000	320,000	470,000
Year in which investment is paid back.	9	7	5
Net present value.	572,758	527,940	690,768
Internal rate of return.	13%	16%	19%
Return on investment.	38%	26%	19%

Some key points that can be taken from Table 1 are:

- Although the revenue from blueberries is lower than the other two the costs at 68% are relatively low compared to the other two which have much higher revenue projections but their costs at just above 80% are also very high.
- All three are relatively similar in their EBITDA results.
- Strawberries are the best in terms of time to 100% yield, time to being cash positive and the year in which the initial cash investment is paid back. This is most probably because it is an annual plant rather than the perennial plants of blueberries and raspberries and so strawberries reach their potential yield immediately.
- Blueberries and raspberries have a similar initial capital cost, but strawberries are much higher because of the high cost of plants.
- Raspberries have the lowest net present value and internal rate of return followed by blueberries with strawberries having by far the highest result for both measures.
- Blueberries have the highest return on investment followed by raspberries and then strawberries.
- Both of these economic measures provide satisfactory results for each of the Berryfruit options.

9.3 Sensitivity

The sensitivity analysis for each berryfruit option are shown in Table 2, Table 3 and Table 4 and are all \$/ha/year.

The sensitivity has been tested in 10% jumps, both positive and negative, from the average assumed value for both of these figures.

Table 2: Sensitivity analysis for yield and price for Blueberries.

Yield Kg	9,600	10,800	12,000	13,200	14,400
Price \$/kg					
30.00	84,575	120,575	156,575	192,575	228,575
27.50	60,575	93,575	126,575	159,575	192,575
25.00	36,575	66,575	96,575	126,575	156,575
22.50	12,575	39,575	66,575	93,575	120,575
20.00	-11,425	12,575	36,575	60,575	84,575

Table 3: Sensitivity analysis for yield and price for Raspberries.

Yield Kg	20,000	22,500	25,000	27,500	30,000
Price \$/kg					
14.4	-78,125	-42,125	-6,125	29,875	65,875
16.2	-42,125	-1,625	38,875	79,375	119,875
18	-6,125	38,875	83,875	128,875	173,875
19.8	29,875	79,375	128,875	178,375	227,875
21.6	65,875	119,875	173,875	227,875	281,875

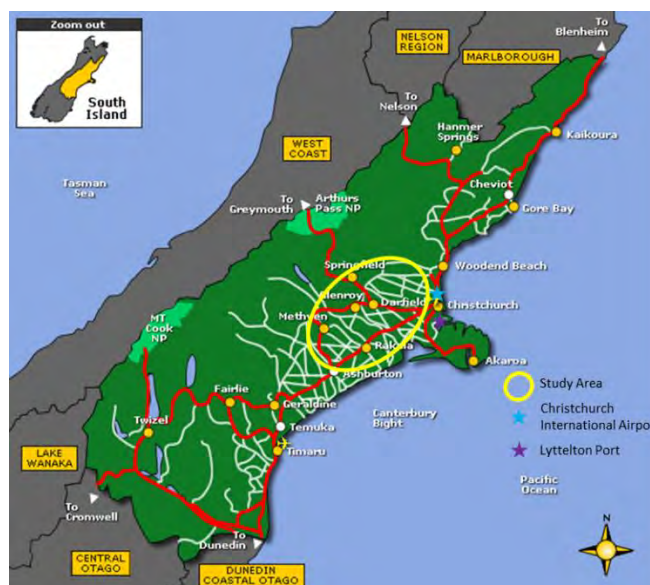
Table 4: Sensitivity analysis for yield and price for Strawberries.

Yield Kg	48,000	54,000	60,000	66,000	72,000
Price \$/kg					
6.96	-96,295	-54,535	-12,775	28,985	70,745
7.83	-54,535	-7,555	39,425	86,405	133,385
8.7	-12,775	39,425	91,625	143,825	196,025
9.57	28,985	86,405	143,825	201,245	258,665
10.44	70,745	133,385	196,025	258,665	321,305

10.0 Growing Conditions and Requirements

The berry types discussed below can all be grown in a Canterbury climate. The major berry companies have cultivars which they can identify that could be suited to the climate and evaluation in Canterbury. Further work is required to identify cultivars that are best suited to the region and the growing system.

Canterbury has an abundance of flat land, water for irrigation and is close to Christchurch International Airport and Lyttelton Port.



Map of Canterbury

10.1 Supply period (Domestic)

Product	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Blackberry	✓	✓	✓									✓
Blueberry	✓	✓	✓	✓							✓	✓
Strawberry	✓	✓	✓	✓					✓	✓	✓	✓
Raspberry	✓	✓	✓									✓

Strawberries

There are a range of strawberry varieties that respond differently to photoperiod, short day and day length neutral. Cultivars are available that will be successful in Canterbury climate and cultivar testing is required to identify the best varieties. Strawberry Growers NZ have a list of all varieties and nine are available currently in New Zealand. They can be transplanted as either stolons (runners) or plugs and managed in covered culture systems to produce fruit over a longer season than is possible outdoors. In covered culture systems the berries are grown on tables in substrate and fed hydroponically with water and nutrients. This system reduces labour (the berries are presented at waist height and separated from foliage by strings), extends the season, reduces disease, improves fruit quality and productivity and is steadily replacing outdoor growing systems. The hydroponic system requires high quality water which is low or no sodium or chloride and low in other elements such as iron.

Raspberries and Blackberries

A number of the marketing companies have their own genetics that they have selected for New Zealand growing conditions under covered culture systems. Some of these are grown commercially in other parts of the country but have not yet been tested in Canterbury but winter chilling should not be a concern and the longer daylengths than further north regions should enhance productivity. While they have not yet been evaluated it is expected that cultivars suited to the climate should be available. These companies also manage the propagation and supply of plants.

For raspberries, there are both summer and autumn fruiting types available and the pruning practices match the types with summer fruiting on floricanes and autumn fruiting on primocanes. In the covered culture system the plants are grown in pots with a suitable media and are fed nutrients and water as required. This system needs good quality water. The covered culture system reduces disease and climate damage (particularly rain on raspberries) to berries, increases yields, increases ease of harvest, improves berry quality and lengthens the harvest window.

Blueberries

Blueberries can be planted under cover anywhere in the country. A number of varieties are available from different companies. Blueberries do not require additional heating as they naturally survive at very cool temperatures. There is a chilling requirement (time below 7C) which varies for different types and varieties. They are winter frost tolerant to at least -5C, but frost may damage flowers or fruit. They are reasonable tolerant of wind but in covered culture are protected from the wind. Climate in Canterbury is suitable for blueberries.

Covered cropping using substrate and hydroponics supplies all of the plant's nutrients in the water. Water/nutrient solution requirements depend on regional climatic conditions. However, plan to provide 100 litres per square meter per month during summer, and around 10 litres over the winter. Blueberries are sensitive to sodium chloride so the water source needs to be tested. Planting density depends on the variety of blueberry. An intensive operation can have up to 2 plants per square metre with the width between rows at around 1.8 to 2.2 metres wide. At this density the substrate pots are touching each other down the length of each row.

10.2 Access to irrigation water

Canterbury farmers with existing water rights via either groundwater consents or shares in an irrigation scheme would be well placed to take up growing berryfruit hydroponically on part of their farm with the lowest quality soil. It has been reported that for individuals/ businesses looking to purchase land in Canterbury with existing water rights, they have reported having difficulty with existing consents having too low of an annual volume allocation to support hydroponic berryfruit production.

10.3 Water Quality

Quality water is critical for growing berryfruit hydroponically. Water testing would be required to ensure water quality is acceptable. For example, blueberries and strawberries are sensitive to sodium chloride, and strawberries are sensitive also to iron. There are measures that can be put in place to filter water if this is an issue. The surplus nutrient water solution can be recycled back into the hydroponic feeding system or applied to surrounding land through fertigation methods through the existing paddock irrigation system, i.e. the centre pivot. As part of this study the water quality from two irrigation schemes was tested and both provide water of a quality suited to hydroponic berryfruit production.

10.4 A mixed farm system approach

Currently most New Zealand farms have a focus on a single land use such as dairy or horticulture. However, this approach does not necessarily result in sustainable land use from an economic or environmental perspective and does not enable the best land use to be paired with land use capability. Diversifying land use within a farm diversifies income and provides greater resilience to the farm but also requires skilled operators across the range of farm activities.

Within Canterbury many farms have diversified land use based on the availability of water and, in some cases, have parts of the farm where the soil type is not really suited to the current land use or the area beyond a centre pivoted is not readily suited to broadacre farming practices. Often these are small areas of the farm, and therefore would need to diversify to an intensive land use, giving a high return that also fits with other land uses of the farm and can justify developing and employing skilled labour. These areas may also need to have a relatively low water demand to allow farms to stay within their water allocation.

Growing berries in protected culture systems, potentially in collaboration with other farmers, may fit a mixed farm system approach. Berries can utilise relatively small areas of land, can be grown on very poor quality soils, as the plants are grown in media and not soil, can be water and nutrient use efficient as water and nutrients are recycled or used in another part of the farm.

Growing berries within some mixed farm systems with a demand for labour (eg outdoor vegetables) may also provide benefits in spreading the labour demand across a range of farm activities thereby increasing long term labour opportunities or utilising labour in covered culture in periods of inclement weather.

While there maybe demand for some skilled labour this may be spread across more than one farm operating collaboratively to ensure full time utilisation of such labour. Labour requirements are expected to result in some seasonality of demand and thus proximity to a major urban area in Canterbury along with developing novel employment terms may help ensure there is adequate labour.

A mixed farm land use with covered berry culture could be a good opportunity for some Canterbury farms to diversify farm income, utilise land, water and nutrients effectively and to spread labour requirements for some employees.

10.5 Infrastructure and Logistics

Logistics will be important for a successful domestic and or export berry industry in Canterbury. The location of farms in relatively close proximity to Christchurch as a domestic or international distribution hub will be important.

Berries will require specific infrastructure on the farm or in the region. In a mixed farm scenario some of this infrastructure may already exist on farm, such as access to and pumping for water, or in the region, such as coolstores. For covered berries grown in substrate there will be significant investment needed in covered structures, hydroponic systems, plants and growing support systems. There will also be ongoing costs such as repairs and maintenance to the covered structures, replacement of plants and growing substrate.

The coolstore facility need not be on farm but systems need to be in place to rapidly remove field heat to preserve quality on farm or at the coolstore complex needs to be readily accessible to receive berries throughout the day. Thus coolstore space could be leased or owned cooperatively with other growers.

11.0 Health Benefits of Berries

There are a number of health benefits of berries that can be provided through eating either fresh or in processed forms. The best range of health benefits could potentially be provided by a blended mixture of berries that could be in a processed form and utilising reject berries.

- Berries are high in antioxidants like anthocyanins, which may protect your cells from free radical damage, reduce oxidative stress and reduce heart diseases.
- Berries may improve blood sugar and insulin response when consumed with high-carb foods or included in smoothies.
- Berries contain fibre which may increase feelings of fullness, as well as reduce appetite and the number of calories your body absorbs from mixed meals and lower your risk of developing type 2 diabetes.
- Berries are low in calories yet rich in several vitamins and minerals, especially vitamin C and manganese. Vitamin C has been found to protect from cancers of the oesophagus and colon.
- Berries may help reduce inflammation and decrease your risk of heart disease and other health problems.
- Berries have been shown to lower LDL (bad) cholesterol levels and help protect it from becoming oxidized, which may reduce your risk of heart disease.

	Blueberries	Raspberries	Blackberries	Strawberries
One cup is equal to (gms)	148	123	144	144
Calories	84	64	62	46
Fibre (gms)	3.6	8	8	3
Vitamin C	16% DV	36% DV	50% DV	94% DV
Vitamin K	24% DV	8% DV	30% DV	-
Manganese	22% DV	36% DV	50% DV	24% DV

One cup of each berry contains different amounts of health providing compounds.

DV = Daily Value

Blueberries

Blueberries contain antioxidant polyphenols called anthocyanins. Anthocyanins from blueberries may reduce oxidative stress, lowering the risk of heart disease in both healthy people and those at high risk for the condition.

Blueberries are rich in calcium, iron, magnesium, phosphorus, zinc, and vitamin K all of these promote good bone health.

In addition, blueberries may improve other aspects of heart health by lowering LDL (bad) cholesterol in the blood, reducing the risk of heart attack and enhancing the function of arteries.

Blueberries may lower the risk of diabetes as well. Studies have shown that blueberries or bioactive blueberry compounds can improve insulin sensitivity and reduce the risk of type 2 diabetes by up to 26%.

Raspberries

Raspberries also contain antioxidant polyphenols called ellagitannins, which can help reduce oxidative stress. One study showed that when cyclists consumed a drink containing raspberries and other berries, oxidative stress caused by exercise decreased significantly.

The most commonly consumed raspberries are the American red or European red varieties. However, there are many different types of raspberries. Black raspberries, for example, have been shown to have several health benefits, too. In fact, they may be especially good for heart health but only from limited studies.

Strawberries

Strawberries are good for heart health. In fact, a study of more than 93,000 women found that those who ate more than 3 servings of strawberries and blueberries per week had over a 30% lower risk of heart attack. Other studies have shown that strawberries may reduce a number of risk factors for heart disease, including blood cholesterol, triglycerides, and oxidative stress.

Strawberries can also reduce inflammation by lowering inflammatory chemicals in the blood, such as IL-1 β , IL-6, and C-reactive protein (CRP).

Strawberries contain pectin that lowers the levels of LDL (bad cholesterol) in the body.

Moreover, strawberries may help control blood sugar levels, which is important for preventing diabetes. In fact, a small study found that when people with overweight consumed strawberries with a high carbohydrate, moderate fat meal, they saw a reduction in insulin response.

Finally, another study showed that eating 60 grams per day of freeze-dried strawberry powder reduced oxidative stress and inflammatory chemicals in people at risk of developing esophageal cancer.

Blackberries

Blackberries contain high levels of antioxidants, such as anthocyanins. Antioxidants help people to fight against the adverse impact of free radicals in the body. Free radicals can damage cells and are thought to be closely involved in the aging process plus other health conditions, such as cancer and heart disease.

Blackberries contain vitamin A, which serves several functions in the body. Vitamin A supports the immune system, which combats infections and illness. It also supports the growth and maintenance of teeth and bones, as well as keeping skin health

<https://www.healthline.com/nutrition/8-healthy-berries>



Appendix 1: Detailed Economic Models

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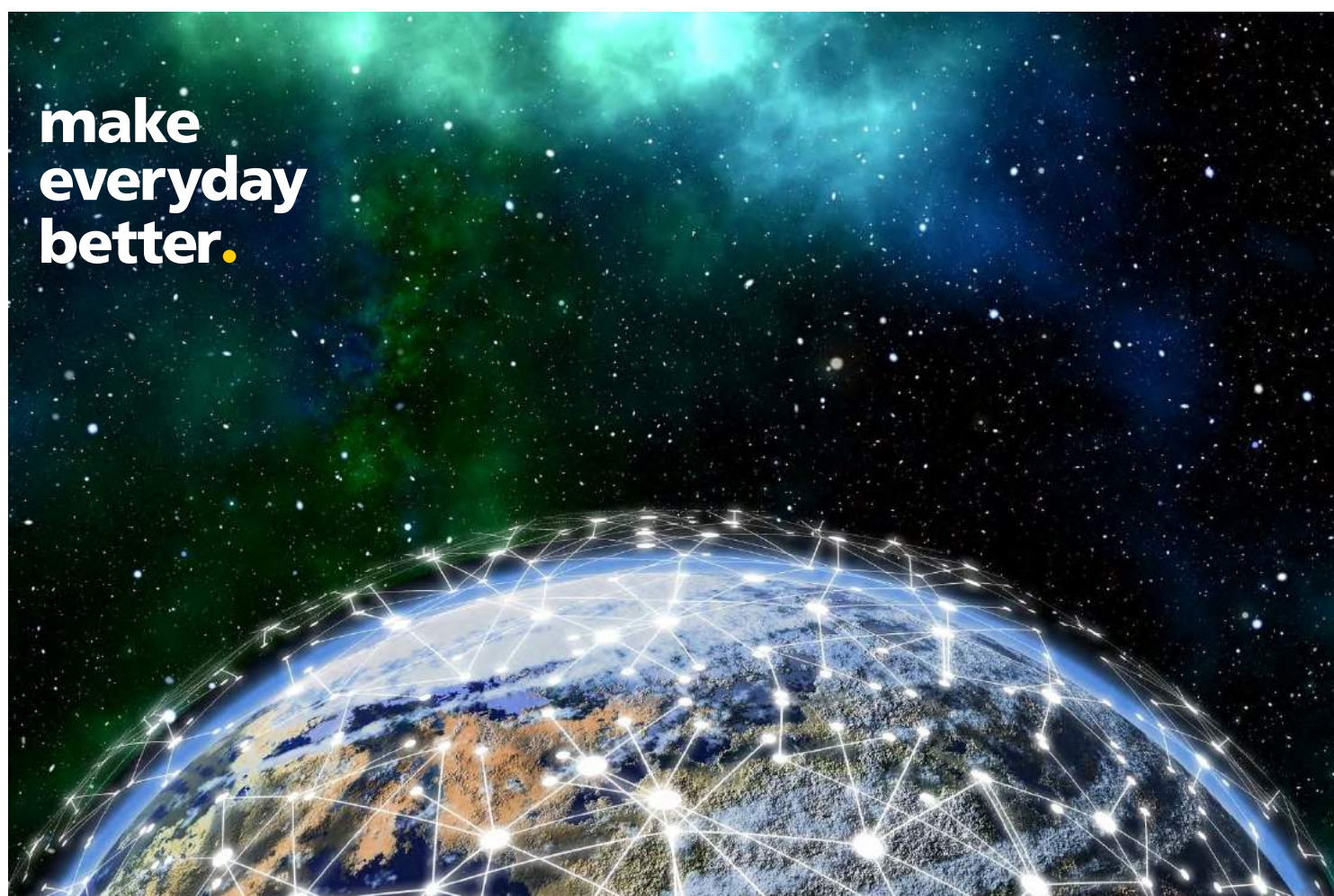
Canterbury Mobile Blackspots – Phase 2

Final Report

Prepared for Environment Canterbury (on behalf of the Canterbury Mayoral Forum)

Prepared by Beca Limited

3 December 2021





Creative people together transforming our world

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Project Purpose

This project was initiated by the Canterbury Mayoral Forum which is made up of the Chair of Environment Canterbury and the Mayors of the 10 territorial authorities in Canterbury and followed on from Phase 1 of the project, which focussed solely on state highways and was delivered March 2021.

In our increasingly connected world, having access to mobile coverage in as many areas as possible is becoming enormously valuable and in some cases even essential for day to day operations. The Mayoral Forum recognises this significance and wanted to better understand the potential economic and social benefits of reducing mobile blackspots on improved productivity and logistics, safety and emergency operations and the tourism sector. Using this information alongside a ground testing process the final task is to advocate targeted investment in mobile telecommunications infrastructure where it is likely to have the greatest impact on economic and social development in the region.

The purpose of this project was to test current voice mobile coverage data by completing on the ground field testing on Canterbury local roads and using this data to gain an understanding of mobile blackspot locations in the Canterbury Region. Once these mobile blackspot locations were identified, they were then defined and prioritised, working with a group of stakeholders. The project also sought to provide some validation of mobile coverage data that already exists to understand how well this data matched the ground tested data to help inform how it can be used to undertake wider analysis in the future.

Methodology

The Canterbury Mayoral Forum reached out to Environment Canterbury and the territorial authorities to gain an understanding of the local roads that they were interested in performing drive testing on as well as to gain their confirmation that they would be prepared to provide field staff to undertake the collection of drive test data to capture mobile signal service levels. This data was used together with other data gathered during the project to identify road segments as mobile blackspots. Stakeholder engagement was then undertaken to confirm and prioritise these locations.

The methodology consists of the following steps:

1. Desktop study and data collation
2. Field data collection using NetMonitor mobile application
3. Identification of mobile blackspots
4. Matrix of social and economic datasets to assist with prioritisation
5. Capture of anecdotal information from stakeholders
6. Stakeholder engagement workshop

1. Desktop Study and Data Collation:

The desktop study explored the datasets that were already available which could help inform early prioritisation of areas, provide a contextual picture of coverage, and be used as a basis for testing the driven data against. As part of the study Crown Infrastructure Partners (CIP), Rural Connectivity Group (RCG) and network providers were contacted to find out what regionally specific mobile coverage data they had, including drive test data, planned tower build locations and the proposed coverage of these towers. Available mobile coverage data was also gathered from telecommunications companies.

2. Mobile Data Collection and Processing

The Mayoral Forum engaged with the regional council and territorial authorities to establish key areas of concern for this project. Environment Canterbury and five of the ten territorial authorities responded to the request, and staff from these councils were engaged to capture mobile signal data. Testers were provided with three mobile phones, one for each mobile network (Vodafone, Spark and 2Degrees). A drive tested dataset was collected and built to support existing evidence of blackspots across Canterbury local roads. An application called “NetMonitor Cell Signal Logging Lite” (NetMonitor) was used to capture signal service levels as received from towers to each mobile device.

Instructions and guidance on how to use the application can be found in Appendix A. Processing of the resulting data captured included converting the text files into a geospatial format, testing each data point for the required service level, and distinguishing data collected on the road network.

The required service levels used on this project were supplied by RCG who are working with CIP to build mobile voice coverage across the country. Where the received signal strength indication (rssi) is greater than or equal to -123 dBm (decibel-milliwatts) as detected inside the vehicle the service level for mobile voice calls is met, as shown in Figure 1.

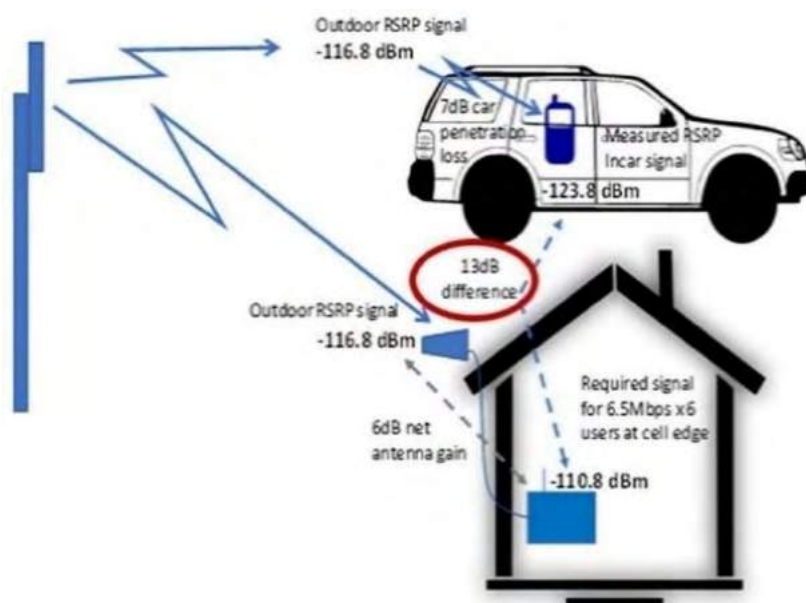


Figure 1 Link diagram showing mobile signal strength levels (dBm) in a vehicle. As provided by the Rural Connectivity Group to Crown Infrastructure Partners.

Figure 2 shows the coverage of NetMonitor data that was received. While this coverage is not complete and exhaustive coverage of local roads in Canterbury, it does provide direct and measurable observation of mobile service levels across the key areas of concern established by the Territorial Authorities. Approximately half of the data points collected were missing latitude and longitude values, which was caused by such factors as satellite coverage/reception or issues with specific phones GPS hardware. Most of these records still had useful data for cell coverage and their signal strength. By joining these records to other network datasets using the 'sys_time' field (a date time field with accuracy to the second value) the location proved to be very close as these were collected at the same time. A small number of records joined to other datasets in the incorrect spatial location in error due to duplicated 'sys_time' values where another drive tester happened to be collecting data in another location at the same time. When investigated these records showed up as a sparse and dispersed small set of points and were discarded in the mobile blackspot gap analysis.

This brought the number of records with a location to 2/3 of the data gathered. Some additional analysis was undertaken into the missing GPS records to understand if the missing data was dotted throughout the data or large portions in succession. From this we found:

- Of the 203 datasets received 22 datasets were missing GPS on all the data points
- There were only two runs that had data GPS data missing from all three network providers
- On average the percentage of GPS data missing per dataset received was 17% and in most instances was dotted throughout the datasets

If required, further analysis could be undertaken to decrease the number of records missing GPS data, however this would require a deeper inquiry into the data than has been scoped for this project. For the purposes of this project sufficient data was received to undertake the analysis required to identify mobile blackspots on Canterbury local roads.

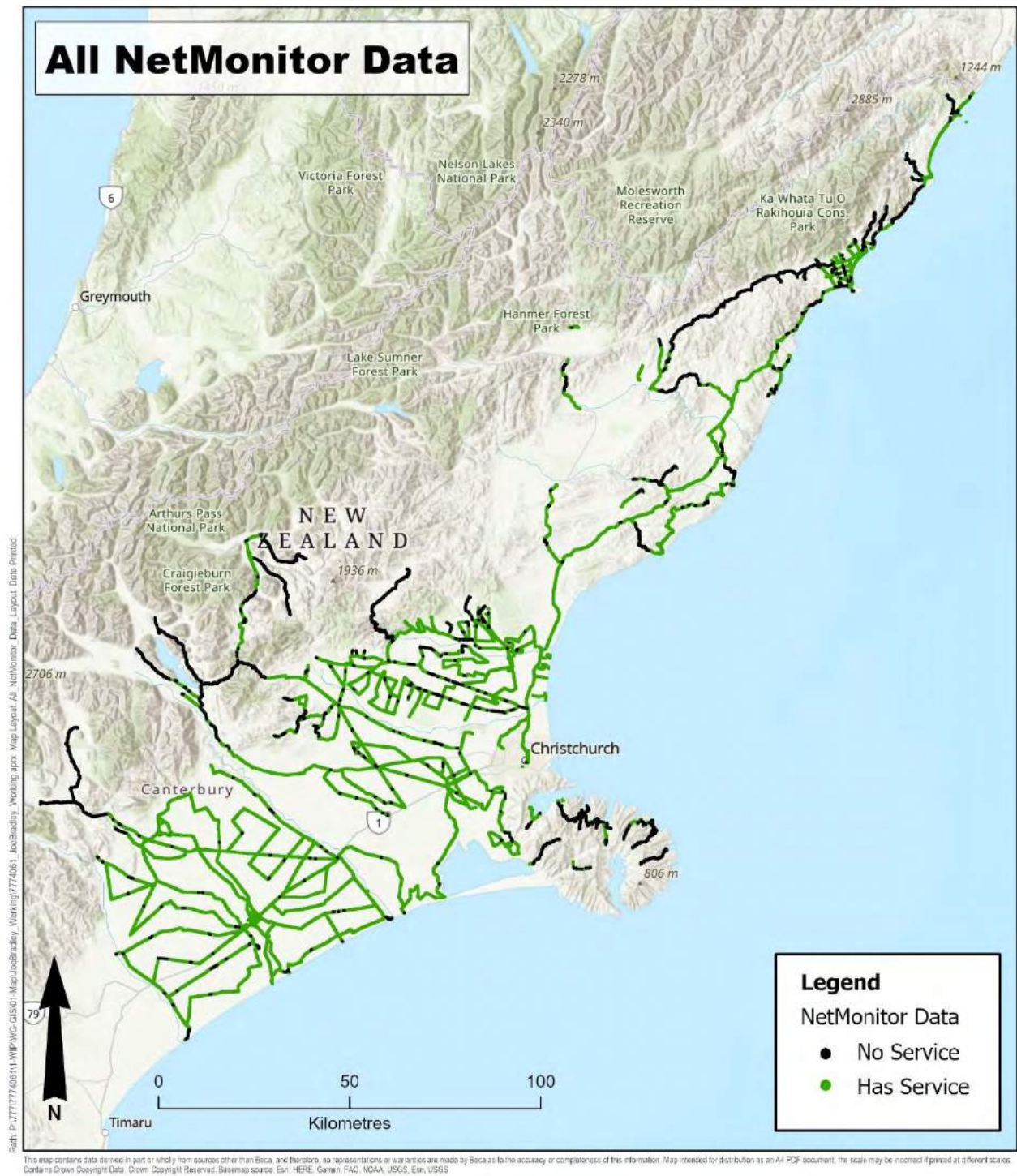


Figure 2 NetMonitor Data received from drive testers

Figure 3 presents the NetMonitor data that has been classed as a mobile blackspot with a rssi value of <-123 dBm as density maps. The blue points show where there is a low number of mobile blackspot points in the same spatial location and the red points show where there is a high concentration of mobile blackspot points in a spatial location. Map 1 shows all three network providers combined and maps 2, 3 and 4 are separate maps for each network provider. This highlights a general correlation of mobile blackspots across the three networks for areas such as the Kaikoura Inland Route, Lees Valley, and the Canterbury Foothills. However, it also shows some differences between networks, for example Vodafone has more areas where the NetMonitor registered a drop in signal strength below the required threshold around Banks Peninsula than both 2Degrees and Spark.

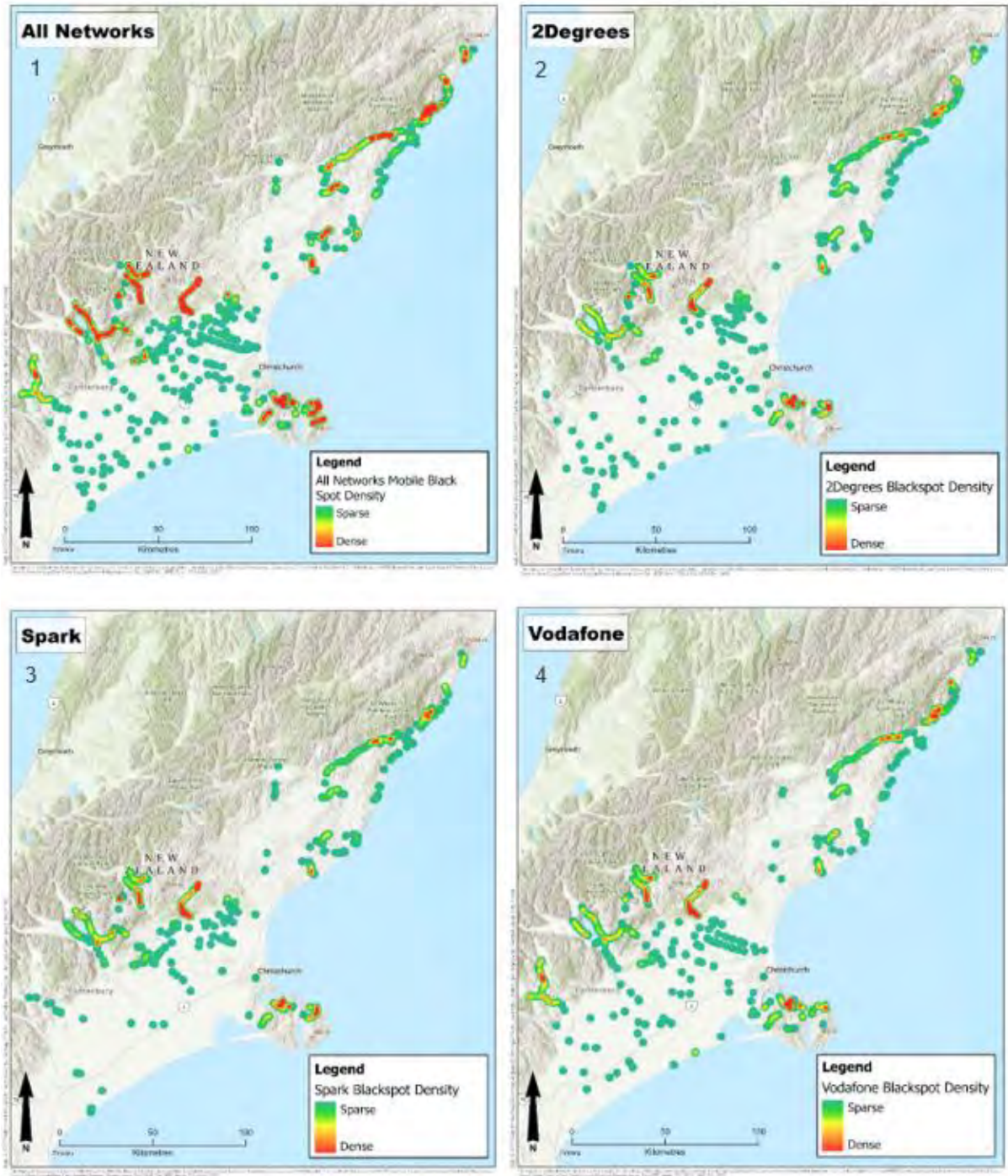


Figure 3 Density heat map of NetMonitor data received that has been categorised as No Service for all networks combined and for each of the network providers

4. Mobile Blackspot Priority Analysis

Each mobile blackspot has been analysed against the datasets listed in Table 1 to capture the attributes of the layer against the blackspot. These metrics were used to understand some of the criteria regarding the social and economic effects of mobile blackspots including crash counts on the mobile blackspot, population numbers affected and number of emergency call outs along the segment.

Table 1 Priority Matrix Inputs

Dataset Name	Description	Source	Open data (if available)
Segment Length	The distance of each blackspot segment	Mobile blackspot identification output	
Estimated Resident Population (2018)	Intersect on Statistical Area 2 boundary. Where more than one area intersects a segment the population with largest area is selected.	Stats NZ 2018 Census by Statistical Area 2 for the Canterbury Region	Weblink
Crash Data	Selected within 50m radius of continuous blackspot. Sum of each crash type <ul style="list-style-type: none"> - Fatal - Serious - Minor - Non-injury 	Waka Kotahi NZ Transport Agency	Weblink
Fire and Emergency NZ Incident Data	This incident record contains point locations for call out incidents, including a time and date alongside a categorised incident type. Provided by Chris Munro, the Operations Manager for the Southern Communications Centre.	Fire and Emergency NZ 2020	Private dataset
Townships	Townships that a mobile blackspot goes through.	Land information New Zealand	Weblink

5. Capture of Anecdotal Mobile Blackspot Information:

A list of stakeholders was provided by the Mayoral Forum for Phase 1 of the project including contacts from each of the territorial authorities, rural post, milk companies, emergency management teams and the NZ Trucking association. For Phase 2 we used this list and some additional stakeholders that were recommended at the conclusion of Phase 1, a full list of stakeholders can be found in Appendix B. Stakeholders were provided with a crowdsourcing web map (see Figure 5) which allowed them to identify locations within the region that they understood to be mobile blackspots. It also offered the opportunity for the stakeholders to provide feedback on how their business was impacted by the lack of coverage.

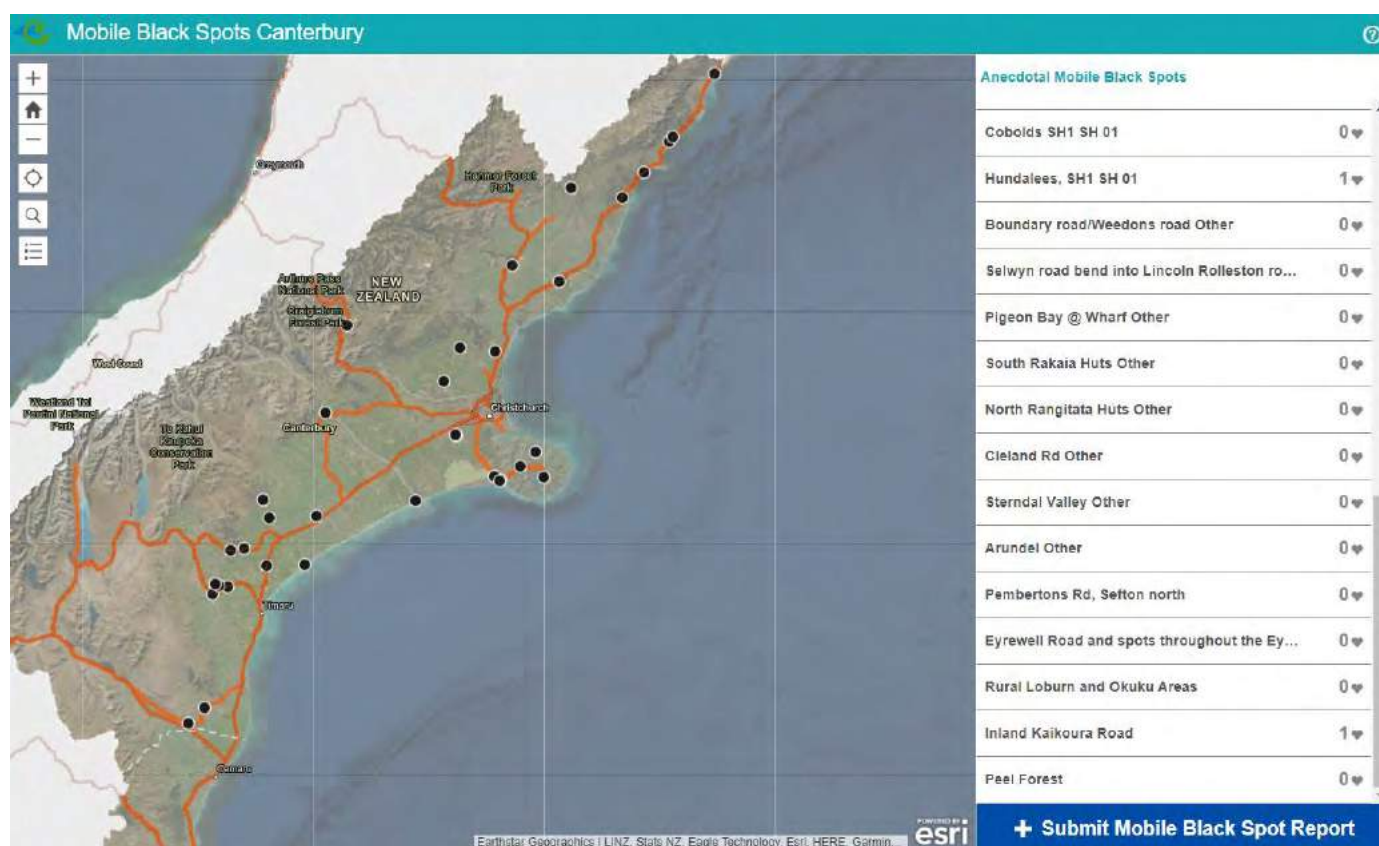


Figure 5 Stakeholder identified mobile blackspots from Phase 1 and Phase 2

6. Stakeholder Engagement Workshop:

A stakeholder engagement workshop was held to engage with nominated staff from territorial authorities, regional council, emergency services and stakeholders from the farming private sector. The purpose of this workshop was to understand the key drivers for mitigating mobile blackspots and the impacts of mobile blackspots on their businesses. This process is explained in more detail below.

Stakeholder Engagement Workshop Feedback Summary

Phase 2 of this project was introduced to key stakeholders identified by the Mayoral Forum via an email on 29 October 2021. Once the drive test data was collected, a workshop was held with the stakeholders to interrogate mobile blackspot data identified in the process described above. The workshop was held on Tuesday 23 November 2021 and was attended by staff from the below organisations. This was a subset of the original list of stakeholders as identified in Appendix B.

- Waimakariri District Council
- Selwyn District Council
- Hurunui District Council
- Kaikōura District Council
- Christchurch City Council
- Environment Canterbury
- Timaru District Council
- Ashburton District Council
- Mackenzie District Council
- St Johns

- Fire and Emergency NZ (FENZ)
- Fonterra
- Federated Farmers
- Enterprise North Canterbury

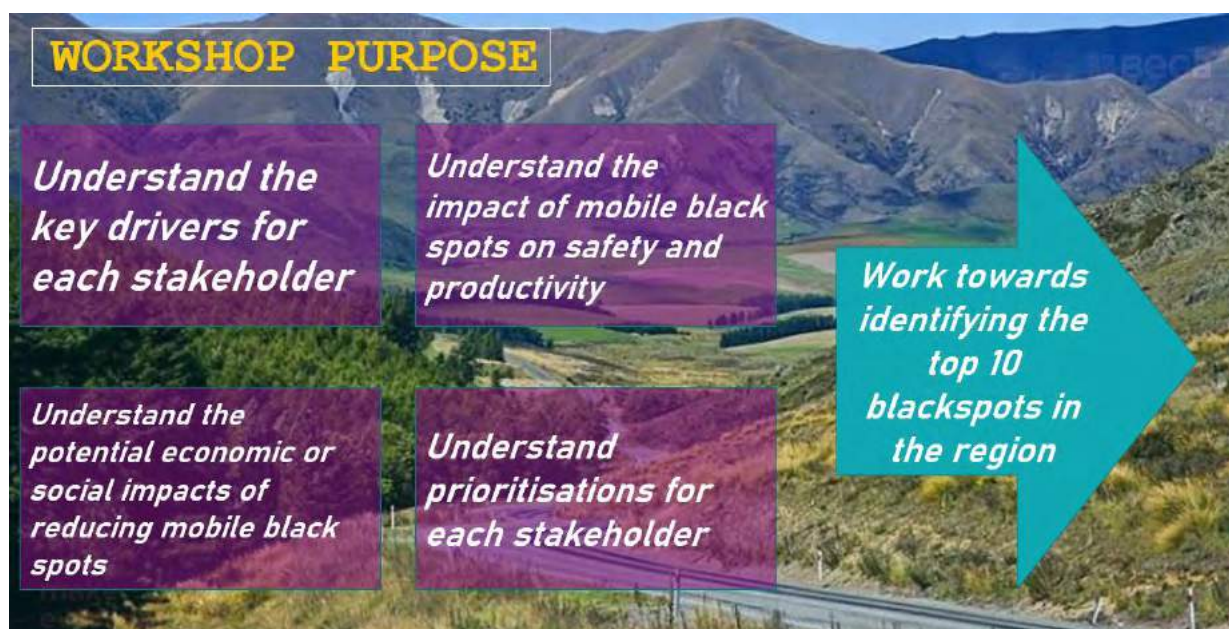


Figure 6 Workshop questions put to stakeholders

After a general introduction to the project, attendees were given the opportunity to outline their key drivers and the impacts of mobile blackspots as shown in Figure 6. A Miro Board was used to capture post-it notes from each stakeholder and these were discussed and categorised into themes. The key drivers and impacts as identified by the workshop attendees are described below. It is important to understand that the information captured below is anecdotal in nature and only includes information provided by the stakeholders that attended the workshop and is a record of what was discussed rather than a full assessment of the impacts.

Key Drivers

St John and FENZ were principally concerned with reducing response time to incidents, either through improving the speed that callers could connect to emergency services or improved accuracy of Enhanced Caller Location technology. This technology pinpoints the location of an emergency call by providing coordinates (therefore, if an incident occurs in a mobile blackspot and someone must travel away from the incident to get signal or call from a landline, time is added to the response while the incident site is located). They were also concerned about improving the safety of their staff, particularly where they have only one paramedic in a crew. Further to this, advice on how to respond to a situation is provided from the call centre to paramedics and this cannot be undertaken within a blackspot, therefore improved coverage improves standard of care.

Fonterra and Federated Farmers were principally concerned with improving on-farm safety and safety in transit to farms, increasing access to and managing costs for mobile connections, improving ability to use latest technology and to use technology to improve environmental compliance, reducing the need to travel for meetings by using online tools, improving social connectivity of farmers and their families, and improving work planning.

Federated Farmers provided us with the results from the Rural Connectivity Survey for 2019, 2020 and 2021.

The territorial authorities were concerned with community safety including:

- Improved coverage of Civil Defence Tools (bulk messaging regarding natural disasters and events such as Covid19 outbreaks, boil water notices)
- Safety of their staff and contractors when out on site or travelling around their district
- Supporting better access to *555 calls and decreasing police response times
- Community connectivity and the flow-on effects on wellbeing and health

Furthermore, territorial authorities were also concerned with improving the ability to gather information about assets and incidents across the region (i.e., water quality data collection and integration, reporting of maintenance / general complaints, wandering stock) and providing more consistent and reliable access to the internet to support tourism and leisure activities.

Impact on Productivity:

The workshop attendees discussed several impacts on productivity. Councils currently rely on telemetry equipment that uses radio technology for communication. This equipment comes at a significant cost so being able to explore and use alternative methods with improved cell phone coverage could save the councils' money.

The emergency call centre now uses Enhanced Caller Location technology that locates where a call has been made from via GPS. This improves the ability of emergency staff to get to an incident quickly as 80% of calls come from cell phones.

Civil Defence relies on bulk emergency messaging services to distribute key urgent communications i.e., emergency event evacuations.

There are efficiencies to be gained for farmers and councils to be able to do work planning live and update instantly, rather than having an additional uploading task when staff are back in service. This also reduces drive time with staff having to drive in and out of service to complete tasks and move to the next. The ability to connect to organisational networks reduces the need to print documents and improves ability of staff to work in the field.

Lack of mobile coverage or patchy mobile coverage acts as a lid to how big a company can grow before they need to relocate.

Connectivity improves resilience of organisations because staff can still contribute while working from home. Connectivity also improves the ability of farmers to multitask and undertake tasks without constraints. Inability to access mobile connectivity reduces innovation.

There could be improved environmental compliance and outcomes if farmers could use the technology available to them while they are on the farm.

Impact on Social and Safety

The workshop attendees discussed that improved connectivity has the potential to reduce isolation, loneliness and improve people's sense of wellbeing. It also improves access to community service organisations and allows for working from home opportunities. Furthermore, it improves the ability of rural

schoolchildren to participate in education opportunities remotely as well as enabling adults to upskill and further their education remotely.

Socially connected and supported families create connected and supported communities.

There are long term psychological impacts on callers who have had trouble connecting with emergency services.

Organisations need to be able to ensure the safety of staff using rural roads.

Stress can be caused by a variable connection and inability to plan mobile-reliant work. This was exacerbated by COVID-19 lockdowns with multiple household members at home and reliant on connecting. Poor connectivity can prevent people carrying out routine tasks (e.g., emails, accounting, compliance administration). Given many tasks are time-sensitive, and the demands on people's time, this causes frustration and stress.

Impacts on Economic Activities

The workshop attendees discussed a number of possible impacts on economic activities. These included that it is common for farmers to employ monitoring technology that uses cell phone coverage to manage farms. Providing more uniform cell phone coverage levels supports the levelling of the playing field for farmers across the region.

Improved cell phone coverage allows people to access the internet and data without having a monthly plan and via a range of devices. This enables and improves social connectivity without the same financial outlay.

Increased integration between agencies and businesses and increasing technology in all sectors and industries will require better connectivity. Improved cell phone coverage will support this.

Improved connectivity has the potential to improve the ability of rural or remote industries to attract and retain staff.

Prioritisation

Following the exploration of the key drivers and impacts, a prioritised list of mobile blackspots was discussed with the workshop attendees in further detail and input from each attendee was gathered to further understand the impact of that specific blackspot. The blackspot prioritisation provided a number of insights, including some specific additional blackspots provided by Federated Farmers. This discussion is captured below in Table 2.

Table 2 summarises the highest priority mobile blackspots by geographic area and provides summaries of the prioritisation matrix criteria for that was outlined in Table 1. The mobile blackspots for each network provider are not always on the same road segment hence the differences in length and summarised prioritisation criteria between the network providers. The mobile blackspots for each geographic area have been mapped and can be found in Appendix C.

Additional Stakeholder Data

Following the stakeholder engagement workshop Federated Farmers provided access to their rural connectivity survey data from 2019 – 2021. This included information regarding the strongest phone signal on each farm and the percentage of the farm that has mobile coverage. This data was passed on to the Mayoral Forum.

Table 2: Top priority mobile blackspot following workshop and prioritisation exercise.

Please note that the mobile blackspots for each network are not necessarily in the same geographic position at each blackspot location area, therefore there may be some significant differences in the prioritisation indicators between networks.

Blackspot Location	Network	Sum Length (km)	Sum FENZ Incidents (All)	Average Resident Population 2018	Total Crash Count	Discussion	Built and planned coverage	Priority
Canterbury Plains - Charing Cross	2Degrees	1.06	2	1875	1	A lot of lifestylers live in the vicinity. Proximity to Christchurch and flat so lack of connectivity is not understood		Low
	Spark	0.65	8	920	21			
	Vodafone	0.66	8	920	21			
Canterbury Plains - Eyrewell	2Degrees	4.04	4	1160	18	A lot of lifestylers live in the vicinity. Proximity to Christchurch and flat so lack of connectivity is not understood		Medium
	Spark	2.21	4	1500	9			
	Vodafone	9.63	17	1628	47			
Canterbury Plains - Loburn	2Degrees	13.09	8	1500	7	A lot of lifestylers live in the vicinity. Proximity to Christchurch and flat so lack of connectivity is not understood		Medium
	Spark	7.54	2	1658	2			
	Vodafone	3.81	0	1257	0			
Kaikōura Alternative Route	2Degrees	60.49	22	2100	53	The backup state highway so can be heavily used. Long sections with no connectivity	Lyford and Inland Roads towers planned for 2022	High
	Spark	58.27	23	2070	52			
	Vodafone	58.27	22	2061	70			

| Stakeholder Engagement Workshop Feedback Summary |

Blackspot Location	Network	Sum Length (km)	Sum FENZ Incidents (All)	Average Resident Population 2018	Total Crash Count	Discussion	Built and planned coverage	Priority
Leader Road, Waiau	2Degrees	13.56	10	2310	17	Long, continuous stretch of mobile blackspot, with relatively high population in the area		Low
	Spark	15.22	10	2310	17			
	Vodafone	13.67	10	2310	17			
Lees Valley	2Degrees	31.95	2	955	15	During emergencies, this community is isolated. During the last slip event, there was no mode of comms available. RTs even cut out. Challenging terrain		Medium
	Spark	32.16	2	1027	15			
	Vodafone	35.12	2	955	18			
Okains Bay Campground	2Degrees	17.38	10	640	13	A lot of concern about this blackspot highlighting that there is a school and camping ground in the vicinity	Lavericks Tower planned for January 2023	High
	Spark	16.48	10	640	13			
	Vodafone	19.06	10	640	13			
Purau - Port Levy	2Degrees	19.53	31	640	11	Long distance to travel to get coverage. A lot of tourists use this route. Concern for roading contractors, DoC staff, a lot of sole operators, small scale farms, stock moved via the road	Port Levy Tower planned for October 2022	High
	Spark	18.41	19	640	11			
	Vodafone	25.96	40	714	24			
Rangitata River Mouth Camping Ground	2Degrees	0.79	0	1630	0	Community vulnerable to coastal hazards and patchy coverage means ability to receive alerts is not certain		Low
	Spark	2.15	1	1630	0			
South Rakaia Huts	Vodafone	1.07	0	2590	0	Community vulnerable to coastal hazards and patchy coverage means ability to receive alerts is not certain		Low

Priority Mobile Blackspots

Prioritisation of mobile blackspots on local roads in Phase 2 was harder to define than the state highways in Phase 1. The local roads tested and discussed were in areas of lower population numbers and on roads that are driven less which was reflected in the lower crash and FENZ incident numbers. We also found that blackspots needed to be grouped together over larger geographic areas as there were clusters of patchy mobile blackspots. The workshop attendees discussed their priorities and based on the data collected and that discussion, the following top 10 priority areas have been selected and shown in alphabetical order:

1. Canterbury Plains - Charing Cross
2. Canterbury Plains - Eyrewell
3. Canterbury Plains - Loburn
4. Kaikōura Alternative Route
5. Leader Road, Waiau
6. Lees Valley
7. Okains Bay Campground
8. Purau – Port Levy
9. Rangitata River Mouth Camping Ground
10. South Rakaia Huts

These prioritised mobile blackspots were allocated a low, medium, or high priority rating based on the prioritisation criteria of population, road crashes and overall length as well as a reflection of the discussion within the workshop. For example, it was unanimous across most workshop attendees that the Kaikōura Alternative Route was a high priority, whereas areas such as the Rangitata River Mouth Camping Ground and South Rakaia Huts primarily concerned localised workshop attendees.

We do also acknowledge that from our understanding of RCG's forward works programme that over the next 12 months the installation of towers along the Kaikōura Inland Route and areas of Banks Peninsula will make a significant difference to the mobile coverage in these areas. This has not affected the prioritisation but should be considered in the planning of action the next steps undertaken by the Mayoral Forum in this project.

Conclusion

Mobile signal data was collected by engaging field staff from the regional council and five territorial authorities using an app called NetMonitor. Although the drive test data collected within this project has not produced a complete dataset of drive testing on all Canterbury local roads, the coverage area of collected data covers roads highlighted as areas of interest by the participating territorial authorities and provided sufficient data to undertake analysis for this project. The drive test data has been used in conjunction with other data collected during the project such as anecdotal information from stakeholders and mobile coverage maps available from telecommunications companies to provide segments of local roads where significant mobile blackspots can be found.

Some key inferences can be drawn from the data collected:

- The existing and planned mobile coverage data already available from telecommunications companies and CIP can be used generally at the macro level to determine the worst mobile blackspot areas.
- Using a combination of the data output from drive testing, anecdotal evidence and the telecommunications mobile coverage data can provide an understanding of the worst mobile blackspot areas and highlight areas for discussion or further testing if required. Additional analysis could be undertaken to decrease the number of data records that are missing GPS data if required.
- The data collected has provided suitable information for stakeholder engagement to take place allowing interpretation and prioritisation based on the contribution of the workshop attendees.

- The data collected using phones connected to all three network providers allows the comparison between the companies and also highlights areas that have a correlation of mobile blackspots.

The stakeholder engagement workshop allowed us to identify ten high priority mobile blackspot areas to be put forward for advocacy to central government, CIP, and telecommunications companies.

1. Canterbury Plains - Charing Cross
2. Canterbury Plains - Eyrewell
3. Canterbury Plains - Loburn
4. Kaikōura Alternative Route
5. Leader Road, Waiau
6. Lees Valley
7. Okains Bay Campground
8. Purau – Port Levy
9. Rangitata River Mouth Camping Ground
10. South Rakaia Huts

The most common driver from stakeholders that aided the prioritisation of these mobile blackspots was safety. Safety of council field staff, communities, emergency services staff working alone, tourists, on farm safety and all road users. Other drivers included community connectivity, information gathering regarding incidents and assets, more consistent and reliable access to the internet to support farming, telemetry technology and tourism and leisure activities.

A

Appendix A – NetMonitor Instruction Guide



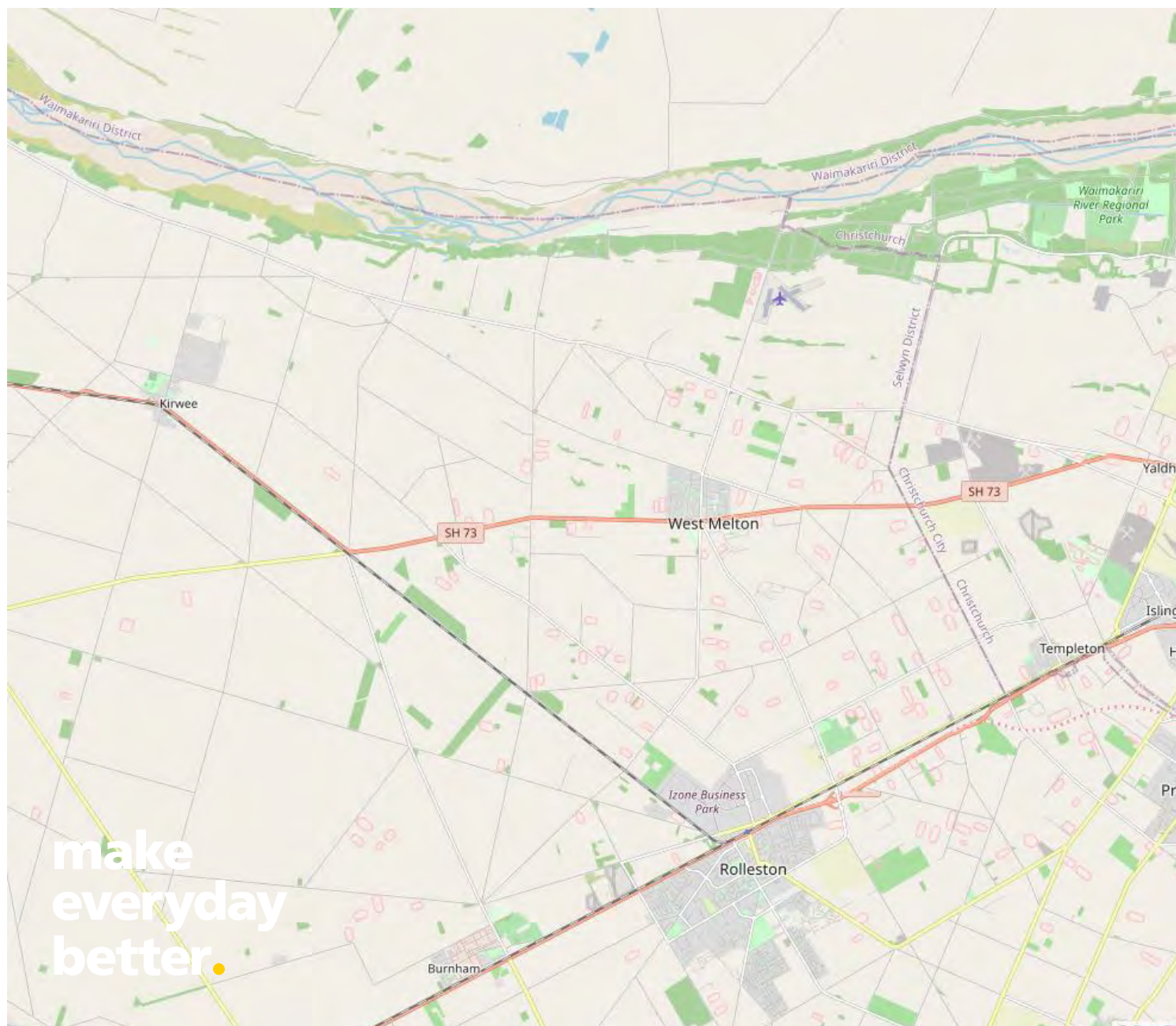
Canterbury Mobile Black Spots Data Capture Guide

NetMonitor Cell Signal Logging

Prepared for Environment Canterbury (on behalf of the Canterbury Mayoral Forum)

Prepared by Beca Limited

22 September 2021



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Appendices

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Revision History

Revision N°	Prepared By	Description	Date
1.0	Marc Graham	Draft for client review	08/06/2020
2.0	Bianca Clark	Draft for client review	22/09/2021
2.1	Bianca Clark	Final for issue to stakeholders	27/09/2021

Document Acceptance

Action	Name	Signed	Date
Prepared by	Bianca Clark		22/09/2021
Reviewed by	Orlando Kootstra		24/09/2021
Approved by	Orlando Kootstra		24/09/2021
on behalf of	Beca Limited		

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Executive Summary

Environment Canterbury has commissioned Beca to design and conduct a data gathering exercise with the intent to determine black spots in cellular coverage on roads chosen by the councils in the Canterbury Region. This document is intended to provide a guide to anyone who will be participating in the data gathering exercise.

It covers:

- The mobile application and hardware to be used
- How to configure the app for data gathering
- Safe operation while driving
- How to export data
- Where to send the exported data

1 The Mobile Phones and Networks

Data collectors will be provided with three mobile phones for capturing data, one on each mobile network:

1. Spark
2. Vodafone
3. 2Degrees

The three mobile phones should be kept together and used to collect data simultaneously. Each phone will be equipped with the NetMonitor App for collecting data. Instructions on how to use the app can be found in Section 2.

NetMonitor is designed to run on the Android operating system. It requires access to the cellular hardware that is not possible on iOS devices. Phones are required rather than tablets, even if a tablet has a sim card for cellular data. The phone should run Android 4.3 or later. **Please use the mobile phones supplied by the Mayoral Forum.**

2 Operating NetMonitor & Safety Recommendations

Do not interact with the phone or application while driving. Any time you need to interact with the phone application the vehicle should be stationary and parked in a safe location.

Steps to capture Cell Signal data (set up in stationary vehicle)

1. Ensure mobile phones are fully charged as regular use of the GPS can deplete the battery quickly.
2. Open the app on each phone.

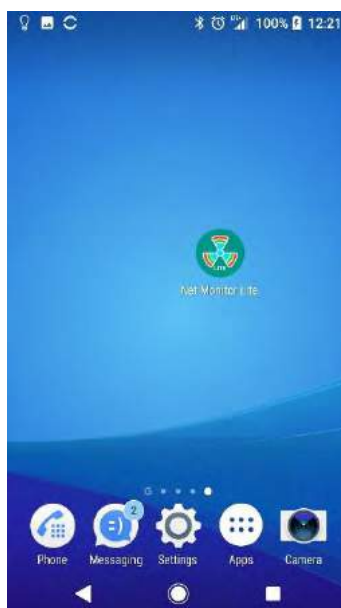


Figure 1 App Icon

3. Begin capturing data in a new session. To start a session, press on the Red circle in the Top Right corner (indicated with the yellow arrow). Ensure this is done on all three phones.



Figure 2 Begin recording options

4. Ensure phones are in clear view of the sky and mounted in a car device holder or properly secured to limit movement in a location that is not distracting to the driver.
5. Where possible ensure the phones are plugged in to genuine tested charging cable as regular use of the GPS can deplete the battery quickly.
6. Follow NZ Legislation requirements outlined in [7.3A Ban on use of mobile phones while driving](#).
7. Once the user has driven their route, they should pull over to a safe location ensuring the vehicle is stationary before stopping data recording.
To stop data recording press on the White square in the Top Right corner (indicated with the yellow arrow).



Figure 3 Stop data recording

Users can start and stop recording as many times as they like. Each session will be recorded and stored as separate sessions in the application. **Each session must be exported and emailed separately.**

3 Exporting and emailing NetMonitor data

Each session should be exported from the application as a CSV file and emailed to project-48116@workspace.beca.com.

The user should press on the “Sessions” Tab (Indicated with a yellow arrow).



Figure 4 Sessions tab

1. The User should long press on each session to export and will be asked to choose an action. Choose “Export Session to CSV File” (Indicated with a yellow arrow). Choose the “Email” option (Indicated with a yellow arrow) and select Gmail. The app will launch; email the file to project-48116@workspace.beca.com.

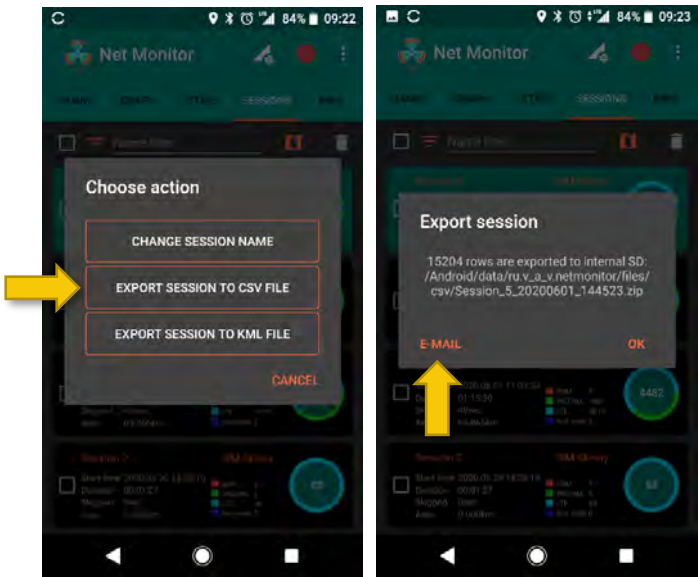


Figure 5 Export session to CSV file via email

Once the sessions are emailed the users can delete the data from their phones. Select all sessions to delete using the check boxes on the left-hand side and pressing the delete icon (Indicated with a yellow arrow) in the top right of the session list.



Figure 6 Selected sessions

4 Help

If you have any issues using the app or the phones, please email bianca.clark@beca.com.

B

Appendix B – Communication and Engagement Plan



Communication and Engagement Plan – Phase 2

Prepared for Environment Canterbury (on behalf of the Canterbury Mayoral Forum)

Prepared by Beca Limited

27 October 2021



Creative people together transforming our world

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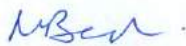
Appendices

No table of contents entries found.

Revision History

Revision N°	Prepared By	Description	Date
	Genevieve Doube	Draft	27 October 2021
	Genevieve Doube	Final	7 December 2021

Document Acceptance

Action	Name	Signed	Date
Prepared by	Genevieve Doube		7 December 2021
Reviewed by	Heather Law		14 December 2021
Approved by			
on behalf of	Beca Limited		

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1 Purpose

The purpose of this plan is to outline the communication and stakeholder engagement approach for the Canterbury Mayoral Forum Mobile Blackspots Project Phase 2.

2 Project Outline and Background

Good mobile coverage is an enabler for productivity and logistics, safety and emergency services, the tourism sector, relationships and connectivity, and communication in our rural communities.

Following on from Canterbury Mayoral Forum Mobile Blackspots Project Phase 1, which investigated mobile phone black spots on state highway routes, the Canterbury Mayoral Forum have engaged Beca to ground truth existing mapped mobile coverage data. Further work with key stakeholders will also be undertaken to understand the impact of mobile black spots within a number of territorial authorities, being -

- Waimakariri District Council
- Selwyn District Council
- Hurunui District Council
- Ashburton District Council
- Kaikōura District Council
- Christchurch City Council
- Environment Canterbury (covering roads in Timaru, Ashburton, Waitaki, Waimate, Mackenzie)

The territorial authorities involved in Phase 1 have each provided a list of roads that they identify as having poor mobile coverage. A desktop study will explore the datasets that are already existing to provide a contextual picture of coverage, and can be used as a basis for testing the driven data against.

There is government funding available through the Mobile Black Spots Fund (MBSF) to help tackle mobile black spots on state highways and at key tourist destinations. Initially, the Canterbury Mayoral Forum needs to identify the key black spots within the region, and then prioritise a list of the top 10 sites for which funding will be sought.

Crown Infrastructure Partners Limited (CIP) and the Ministry of Business Innovation and Employment (MBIE) have GIS mapped mobile coverage using publicly available data. However, experience on the ground and anecdotal evidence indicate that this may not paint an accurate picture of the actual coverage that can be achieved throughout rural Canterbury.

As part of the study, CIP will be contacted to establish what regionally specific mobile coverage data they hold, including drive test data, planned tower build locations and the proposed coverage of these towers. Available mobile coverage data will also be gathered from telecommunications companies. We will also interface with CIP and the telecommunication providers to understand what constitutes an acceptable level of service for cellular data and communications.

Once the full list of black spots has been identified, Beca will facilitate a virtual workshop with the key stakeholders so that we can collectively prioritise the top 10 sites.

3 Communication Objectives

The following communication objectives have been identified for this project:

- Key stakeholders are identified and invited to participate

- Key stakeholders are well informed of the project early in the process
- Key stakeholders understand the project timeframe and when they will have opportunities to feed into the process
- Key stakeholders' knowledge and resources support the information requirements for the project
- Key stakeholders feel that their input has been considered and has helped to shape the priorities
- Key stakeholders buy into, and support, the project outcomes
- Key stakeholders understand the limits of the project scope
- Key stakeholders feel that there is clear understanding of the issues each stakeholder faces

4 Roles and Responsibilities

The below table outlines the key team members, and interfaces with Environment Canterbury and Mayoral Forum -

Role	Name	Organisation	Responsibility
Environment Canterbury Chair	Jenny Hughey	Environment Canterbury	
Canterbury Mayoral Forum Chair	Sam Broughton	Environment Canterbury	
Canterbury Mayoral Forum secretariat – Principal Advisor	Maree McNeilly	Environment Canterbury	Communications with the forum
Project Director	Orlando Kootstra	Beca	Job Director
Project Manager	Bianca Clark	Beca	Job Manager - main client contact. Has weekly meetings with the Canterbury Mayoral Forum secretariat – Programme Manager
Canterbury Mayoral Forum secretariat – Programme Manager	Rosa Wakefield	Environment Canterbury	

5 Communication Protocols

Genevieve Doube (Beca) will prepare and update the Communications and Engagement Plan during the project, working closely with Bianca Clark, Beca Project Manager and Rosa Wakefield, CREDS Programme Implementation Manager.

All documents will be reviewed by the Project Director Orlando Kootstra, Project Manager Bianca Clark (Beca) and Project Manager Rosa Wakefield (Canterbury Mayoral Forum secretariat).

Engagement and coordination with the relevant stakeholders will be initiated by Genevieve Doube. Relationships with Environment Canterbury staff will be managed by Bianca Clark.

COVID impacts

As of 6 September 2021, indoor gatherings up to 50 people are allowed. However, organisations may have different approaches to Health and Safety requirements for their staff which may impact their ability to attend face to face meetings and workshops. Digital engagement techniques such as MS Teams call or Miro 'brainstorming' boards will be utilised.

6 Stakeholders

Environment Canterbury previously supplied a list of stakeholders to be contacted in the first instance, which we have used as our starting point. Where the employee no longer works at the organisation, we have endeavoured to find an alternative contact. We have also included the attendees from the Phase 1 workshop and extended the stakeholder group to include several additional organisations. These details are provided in the table below:

Organisation	Contact	Contact Details
Kaikōura District Council	Dave Clibbery Sam Murphy	Dave.Clibbery@kaikoura.govt.nz sam.murphy@kaikoura.govt.nz
Hurunui District Council	Hamish Dobbie, CE, and Chair of the Canterbury Operations Forum Dan Harris	hamish.dobbie@hurunui.govt.nz dan.harris@hurunui.govt.nz
Waimakariri District Council	Jim Palmer, CE Gerard Cleary Jenny Wilkinson Carl Grabowski	Jim.Palmer@wmk.govt.nz gerard.cleary@wmk.govt.nz Jenny.Wilkinson@wmk.govt.nz carl.grabowski@wmk.govt.nz
Christchurch City Council	Dawn Baxendale, CE Andrew Hensley	dawn.baxendale@ccc.govt.nz Andrew.hensley@ccc.govt.nz
Selwyn District Council	David Ward, CE Murray Washington (Chair, Canterbury Engineering Managers Group)	david.ward@selwyn.govt.nz murray.washington@selwyn.govt.nz
Ashburton District Council	Hamish Riach, CE Simon Worthington James Lamb Martin Lo	Hamish.riach@adc.govt.nz Simon.worthington@adc.govt.nz James.lamb@adc.govt.nz Martin.Lo@adc.govt.nz
Timaru District Council	Bede Carran, CE Ashley Harper Andrew Dixon Suzy Ratahi Richard Lovell	bede.carran@timdc.govt.nz ashley.harper@timdc.govt.nz andrew.dixon@timdc.govt.nz suzy.ratahi@timdc.govt.nz richard.lovell@timdc.govt.nz

Mackenzie District Council	Suzette van Aswegen, CE David.adamson@mackenzie.govt.nz	suzette@mackenzie.govt.nz David.adamson@mackenzie.govt.nz
Waimate District Council	Stuart Duncan, CE	stuart.duncan@waimatedc.govt.nz
Environment Canterbury	Natasha Densey contact for Environment Canterbury Operations group Jacob Davies	Natasha.Densey@ecan.govt.nz Jacob.davies@ecan.govt.nz
Rural Post	Adrian Sexton, Rural Contracts Manager	adrian.sexton@nzpost.co.nz
Fire and Emergency New Zealand (Canterbury)	Steven Greenyer, Area Commander Mid/South Canterbury Mike Gaskin – Fire Risk Management Officer / Specialist Fire Investigator (Selwyn contact) Chis Munro Karl Patterson	steven.greenyer@fireandemergency.nz mike.gaskin@fireandemergency.nz chris.munro@fireandemergency.nz karl.patterson@fireandemergency.nz
St John Ambulance	David Thomas, General Manager South Island Region Daryl Tomlinson	david.thomas@stjohn.org.nz Daryl.Tomlinson@stjohn.org.nz
Police	Jonathan Lin, Operations	jlin94@police.govt.nz
Fonterra	Robb Stevens, Manager Local Government & Stakeholder Affairs Nola Turner	Robb.Stevens@fonterra.com Nola.turner@fonterra.com
Synlait	Yves Denicourt, Environmental Sustainability Manager	Yves.Denicourt@synlait.com
NZ Trucking Association	Dave Boyce, Chief Executive Officer Carol McGeady, General Manager	dave.boyce@nztruckingassn.co.nz carol.mcgeady@nztruckingassn.co.nz
Federated Farmers	Caroline Amyes, Federated Farmers North Canterbury rep Jacob Haronga	caroline.amyes@gmail.com jharonga@fedfarm.org.nz
Enterprise North Canterbury	Miles Dalton, Business Support Manager	miles@enterprisenc.co.nz
LandSAR		LandSARChristchurch@outlook.com

Westland Milk was initially contacted but asked not to be included going forward. Given staff changes at Waitaki District Council, no replacement contact has been identified.

7 Key Messages

The following key messages will guide discussion with the stakeholders –

- Publicly available data sets have been used as a base
- More data has been gathered via drive testing
- Importance of working together to agree criteria for prioritisation recognising that organisations may have different perspectives
- Desire to understand the impact of mobile blackspots on safety and productivity as well as the potential economic or social impacts of reducing these
- Identify the top 10 blackspots in the region
- Limits of project to effect change

8 Communication and Engagement Tactics

The table below outlines the tactics and timings for engagement with stakeholders -

Date	Audience	Activity / Action	Responsibility	Status
October 2021	Stakeholders	Email to introduce Phase 2 of the project and the process that will be followed, along with when we expect to make further contact with them. Outline how we will record their feedback and ideas.	Genevieve Doube draft email and coordinate stakeholders	Completed 29 October 2021
	Canterbury Mayoral Forum	Agree criteria of social and economic impacts for assessment of prioritisation of black spots	Bianca and / or Genevieve	Completed Conversation with Rosa prior to stakeholder engagement
November 2021	Stakeholders	Joint online engagement workshops to: • Understand the key drivers for each stakeholder • Assess the potential economic or social impact of the identified blackspots on their business based on the set of agreed criteria.	Genevieve Doube	Completed 23 November 2021
November 2021	Stakeholders	Follow up conversations via phone, online surveys or interactive maps to capture information from those who may not be able to attend workshops.	Bianca Clark / Genevieve Doube	Completed

Ongoing	Canterbury Mayoral Forum	Outline process to keep them up to date on project progress	Maree McNeilly	
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9 Risks and Opportunities

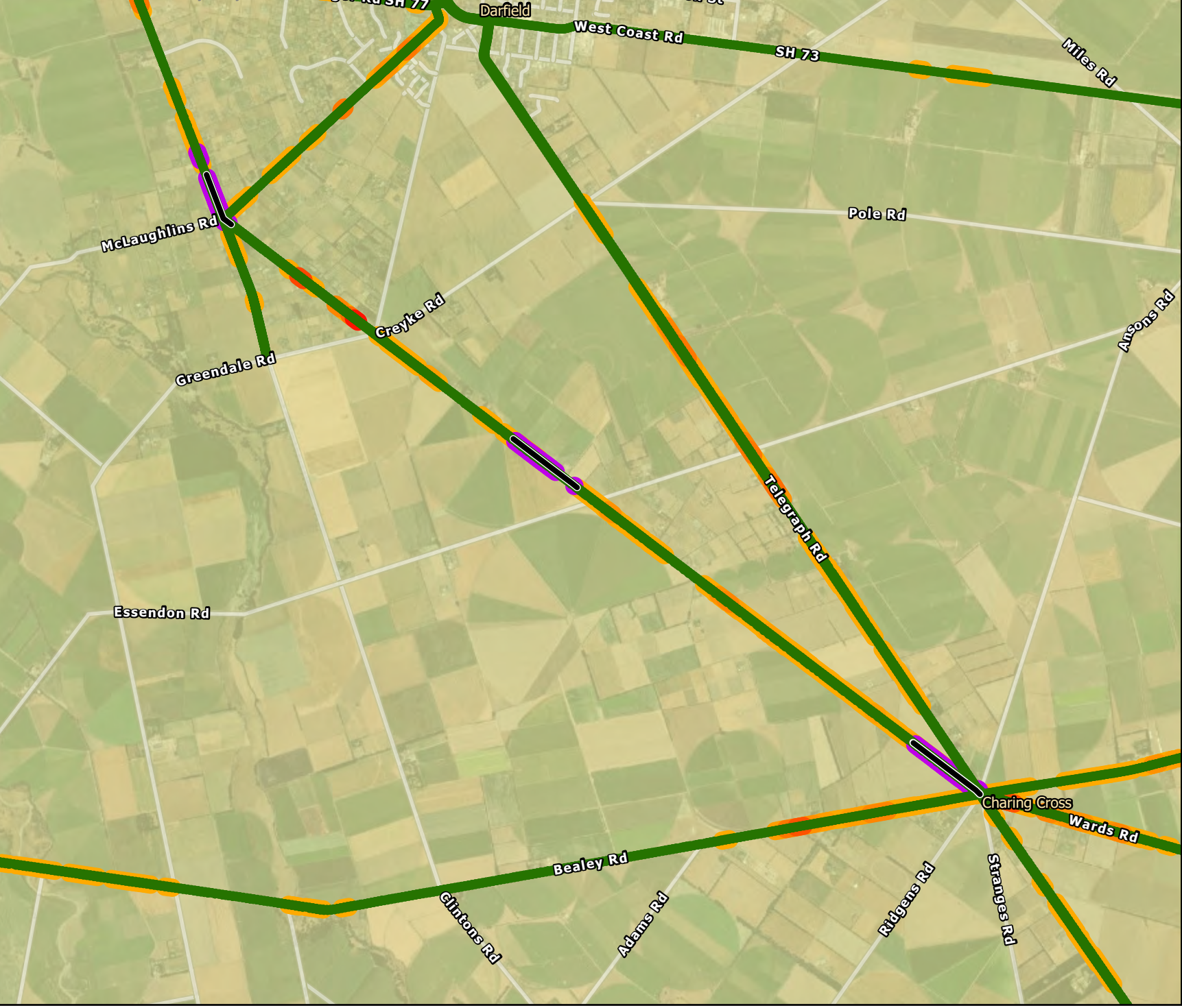
Risk	Likelihood	Level of Impact	Mitigation approach / opportunity
Competing priorities identified	Medium	High	Further tease out the impact of the mobile black spot on each priority
Agreement cannot be reached between stakeholders	Medium	High	Use the evaluation criteria
Prioritisation criteria are not fit for purpose	Low	Medium	Be agile in the workshop and take robust notes of the conversation
A stakeholder feels this project is a duplication of work already done	Low	Low	Clear communication about the project, work that has been done and work we are planning

10 Stakeholder Outcomes

Successful stakeholder engagement will have been achieved if the workshop builds understanding between the attendees of the challenges that a lack of mobile coverage creates for each of them, and the 10-priority mobile black spots can be agreed upon.

C

Appendix C – Report Maps



Canterbury Plains - Charing Cross

Page 1 of 10

Legend

— Mobile Blackspot

NetMonitor Data

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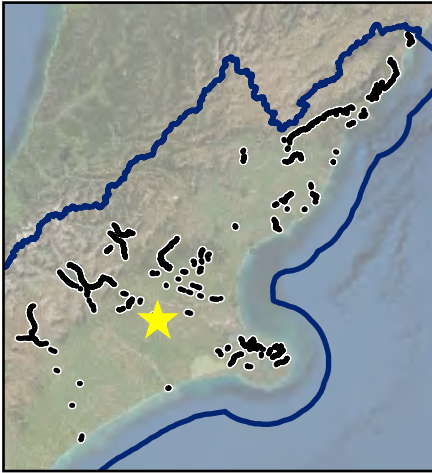
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■ -120 (dBm)

■ Commercial Mobile Voice Coverage

□ Canterbury Regional Council Boundary



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Map Scale @ A4: 1:40,000



Canterbury Plains - Eyrewell

Page 2 of 10

Legend

— Mobile Blackspot

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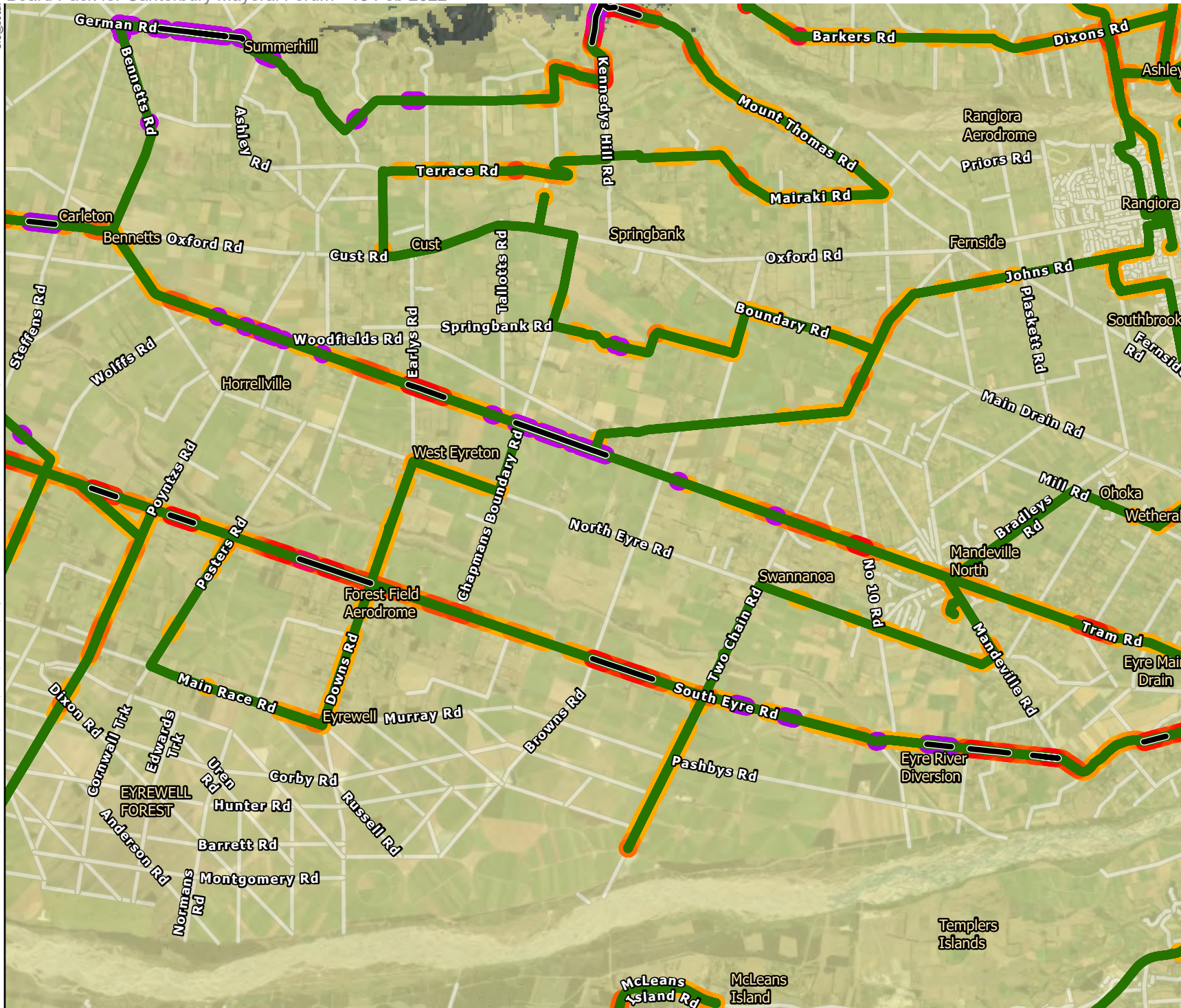
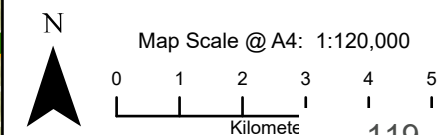
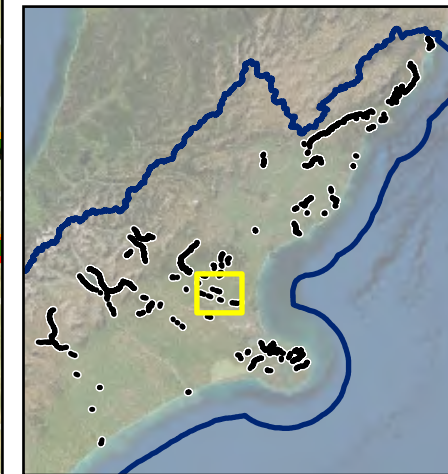
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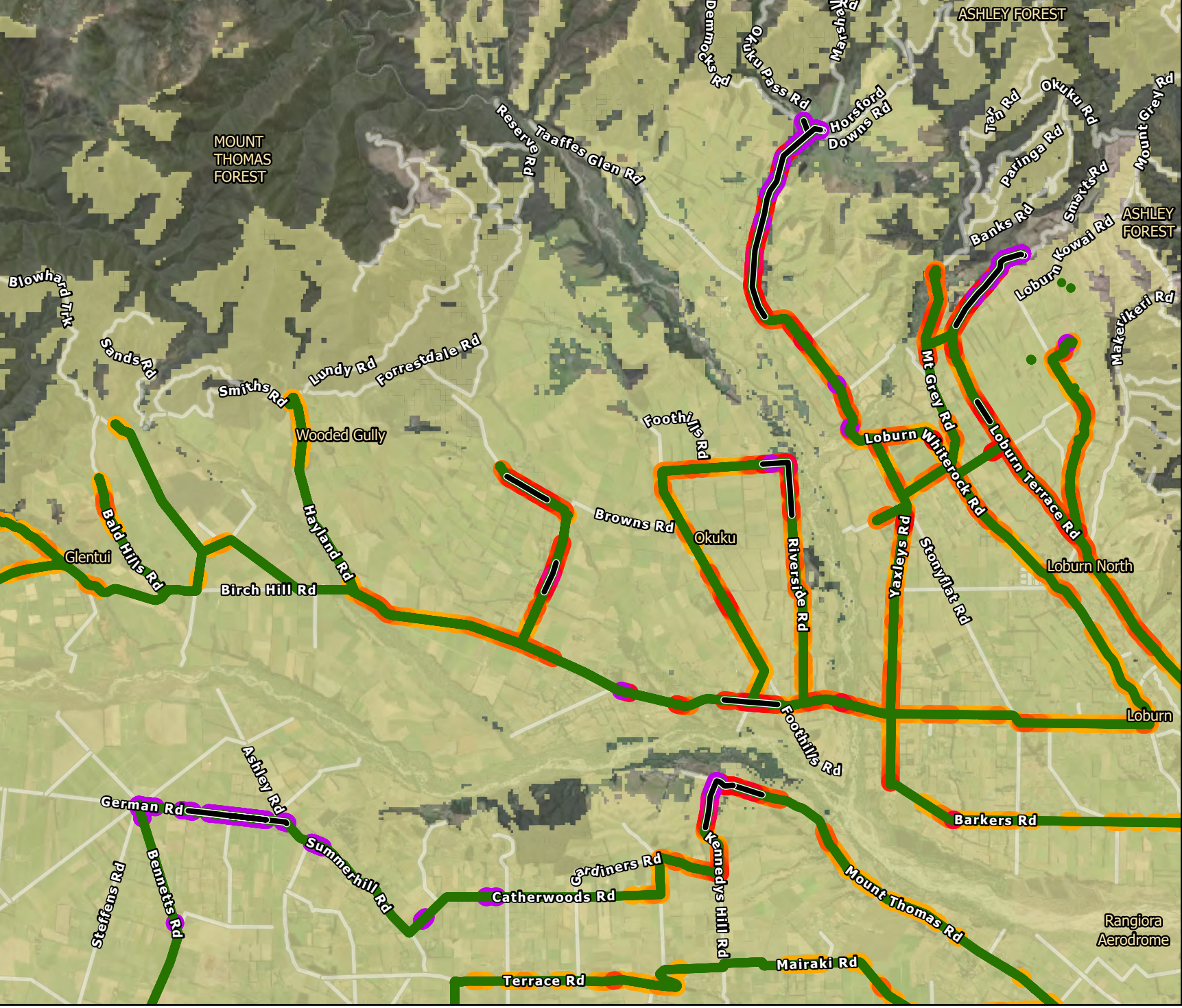
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Canterbury Regional Council Boundary



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Canterbury Plains - Loburn

Page 3 of 10

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Mobile Blackspot

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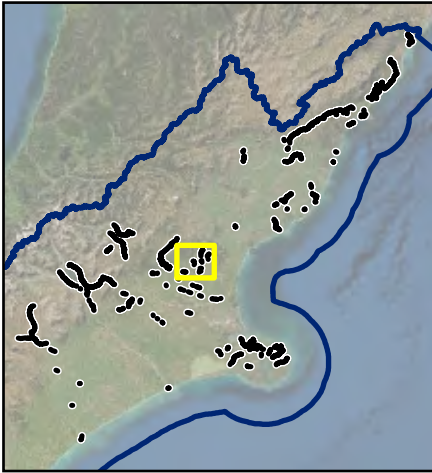
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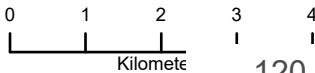
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Kaikoura Alternative Route

Page 4 of 10

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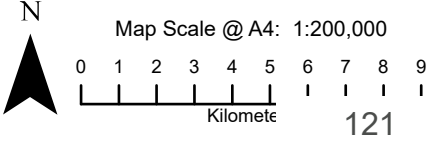
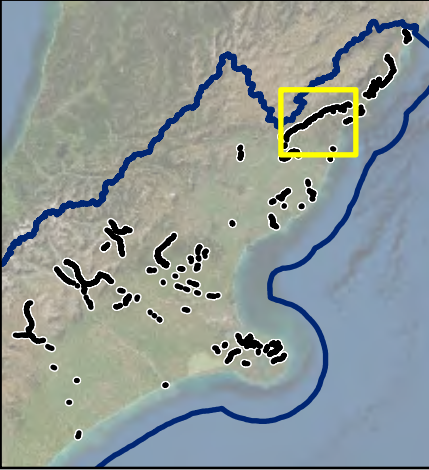
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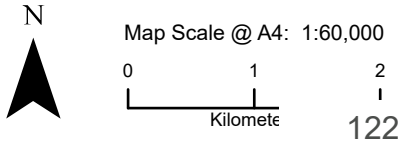
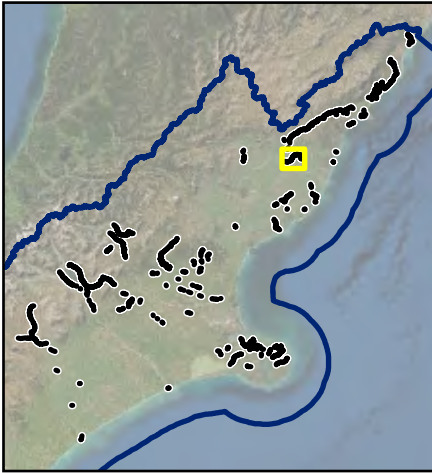
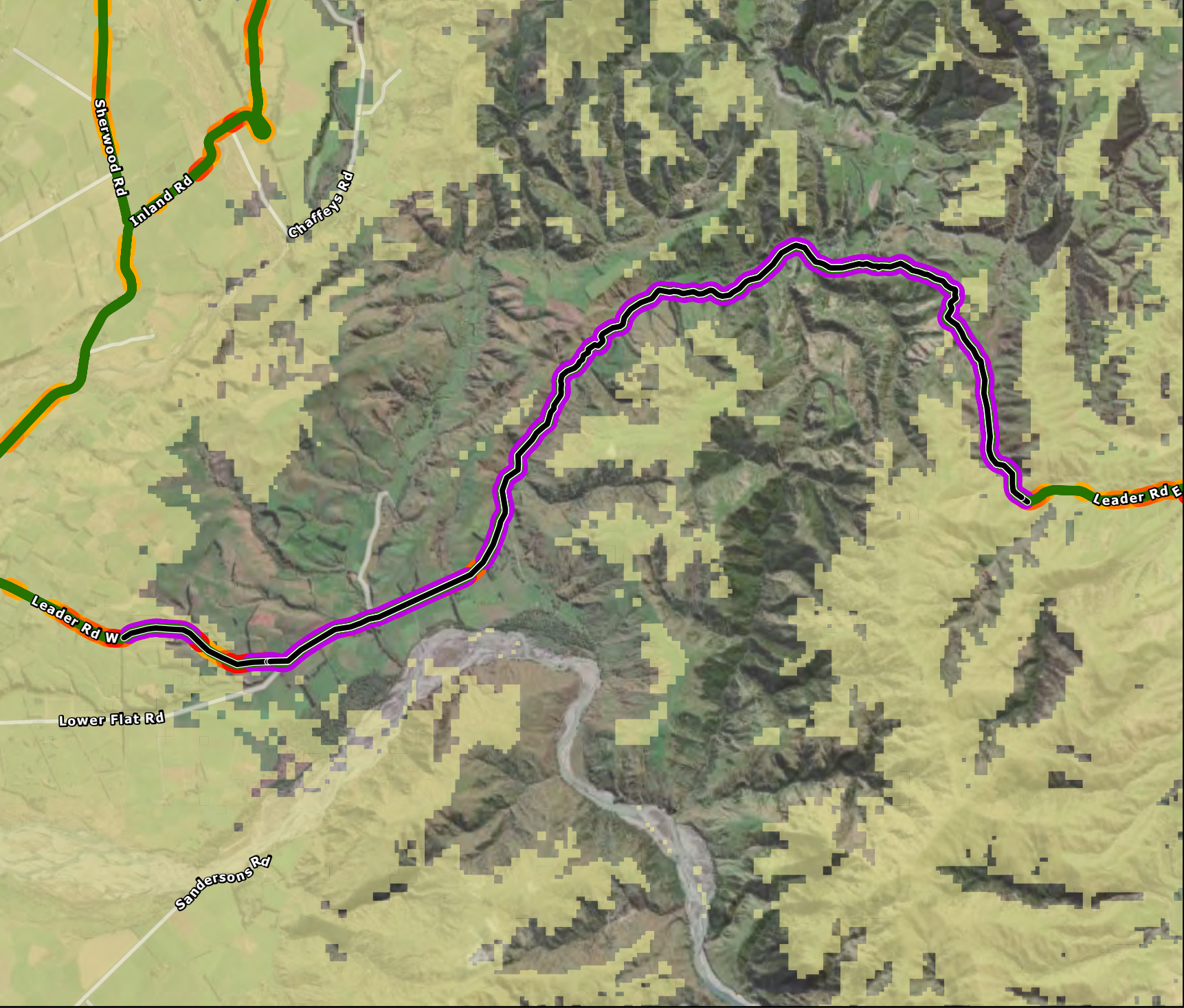
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Canterbury Regional Council Boundary

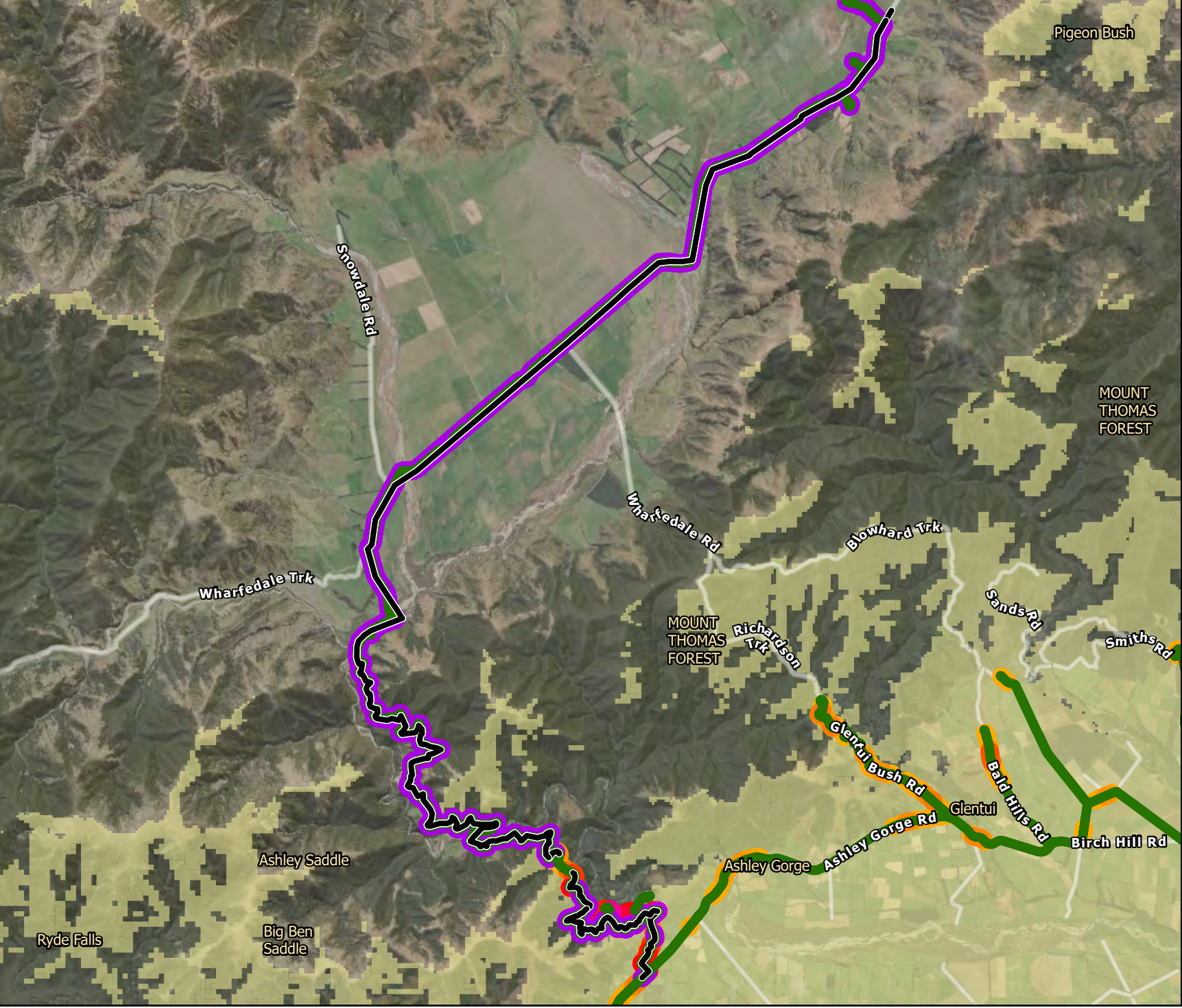


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- Low Service Levels
 - 140 (dBm)
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- Commercial Mobile Voice Coverage
- Canterbury Regional Council Boundary



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Lees Valley

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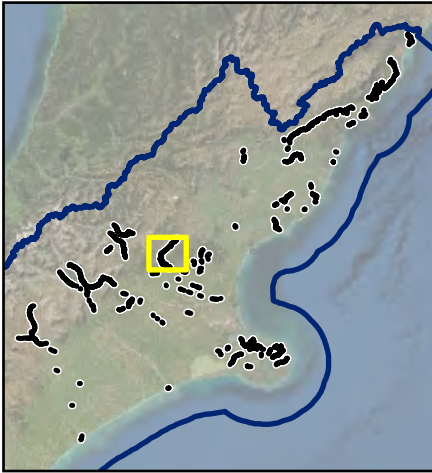
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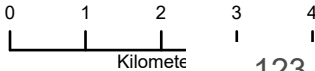
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■ Canterbury Regional Council Boundary

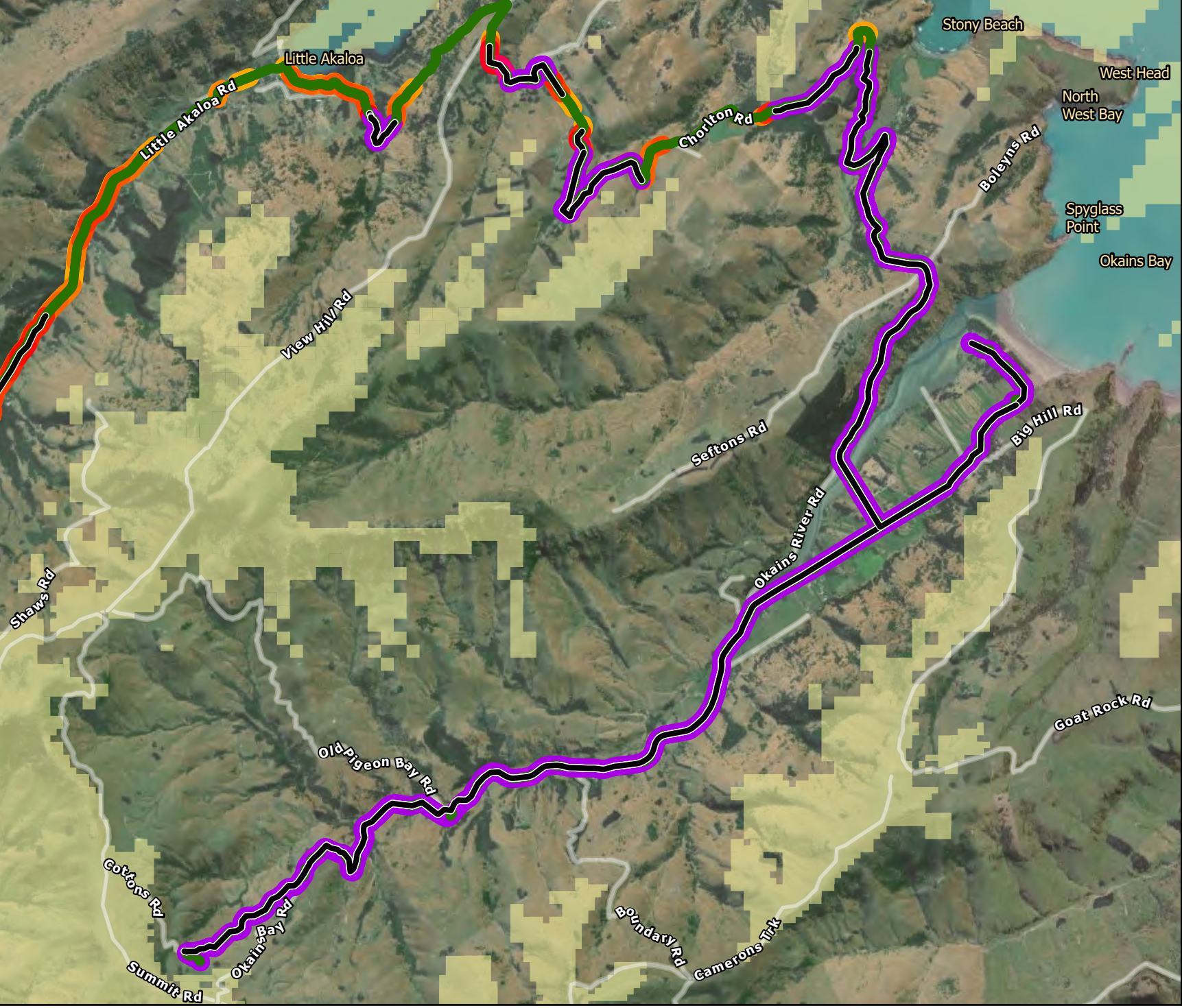


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Okains Bay Campground

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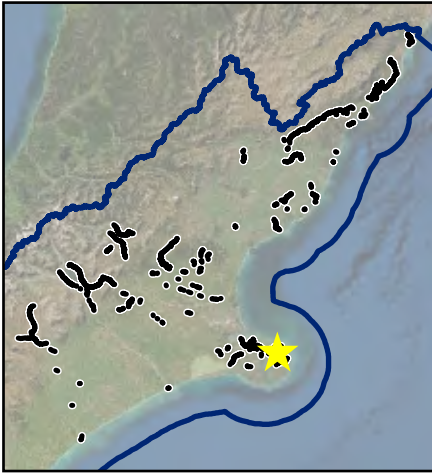
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■ Commercial Mobile Voice
Coverage

□ Canterbury Regional Council
Boundary

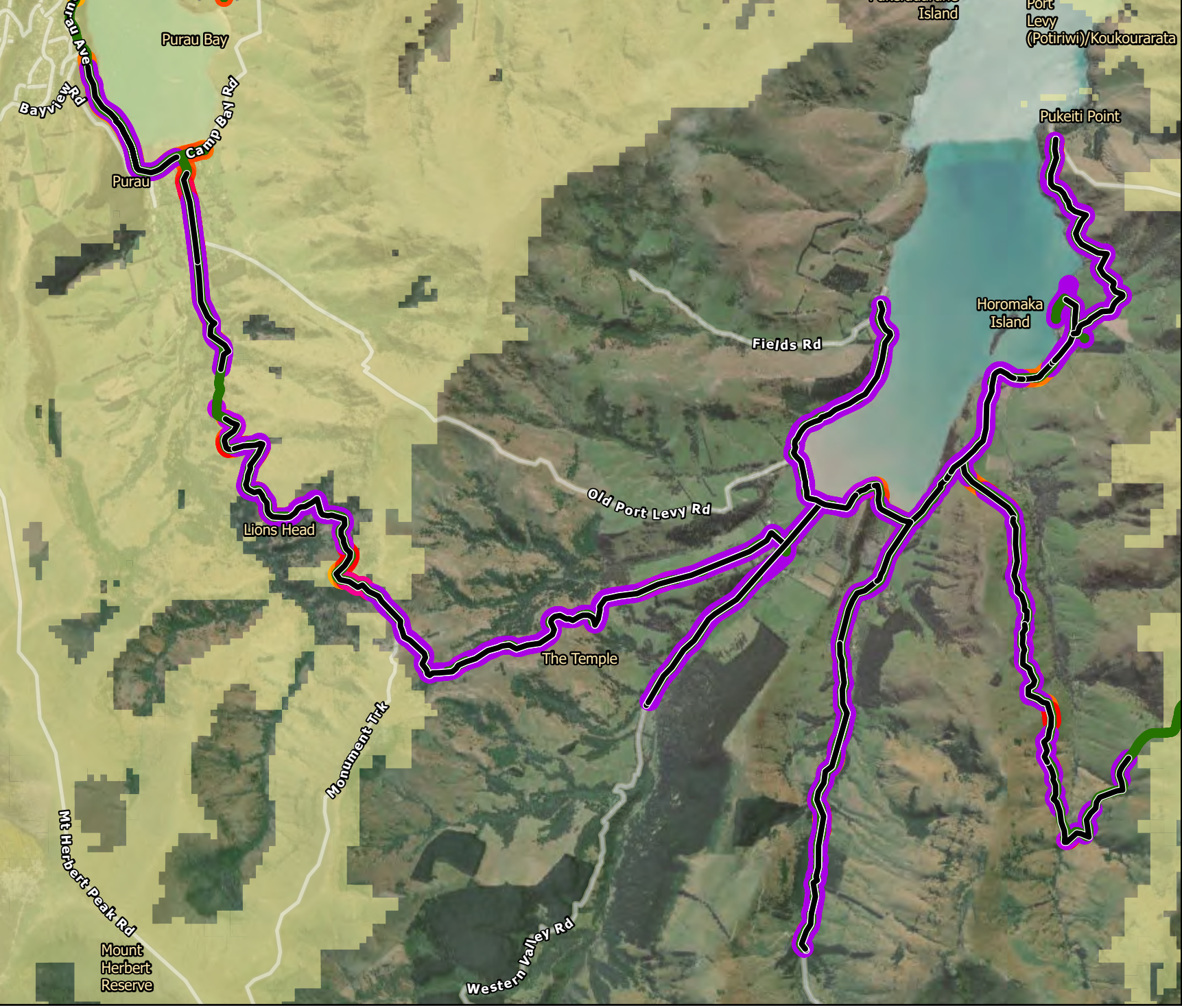


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Purau - Port Levy

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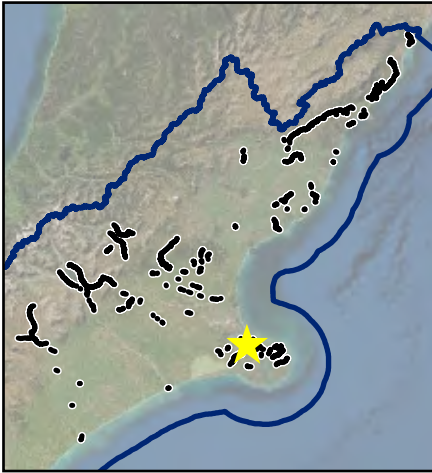
Low Service Levels

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■ Commercial Mobile Voice Coverage

□ Canterbury Regional Council Boundary



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**Rangitata River Mouth
Camping Ground**

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Legend

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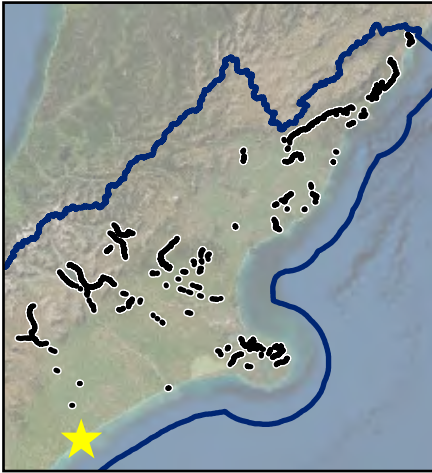
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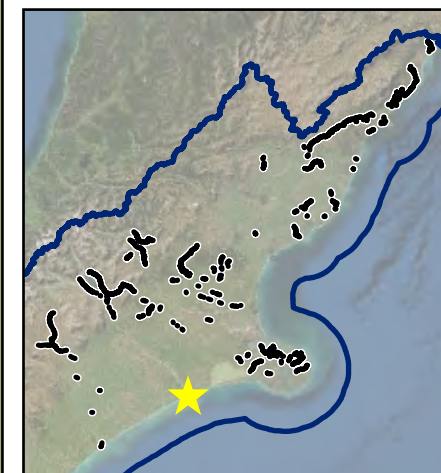
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date

addressee

address line 1

address line 2

city postcode

Tēnā koe [name]

Improving mobile telecommunications infrastructure in Canterbury

As you will know, in 2021 the Canterbury Mayoral Forum completed a project to identify mobile blackspot locations on Canterbury state highways and better understand the potential economic and social benefits of reducing mobile blackspots on improved productivity and logistics, safety and emergency operations and the tourism sector.

The Forum has since undertaken a second phase of the project, this time expanding mapping to non-state highways to get a better understanding of wider blackspot issues across the region. The project also sought to provide some validation of mobile coverage data that already existed to understand how well this data matched the ground tested data in order to help inform how it can be used to undertake wider analysis in the future.

A copy of the final report is attached.

We are writing to you/telecommunications companies/Crown Infrastructure Partners again to further advocate for targeted investment in mobile telecommunications infrastructure to advance economic and social development in the region.

The project, which included consultation and workshops with stakeholders including local authorities, St John and Fire and Emergency New Zealand, St Johns, Fonterra, Federated Farmers and Enterprise North Canterbury, identified the following ten priority mobile blackspot areas:

- Canterbury Plains - Charing Cross
- Canterbury Plains - Eyrewell
- Canterbury Plains - Loburn
- Kaikōura Alternative Route
- Leader Road, Waiau
- Lees Valley
- Okains Bay Campground
- Purau – Port Levy
- Rangitata River Mouth Camping Ground
- South Rakaia Huts.

The report includes maps showing the exact locations of these blackspots.

In identifying the top ten areas for action, the most common driver from stakeholders that aided the prioritisation of these mobile blackspots was safety – safety of council field staff, communities, emergency services staff working alone, tourists, on farm safety and all road users. Other drivers included community connectivity, information gathering regarding incidents and assets, more

consistent and reliable access to the internet to support farming, telemetry technology and tourism and leisure activities. This is consistent with the themes from the workshop in the first phase of the project.

The report also identifies some opportunities for future actions, including:

- using a combination of the data output from drive testing, anecdotal evidence, and the telecommunications mobile coverage data can provide an understanding of the worst mobile blackspot areas and highlight areas for discussion or further testing. Additional analysis could be undertaken to decrease the number of data records that are missing GPS data if required.
- the data collected has provided suitable information for stakeholder engagement to take place allowing interpretation and prioritisation based on the contribution of the workshop attendees.
- the data collected using phones connected to all three network providers allows the comparison between the companies and also highlights areas that have a correlation of mobile blackspots.

We were pleased to hear that Crown Infrastructure Partners' work programme will see towers installed to remedy blackspots in three of the above priority areas – the Kaikōura Alternative Route, Okains Bay Campground, and Purau – Port Levy. This will largely resolve the issues in these three areas. However, we are not aware of other work under way to address the remaining 7 priority areas.

The Mayoral Forum considers prompt action by the Government and telecommunications companies is required to remedy these blackspot areas as well as the state highways areas identified in the first phase of our project. As with your response to the first phase of this work last year, we trust that you will give this matter due consideration. The Forum would appreciate a response from you to the issues we have raised in this letter, which could include advice on any work that may be currently under way on this, or any work that is planned in the near future.

Should you wish to discuss the report and future actions to address the blackspots, we would be more than happy to meet with you. To arrange a meeting, please contact our Secretariat through Maree McNeilly, by email at secretariat@canterburymayors.org.nz, or phone on 027 381 8924.

Ngā mihi,

Sam Broughton
Mayor, Selwyn District
Chair, Canterbury Mayoral Forum

CANTERBURY Mayoral Forum

A strong regional economy with resilient, connected communities and a better quality of life, for all.

Briefing notes for Hon David Parker, Minister for the Environment - Meeting with Canterbury Mayoral Forum – Friday 18th February 2022 – via Zoom

(<https://us06web.zoom.us/j/88130316568?pwd=OGhvVi9sK3gxVnJCVVZ5MnV0dEttQT09>)

Meeting ID: 881 3031 6568: Passcode: 546866

The Canterbury Mayoral Forum welcomes the opportunity to discuss with you the Resource Management reforms, where we are in the process, both the Mayoral Forum's and the Government's expectations with ongoing engagement, and opportunities and challenges the implementation of the reforms will bring for Canterbury.

Resource Management Reform

The Ministry for the Environment held a workshop with the Canterbury Mayoral Forum on the resource management reforms on 18 November 2021. Following this workshop the Canterbury Mayors met with Vicky Robertson, Janine Smith, Liz Moncrieff and Caroline Hart from Ministry for the Environment, Mayor Toby Adams, Co-chair of the MfE Local Government Steering Group and Lisa Tumahai (Kaiwhakahaere Te Rūnanga o Ngāi Tahu) to discuss the RM reform process. Following that meeting Janine Smith advised that you were happy to meet with the Mayoral Forum to continue engagement on the RM reform process.

The Canterbury Mayoral Forum is currently preparing a submission to the *Our future resource management system: Materials for discussion*.

The Mayoral Forum appreciates that the engagement process for the reform has moved away from a solely parliamentary-based process seeking written feedback only towards a commitment to a partnership-based approach with councils, iwi and communities. It also acknowledges that there are a number of big questions still to be resolved and welcomes the opportunity to discuss these with you today.

We want to continue to work with you and the MfE to ensure the legislation safeguards the ability of communities to influence planning in their local areas in light of a more regionalised planning approach?

Specific points we would like to cover include the following:

Mayors standing together for Canterbury.

Secretariat, E: secretariat@canterburymayors.org.nz W: www.canterburymayors.org.nz
C/- Environment Canterbury, PO Box 345, Christchurch 8140 T: 03 345 9323

Ashburton District Council • Canterbury Regional Council • Christchurch City Council • Hurunui District Council
Kaikōura District Council • Mackenzie District Council • Selwyn District Council • Timaru District Council
Waimakariri District Council • Waimate District Council • Waitaki District Council

- the makeup of regional and sub-regional boundaries, and the desire to be involved in discussions with iwi partners about regional boundaries
- recognition of the diversity within and across regions – Canterbury is the largest region by land area and number of councils and the difficulty of having one NBA plan and committee to cover all the different issues across the region (urban and rural etc)
- joint committee representation, role and scope, how to get good representation without the committee becoming too large
- hierarchy of plans and concerns about top-down approach leading to loss of local placemaking - local voices in the local neighbourhood, recognition of what places will be like in 30 years' time
- local democracy in future planning processes; accountability to local communities
- role of community in the preparation of plans and policy frameworks
- ongoing partnership between central and local government on the 10-year+ transition and implementation period

We are also very interested in hearing from you on the proposed timeframes for the three pieces of new legislation and submission periods.

Local government would also like to see an integrated impact assessment to assess the cumulative impact of each of the governments reform processes on local government, rather than each reform process being assessed in isolation of each other.

Canterbury Mayoral Forum

Date: 18 February 2022

Presented by: Ben Clark, Regional Public Service Commissioner

Regional Public Service Commissioner update

Purpose

1. The purpose of this paper is to provide an update from the Regional Public Service Commissioner on the activities of the Regional Leadership Group.

Recommendation

That the Canterbury Mayoral Forum:

1. **receive the Regional Public Service Commissioner update.**

Background

2. This update provides an overview of the COVID Protection Framework (CPF) response structure and the role of the Regional Leadership Group (RLG) to ensure the region's system response to CPF is well prepared.
3. As the Omicron response situation continues to evolve I have highlighted some key areas below and will expand on these at the Forum.

Omicron Update

4. Cases are growing but this is not unexpected and in line with what has been planned for. Key points to note are:
 - vaccinations and the COVID Protection Framework are helping slow the spread
 - two weeks into New Zealand's Omicron outbreak, currently there is a 3-day rolling average of around 200 cases, lower than many of the predictions for this point in time
 - at the peak of the Delta outbreak there were just under 100 people in hospital and a dozen in ICU
 - there is now a similar level of case load with Omicron, but with just 14 people in hospital and 1 in ICU
 - New Zealand currently is still in the very early stages of the outbreak.

Close contact exemption scheme

5. A new exemption scheme has been established with the aim of keeping critical supply chains running. This will allow close contacts to continue to go to work instead of isolating if they return a negative rapid antigen test.
6. Businesses will self-assess against criteria to join the scheme.
7. In addition, the Government has confirmed that close contacts who work alone can continue to operate in a bubble of one.

New National Accommodation Service

8. The anticipated scale of Omicron infections as the outbreak progresses will put further pressure on our alternative accommodation supply, which has potential implications for isolation compliance, COVID-19 transmission, and welfare outcomes.
9. As a result, the Government has been working on options to better manage the increased demand for alternative accommodation, which will support health to respond to increased demand. The Service will be established in two key phases:
 - Phase 1: assisting regions to source accommodation via a third-party provider (Orbit Travel) where you require support to identify additional accommodation options. This will need to be funded by the Care Coordination Hub (either via the Community SIQ Service funding made available last year or added to the COVID-19 Tracker)
 - Phase 2: subject to Cabinet approval in March, this is expected to be a fully funded service where regions can request accommodation via Orbit Travel.
10. Phase 1 went live and available for Care Coordination Hubs to access on **Tuesday 8th February 2022**.

Rural support

11. Please see attached presentation pack from MPI, which covers the Rural Trust announcement and a local/regional connections overview.

Self-isolation in the community

12. We have amassed a lot of useful collateral material that can help inform whānau how they need to prepare for the possibility of self-isolation and what to expect.
13. Given the likelihood that with the Omicron wave, people will self-isolate without having been tested on the assumption that they have Omicron, it will be even more important that citizens know who to call and what to do if they need health or welfare support beyond what families or friends can provide.

14. Our communications focus needs to shift to utilising local channels of communication that don't rely on email or internet. For example, pamphlets being available in local libraries and community centres; posters up in similar locations and using local radio stations to get the message out to communities.
15. The Communications Network is happy to work with local leaders and comms representatives to make the best use of the information we have and ensure it gets into the right hands.

Vaccination numbers

16. A booster jab remains the most important part of the protective toolbox and I'll provide a breakdown at the meeting of the latest vaccination figures, including for 5–11-year-olds.

Attachments

- Presentation pack from MPI

RURAL SUPPORT TRUSTS

\$400,000 funding boost

Responding to Omicron

Extra support to help farmers and growers affected by positive cases of COVID-19



- ▶ [Agriculture](#) - Link to [Beehive.govt.nz](https://www.beehive.govt.nz)
- ▶ Farmers and growers are getting a helping hand to prepare for Omicron, Agriculture Minister Damien O'Connor announced today.
- ▶ “The Government has allocated \$400,000 to support primary producers with contingency planning and response if a farmer or grower contracts COVID-19,” Damien O'Connor said.
- ▶ “The funding will bolster the resources of Rural Support Trusts and other organisations, including those supporting Māori agribusinesses, to help them respond to cases.
- ▶ “This funding will help ensure there's someone that farmers and growers can speak to and provide guidance should they or their staff be dealing with Omicron. The Rural Support Trusts are well woven into rural communities to provide wrap around support services.
- ▶ “The sector has to date been resilient throughout the pandemic. The hard work of farmers and growers along with those involved in keeping supply chains open and exports flowing, is leading Aotearoa New Zealand's trade-led recovery from COVID-19.

“The latest Situation and Outlook for Primary Industries (SOPI) shows revenue from food and fibre exports is predicted to hit a record \$50 billion in the year to 30 June 2022.

“But the Government is committed to keeping vital workforces going. Primary producers have always been essential workers throughout the pandemic, but as Omicron reaches further into our communities, we are stepping up to ensure we can protect the wellbeing of our rural communities.

“The most important thing New Zealanders can do to prepare is to get their vaccine booster dose, before Omicron takes off in the community.”

Contingency planning by farmers, growers and lifestyle block owners will minimise the risk of further COVID-19 related disruptions, which can occur anywhere along the supply chain.

“It’s vital all food and fibre producers have a plan. It makes it easier for other people to step in and help run your farm, or feed your livestock, at short notice,” Damien O’Connor said.

“There are several free checklists available which have been developed by industry and MPI. I encourage people to make use of them.”

Wage support is also available through the Leave Support Scheme for people affected during this stage of the Omicron outbreak.

"This is available to employers, and also includes self-employed people, to help pay their employees who've been advised to self-isolate because of COVID and can't work at home during that period.

"It's paid at the same rates as the wage subsidy was previously, that being \$600 per week per full-time worker and \$359 per week per part-time worker.

"Our Rural Support Trusts do great work when things are at their most difficult in the provinces. Whether it's drought, floods, or now, a pandemic. The Trusts can respond in a case-by-case basis and make sure people aren't left isolated. This includes ensuring that mental health is well-supported," Damien O'Connor said.

The targeted funding is being administered by the Ministry for Primary Industries (MPI) and will initially be available until 1 April 2022, in line with the Government's Covid-19 response planning.

Free Covid-19 checklists for farmers, growers and lifestyle block owners:

Download the COVID-19 on-farm checklist for farmers [here](#).

Download the COVID-19 checklist for lifestyle block owners [here](#).

Download the COVID-19 checklist for orchardists [here](#).

Download the COVID-19 checklist for winegrowers [here](#).

Leave Support Scheme link [here](#)

Regional on Farm Covid Co-ordination (RoCC)

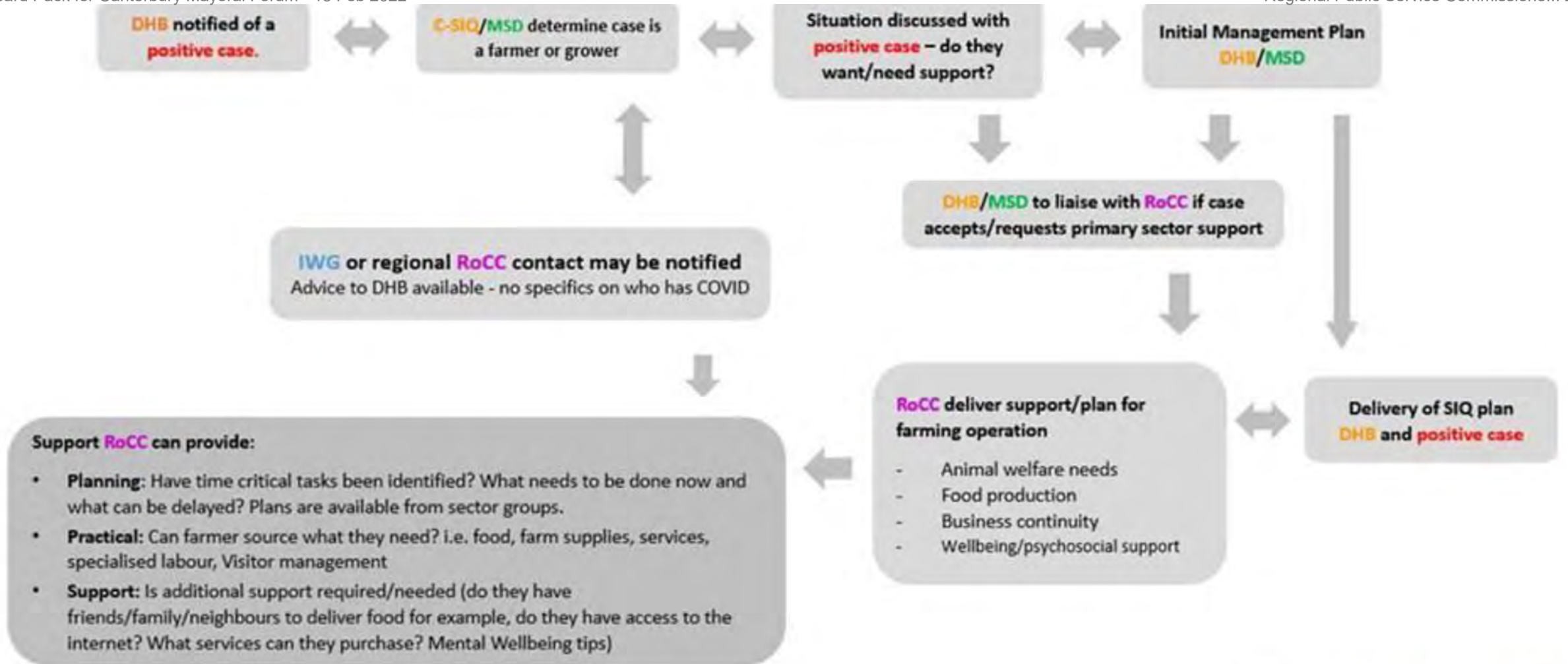
A COVID-19 on-farm Industry Working Group has been working to try to be ready to support farmers' and growers' wellbeing, and to protect NZ's reputation for good animal welfare, trusted food production and thriving rural businesses. The group includes Federated Farmers, DairyNZ, Deer Industry NZ, Beef + Lamb NZ, NZ Pork, Egg Federation, Poultry Industry, MPI, Rural Support Trusts, and others.

The farmer assistance referral process would work something like this:

The Health caller contacting the new isolating case/close contact has some scripted questions, including to ask if the case has any animal or farming issues.

Serious health issues would be referred to Health providers, welfare issues to MSD, and farm issues to RST (directly from Health, or from MSD).

The following diagram may not still be 100% correct, but is indicative of how farmer cases will be referred to RSTs. Note Regional on Farm Covid Co-ordination (RoCC) in the following diagram = Otago Rural Advisory Group in Otago, and Southland Rural Stakeholder Group in Southland.



MPI staff involved in IWG and the Regional on-farm COVID Coordination groups

Key:

- DHB:** District Health Board
- C-SIQ:** Community Supported Isolation and Quarantine
- MSD:** Ministry of Social Development
- RoCC:** Regional On-farm COVID Coordination
- IWG:** Industry Working Group

Rural Support Trust - needs assessment survey

- When the RST is notified about a farm case, they will contact the case and run through a pre-prepared survey form to understand the type of farm, and the aspects that the farmer needs assistance with. Needs will be referred to other parties to address.... depending on the need, e.g. it might be advice from DairyNZ for a dairy farmer.

Animal Welfare Referrals

- In each region, MPI has a Regional Animal Welfare Coordinator responsible for coordinating animal welfare in emergencies (like Covid).
- If any urban pets or lifestyle block animal welfare issues come to the attention of MSD/DHBs or the Hubs, the owner and regional MSD/DHB will usually be able to solve them by referring to the FAQ that MPI has developed. Failing this, the issue can be referred directly to the MPI Regional Animal Welfare Coordinator. For frequently asked questions about positive COVID-19 cases and caring for companion animals, horses, and lifestyle blocks, scroll to the bottom of MPI's COVID page here <https://www.mpi.govt.nz/covid-19-protection-framework-primary-sector-businesses/>
- When the RSTs undertake a needs assessment with the farmer in Southern, and if a production animal welfare issue is identified, the RST would help resolve it with the farmer and with industry support if needed (and refer the issue to the MPI Regional Animal Welfare Coordinator if the farmer and industry cannot resolve the issue).

For clarity:

- MPI animal welfare covers all animals – farm and non-farm, rural and urban.
- Rural Support Trusts support human welfare – just for primary industries and farming families – not for urban or wider rural dwellers (they don't have capacity for that).

Some useful primary sector checklists for farmer readiness planning – useful for positive cases to quickly fill in, if they haven't already done so:

- **(Readiness)** COVID-19 on-farm checklist for **farmers** [Preparing for COVID-19 on-farm checklist for farmers \(fedfarm.org.nz\)](#)
- **(Readiness)** COVID-19 on-farm checklists for **dairy farmers** [Business Continuity Plan templates](#), (partly pre-populated) and [what to do if you have a case on farm](#)
- **(Readiness)** COVID-19 checklist for **growers** (scroll down in here) [Covid-19 | Horticulture New Zealand — Ahumāra Kai Aotearoa \(hortnz.co.nz\)](#)
- **(Readiness)** COVID-19 checklist for **lifestyle block owners** [Preparing for COVID-19 Checklist for your lifestyle block \(fedfarm.org.nz\)](#)

CANTERBURY Mayoral Forum

A strong regional economy with resilient, connected communities and a better quality of life, for all.

Briefing note for Peter Bramley, CE Canterbury District Health Board, Friday 18 February 2022

Where/when

Zoom Meeting

<https://us06web.zoom.us/j/88130316568?pwd=OGhvVi9sK3gxVnJCvVZ5MnV0dEttQT09>

Meeting ID: 881 3031 6568

Passcode: 546866

Who

The Mayors/Chair and chief executives of Canterbury councils are:

Council	Mayor / Chair	Chief Executive
Kaikōura District	Craig Mackle	Will Doughty
Hurunui District	Marie Black	Hamish Dobbie
Waimakariri District	Dan Gordon	Jim Harland
Christchurch City	Lianne Dalziel	Dawn Baxendale
Selwyn District	Sam Broughton (Chair)	David Ward
Ashburton District	Neil Brown	Hamish Riach
Timaru District	Nigel Bowen (Deputy Chair)	Bede Carran
Mackenzie District	Graham Smith	Angela Oosthuizen
Waimate District	Craig Rowley	Stuart Duncan
Waitaki District	Gary Kircher	Alex Parmley
Environment Canterbury	Jenny Hughey	Stefanie Rixecker

The Forum is mandated by the Canterbury Local Authorities' Triennial Agreement as the primary mechanism for local government co-ordination, collaboration and advocacy in Canterbury.

The Forum is supported by a permanent secretariat hosted by Environment Canterbury. Maree McNeilly, Amanda Wall and Rosa Wakefield, Regional Forums Secretariat, and Sean Tully, Advisor to the Mayor of Selwyn District, will also be online.

What

COVID-19 continues to make its presence felt across New Zealand, and while our numbers may currently be low, the threat of Omicron and other variants is not far from our minds and the minds of our communities. The CMF would value the insight that you can bring to this topic for us and how we can all work collectively to respond to the ongoing impact of COVID-19 in our communities.

We are also very conscious of the health reforms unfolding at a rapid pace, and any perspective you are able and willing to share would be of great value to Forum members. For your background please find attached a copy of the Canterbury Mayoral Forum's submission to Pae Ora (Healthy Futures) Bill.

Mayors standing together for Canterbury.

Secretariat, E: secretariat@canterburymayors.org.nz W: www.canterburymayors.org.nz
C/- Environment Canterbury, PO Box 345, Christchurch 8140 T: 03 345 9323

Ashburton District Council • Canterbury Regional Council • Christchurch City Council • Hurunui District Council
Kaikōura District Council • Mackenzie District Council • Selwyn District Council • Timaru District Council
Waimakariri District Council • Waimate District Council • Waitaki District Council

CANTERBURY Mayoral Forum

A strong regional economy with resilient, connected communities and a better quality of life, for all.

Briefing note for Marlon Bridge, Acting Director DIA Transition Unit, Friday 18 February 2022

Where/when

Zoom Meeting

<https://us06web.zoom.us/j/88130316568?pwd=OGhvVi9sK3gxVnJCvVZ5MnV0dEttQT09>

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What

The Canterbury Mayoral Forum has actively engaged in the three waters reform programme, including partnering with Ngāi Tahu and contracting with PWC to undertake a three waters service delivery review for Canterbury.

Forum members would appreciate an update on the transition process that has/is being developed and how Canterbury councils will be engaged in this critical process.

There are a variety of different views amongst Canterbury Councils regarding the reform proposals, therefore you can expect a wide-ranging variety of questions from forum members.

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Waimakariri District Council • Waimate District Council • Waitaki District Council

Canterbury Mayoral Forum

Date: 18 February 2022

Presented by: Jenny Hughey, Chair Environment Canterbury

Canterbury Water Management Strategy update

Purpose

1. This paper provides an update on region-wide progress of Canterbury Water Management Strategy (CWMS) partners' work towards implementing the CWMS for the October to December 2021 period.

Recommendations

That the Canterbury Mayoral Forum:

1. **receive the CWMS update report**
2. **note that future CWMS updates will incorporate a focus on activities that deliver on the key priorities identified within Zone Committee Action Plans.**

Update on region-wide progress towards implementing the CWMS

2. The CWMS is implemented throughout the Canterbury region by the CWMS partners via a range of statutory and non-statutory obligations and working with agencies and community groups.
3. Future reports will focus on reporting the delivery of actions by CWMS partners through their Fit for Future work programmes to meet the 2025 goals. It will also focus on the delivery of actions by Zone Committees through their Action Plans (provided in Attachment 1) supported by the relevant Territorial Authority and Environment Canterbury.

Zone and Regional committee updates

4. All CWMS Zone Committees have now finalised their Action Plans for 2021-2024. The CWMS Regional Committee and Hurunui Land and Water Committee are expected to complete Action Plans once these Committees are fully established in 2022.
5. Zone Committees have been prioritising projects to recommend for funding and support from their CWMS Action Plan Budget of \$50,000 this financial year (established through Environment Canterbury's LTP 2021-2031). An update on the progress of the prioritised projects from their Action Plans will be provided in the next report in May 2022.

6. Following the refresh of Zone Committees, members participated in a number of combined hui to induct new members and plan for the year ahead.
7. The first of the combined hui was held on 28 September 2021 at Arowhenua Marae with Chairs, Deputy Chairs, and new community representatives from the four southern Zone Committees attending (Lower and Upper Waitaki, Orari Temuka Opihi Pareora, and Ashburton). The central Zone Committees (Selwyn Waihora, Banks Peninsula, and Christchurch West Melton) held their combined hui on 2 November 2021 at the Tai Tapu Community Centre. A combined hui for the northern Zone Committees (Waimakariri, Hurunui, Kaikōura) is being scheduled for February 2022.
8. Hurunui District Council is working with Ngāi Tūāhuriri, Kaikōura Rūnanga, and Environment Canterbury in co-designing the new Hurunui Land and Water Committee. Representatives of the new Hurunui Water and Land Committee will be invited to participate in future CWMS combined northern Zone Committee hui once they are appointed.
9. Jane Demeter has been appointed Co-Chair with Iaeen Cranwell appointed as the interim Ngāi Tahu Co-Chair of the CWMS Regional Committee. Iaeen Cranwell's appointment will ensure Ngāi Tahu is represented from the outset and contribute to the establishment of the Committee. The Co-Chairs bring strong leadership and experience to the Regional Committee.
10. The community representative appointment process for the Regional Committee was completed with Environment Canterbury confirming the appointments at its 9 December 2021 Council meeting. The six appointments represent a balance of backgrounds, experience and interests from water management and biodiversity topics across the region.

RMA planning and implementation

11. Environment Canterbury adopted the recommendations of the independent hearing panel on Plan Change 7 in November 2021. Five appeals to PC7 have been made to the High Court, on points of law, that will be worked through over the coming months. No appeals have been received on PC2.
12. Environment Canterbury is reviewing its land and water plan framework to give effect to the National Policy Statement for Freshwater Management 2020. Environment Canterbury is undertaking this review alongside the review of the Regional Policy Statement and Coastal Environment Plan, with the aim of creating an integrated planning framework that takes a ki uta ki tai approach to managing the region's resources.
13. The first step in this process is to establish how the review can best be approached in partnership with Papatipu Rūnanga. Environment Canterbury and Ngā Rūnanga have agreed to progress the partnership approach through wānanga and korero in 2022.

Key regional projects/campaigns

14. Braided river work has been focussed on flood recovery and ongoing joint work programmes including weed clearance projects on the Ashley/Rakahuri and Ashburton/Hakatere, and predator control projects on the Waiau Toa/Clarence and upper Rakaia. Several work programmes have commenced to monitor braided river bird nesting success, including one on the Rangitata in partnership with Arowhenua Rūnanga. Flood recovery work is progressing in the Waimakariri Regional Park with silt removal and track reinstatement.
15. The Kaitiakitanga mahinga kai programme aims to restore and protect key priority sites, mahinga kai and waterways identified by Papatipu Rūnanga across the region. This programme will help achieve the CWMS Kaitiakitanga target and goals. Fifteen projects have been co-developed with Rūnanga across Canterbury and are at various stages of planning and implementation.
16. Environment Canterbury engaged NIWA to undertake a delimitation of the aquatic weed *Egeria densa* ("Oxygen weed" or "lakeweed" – a nationally designated Unwanted Organism) in the Avon River/Ōtākaro at Kerrs Reach in Christchurch city to help guide, and gauge effectiveness, of potential management responses.
17. A draft agreement between Southland, Otago and Canterbury regional councils is being considered to further enhance pest management work between the councils by developing joint work programmes including sharing of information and tools to enable improved pest management.
18. Environment Canterbury is evaluating the monitoring and reporting requirements of the Water Services Act 2021 from a regional council perspective and is progressing an in-depth programme of compliance monitoring of territorial authorities' and industrial wastewater and stormwater discharge consents. Environment Canterbury is working closely with territorial authorities and industry and presented to the Operations Forum in December 2021 on the regulatory implications.
19. The issue of poorly located, designed, or maintained onsite wastewater management systems (OWMS) is a concern in many parts of Canterbury, particularly where growing townships or rural residential areas are not reticulated for drinking water or wastewater, and individual on-site systems are proposed for small lot sizes.
20. Environment Canterbury is currently engaged in projects to further understand the risks arising from OWMS to source drinking water and how they can be better managed. For example, a tool is being developed to better assess the risk of cumulative effects of OWMS from new rural residential lots on groundwater quality.
21. Environment Canterbury is engaging with territorial authorities and the OWMS industry to set expectations for new subdivisions where lot sizes are small, groundwater is shallow and there is no drinking water reticulation. This issue will be covered as part of the regional policy framework review working towards 2024.

22. Two government-funded research programmes, led by Crown Research Institutes working with industry into better use of irrigation water, have provided insights into the importance of, and challenges for, water users in considering the impacts of climate change on farm systems. The research highlighted the need for greater clarity around future water infrastructure requirements that support healthy waterbodies to enable sustainable farming practices.
23. The following water infrastructure projects to improve water quality, increase river flows and groundwater levels continue to be trialled in the region:
 - Logging of 27 ha of pine plantation surrounding the Selwyn/Waikirikiriri Near River Recharge (NRR) scheme is nearly complete, with income reinvested in 2022 in new native and exotic plantings.
 - A community planting day at the upper Hekeao Hinds Near River Recharge site was held on 3 October and the site now contains ~10,000 native trees, with further native planting underway for 1.5 km of riverbank upstream.
 - A preliminary business case has been completed for a variety of Targeted Stream Augmentation (TSA) options based on initial learnings from the Eiffelton TSA trial site.

Central government policy

24. Taumata Arowai took over as the water services regulator from the Ministry of Health on 15 November 2021.
25. The Water Services Act 2021 came into effect on 15 November 2021, with drinking water residual disinfection exemptions commencing on 1 March 2022 and a small number of provisions relating to stormwater and wastewater delayed until 15 November 2023.
26. To refine elements of the Three Water Reform programme the Government established the following three independent working groups:
 - Representation, Governance and Accountability of new Water Services Entities
 - Planning Technical Working Group
 - Rural Supplies Technical Working Group.
27. The Representation, Governance and Accountability of new Water Services Entities Working Group comprise of representatives from local government and iwi/Māori, and is considering how representation, governance and accountability arrangements for water services entities can be strengthened. The Working Group will report back to the Minister by 28 February, which will enable Ministers to consider recommendations from the Working Group process before the Water Services Entities Bill is introduced.
28. Drafts for the new Drinking Water Quality Assurance Rules, Drinking Water Standards, Aesthetic Values, and Acceptable Solutions for spring and bore drinking water supplies, rural agricultural water supplies, and roof water supplies are now available at taumataarowai.govt.nz/for-water-suppliers. A 10-week public consultation period commenced on 17 January 2022.

29. Acceptable Solutions are prescribed requirements prepared by Taumata Arowai which a water supplier can adopt to demonstrate compliance against some of the legislative requirements set out in the Water Services Act 2021.
30. Future management of stormwater assets, including flood protection and drainage structures, remain uncertain and will require coordination across central and local government.
31. Ministry for the Environment released a consultation document on Improving the protection of drinking-water sources – proposed amendments to the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007. The public consultation period closes 6 March 2022.
32. In addition, the Ministry for the Environment initiated a further round of targeted engagement with Māori / iwi / hapū and local government. To support the process, the Ministry provided stakeholders with a copy of their new consultation material – *Our future resource management system* – which sets out proposals for key components within the system including plan-making, joint committees, compliance, monitoring and enforcement, monitoring and system oversight. Feedback on the consultation document closes 28 February 2022.
33. On 1 November the select committee reported back to Parliament on the Inquiry into the Natural and Built Environments Bill: Parliamentary paper and exposure draft. The Government will consider the select committee's recommendations and publish its response in February 2022.

Essential Freshwater implementation

34. Ashburton District Council continues to lead the Resilient Business project to understand and identify opportunities and risks faced by the farming sector in adapting to climate change.
35. The "Supporting Land Use Adaption in a Changing Climate" project led by Ashburton District Council was approved for funding by Our Land and Water in November 2021. It is an eight-month project investigating how farmers' land use and climate change adaption practices are influenced by how information on climate change research is presented to them. This project's results will influence the design of the Resilient Business programme which is due to commence in late 2022.
36. Alongside reviewing the regional land and water planning framework, Environment Canterbury continues to develop its approach to implementing the new requirements of the Essential Freshwater package and provides regular updates on Environment Canterbury's website^[1]. This includes developing campaigns (including key messages, factsheets and resources) for wetland protection, synthetic nitrogen cap and intensive

^[1] <https://www.ecan.govt.nz/your-region/your-environment/water/essential-freshwater-package>

winter grazing to help landowners understand the requirements of the Essential Freshwater National Environmental Standards.

37. Following the Government's review of OVERSEER[®], Environment Canterbury initiated a work programme to respond to immediate and longer-term issues raised by the review. Papatipu Rūnanga, farm consultants, managers of irrigation schemes and auditors were engaged on the findings of the review.
38. Timeframes for processing new consent applications have been extended where requested by an applicant, and Farm Environment Plan (FEP) audits were temporarily paused to enable discussion with rūnanga on these matters. An interim approach to manage the processing of new consent applications and upcoming FEPs audits has been developed with Papatipu Rūnanga, and consent processing and audits resumed across most of Canterbury in December, but not those parts of the region where discussions with Rūnanga continue.
39. There is now a significant body of work underway in preparing for amendments to the regulatory framework (to give effect to central government's Essential Freshwater package, achieving Te Mana o te Wai) which must be notified by 2024. This includes identifying a longer-term solution to the OVERSEER[®] review, identifying how to integrate existing FEPs into the proposed Freshwater Farm Plan framework, assessing what role catchment collectives could play in the new framework, and assessing what going beyond Good Management Practice will look like in the future.

Attachments

- Attachment 1: Zone Committee Action Plans

Kaikōura Water Zone Committee

Action Plan July 2021–June 2024

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/kaikoura-water-zone.

Our vision:

Clean Water, Healthy Life – Waiora, Hauora, Mauri Ora

Our purpose:

To uphold the mana of the freshwater bodies within Kaikōura by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- **To get involved** in an active programme of community engagement on freshwater management matters.
- **To facilitate relevant advice** to councils and other organisations contributing to freshwater management.
- **To extend the resources** available to implement the CWMS by: working with stakeholders across all sectors and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS.
- **To report back** annually to councils and Rūnanga on progress towards delivery of the zone-specific priorities.

Our Councils' priorities for our zone committee are:

Kaikōura District Council

Ecosystem health

- Progress improvements to stormwater and wastewater infrastructure to reduce ecological damage to lowland streams from sediment and contaminants and fulfil requirements to obtain and comply with stormwater consents for townships by 2025.
- Review the state and operation of the district's wastewater treatment plant infrastructure to address and reduce potential impacts on the district's highly valued rivers.
- Continue regular community education/behaviour change campaigns on stormwater issues and management.

Protecting biodiversity in our district by:

- Implementing a system to protect SNAs and maintain indigenous vegetation and work with Environment Canterbury to develop a biodiversity monitoring strategy.
- Review vegetation clearance rules as part of District Plan review.
- Continue to identify and map SNA sites throughout the district for inclusion in District Plan review in line with NPSIB criteria and requirements by 2026.
- Advocate for indigenous biodiversity through regular education/behaviour change campaigns to improve understanding of the importance of protecting and conserving indigenous vegetation.

Source water quality

- Prioritise planning for water supply wells and treatment plant upgrades, in particular Suburban, Fernleigh and East Coast water supplies.
- Running campaigns to recommend regular testing of private bores and consider options for secure water supply.

Water use efficiency

- Improve compliance with national regulations on the measurement and reporting of water takes.
- Manage water demand through meeting requirements under LWRP and continue regular community education/behaviour change campaigns on water use management and conservation.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

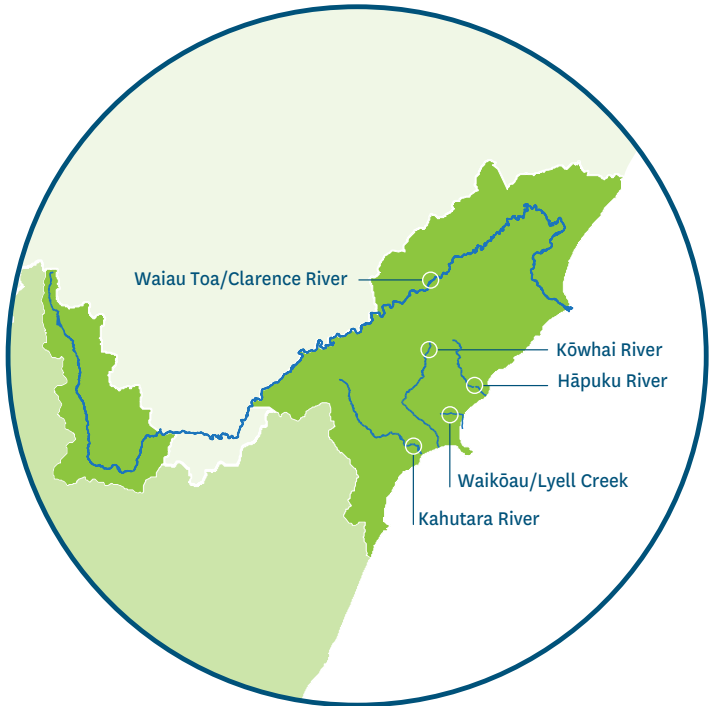
Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems.
- Reducing the number of fish barriers.
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieving the 2025 target to restore priority freshwater recreation opportunities in each zone.



Kaikōura Water Zone Committee

Action Plan 2021–2024

We will continue to support “ki uta ki tai” projects and identify future projects within our takiwā by:

Continuing to support whole catchment management of the Waiau Toa/Clarence by:

- Providing advisory support to maintain or increase predator control of threatened and at-risk bird nesting sites.
- Continuing to support and monitor weed control in the existing four priority areas.
- Continuing to collaborate and build collective knowledge with papatipu rūnanga, stakeholders, landowners, and wider community.

Continuing to support Waikōau/Lyell Creek catchment recovery by:

- Supporting the monitoring of Waikōau tributaries and all forms of pollution in the catchment and advocate accountability.
- Working with our community to improve amenity sites in the Waikōau.
- Supporting an annual event “Lyell Creek clean up” and promote community engagement.
- Using the Waikōau/Lyell Creek as an exemplar for future projects.
- Public advocacy of responsibility around waterways to residents, businesses and farmers in the area.

Identifying new “ki uta ki tai” opportunities by:

- Identifying ‘ki uta ki tai’ projects and opportunities that support existing efforts in this space.

We will support kaitiakitanga within our zone by:

- Continuing to collaborate with local groups to promote kaitiakitanga as a responsibility for all.
- Supporting mana whenua and whānau on mahinga kai projects.
- Supporting the management and water quality monitoring of freshwater mātaimai.
- Advocate for and support actions to address challenges in meeting CWMS targets.

We will facilitate action to enhance biodiversity and improve amenity and recreation outcomes by:

Supporting the protection and enhancement of wetlands across the zone by:

- Focusing advocacy on inanga spawning sites.
- Supporting the monitoring of existing funded wetlands.
- Facilitating landowner, community, and our schools’ understanding of the value of wetlands and wetland regulations.
- Coordinating and supporting “on the ground” actions such as trapping and planting.

Identifying and advocating action for priority areas to improve environmental outcomes, and amenity and recreation opportunities by:

- Working with landowners, rūnanga, whānau, communities, Councils, and others to identify priority improvement areas including priority freshwater recreational opportunities to support.
- Identifying and supporting opportunities along the coastal corridor including South Bay.

We will support our community to respond to changing requirements, and share resources for good management practice by:

- Sharing information and resources for managing riparian margins with landowners to enable effective and integrated management.
- Sharing information and resources with our community to enable good kaitiakitanga of our zone.
- Supporting farmers, landowners, businesses and our community to understand new legislation requirements around freshwater management.

We will facilitate understanding of catchment systems within our zone, build community knowledge and connection to these systems and increase public participation by:

- Building our understanding of our zone to enable us to provide robust advice.
- Building our understanding of Environment Canterbury’s water testing regime and the science behind it, so we can share our zones water story and progress.
- Working with mana whenua and whānau to build our community’s cultural understanding of our catchments.
- Building our community collective understanding of the geological and hydrological contexts of our catchments, and the impacts of climate change on our zone.
- Using our collective knowledge to identify mahinga kai opportunities.
- Investigating educational opportunities that encourage learning and research.
- Celebrating and sharing stories of success with our community.

Want to get involved? Head to ecan.govt.nz/kaikoura-water-zone

“As Kaitiaki (guardians) we will ensure the water in our zone enhances the abundance and quality of life, we will rejuvenate its mauri, as stated in our zone implementation plan.”



Waimakariri Water Zone Committee

Action Plan July 2021–June 2024



Image – Ashley River / Rakahuri

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/waimakariri-water-zone.

Our purpose:

To uphold the mana of the freshwater bodies within the Waimakariri Water Zone by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our functions:

Community engagement – continuing an active programme of engaging with communities on freshwater management matters and facilitating the provision of advice to councils (relevant territorial authorities and Environment Canterbury) and others (e.g. private sector) contributing to freshwater management.

Enhancing delivery capability and coalition of the willing – working with stakeholders across all sectors to extend the resources available to implement the CWMS, including securing additional resources and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that advance CWMS implementation.

Progress reporting – annual progress reporting to councils on progress towards delivery of the zone-specific priorities and CWMS target areas identified in the Zone Committee Action Plan.

Our Councils’ priorities for our zone committee are:

Waimakariri District Council

Ecosystem Health and Biodiversity

- To maintain or improve existing high-quality indigenous dryland ecosystems in intermontane basins and on the plains;
- Reduction of threatened or at-risk status of indigenous fish species compared with 2020;
- All coastal lagoons, hāpua and estuaries show improvement in key ecosystem health indicators compared with 2010.

Drinking Water

- Implementation programmes in place for each zone to achieve catchment load limits;
- Achieve nutrient efficiency targets for the zone on all new irrigated land and 80% of other land in major rural land uses (pasture, major arable, and major horticulture crops, and have 100% of rural properties working towards these targets (and for properties within urban boundaries that apply nutrients over significant areas).

Recreation and Amenity Opportunities

- Cyanobacterial risk for priority contact recreation sites in Canterbury rivers and lakes is understood and managed for public health;
- Manage water demand through meeting requirements under the Land & Water Regional Plan and continue regular community education/behaviour change campaigns on water use management and conservation.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems;
- Reducing the number of fish barriers;
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieving the 2025 target to restore priority freshwater recreation opportunities in each zone.



This taniko (woven pattern for clothing) Pātikitiki, represents lashing or binding together. The smaller diamonds represent pātiki (flounder). The Aramoana are white chevron shaped spaces representing the ocean waves. Together they represent the sustainment of our waters and the binding organisations that protect them. Pātiki is also the symbol for abundance.

– Ariki Creative

Waimakariri Water Zone Committee

Action Plan 2021–2024

Improved monitoring of groundwater and surface water in the zone

To encourage community understanding and awareness of monitoring and clarify future monitoring requirements in the zone by:

- Facilitating collaboration to develop a wider monitoring network in the zone;
- Encouraging more monitoring by catchment and landcare groups.

We will measure this by:

- Establishing a working group to bring together relevant organisations to review existing freshwater monitoring in the zone and address future monitoring requirements across the zone;
- Promoting the benefits of monitoring and establish options for the community to be involved in monitoring;
- Working with ECan and WDC to ensure monitoring results are accessible and understandable to the community;
- Facilitate catchment and landcare groups and the wider community working together with Councils to expand the freshwater monitoring in the Waimakariri and share information.

Increased indigenous biodiversity in the zone

To protect and improve the indigenous biodiversity, habitat or ecosystems in the zone through:

- Managing and eliminating plant and animal pest species;
- Assisting all landowners and managers to integrate indigenous biodiversity management into the wider aspects of land and water (catchment) management.

We will measure this by:

- Facilitating the establishment of a Waimakariri Biodiversity Trust and provide ongoing support to this Trust;
- Provide ongoing support and encouragement to groups in the zone advancing indigenous biodiversity values;
- Encourage catchment and landcare groups to protect, enhance and create more indigenous biodiversity habitat on properties;
- Promoting greater community understanding about biodiversity, and wetlands, and the benefits of their protection and enhancement.

Promoting the natural braided character and increased flow of the Ashley River/Rakahuri

To protect the braided river values associated with the Ashley River/Rakahuri, ki uta ki tai, by:

- Promoting an improved community understanding of land and water use impacts on braided river character and the lower catchment ecosystems;
- Working to make the Ashley River/Rakahuri safe for contact recreation, with improved river habitat, fish passage and customary use, and flows that support natural coastal processes.

We will measure this by:

- Encouraging the improved understanding of landowners and wider community of climate change impacts on the Ashley River/Rakahuri;
- Encouraging landowners and agencies to protect the landscape and indigenous biodiversity values in the upper catchment;
- Supporting weed control in the upper and middle sections of the catchment;
- Supporting an investigation into existing consents and water use in the Ashley River/Rakahuri catchment;
- Encouraging landowner and agency efforts to improve the habitat health of lowland spring-fed tributaries;
- Supporting investigations focused on understanding and improving the ecosystem health of Te Aka Aka/Ashley estuary.

Protection and enhancement of recreation in the zone

To protect and manage the natural landscape and recreation resources in the Waimakariri Water Zone by:

- Facilitating the extension of recreation corridors and amenity space in the zone;
- Encouraging awareness of land use impacts on high value landscapes in the zone.

We will measure this by:

- Supporting the completion of the Silverstream loop;
- Supporting specific Arohatia te Awa marginal strip recreation works;
- Encouraging investigation into the causes of cyanobacteria blooms;
- Encouraging reductions in pollutants/contaminants to help reduce nuisance algal growths in waterways.



Image – Burgess Stream, near Eyreton

Improved Mahinga Kai within the Waimakariri Water Zone

To protect and enhance mahinga kai practices in waterways within the Waimakariri Water Zone, while also:

- Encouraging a wider understanding of mahinga kai practices in the community;
- Increasing Mahinga kai enhancement and access on the plains.

We will measure this by:

- Supporting the Ngāi Tūāhuriri mahinga kai enhancement projects on the plains and in lowland waterways;
- Encouraging catchment and landcare groups to protect and improve riparian habitat to support mahinga kai practices on the plains and lowland waterways;
- Supporting mahinga kai workshops across the zone.

Want to get involved?

Head to ecan.govt.nz/waimakariri-water-zone



Image courtesy of N Ledgard & G Davey



New committee member, Martha Jolly

Christchurch West Melton Water Zone Committee

Action Plan July 2021–June 2024

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/christchurch-west-melton-water-zone

Our purpose:

To uphold the mana of the freshwater bodies within Christchurch West Melton by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- **To get involved** in an active programme of community engagement on freshwater management matters
- **To facilitate relevant advice** to councils and other organisations contributing to freshwater management
- **To extend the resources** available to implement the CWMS by: working with stakeholders across all sectors and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS
- **To report back** annually to councils and Rūnanga on progress towards delivery of the zone-specific priorities.

Our Councils' priorities for our zone committee are:

Christchurch City Council

Public awareness and engagement

Model manaakitanga (caring and respect) for our waters and promote takohanga (commitment) and kaitiakitanga (stewardship) through:

- Leading water forums and supporting CCC initiatives to give effect to Te Mana o Te Wai;
- Advocacy of and support for the Community Water Partnership, connections with members' community and professional networks;
- Supporting erosion and sediment control workshops for industry.

Selwyn District Council

Align all zone activities with the **overall social, economic, environmental and cultural wellbeing** for the district.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems
- Reducing the number of fish barriers
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieving the 2025 target to restore priority freshwater recreation opportunities in each zone.



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– Ariki Creative

Christchurch West Melton Water Zone Committee

Action Plan 2021–2024

We will enhance mahinga kai by:

- Seeking ngā rūnanga guidance on priority sites for mahinga kai and wāhi taonga and undertake activities that improve our knowledge. Support ngā rūnanga mahinga kai projects through implementing agreed joint actions and advocating for funding
- Building our understanding of Te Mana o te Wai
- Requesting that the ngā rūnanga and Environment Canterbury Mātauranga Māori monitoring programme begins by 2023
- Supporting implementation of the Iwi Management Plan.

He rau ringa e oti ai
(Many hands make light work)

We will engage with the community and raise awareness by:

- Supporting the Community Waterways Partnership by assisting with community engagement and providing a conduit to councils
- Advocating that Christchurch City Council resources an effective long-term stormwater behaviour change programme, as part of the Community Waterways Partnership
- Advocating that Christchurch City Council effectively engages with the community to develop Stormwater Management Plans. Providing assistance with engagement activities
- Using the Stormwater Superhero mobile resource at events and undertaking other Stormwater Superhero engagement activities about reducing stormwater pollution at source
- Providing Stormwater Superhero awards to deserving businesses/industries to encourage good practice
- Encouraging use of Storminators once available
- Educating influential professions/industries about the impact of building materials on stormwater
- Engaging with key community groups to understand their main issues and explore how we can help, such as support for applications for funding and making recommendations to councils
- Sharing biodiversity success stories with the community
- Educating the community about the groundwater system and how it connects to surface waterways, such as by hosting a field trip and creating a video
- Sharing Christchurch City Council messages about water use efficiency with the community.

We will enhance ecosystem health by:

Advocating to local, regional and central government for statutory and non-statutory improvements, research and modelling including:

- Advocating to Christchurch City Council, Environment Canterbury and others for statutory and non-statutory improvements to erosion and sediment control
- Advocating for national measures to manage urban contaminants at source, such as regulation of materials and industry standards for copper and zinc from roofs, tyres and brake pads
- Advocating for central government and/or university research on the potential link between nitrate levels and colorectal cancer
- Advocating to Environment Canterbury for improvements to groundwater model to understand how groundwater from Waimakariri and Selwyn-Waihora catchments may impact on spring fed streams and drinking water
- Advocating to Christchurch City Council for effective water charging
- Advocating to Christchurch City Council that it implements mechanisms to achieve household rain water collection, such as bylaws
- Advocating that Christchurch City Council, Selwyn District Council and central government include water sensitive urban design in spatial planning and developments
- Advocating to Christchurch City Council and Environment Canterbury for reduction of sewer overflows.

Supporting landowner, community, and local government work in catchments:

- Supporting Cashmere Stream Care Group and Ōtūkaikino Healthy Waterways Partnership by implementing actions that support the projects and organisations involved. Examples of actions: letters of support for funding applications, recommendations to councils
- Supporting catchment approaches in Addington, Haytons, Ōpāwaho Heathcote, Avon Ōtākaro and Styx waterways by implementing actions aligned with land, water and biodiversity work of Christchurch City Council, Environment Canterbury, community groups and others
- Advocating to Environment Canterbury and others for drylands biodiversity protection.

Want to get involved?

Head to ecan.govt.nz/christchurch-west-melton-water-zone



Te Pātaka o Rākaihautū/Banks Peninsula Water Zone Committee

Action Plan July 2021–June 2024

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/banks-peninsula-water-zone

Our purpose:

To uphold the mana of the freshwater bodies within Te Pātaka o Rākaihautū/Banks Peninsula by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- **To get involved** in an active programme of community engagement on freshwater management matters
- **To facilitate relevant advice** to councils and other organisations contributing to freshwater management
- **To extend the resources available** to implement the CWMS by: working with stakeholders across all sectors and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS
- **To report back annually** to councils and Rūnanga on progress towards delivery of the zone-specific priorities.

Our Councils' priorities for our zone committee are:

Christchurch City Council

Public awareness and engagement:

Model manaakitanga (caring and respect) for our waters and promote takohanga (commitment) and kaitiakitanga (stewardship) through:

- Leading water forums and supporting CCC initiatives to give effect to Te Mana o Te Wai;
- Advocacy of and support for the Community Water Partnership, connections with members' community and professional networks;
- Supporting erosion and sediment control workshops for industry.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

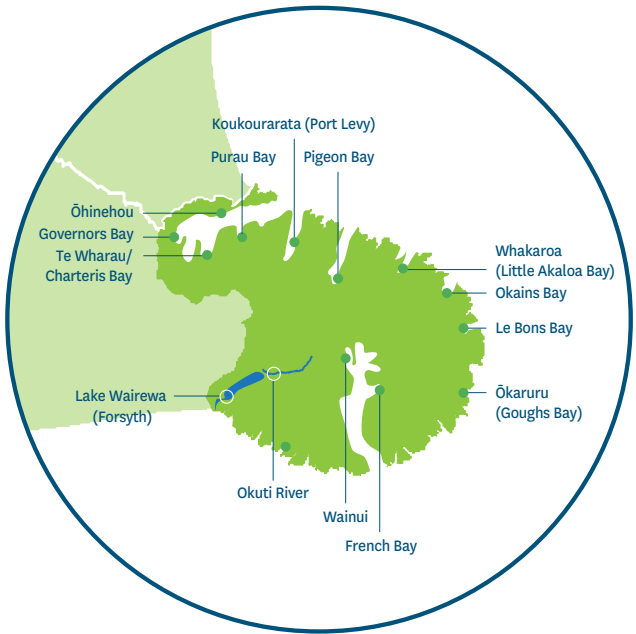
Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems
- Reducing the number of fish barriers
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieving the 2025 target to restore priority freshwater recreation opportunities in each zone.



Te Pātaka o Rākaihautū/Banks Peninsula Water Zone Committee

Action Plan July 2021– June 2024

We will enhance mahinga kai by:

- Building mahinga kai and mātauranga Māori into our deliberations and decision making
- Supporting implementation of the Mahaanui Iwi Management Plan
- Modeling manaakitanga and promoting takohanga and kaitiakitanga through our actions
- Supporting ngā rūnanga mahinga kai projects though implementing agreed joint actions and advocating for funding
- Requesting that ngā rūnanga and Environment Canterbury Mātauranga Māori monitoring programme begins by 2023
- Undertaking activities that improve our knowledge of mahinga kai
- Selecting a priority species to be more abundant in the zone. Collaborate and advocate for others to carry out actions that will increase the abundance of this species.

We will engage with the community and raise awareness by:

- Working with landowners
- Ensuring we are aware of the impacts of our actions on landowners and building this into our deliberations and decision making
- Supporting the trial of a native forestry carbon farming approach on a landowner’s property and help share their experience with the community
- Engaging with the community to improve their understanding and uptake of mahinga kai, soil conservation, erosion and sediment control, biodiversity and native forestry carbon farming. Seek opportunities to partner with other organisations to carry out this engagement
- Supporting community organisations that engage with the community about water management, biodiversity, mahinga kai, sustainable land management, soil conservation, erosion and sediment control and native forestry carbon farming. Explore opportunities to partner with these community organisations
- Supporting community engagement about climate change by helping gather local knowledge about values, changes and adaptation. Encourage activities that increase community resilience, mahinga kai, biodiversity, and water quality and quantity. Carry this out in partnership with Christchurch City Council, Environment Canterbury and community organisations
- Engaging with the community about water efficiency within the context of climate change on Banks Peninsula - meaning the consequence of reduced rainfall and more intense storms
- Assisting Environment Canterbury and Christchurch City Council to engage with the community about the management or replacement of on-site wastewater treatment systems. Start with engaging with the Wainui community.

We will enhance ecosystem health by:

Advocating to local, regional and central government for statutory and non-statutory improvements, including:

- Advocating to Christchurch City Council that it trials a variety of techniques to find effective erosion and sediment control for roadside cuttings and implements the most effective techniques on roadside cuttings
- Advocating to Christchurch City Council that it improves how it carries out roadside maintenance so that sediment and other contaminant discharges are reduced
- Advocating to Environment Canterbury, Christchurch City Council and others that they support landowners to carry out effective erosion and sediment control
- Promoting the use of soil maps (S-Map) as a freely available online asset for environmental benefits and productivity gains to Whakaraupō (2021) and Banks Peninsula community (2022-23)
- Advocating to Environment Canterbury that it creates practical new rules to optimise Te Mana o te Wai in its allocation of water, and that the allocation of water as is fair as possible while still fulfilling Te Mana o te Wai
- Advocating to Christchurch City Council that they have effective mechanisms to ensure water use is efficient, for example widespread community use of rain water tanks
- Advocating to Environment Canterbury and Christchurch City Council that they ensure adequate advice is provided to the community about the management and replacement of on-site wastewater treatment systems, so that the negative impacts on freshwater and coastal water quality is reduced
- Advocating that Christchurch City Council and Environment Canterbury remove barriers to fish passage and support landowners to do so
- Advocating to Environment Canterbury for monitoring and initiatives to improve kai moana and that they support ngā rūnanga initiatives to improve kai moana

- Advocating for our Zone Implementation Programme priority outcomes through engaging in Environment Canterbury’s Coastal Plan Review
- Advocating to central government for changes to the Emission Trading Scheme so that it is significantly more favourable to landowners wishing to carry out native forest carbon farming
- Advocating to Christchurch City Council and Environment Canterbury that they ensure they are aware of the impacts of their actions and decisions on landowners and that they take this into account in their work programmes, policies, plans and decisions.

Supporting landowner, community, and local government initiatives in catchments:

- Supporting Whaka-Ora Healthy Harbour with implementing the Whakaraupō Catchment Management Plan through implementing agreed joint actions. Focus on priority action projects for reducing sediment into waterways
- Supporting Ki Uta Ki Tai catchment approach 2021-2022 in Wainui Bay, Ōkaruru/Goughs Bay and Pireka/ Peraki Bay by implementing actions that support the landowners, community and Environment Canterbury’s land management and biodiversity advice work. Showcase these Ki Uta Ki Tai catchment approaches. Recommend that some of Environment Canterbury’s Community Engagement Fund be allocated to these catchments
- Selecting Ki Uta Ki Tai catchments for 2023 and 2024
- Supporting Wairewa Bank Stabilisation Project through implementing actions that align with Environment Canterbury and other organisations’ land management, biodiversity and river management work.

Want to get involved? Head to ecan.govt.nz/banks-peninsula-water-zone



Selwyn Waihora Water Zone Committee

Action Plan July 2021–June 2024

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/Selwyn-waihora-zone.

Our purpose:

To uphold the mana of the freshwater bodies within Selwyn Waihora by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- **To get involved** in an active programme of community engagement on freshwater management matters
- **To facilitate relevant advice** to councils and other organisations contributing to freshwater management
- **To extend the resources** available to implement the CWMS by: working with stakeholders across all sectors and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS
- **To report back** annually to councils and Rūnanga on progress towards delivery of the zone-specific priorities.

Our Councils' priorities for our zone committee are:

Selwyn District Council

Align all zone activities with the **overall social, economic, environmental and cultural wellbeing** for the district.

Christchurch City Council (CCC)

Public awareness and engagement

Model manaakitanga (caring and respect) for our waters and promote takohanga (commitment) and kaitiakitanga (stewardship) through:

- Leading water forums and supporting CCC initiatives to give effect to Te Mana o Te Wai;
- Advocacy of and support for the Community Water Partnership, connections with members' community and professional networks;
- Supporting erosion and sediment control workshops for industry.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems
- Reducing the number of fish barriers
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieving the 2025 target to restore priority freshwater recreation opportunities in each zone.



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– Ariki Creative

Selwyn Waihora Water Zone Committee

Action Plan 2021–2024

We will help raise awareness about the risks to private drinking water supplies by:

- Requesting and assisting with consolidation of information to raise awareness about the safety of private drinking water supplies by July 2021
- Attending or hosting at least one public event each year to raise awareness about water quality in private drinking water supplies and wider water quality trends
- Investigating opportunities for accessible community testing by late 2021.

We will enhance mahinga kai, biodiversity and recreation opportunities by:

- Hosting or attending at least one public information session on mahinga kai each year
- Developing ‘prompt questions’ to ensure mahinga kai is built into decision making and projects by December 2022
- Using at least one method each year to support rūnanga and agencies to implement mahinga kai projects
- Hosting at least one biodiversity-focused celebration each year
- Publicising and celebrating measurable improved biodiversity outcomes for at least one project each year
- Publicising and supporting at least two planting days per year
- Co-hosting a 2021 Rakaia field trip with Ashburton Water Zone Committee, with a focus on biodiversity and recreation
- Recommending full allocation of Immediate Steps each financial year
- Requesting Environment Canterbury and Department of Conservation briefings on progress in the identification of fish passage issues, improved guidelines, and Environment Canterbury’s prioritised approach to improving intake design.

We will facilitate actions to achieve catchment nutrient targets and water quality outcomes by:

- Identifying and suggesting at least one role model farmer each year to be promoted
- Requesting at least two verbal or written updates each year on progress, including current rules, consent updates, audit results, meeting the PC1-modelled nitrogen load
- Hosting at least one community meeting per year on progress and challenges with meeting nutrient limits (rural and urban)
- Attending at least three Environment Canterbury farm advisory drop-ins per year
- Hosting or attending at least one community engagement event per year that assists with community understanding about Central Plains Water
- Communicating with at least three people or organisations driving positive change in the rural sector each year.

We will support actions to restore Te Waihora to a healthy state by:

- Attending and contributing to Te Waihora Co-Governance and Whakakōhanga Kōrero Group meetings
- Advocating for and contributing to a map of all projects in the catchment by December 2021
- Assisting Te Waihora Co-Governance with community engagement and communications
- Requesting and completing regular reporting to/engagement with Te Waihora Co-Governors.

We will facilitate a community-wide approach to restore the Waikirikiri/Selwyn River back to a healthy state by:

Seeking support in the form of a partnership and actively seeking resources and practical projects, including:

- Identifying and requesting specific priorities/actions/locations/funding for councils and agencies to prioritise by June 2022
- Writing at least one story for publication on the Waikirikiri each year
- Attending and contributing to relevant community/partner meetings
- Investigating a “scorecard” for the river for community reporting by December 2023 and seeking assistance with measurable criteria for a healthy Waikirikiri/Selwyn River
- Promoting and enabling school engagement and citizen science.

Ensuring all practical work is based on best practice and evaluation, including:

- Actively pursuing research into the effectiveness of riparian planting to ensure best practice and positive environmental outcomes
- Requesting regular reporting to track sediment loads in Silverstream catchment, and providing this information to the community
- Recommending 2021-22 summer student internships to relevant councils for specific research
- Requesting regular Waikirikiri/Selwyn-related project updates and contributing ideas and support to ensure projects progress
- Supporting Greendale School’s Enviroschools work in the Near River Recharge project and supporting the NRR and Targeted Stream Augmentation projects
- Investigating the impact of 4WD use and rubbish dumping in the river, and options for low-impact recreational 4WD use.

Support landowner work in the catchment:

- Supporting the Environment Canterbury zone team to encourage catchment groups and implement the Swimmable Selwyn at Coes Ford project
- Supporting funding bids and land purchases.

Want to get involved? Head to ecan.govt.nz/selwyn-waihora-zone



Ashburton Water Zone Committee

Action Plan July 2021–June 2024

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/ashburton-water-zone

Our purpose:

To uphold the mana of the freshwater bodies within Ashburton by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- **Facilitate community engagement and collaboration** by continuing an active programme of engaging with communities on freshwater management matters
- **Facilitate the provision of advice** through to councils (relevant territorial authorities and Environment Canterbury) and others (e.g. private sector) contributing to freshwater management
- **Enhance delivery capability and coalition of the willing** – working with stakeholders across all sectors to extend the resources available to implement the CWMS, including connecting others to additional resources and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS
- **Provide progress reports** – annual progress reporting to councils and rūnanga on progress towards delivery of the zone-specific priorities and CWMS target areas identified in the Zone Committee Action Plan.

Our Councils’ priorities for our zone committee are:

Ashburton District Council

Ashburton Lakes water quality and future preservation

Carters Creek enhancement project

Wakanui hāpua project

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

Working alongside landowners, rūnanga, communities, and others to inspire and grow support for and resources needed to achieve the 2025 mahinga kai goal of five mahinga kai projects in each zone.

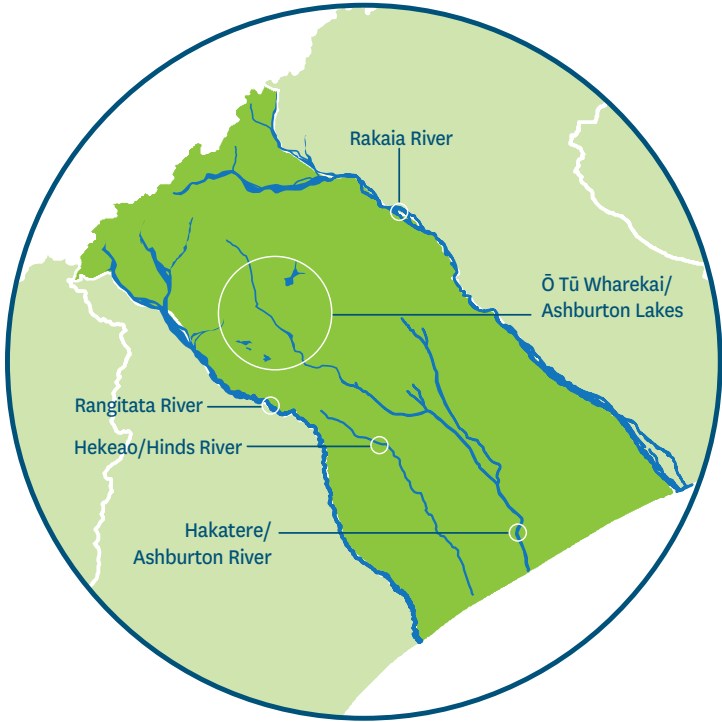
Ecosystem health and biodiversity targets

Working alongside landowners, Rūnanga, communities, councils and others to inspire and grow support and resources to achieve the 2025 target goal covering all freshwater ecosystems through

- increased riparian management to protect aquatic ecosystems
- reducing the number of fish barriers in the zone
- protection and enhancement of named wetlands.

Recreation and amenity targets

Working alongside landowners, rūnanga, communities, councils and others to support and grow resources to achieve the 2025 target to restore priority freshwater recreation opportunities in each zone that do not meet contact recreation standards, and developing plans and actions to achieve and show measurable progress.



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– Ariki Creative

Ashburton Water Zone Committee

Action Plan 2021–2024

We will focus on several waterbodies:

- Ō Tū Wharekai/Ashburton Lakes,
- Hakatere/Ashburton River and its tributaries (including Carters Creek and Wakanui hāpua) and
- Hekeao/Hinds catchment

We will work to enhance mahinga kai values by:

- Working in partnership with papatipu rūnanga, with councils, government agencies, catchment and community groups, and landowners championing five mahinga kai projects across the zone
- Increasing our knowledge of mahinga kai, including by attending a hui on mahinga kai at T Pā o Moki Marae with Te Taumutu Rūnanga in 2021
- Utilising our members’ communications channels such as newsletters, news media and social media to educate and promote mahinga kai and tangata whenua values
- Ensuring mahinga kai is considered in all projects and decisions.

We will work towards improving ecosystem health and meeting biodiversity targets by:

- Advocating for the protection of native fish species including uninterrupted access to the sea and the reduction of fish barriers where appropriate
- Co-hosting a 2021/22 Rakaia field trip with the Selwyn Waihora Water Zone Committee, with a focus on biodiversity and recreation
- Supporting the Ō Tū Wharekai / Ashburton Lakes recovery project by keeping abreast of the project implementation and assisting with recommendations where appropriate, which may include community engagement and education
- Working with partners and the community to review progress with the Hinds Drains Working Party recommendations and help facilitate the development of the Hekeao / Hinds biodiversity vision and providing ongoing support for agreed actions
- Facilitating a collaborative process to agree and support priority projects within the Hakatere / Ashburton River catchment. Examples of existing projects include the Hakatere river mouth enhancement, Ashburton consent review and biodiversity corridor Ki Uta Ki Tai
- Supporting the Carters Creek Enhancement project group by assisting with community engagement, education and communications, to encourage behaviours that positively impact water quality in Carters Creek
- Engaging with councils, rūnanga, catchment groups and schools to support further restoration activities which positively impact the biodiversity and mahinga kai values of the Wakanui hāpua area.

We will support measures to enhance recreation and amenity targets by:

- Identifying waterways that do not meet contact recreation standards, and supporting and encouraging catchment groups and community groups to implement actions that achieve water quality improvements for contact recreation
- Supporting the Ō Tū Wharekai / Ashburton Lakes recovery project to arrest the decline in high-country lake water quality for contact recreation by assisting with the implementation of recommendations where appropriate, which may include community engagement and education.

Want to get involved? Head to ecan.govt.nz/ashburton-water-zone



Orari Temuka Opihi Pareora (OTOP) Water Zone Committee

Action Plan 2021-2024



This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/otop

Our purpose:

To uphold the mana of the freshwater bodies within the OTOZ Zone by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

Our role:

- To get involved in an active programme of community engagement on freshwater management matters;
- To facilitate relevant advice to councils and other organisations contributing to freshwater management;
- To extend the resources available to implement the CWMS by: working with stakeholders across all sectors and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS;
- To report back annually to councils and Rūnanga on progress towards delivery of the zone-specific priorities.

Our Councils' priorities for our zone committee are:

Waimate District Council

- Safe drinking water free of contaminants for humans and animals;
- Rivers and wetlands have healthy ecological flows and high-quality water;
- Rural and urban communities are fully engaged and have ownership of water management processes;
- Native and indigenous wildlife associated with waterways have adequate habitats.

Mackenzie District Council

- Support Catchment Groups;
- Drinking water supplies (awareness and education);
- Recognise and protect culturally significant sites;
- Protect and enhance mahinga kai; and
- Protect and enhance biodiversity.

Timaru District Council

- **Lowland stream health** – collaborate to reduce ecological damage to stream health from sediment and contaminants from stormwater and wastewater. Community education/ behaviour change campaigns on stormwater issues and management;
- **Indigenous biodiversity** – advocate for indigenous biodiversity. Education/behaviour change campaigns to improve understanding of the importance of protecting and conserving indigenous vegetation as well as the management of Significant Natural Areas;
- **Safe drinking water** – collaborate to ensure Drinking-water Standards for New Zealand are met. Education on land-use activities within drinking water protection zones;
- **Water use management and conservation** – community education/behaviour change campaigns on water use management and conservation.

Environment Canterbury

Kaitiakitanga Wahi Taonga and mahinga kai targets

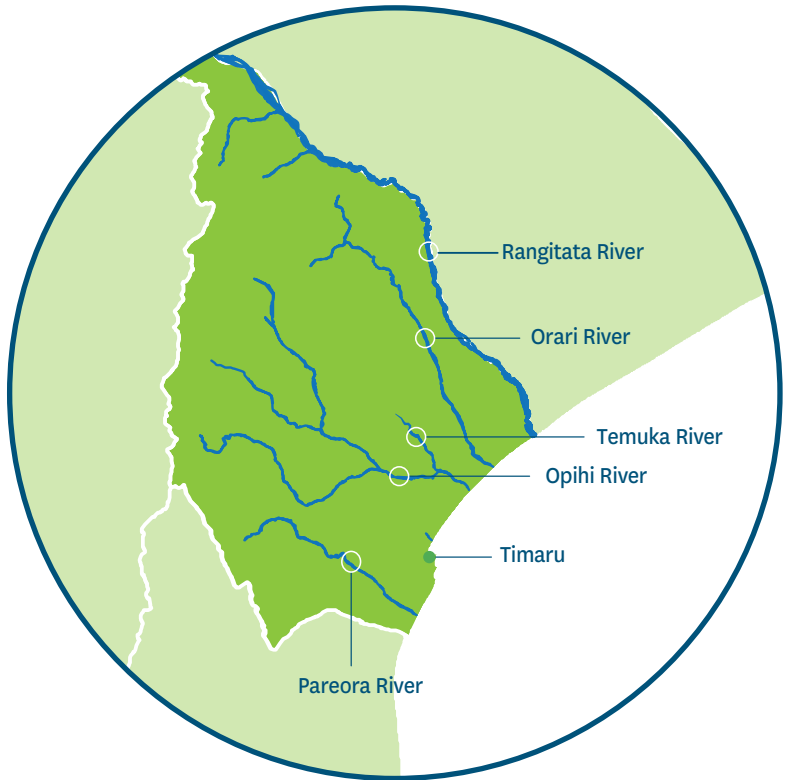
Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets:

- Increased riparian management to protect aquatic ecosystems;
- Reducing the number of fish barriers;
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieve the 2025 target to restore priority freshwater recreation opportunities in each zone.



This taniko (woven pattern for clothing) Pātikitiki, represents lashing or binding together. The smaller diamonds represent pātiki (flounder). The Aramoana are white chevron shaped spaces representing the ocean waves. Together they represent the sustainment of our waters and the binding organisations that protect them. Pātiki is also the symbol for abundance.

– Ariki Creative

Orari Temuka Opihi Pareora (OTOP) Water Zone Committee

Action Plan 2021-2024



Image - Opihi River

Our vision:

Te Mana o te Wai - When managing freshwater, it ensures the health and well-being of the water is protected and human health needs are provided for before enabling other uses of water for us and our children after us.

CWMS – To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework. The first order priorities are environment, customary use, community supplies and stock water.

We commit to protecting, enhancing, and restoring mahinga kai and tuhituhi neherā sites:

- Zone committee to attend a session at the Te Ana Maori Rock Art Centre and host a field trip to Taniwha Gully with invited catchment group members. Focus on tuhituhi neherā sites and mahinga kai and how best to manage these.

We commit to raising awareness of how to engage in a more positive manner with Rūnanga:

- Host an annual Te Tiriti o Waitangi workshop for community members to attend;
- Work with papatipu rūnanga and relevant landowners to host at least one hikoi for the community. Areas of interest include Waitarakao Washdyke Lagoon, Te Ahi Tarakihi Reserve and Creek, and Milford Lagoon.

We commit to raising awareness of Te mana o te Wai and te mana o te awa in a rural, urban, and industrial context:

- Host a public forum, combined with other Southern Canterbury zone committees, to assist the public in understanding what Te Mana O Te Wai and te mana o te awa means for them;
- Request briefings from Environment Canterbury on the state of our water resources and results from monitoring and share with relevant catchments.

We champion safe and reliable drinking water for the OTOP community:

- Host at least one community session offering on-site indicative private drinking water testing. Include presentations of possible solutions and research on reducing high nutrient levels.

We engage with the community and raise awareness of the impacts of human activity on land and water:

- Support the Catchment Collective South Canterbury Society Incorporated;
- Every zone committee member to be a member of one catchment group and report back regularly to the committee on catchment group needs and initiatives;
- Assist in establishing a Washdyke catchment group and help align this with the Waitarakao Washdyke working group.

Want to get involved?

Head to ecan.govt.nz/otop



Upper Waitaki Water Zone Committee

Action Plan 2021-2024



Image - Native planting at Twaddle's Swamp

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/upper-waitaki-water-zone

Our purpose:

To uphold the mana of the freshwater bodies within the Upper Waitaki Zone by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy (CWMS) vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- To get involved in an active programme of community engagement on freshwater management matters;
- To facilitate relevant advice to councils and other organisations contributing to freshwater management;
- To extend the resources available to implement the CWMS by: working with stakeholders across all sectors and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS;
- To report back annually to councils and Rūnanga on progress towards delivery of the zone-specific priorities.

Our Councils' priorities for our zone committee are:

Waitaki District Council

- Safe drinking water free of contaminants for humans and animals;
- Rivers and wetlands have healthy ecological flows and high water quality;
- Rural and urban communities are fully engaged and have ownership of water management processes;
- Native and indigenous wildlife associated with waterways have adequate habitats;
- The objectives of the Waitaki Whitestone Geopark are supported and strengthened through the above;
- The objectives of the Mackenzie Basin Alignment Programme are supported and strengthened through the above.

Mackenzie District Council

- Managing impacts of recreational use on lakes and rivers;
- Enabling biodiversity enhancement;
- Understanding cultural values – rehabilitation of nohoanga and mahinga kai.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems;
- Reducing the number of fish barriers;
- Protection and enhancement of wetlands.

Recreation and amenity targets

Achieve the 2025 target to restore priority freshwater recreation opportunities in each zone.

This taniko (woven pattern for clothing) Pātikitiki, represents lashing or binding together. The smaller diamonds represent pātiki (flounder). The Aramoana are white chevron shaped spaces representing the ocean waves. Together they represent the sustainment of our waters and the binding organisations that protect them. Pātiki is also the symbol for abundance.

– Ariki Creative

Upper Waitaki Water Zone Committee

Action Plan 2021-2024



Image - Lake Ruataniwha

We will commit to the enhancement of Nohoanga, improved health of key waterways for customary use and enhancement of mahinga kai opportunities by:

- Gaining insight into cultural values and areas of significance relating to mahinga kai;
- Engaging with schools and youth to illustrate the importance of mahinga kai and the local history
- Increasing engagement with Ngāi Tahu regarding enhancement of Nohoanga sites;
- Recommending biodiversity funding with a priority focus on mahinga kai sites;
- Improving understanding of Te Tiriti o Waitangi;
- Hosting hāngi for stakeholders and local schools.

We will commit to the improved management and preservation of recreational values of the Waitaki Lakes by:

- Supporting and enhancing our Love Our Lakes Campaign;
- Engaging with agencies, catchment groups and stakeholders to enhance and protect recreational areas such as the Twizel River and Lake Ruataniwha;
- Educating the community about how to protect our environment through actions such as responsible toilet use.

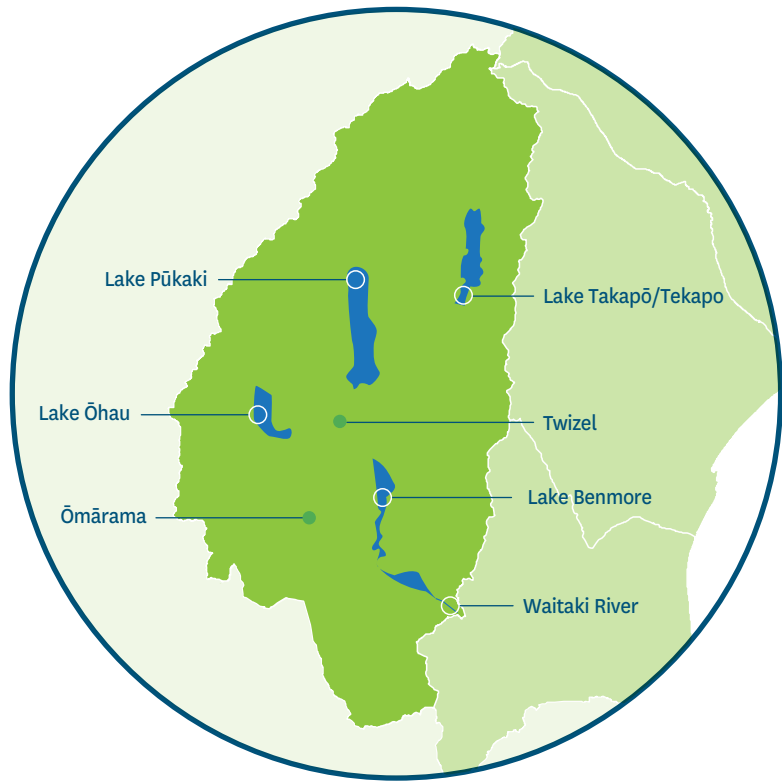
We will support catchment groups taking collective action to reduce losses of contaminants, prioritised where they are addressing identified at-risk areas by:

- Exploring opportunities to partner with key community groups who are focused on waterways, such as the Ahuriri Catchment Community Group;
- Supporting establishment of new catchment groups and build on what is already on the ground in the community;
- Requesting bi-annual reports from Environment Canterbury on Farm Environment Plan audit results and consenting follow-up and sharing this information with relevant catchments;
- Requesting briefings from Environment Canterbury on the state of our water resources and results from monitoring and sharing with relevant catchments.

We will communicate and engage with our communities by:

- Investigating additional channels for sharing the Zone Committee story within local townships around the Upper Waitaki zone;
- Increasing engagement with local community boards, such as Tekapo Community Board, and discussing opportunities for collaboration;
- Developing and maintaining relationships with industry, rūnanga, councils, and catchment groups to be an intermediary for when community members need advice;
- Sharing and celebrating successes.

Upper Waitaki Water Zone



Want to get involved?

Head to ecan.govt.nz/upper-waitaki-water-zone



Lower Waitaki South Coastal Canterbury Zone Committee

Action Plan July 2021–June 2024

This summary highlights the key actions agreed by the zone committee for the next three years.

For more detail on the zone committee and plan, visit ecan.govt.nz/lower-waitaki-water-zone

Our purpose:

To uphold the mana of the freshwater bodies within Lower Waitaki South Coastal Canterbury by facilitating enduring land and water management solutions that give effect to the Canterbury Water Management Strategy vision, principles and targets in our zone.

The CWMS aims to enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

Our role:

- **Facilitate community engagement and collaboration** – continuing an active programme of engaging with communities on freshwater management matters
- **Facilitate the provision of advice through to councils** (relevant Territorial Authorities and Environment Canterbury) and others (e.g. private sector) contributing to freshwater management
- **Enhance delivery capability and coalition of the willing** – working with stakeholders across all sectors to extend the resources available to implement the CWMS, including connecting others to additional resources and seeking opportunities to promote, support, leverage and expand catchment-based initiatives that deliver the CWMS
- **Provide progress reports** – annual progress reporting to councils and rūnanga on progress towards delivery of the zone-specific priorities and CWMS target areas identified in the Zone Committee Action Plan.

Our Councils’ priorities for our zone committee are:

Waitaki District Council

Overarching Priorities

- Promoting & encouraging the responsible use of our water resources to sustain the four wellbeings identified in the Local Government Act “Purpose” clause for TLAs (improving the social, economic, environmental and cultural well-being of our communities)
- Enable people to sustainably and environmentally appropriately use water for the benefit of its communities
- Support farmers adjusting to the requirements of the Governments “Action for Healthy Waterways”.

Focused Priorities

- Increased community engagement on water quality issues and improvement opportunities across the wider community (including schools)
- Achieving a higher level of engagement and support from landowners to ensure water quality improves as it travels along the waterway system
- The objectives of the Waitaki Whitestone Geopark are supported and strengthened through the above.

Waimate District Council

- Increased community engagement on water quality issues and improvement opportunities across the wider community (including schools)
- Improving water quality and enhance immediate environs of Wainono Lagoon and the Waihao River and catchment area
- Achieving a higher uptake of water quality responsibility from landowners to ensure water quality improves as it travels along the waterway system.

Environment Canterbury

Kaitiakitanga Wāhi Taonga and mahinga kai targets

Grow support and resources to achieve the goal of five mahinga kai projects.

Ecosystem health and biodiversity targets

- Increased riparian management to protect aquatic ecosystems
- Reducing the number of fish barriers
- Protection and enhancement of wetlands.

Recreation and amenity targets

Working alongside organisations and communities to achieve the 2025 target to restore priority freshwater recreation opportunities in each zone that do not meet contact recreation standards, and developing plans and actions to achieve and show measurable progress.



Lower Waitaki South Coastal Canterbury Zone Committee

Action Plan 2021–2024

We will work alongside landowners, rūnaka, communities, and others to achieve the 2025 goal of five mahika kai projects in Lower Waitaki South Coastal Canterbury. We will achieve this by:

- Inspiring and growing support and resources
- Rūnaka identifying five mahika kai projects
- Kaitiakitanga will be at the heart of all zone committee actions.

We will work alongside landowners, rūnaka, communities, councils and others towards ecosystem health and biodiversity targets by:

- Identifying and championing new and existing riparian, stream and wetland projects providing the most benefit for water quality in the zone.

We will promote and encourage the responsible use of water resources to sustain the “Four Wellbeings” identified in the Local Government Act by:

- Having regard to the four wellbeings in all zone committee activities and decisions in conjunction with Te Mana o Te Wai and the CWMS order of priorities
- Ensuring all Zone Committee members are familiar with the four wellbeings; Te Mana o Te Wai; and the CWMS First Order Priorities.

We will work alongside landowners, rūnaka, communities, councils and others to restore priority freshwater recreation opportunities in the zone and develop plans and actions to achieve and show measurable progress. We will achieve this by:

- Identifying waterways that do not meet contact recreation standards
- Supporting and growing resources to restore identified priority freshwater recreation opportunities
- Supporting the work already underway on the Waihao River (Black Hole) by the Waihao Wainono Catchment Community Group.

We will improve water quality and enhance immediate environs of Wainono Lagoon and the Waihao River and catchment area by:

- Identifying and championing projects across the catchment
- Supporting the Waihao Wainono Catchment Community Group, particularly with their work on the upper Waihao River by attending meetings, supporting funding applications, and linking with other groups
- Investigating the urban impact on Wainono Lagoon and working with Waimate District Council to develop and deliver an educational programme and community engagement
- Staying abreast of industry initiatives such as augmentation proposals.

We will support farmers adjusting to the requirements of the Government’s Action for Healthy Waterways proposal by:

- Maintaining close networks with the farming community, listen to issues, and connect with relevant support networks and authorities when appropriate
- Working with councils, industry and community groups (e.g. South Canterbury Catchment Collective), encourage timely education and information sharing
- Participating in the review of the Waitaki Water Allocation Plan as appropriate.

We will strive for increased engagement to identify and support improvement opportunities in water quality across the wider community, including schools.

We want to achieve a higher level of engagement and support from landowners to ensure water quality improves as it travels along the waterway system by:

- Developing an engagement plan on water quality issues and improvement
- Engaging with the Waihao Wainono Catchment Community Group and the Hakataramea Sustainability Collective to agree how they can best work with the zone committee
- Engaging with the community to set up a northern streams catchment group
- Advocating for the funding of catchment coordinators to set up and sustain catchment groups
- Encouraging and supporting initiatives to improve water quality, including community events, field days and educational events
- Educating, motivating and inspiring communities, both rural and urban, through the use of community events, newsletter and other communications channels. We will tell the real story and advocate for change; and we will involve schools – through Enviroschools and other direct engagement.

Want to get involved? Head to ecan.govt.nz/lower-waitaki-water-zone



The future of public service for Aotearoa’s communities

Taking steps now to create an empowered, integrated public service

Action we can take now

1. Review current reforms in light of the building blocks, and suggest tweaks.
2. Review the LGA in light of the building blocks, and suggest tweaks.
3. Lift bicultural governance — LGNZ co-governance, swearing-in ceremonies, imagery in council chambers, Iwi Chairs to LGNZ events, ToW training, etc.
4. Shift culture between elected members and council officers — guidance through LGNZ and Taituarā, induction of elected members, charter and accountability mechanism, share stories of good Mayor/OE relationships, train on free and frank conversations, etc.
5. Lift leadership and governance capability — ensure candidates know our expectations, induction and training for all elected members, collaborate with IOD and wānanga, create CPD programme, share stories of good leadership, etc.
6. Safeguard and spearhead changes through Election 2022 — drive voter turnout, champion Māori leadership avenues, increase civics awareness and perceived value of local government, ensure candidates are aware of the coming opportunity and change, etc.
7. Develop more civics education programmes — especially for young people, disenfranchised, etc.
8. Use local businesses and community groups to deliver services.
9. Change the format that submissions are accepted through — video, facebook, written, spoken, audio.
10. Start collaborating and integrating, eg Greater Christchurch Partnership planning.

Prompts for identifying further action to take

1. HMW (how might we) better reflect the demographics of communities in leadership and governance?
2. HMW close the digital divide? HMW eliminate digital exclusion?
3. HMW grow and ensure great local leadership? Staff, elected members, community
4. HMW stoke the culture shift for elected members and council officers?
5. HMW land important changes and ideas in Election 2022?
6. HMW engage more people in the election process?
7. HMW engage the sector in our thinking, and road-test with them?
8. HMW show the benefits of a new funding model?
9. HMW push the panel’s thinking?
10. HMW keep up the momentum of this group?

Transformational experiments (big concepts we can get on and try in little ways)

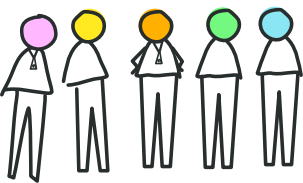
1. Collaborative approaches to long-term planning and budget-setting.
2. Delivering services and programmes through community partnerships.
3. Ways to digitise civic engagement.
4. Iwi-led strategy events.
5. New iwi engagement methods and tools, based on social procurement model.
6. Innovative professional development modules for future-style leadership.
7. Pilot a framework to deliver partnership at a community level
8. Participative budgeting — ask communities how they want to spend portions.
9. Toolkits for prompting innovative practises.
10. Events for sharing wins and leanings from integrated, empowered public service initiatives.

Gearing up to secure and embed big changes

1. Call out the current issues and barriers, eg Taituarā and LGNZ call out the hierarchical nature of some leader relationships.
2. Engage elected members and council officers in the ‘no status quo’ message.
3. Model the benefits of our imagined change — efficiency, effectiveness, alignment to agendas and outcomes.
4. Have a ‘tell us what you really think’ series, to road-test our big rocks.
5. Each of us talk to like-minded peers — share, test, engage, enlist.
6. Assign people to influence and learn from specific others — political (both sides), operational, sector leaders, community leaders.
7. Develop a centre of excellent for integrated commissioning work across the country — leadership and sharing of experience to empower and support the work
8. Champion stepping-stone legislative changes — eg duty of collaboration, requirement for capability levels and CPD.
9. Create a clear vision for the future and embed it in everything we do and say.
10. LGNZ develop stronger / meaningful relationship with Iwi Leaders Forum.

The future of public service for Aotearoa’s communities

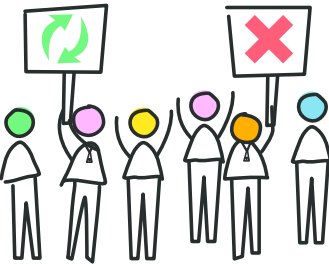
An empowered, integrated public service



AT THE MOMENT

The rates system, silos, lack of trust and low capability are all barriers to equity, efficiency and effectiveness.

- The system is not working well enough for or with swathes of our communities — Māori, people in lower socioeconomic rohe, the disenfranchised.
- Rates and elections are fuelled by homeowners, not residents. The revenue of a rohe is not related to its needs. Often lowest for rohe who needs the most.
- Responsibilities and expectations are being placed on local government and iwi without the necessary allocation of resources to deliver.
- There is a huge range of capability in elected members and council staff. The level of trust, respect and collaboration between leaders ranges too.
- Wellbeing initiatives and infrastructure solutions are rolled out to different communities in the same way. There is a ‘one size to fit all’ approach.
- Government bodies don’t necessarily trust each other or communities to deliver outcomes. Collaboration and cooperation is possible and happening, but is hard-fought, not easy.
- Communities often have things done to them or for them, not with them or by them.



THE IMPERATIVE

Status quo is not an option. The system must work better for current and future generations. Aotearoa is ready for change.

- Our current ways are outdated. They will lead to our demise.
- The new generation is demanding change.
- Better Public Service reforms are paving the way and opening the door.
- We must be leaders for current and future communities.



THE CHANGE

We imagine an empowered, integrated public service that works for and with Aotearoa’s communities. This requires a huge shift — philosophical, behavioural, cultural and structural.

- An integrated and collaborative ecosystem. One public service.
- A huge mindset shift by all involved, not just those at the current local government level.
- A ‘one-system’ approach. Integration and collaboration.
- Flexible and adaptive legislation, settings, and processes.
- All leaders and governors of relevant groups involved in making key decisions and delivery, at the right time in the right way.



WHAT IT WILL BRING

By integrating, collaborating and empowering, we reduce cost of the system and increase effectiveness and equity — for current and future generations.

- Removed layers of bureaucracy, fit-for-purpose solutions and delivery.
- Increased efficiencies allowing resource reallocation and reinvestment. The ability to do more with less.
- Increased effectiveness thanks to the the right people working together with the right levers.
- Significantly increased ability to deliver wellbeing outcomes.
- Thriving, resilient, cohesive communities and nation — now and in the future.

The future of public service for Aotearoa's communities

An empowered, integrated public service

Building blocks for the future we imagine

OBJECTIVES
Agreed wellbeing outcomes for each rohe

Central government, local government and iwi agree what wellbeing means for a rohe — specific outcomes sought, priorities. Stemming from national view, localised to fit. Community involved. Co-signed, commitment to collaborate and integrate to achieve.



GOVERNANCE
High-quality local leadership and governance

Capability lift, culture shift. Ensuring capable elected members, senior council officers, iwi chairs. Operating as one team, safe to speak up. Collaborative leadership. Taking ownership of the elected mandate. Acting as leaders for current and future communities.

Perhaps a 4yr or 5yr term, sequenced with central government elections.

Perhaps local government rohe and boundaries aligned with Māori rohe and takiwā.

Eg, similar to localising the education curriculum.

Perhaps a mixed model of governance — half elected, half appointed.

Eg, Eastern BOP spatial planning, involving MHUD, local council OEs, Waka Kotahi, Kāinga Ora, and more.

Need to reduce the number and complexity of councils. Larger governed territories with strengthened grass-roots democracy.

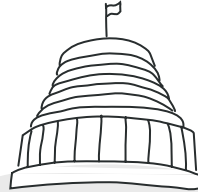
PLANNING
Integrated planning and delivery commitments

Central government, local government, and iwi co-create and integrate plans to deliver agreed wellbeing outcomes. Different roles working together. Funding for mandates and delivery secured and provided.

Important to have a duty to cooperate.

LEVERS
Local involvement in central decisions

Rohe leaders involved in national legislation, policy and infrastructure decisions. Ensuring central decisions support agreed local wellbeing outcomes, and can be interpreted for local context. Creating big levers that work nationally and locally.



Perhaps through a house of mayors and iwi chairs.

At the moment, legislation is often too prescriptive and formulaic to be effective locally. We need to respond to big things at the local level.

Different planning documents and processes are needed.

At the moment, 10% public revenue collected by LG. Two collection systems, distribution in a non-equitable way. Opportunities for increased efficiencies and effectiveness if 100% collected by CG.

FUNDING
Centralised revenue collection, localised spend

Collected by central government, possibly within current tax tools including income tax and GST. Allocated to rohe based on agreed wellbeing outcomes and plans, assets and maintenance requirements, community needs, role of rohe for the nation. Rohe decides how best to allocate resources and roles to achieve agreed outcomes and plans.



Must fund the mandate of iwi.

Eg, Whakatāne Ki Mua project, gaining true empathy for community, needs and values and hopes and identity, to underpin all sorts of projects and decisions.

PARTICIPATION
Engaged, empowered communities

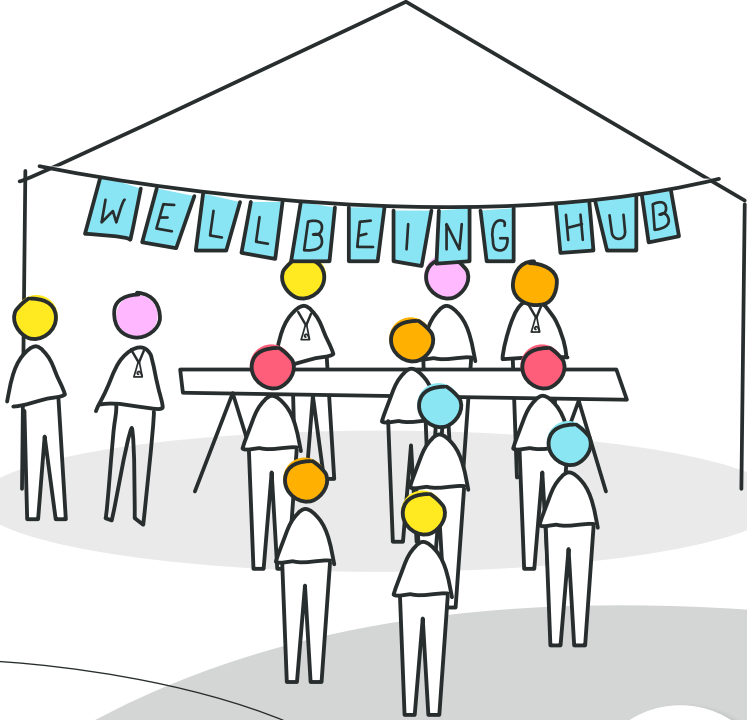
Understanding and listening to the community — all voices, not just the confident and loud. Enabling input and action. Increasing awareness, perceived importance and value of civic engagement.

Trust the community and give people the mandate to do things themselves.

Eg, locals maintaining community reserves.

Perhaps mandatory voting — with a 'none of the above' option.

Not everyone wants to participate. But more would if they understood the influence of local governance and could access systems and processes.



Canterbury Mayoral Forum

Date: 19 February 2022

Presented by: Dan Gordon, Chair Climate Change Steering Group

Climate Change Steering Group update

Purpose

1. This paper provides an update on the January Climate Change Steering Group meeting.

Recommendation

That the Canterbury Mayoral Forum:

1. **note the update provided in the paper.**

Background

2. The Climate Change Steering Group met in January to consider the communications and engagement plan for publication of the Climate Change Risk Assessment technical and summary reports.
3. Approval of the plan was delegated to the Steering Group at the November 2021 Mayoral Forum.

Communications and engagement plan

4. At its meeting on 25 January, the Steering Group approved the communications and engagement plan (refer attachment 1). The plan's approach is to share the information with councils, Rūnanga and other interested stakeholders, rather than launch the report.
5. This approach differs from that discussed at the November 2021 Mayoral Forum, where the possibility of a launch event was proposed. The rationale for opting for a 'softer' approach is because the technical report is highly relevant to councils and stakeholders who will use it to look at their next steps and action plans, but not necessarily the wider community.
6. Had the report included an analysis of the urgency of the risks, as was originally intended, this aspect would have formed the basis of public communications and engagement. However, this aspect was removed from the scope of the report (as discussed at the August 2021 Mayoral Forum), resulting in the technical report having considerably less saliency for public engagement.

7. However, public communications and/or engagement activities in relation to the information in the technical report are planned to be undertaken as part of engagement activities proposed for the next phase of the *It's Time, Canterbury* campaign.
8. As members are aware, the technical and summary report will be shared with councils, Rūnanga and other stakeholders ahead of the 18 February Mayoral Forum.
9. Councils may wish to discuss the technical report at an upcoming council meeting, to ensure all elected members are aware of it and the planned next steps. A template council report has been drafted to help with this.

Next steps

10. Next month, the Steering Group will hold its regular quarterly meeting. The agenda for this meeting will include an update on next steps for the risk assessment.
11. The Steering Group will also host one of the twice-yearly regional councillor workshops next month. The guest speaker for this event will be Don Hine, a professor of psychology at the University of Canterbury whose work focuses on understanding the factors that underlie environmental problems (including climate change) and behaviour change strategies to help solve these problems.

Attachments

- Final communications and engagement plan for the Canterbury Climate Change Risk Assessment

Communications and engagement plan

General Information

Project/Campaign Name	Publication of the Canterbury Climate Change Risk Assessment technical report and summary report		
Campaign lead	Canterbury Mayoral Forum	Canterbury Mayoral Forum Spokesperson	Sam Broughton, Mayor, Selwyn
Environment Canterbury spokesperson	Tim Davie, Director, Science	Date created	January 2022

Background

Since 2017/18, the Canterbury Mayoral Forum (CMF) has invested in a dedicated regional climate change work programme, being delivered by the Canterbury Climate Change Working Group (staff from Canterbury councils and two Ngāi Tahu Papatipu Rūnanga representatives).

In December 2020, Environment Canterbury engaged a consortium led by external contractors Tonkin + Taylor (T+T) to conduct a detailed climate change risk assessment, titled the Canterbury Climate Change Risk Assessment (CCCRA) project.

This project builds on the Canterbury Climate Change Risk Screening that was conducted in 2019/20, which identified a list of risks and opportunities for Canterbury.

Project outcomes

Deliverables for the CCCRA project included the development of a technical report supported by a summary of the technical report and infographics for clarity when sharing information outside a technical audience.

The technical report identifies risks and opportunities related to climate change for Canterbury. It also includes a Ngāi Tahu-tanga-informed climate change integrated framework for assessing climate change risk called *Te Tūtei o te Hau – Surveillance of the Wind*.

Importantly, due to district council constraints and disruptions from COVID-19, and the mid-year Canterbury floods, T+T were prevented from assessing the urgency of climate change adaption actions, and this planned assessment was removed from the scope of the project by mutual agreement.

Strategic approach for release

This approach for release of the information is based on the advice provided at the Mayoral Forum's meeting in November 2021, which proposed that the Mayoral Forum will lead the public release of the CCCRA, with the material being made available to councils to use for

their own engagement. The material would also form part of the *It's time, Canterbury* engagement campaign.

However, this communications and engagement plan differs slightly to what was discussed at the November 2021 Mayoral Forum in that a 'softer' launch of this information is recommended; ie public release will be managed through *It's Time, Canterbury* around key pieces of information rather than through a launch or media release for the report itself. (At the November meeting it was proposed that a media release would accompany the release of the technical report itself on www.canterburymayors.org.nz).

Because the de-scoped technical report has considerably less saliency for public communications and engagement than was expected earlier in 2021, this version of the communications plan recommends that the material be published on the Mayoral Forum website without a proactive media release. The report would instead be supported on the website's landing page by the following text:

As part of the Canterbury Mayoral Forum's work on climate change, a detailed technical report has been completed assessing climate risks in the region. This is the next step in a process that began with initial risk screening work in 2020, which identified a range of priority risks for Canterbury and its communities.

The detailed assessment outlines the risks Canterbury faces from climate change. The report centres around an integrated framework, Te Tūtei o Te Hau: Surveillance of the Wind, aligned with a Te Ao Māori worldview as well as the National Climate Change Risk Assessment framework. The purpose of the report is to support councils to prioritise the identified climate change risks, allowing local authorities to plan for action.

The next step in the process is to work with local authorities, rūnanga and Canterbury communities to consider the urgency of the risks, localised impacts of climate change and climate action planning.

Once published on the Mayoral Forum's website, Canterbury councils can share this across their communication channels and with key stakeholders.

Once urgency planning and analysis of localised impacts is completed, that information will better inform targeted community engagement.

Role of the risk assessment in the *It's Time, Canterbury* campaign

Although the advice is not to proactively promote the report in isolation, key messages from the CCCRA will contribute to the direction of the *It's Time, Canterbury* campaign in 2022. The next phase of the *It's Time, Canterbury* campaign will involve engagement with councils and opportunities for councils to deliver climate change messages to their communities ie to make the information and action relevant at a local level.

The Mayoral Forum previously set aside up to \$10,000 for the launch of the CCCRA report. While this is no longer needed due to the de-scoping of the report, subject to approval from the Mayoral Forum, some funds from the regional forum's budget could be allocated to

developing materials to support *It's Time, Canterbury* engagement through a variety of channels, particularly using video content.

Environment Canterbury staff are engaging with Canterbury councils on *It's Time, Canterbury* communications and engagement opportunities and activities to ensure phase 2 of *It's Time, Canterbury* progresses with locally-relevant content and conversations.

While this approach is the advice of communications and engagement staff, it is recognised that the Steering Group may wish to have a broader, more proactive communications approach to the CCCRA report itself. If this is the case, the project team would need to consider and provide advice on scope, activities, budget and resourcing.

Snapshot summary report

The summary information from Tonkin + Taylor and infographics have been used to inform a non-technical summary of the full report. It contains an overview of

- *Te Tutei o Te Hau: Surveillance of the Wind* integrated framework
- climate change projections and impacts for the region
- key climate risks and opportunities for Canterbury.

The document is styled to be consistent with other documents produced by the Mayoral Forum.

The snapshot report is appended as Attachment 2 for the Steering Group's review and approval.

Following the Climate Change Steering Group meeting on 25 January 2022, the technical report and summary report will be placed on the CMF website.

Communications and Engagement tactics

Tactic	Responsible
Website – Upload technical report and summary report	CMF – following the CMF Climate Change Steering Group meeting of 25 January 2022, and feedback from that meeting
Targeted communications sharing the link to the documents to rūnanga, councillors, TA technical staff, and stakeholders	CMF
Key information to be used as part of the <i>It's Time Canterbury</i> conversations via social and other media as the Phase 2 campaign rolls out	Environment Canterbury and TAs communications staff
Responses to reactive media enquiries	CMF (spokesperson Mayor Sam Broughton), with support from Environment Canterbury if required (technical spokesperson, Dr Tim Davie or Dr Fiona Shanhun)

In summary, as noted above, it is advised that the full Climate Change Risk Assessment technical report is used to inform climate change action and planning by councils, partners and interested stakeholders.

It is advised that any community communications or engagement activities in relation to this report are undertaken as part of communications and engagement activities planned for the *It's Time, Canterbury* campaign.

Risks

Risk	Mitigation
<p>Enquiries from the media/community regarding:</p> <ol style="list-style-type: none"> 1. The cost of the project. 2. Considering its cost, how does the technical report tangibly improve upon the previous Canterbury Climate Change Risk Screening? 3. Why does the report not include information about the urgency of risks or outline potential steps to mitigate them? 	<p>If a media release is published, key points to mitigate these questions to be included: Appendix A.</p> <p>Reactive messaging: Appendix B.</p>
<p>Papatipu Rūnanga not feeling considered or involved in the development of this work.</p>	<ul style="list-style-type: none"> • Emails from Tim Davie, as chair of the Working Group, providing a project update. • Updated papers have been provided to Te Rōpū Tuia throughout the project, but due to other priorities, the work has never been discussed, creating a risk. As the work is most meaningful to Papatipu Rūnanga at the district level, encouragement of district councils to use their current engagement forum with their Papatipu Rūnanga to socialise the report should take place, and for them to pro-actively consider how to engage early with the Rūnanga in all future work they are doing in the climate change area. • Physical copies of the report and/or posters of the infographics will be provided to the Rūnanga Steering Group members, and to Papatipu Rūnanga on request.

Appendix A – Key messages

- This project aims to build a shared understanding of the climate change risks we face across the region.
- The technical report outlines both the risks and opportunities Canterbury faces from climate change. It's one of the steps we are taking to understand the impact of climate change on our region and will help us plan for the future.
- The technical report centres around a framework which is aligned with a Te Āo Māori worldview, as well as the National Climate Change Risk Assessment framework. It identifies eleven values at risk within our region and addresses the interactions between them. The analysis includes an assessment of the economic and social impacts of climate change across each of the eleven values, as well as impacts to individuals, communities, and businesses.
- The overall findings of the report show that climate change risks are threatening eleven key values. It identifies that by the year 2100 there will be high or extreme risks predicted against all eleven areas, and particularly highly rated risks associated with biodiversity, water and infrastructure services. Present-day risks that are rated extreme include those relating to water supply and irrigation.
- The report shows that climate change will occur in different ways across the region, and the differing impacts of these risks is described throughout the report.
- Ngāi Tahu is an influential regional leader on climate change, and the Mayoral Forum is honoured to be able to incorporate Mātauranga Māori into our climate change work through this valuable and unique framework and project. The Te Ao Māori framework used in the report has a name gifted by Ngāi Tahu - *Te Tūtei o Te Hau: Surveillance of the Wind*.
- The purpose of the technical report is to support councils across the region to prioritise the identified risks, allowing local authorities to plan for action.
- Our next step is to work with local authorities, rūnanga and our wider communities to consider the urgency of the risks identified in the report, understand localised impacts of climate change, and undertake climate action planning.

Appendix B – Reactive media enquiry messaging

How does this latest report differ from the earlier Canterbury Climate Change Risk Screening?

The report has built on the previous Canterbury Climate Change Risk Screening by providing an in-depth analysis of eleven key areas of risk. The report includes an assessment of the economic and social impacts of climate change across each of the eleven risk areas, as well as the potential impacts to individuals, communities and businesses.

Does the report say what the most urgent risk facing Canterbury is and when we can expect this to occur?

This report was designed to build a shared understanding of climate change risks across the region, and is an important step towards helping us determine the urgencies.

The overall findings of the report show that climate change risks are threatening eleven key areas. It identifies that by 2100 there will be high or extreme risks predicted against all eleven areas, and particularly highly rated risks associated with biodiversity, water and infrastructure services.

Present-day risks that are rated extreme include those relating to water supply and irrigation.

The report shows that climate change will occur in different ways across the region, and the differing impacts of these risks is described throughout the report.

How does this report help mitigate the risks of climate change?

This report is a stocktake, not a plan, and has been developed to outline risks and opportunities related to climate change in the region. Further assessment is required to determine the urgency and priority of the risks identified.

When will these next steps occur?

The CMF will meet in early 2022 to plan next steps.

How much did it cost to develop the report?

The total cost for the project was \$248,216

If asked for a [cost breakdown](#):

Item	Cost
Tonkin + Taylor Expert advice on methodology, and developing the technical report, summary report and infographics.	\$192,350

Environment Canterbury internal labour	\$50,800
Engagement expenses. Including expert workshops and Rūnanga engagement	\$5,066
TOTAL	\$248,216

Council contributions

Waimakariri District Council	\$6,662
Selwyn District Council	\$6,662
Timaru District Council	\$6,102
Hurunui District Council	\$3,238
Waitaki District Council	\$2,428
Christchurch City Council	\$12,764
Waimate District Council	\$2,428
Kaikōura District Council	\$1,557
Ashburton District Council	\$6,102
Mackenzie District Council	\$1,557
Environment Canterbury Regional Council	\$198,716

What was Rūnanga involvement in the development of the report?

From the project outset, a Rūnanga Project Steering Group (RPSG) was formed to advise on the project.

This Rūnanga Steering Group advised and supported the project team to develop a Te Ao Māori risk assessment framework to ensure the project was fit-for-purpose and reflected Waitaha/Canterbury and Ngāi Tahu.

As a result, the report includes the Ngāi Tahu-tanga-informed climate change integrated framework for assessing climate change risk, called *Te Tūtei o te Hau – Surveillance of the Wind*.

This name refers to the relationship of the wind, or breath, as a guardian or alert system for the environment, with climate change a warning from the environment to human beings. The framework symbolises climate change as a revenge or utu due to the destruction and desecration of Te Taiao, the environment.

The values/ngā pono that exist within Te Ao Mārama (the natural world) and which are relevant for all in Waitaha/Canterbury form the basis of the risk assessment:

- Rerenga Rauropi (biodiversity),
- Wai (water),
- Ngā Waihanga (infrastructure services),
- Hirihiri (energy),
- Ōhanga (prosperity),
- Hauora (physical health),
- Ora rite (equity),
- Hapori (sense of community),
- Kainga tūturu (historic heritage),
- Mātauranga (knowledge),
- Rangatiratanga and Kāwanatanga (governance).

Canterbury Mayoral Forum

Date: 18 February 2022

Presented by: Hamish Riach, Chair, Chief Executives Forum

Chief Executives Forum report

Purpose

1. The purpose of this paper is to report on the work of the regional forums since November 2021 and implementation of the three-year work programme.

Recommendation

That the Canterbury Mayoral Forum:

1. **receive the quarterly report from the Chief Executives Forum and note updates to the three-year work programme.**

Regional forums activity since November 2021

2. Since the Mayoral Forum's last regular quarterly meeting on 19 November, the Chief Executives Forum met in person on 31 January 2022. The Forum also held a half-day strategy session on 17 January.
3. The Policy Forum met on 10 December and the Corporate and Operations Forums met on 13 December.

Chief Executives Forum

Strategy session

4. Chief executives met on 17 January for a facilitated strategy session.
5. A key outcome from the day was the agreement to change the meeting format of the Chief Executive Forum to provide the opportunity for us to be more personally supportive of each other, while still providing the necessary support to the Mayoral Forum.
6. We have allowed time at the beginning of our meetings to discuss matters that we are dealing with across our organisations and provide support to each other by sharing insights and learnings.
7. Members felt the session was valuable and have agreed to hold a further one in the middle of this year to reflect on progress.

31 January 2022 Forum

8. At the meeting on 31 January, which was held online, the Chief Executives Forum:
- discussed business continuity planning in light of the current COVID-19 situation
 - discussed operational planning for the pre- and post-election period
 - discussed education and training governance and leadership in Canterbury, and agreed to invite the co-chairs of the Regional Skills Leadership Group to the Mayoral Forum to begin direct engagement between the groups (*see related agenda items*)
 - reviewed and agreed to provide further feedback on the draft Mayoral Forum submission on the Ministry for the Environment's resource management reform discussion materials
 - received an update from Ben Clark, Regional Public Service Commissioner, on the regional leadership group's COVID-19 response.

Other agenda items

9. The agenda for the meeting also covered the following matters:
- updates on recent Operations, Corporate and Policy Forum meetings
 - an update on the regional forums budget
 - an update on the CWMS strategy
 - a review of the operation of regional forums and working groups, following an earlier evaluation in late 2020
 - a review of the three-year work programme and requested that outstanding actions be prioritised.

Three-year work programme

10. Updates to the three-year work programme are highlighted in the attached document. Prioritisation will be added following the next round of Operations, Corporate and Policy Forum meetings.

Attachments

- Attachment 1: Three-year work programme

Three-year work programme 2020–22

as at 10 February 2022

WHAT	TASK	PLAN FOR CANTERBURY PRIORITY	SPONSOR	LEAD	ACTION	DUE	STATUS	UPDATE
Canterbury Water Management Strategy	To continue providing governance oversight and strategic support to the implementation of the Canterbury Water Management Strategy (CWMS)	Sustainable environmental management of our habitats	Mayoral Forum	Jenny Hughey	Request the Regional Committee to work with CWMS partners to re-engage communities and stakeholders on actions undertaken to deliver the CWMS across the region in order to maintain and nurture commitment to the delivery of the CWMS	30/09/2022	On track	Updated Zone Committee terms of reference approved at the Mayoral Forum 27 November 2020
	Renew community acceptance and commitment to the Canterbury Water Management Strategy				CWMS Regional Committee reports on progress towards the 2025 and 2030 goals	30/06/2022	On track	Work in progress with CWMS team
Build capacity and influence to understand climate impacts, risks and opportunities and incorporate these into regional planning documents and community awareness.	Complete our first regional climate change risk assessment, aligned with the national climate change assessment, and identify critical gaps in our adaptation planning	Climate change mitigation and adaptation	Mayoral Forum	Climate Change Steering Group	Progress Stage 2 of the Climate Change Risk Assessment	30/06/2021	Delayed	Document completed and endorsed by the Mayoral Forum. Planning for release is underway and expected 11 February 2022.
					Progress Stage 3 of the Climate Change Risk Assessment	30/9/22	On track	Advice to be considered in March 2022.
	Encourage all Canterbury local authorities to complete carbon footprint assessments, to inform action plans for reductions				All Canterbury local authorities are encouraged and supported to commission council carbon footprint assessments	31/12/2020	Delayed	Working party reconvened in mid-2021 to progress the work. Working party convenor to provide advice to the March 2022 Corporate Forum meeting on next steps for software and data collection options.
CREDS 2016–2019 continuing work programmes	Food, Fibre and Innovation	Shared economic prosperity	Mayoral Forum	Secretariat	High value manufacturing Value added production	30/06/2022	On track	Work on industry roadmaps is nearing completion, industry clusters continue to be supported, and Te Ohaka and FoodSouth continue to support food businesses in their incubators. Leftfield Innovation have completed work on vegetable and berryfruit possibilities for sustainable land use
Freshwater Package investments	Advocate with Government for the region's interests to be addressed in the investment decisions to support the Government's Freshwater Package	Sustainable environmental management of our habitats	Mayoral Forum		Add to the agenda for the Mayoral Forum meetings with Ministers.	30/09/2022	On track	Essential Freshwater Steering Group established in March 2021. Hon David Parker met with the Mayoral Forum in October 2021. Ashburton DC has prepared economic and social impact reports on the new Essential Freshwater regulations for the Ashburton district, which have been shared with CMF
Education Forum	Facilitate a forum of key tertiary education and training providers to enable the exchange of ideas and information and support collaboration Advocate for transition of secondary students to further study and training or work	Shared economic prosperity	Mayoral Forum	Dan Gordon	Forum meets at least twice each year	30/09/2022	On hold	Forum meeting held 1st quarter 2021. Paper provided to January 2022 Chief Executives Forum to discuss future of the forum and the Mayoral Forum's engagement with the Regional Skills Leadership Group.
Skilled Workforce	Advocate with Government for education and immigration policies that deliver a skilled workforce now and into the future	Shared economic prosperity	Mayoral Forum		Add to the agenda for the Mayoral Forum visit(s) to Wellington	30/09/2022	On track	A submission has been made on the Productivity Commission's review of immigration settings.
Better freight options	Collaborate with South Island chairs of RLTC to drive multi-modal transport planning investment	Better freight transport options	Mayoral Forum			30/09/2022	On track	The Regional Transport Committee are planning a South Island RTC Freight Summit
	Advocate with Government for investment in multi-modal transport outcomes, especially moving more long-distance freight by rail				Write to Ministers to advocate for Canterbury's position Add to agenda for Mayoral Forum visit(s) to Wellington	30/09/2022	On track	Met with Minister Wood 27 May 2021. The Forum has written to Minister Wood to raise issues with funding for the RLTP, and in particular resilience, maintenance and timing of NLTP decisions. Working with RTC to continue to advocate with Ministers and NZTA

Update Canterbury Biodiversity Strategy	Oversee the review of the Canterbury Biodiversity Strategy 2008 to ensure alignment with the NZ Biodiversity Strategy 2020 and the proposed National Policy Statement on Indigenous Biodiversity	Sustainable environmental management of our habitats	Policy Forum			30/09/2022	On track	Environment Canterbury's LTP includes the Canterbury Biodiversity Strategy review and work will commence when the Government announces the NPS IB. Canterbury Regional Biodiversity Champions Group established in Environment Canterbury.
IT systems and digital services	Lead development of a 10-year plan for Canterbury councils to move to a common platform for IT systems and digital services (including valuation and rating functions) and secure cost savings through group licensing procurement, with specific concrete actions to be implemented in each year of the 10-year plan		Corporate Forum	Chief Information Officers Group (CIOs)	Conduct a stocktake of where everyone is at	13/12/2022	Delayed	CCF agreed 16 March 2020 that CIOs will conduct a stocktake of Canterbury councils' IT platforms, applications and procurement / licensing cycles and investment intentions to inform planning to move towards a common platform by 2030. Next actions to be confirmed at Corporate Forum March 2022 meeting.
	Develop a business case (with value proposition and a request for funding) to go to member councils to test and build consensus on a collective vision, commitment and understanding of what it might mean over time for procurement and renewal					13/12/2022	Delayed	Pending outcome of collaborative procurement investigations. Key item on agenda for March 2022 Corporate Forum meeting.
Procurement	Develop a proposal for a joined-up procurement system/service for Canterbury councils, including legal services provisioning Develop a proposal for consideration by member councils		Corporate Forum	Canterbury Finance Managers Group		13/12/2021	Delayed	In late 2020 Deloitte were contracted to analyse third-party expenditure by Canterbury councils, to inform collaborative procurement options. In August 2021 the CEs Forum approved funding to engage a consultant to evaluate collaborative procurement options. Work is underway to initiate this contract; an update will be provided to the Corporate Forum's March meeting.
Implementing new Water Safety Plan format	Share advice and lessons between drinking water suppliers from implementing the new Water Safety Plan to improve compliance across the region		Operations Forum	Drinking Water Reference Group		13/12/2021	On track	Councils are working on plans but it is a slow process as they require a lot of effort and DHB-side resources have been preoccupied by Taumata Arowai changes. At least three in Canterbury have been approved as of June 2021. There is concern about the what the status of these will be as we transition through with Taumata Arowai.
Resource Management Reform	Engage with central government on the resource management reforms through participation in the Local Government Forum of Chief Executives for resource management reform, reviewing and preparing submissions on new legislation, participating in Select Committee processes		Chief Executives Forum	David Ward	Jim Harland nominated for Local Government Forum of Chief Executives for resource management reform Policy Forum (through CPMG) keep watching brief on exposure drafts of the Natural and Built Environment Act and prepare to draft a regional submission when released	30/09/2022	On track	Mayoral Forum submission made on the Inquiry on the Natural and Built Environments Bill: Parliamentary Paper. MFE engagement workshop on reforms Nov 2021. Submissions being prepared on MfE engagement discussion document Feb 2022. Letter to sent to LGNZ, Taituarā, Department of Internal Affairs and Ministry for the Environment requesting Canterbury presence on national working parties and reference groups.
				Policy Forum	Policy Forum (with Climate Change Working Group & Canterbury Planning Managers Group) keep watching brief on drafts of Strategic Planning Act and Climate Change Adaptation Act	30/09/2022	On track	
Future for Local Government	Engage with central government on the future for local government by supporting development of a regional approach and participating in the Future for Local Government Review		Mayoral Forum	Chief Executives Forum	Progress actions from the Future for Local Government Workshop (April 2021) and actively participate in engagement with central government's Future for Local Government Review	01/04/2023	On track	Workshops were held with papatipu rūnanga chairs and central government regional directors in March and May 2021. The May session also included the chair and executive director of the Local Government Review Panel. A health workshop was held in July 2021.

Canterbury Mayoral Forum

Date: 18 February 2022

Presented by: Secretariat

Mayoral Forum activities and engagements – November 2021 to February 2022

Purpose

1. The purpose of this paper is to provide a summary of activities, engagements and correspondence since the Mayoral Forum on 19 November 2021.

Recommendation

That the Canterbury Mayoral Forum:

1. receive the update on Mayoral Forum activities and correspondence since the Forum's meeting on 19 November 2021.

Background

2. A number of activities, meetings, submissions and correspondence occur between Mayoral Forum meetings. Meeting notes, correspondence and copies of submissions are currently circulated to members throughout the quarter between meetings. This paper compiles these in one place for the Mayoral Forums' convenience.

Meetings and engagements

3. The Mayoral Forum has met with the following people or groups during the last quarter:

Date of meeting	Group/Individual	Purpose of meeting	Key actions or outcomes
20 December 2021	Ministry for the Environment	Resource management reform – process and engagement	Agreement to continue to engage Agreement to facilitate a meeting for the Forum with the Minister for the Environment
31 January 2022	Ben Clark, Regional Public Service Commissioner; Jim Palmer, Chair Greater Christchurch Partnership	Discussion on Social Policy Interagency Network and where this sits post-CERA	Secretariat to investigate existing social policy networks and report back to CMF at their May meeting

4. Records of the meetings are provided at attachment 1.

Correspondence

5. Between November 2021 and February 2022 the Mayoral Forum has written to the Ministry for the Environment, the Ashburton District Council, and the chairs of the Papatipu Rūnanga. Correspondence has been received from the Ministry for the Environment.
6. The correspondence is provided at attachment 2.

Submissions

7. During this period the Mayoral Forum has made the following submissions:

Submission date	Organisation	Consultation topic
24 November 2021	Ministry for the Environment	Emissions reduction plan discussion document (joint submission with Regional Transport Committee)
9 December 2021	Pae Ora Legislation Committee	Pae Ora (Healthy Futures) Bill
10 December 2021	Ministry for the Environment	Waste strategy discussion document
20 December 2021	Productivity Commission	Review of New Zealand's immigration settings
20 December 2021	Ministry of Business, Innovation and Employment	Economic regulation and consumer protection for three waters

8. Copies of submissions are available via the links in the table above and on www.canterburymayors.org.nz.
9. The Chair presented to the Pae Ora Legislation Committee on 2 February in support of the Forum's submission on the Pae Ora (Healthy Futures) Bill.

Attachments

- Meeting notes
- Correspondence

Meeting notes

Canterbury Mayoral Forum and Ministry for Environment

Date: Monday 20 December 2021
Time: 2.00pm to 3.00pm
Venue: Mayoral Lounge, Christchurch City Council, 53 Hereford Street
 (please note you will require your Vaccine Pass to attend in person)
 or
 Join Zoom Meeting
<https://us02web.zoom.us/j/82052749166?pwd=cU1xTIRMUC9ld2JKODI3cDhqeE0QT09>
 Meeting ID: 820 5274 9166
 Passcode: 629515

Attendees: Mayors/Chair:
 Sam Broughton (Mayor Selwyn, Chair Canterbury Mayoral Forum) Nigel Bowen (Mayor Timaru, Deputy Chair Canterbury Mayoral Forum); Lianne Dalziel (Christchurch); Dan Gordon (Mayor Waimakariri); Graham Smith (Mayor Mackenzie); Neil Brown (Mayor Ashburton); Marie Black (Hurunui)

Te Rūnanga o Ngāi Tahu:
 Lisa Tumahai (Kaiwhakahaere)

Ministry for the Environment:
 Vicky Robertson (Chief Executive); Janine Smith (Deputy CE); Liz Moncrieff (Director, RM reform), Caroline Hart (Director, Implementation and Regional Relationships Policy Implementation), Toby Adams (Mayor, Hauraki District Council, Co-Chair MfE Local Government Steering Group).

Chief Executives:
 Hamish Dobbie (Hurunui); Dawn Baxendale (Christchurch)

In attendance:
 Maree McNeilly, Amanda Wall, (CMF Secretariat)

Apologies: Gary Kircher (Mayor, Waitaki); Craig Mackle (Mayor Kaikōura); Craig Rowley (Mayor Waimate) David Ward (CE Selwyn); Hamish Riach (CE Ashburton); Jenny Hughey (Chair, Environment Canterbury); Stefanie Rixecker (Environment Canterbury); Will Doughty (Kaikōura); Jim Harland (Waimakariri); Stuart Duncan (Waimate); Angela Oosthuizen (Acting, Mackenzie); Bede Carran (Timaru); Alex Parmley (Waitaki).

Item	Person
1. Welcome, introductions and apologies Mayor Sam Broughton welcomed everyone to the meeting and asked attendees to introduce themselves.	Chair
2. Confirmation of agenda Mayor Sam Broughton advised attendees of the purpose and structure of today's meeting.	Chair
3. Resource management reform engagement programme Mayors provided comment on the workshop that was held with the Mayoral Forum in November, and the issues raised in its letter to the Ministry following it. Points raised included: <ul style="list-style-type: none"> the Ministry-led process felt like a top-down approach where local government and its experience and perspectives are not seen as important 	Vicky Robertson

- there seemed to be a lack of understanding of Canterbury as a region, and particularly the Greater Christchurch planning experience post-earthquake
- there was some disrespect toward mana whenua in the arranging of the workshop and their involvement in the process more widely
- it was noted that face-to-face engagement in the process is just as important as written submissions – submissions should only be one part of the engagement picture
- if local government is part of the journey as a partner, the reform process will result in a much better outcome than without it.

In response, the Ministry acknowledged that the workshop was not a good experience for the Mayoral Forum, and commented that the workshop was just the beginning of the process, which is intended to be partnership-based, with both local government and iwi.

The Ministry also noted that the reform timeline is very short, which presents a challenge, but it is committed to working with local government within this. Evidence of this is the fact that the timeline was slowed a little to establish the Local Government Steering Group to advise on the reform programme. The Steering Group will provide its views directly to Ministers, rather than being filtered through Ministry advice.

The Ministry raised a question about how mana whenua would like to be engaged with in this process – with the Mayoral Forum or separately. This is an ongoing matter for consideration. Lisa Tumahai noted that iwi will look for where Treaty partnerships are genuine – equal partners, at the table making decisions and co-designing programmes and policy. If relationships with local councils are not good, rūnanga will look to central government instead. It was also noted that 83 iwi have now settled with the Crown, and their voices are getting stronger and more prominent.

The Ministry also pointed out that the Minister for the Environment had evolved his view in the last year on engagement on the reform process, and instead of a parliamentary-based process seeking written feedback only, there was genuine commitment to a partnership-based approach with iwi, local government and communities. The Minister sees the reform not as local government reform, but retaining local placemaking through a much smarter system. Honouring the Treaty is also a key motivator.

Mayors commented that the scale of councils' ability or capacity to engage varied across the region, and it was incredibly important for the Ministry to make it clear to communities why the reform was needed, and the benefits that would result. There is a lot of disgruntlement in the community at present on a whole range of matters, and people need to be taken on the journey with this reform process so they can see where they have a say about where they live. The Ministry noted that no one knows the regions better than regional partners, and the goal of the reforms was for communities to design their own futures, but in a simpler way than the current system allows.

Mayors and chief executives noted diversity exists within a region as well as between regions, and the approach to resource management must reflect this. Local voices go right down to the neighbourhood level. Planning needed to take into account what places will be like in 30 years' time. It was suggested that integrated impact assessments were required to assess the cumulative impact of each of the reform processes on local government, rather than each reform process being assessed in isolation of each other.

In addition, Mayors and chief executives commented that the Ministry must also work in partnership with local government on the 10-year transition and implementation period. The engagement must not stop when the legislation is complete.

In concluding, the Ministry noted that the Steering Group had heard similar views across local government that have been raised today, and is keenly aware of the range of issues. The views and issues that have been discussed today are very valuable for the Ministry and the Steering Group. The Ministry will keep engaging with the Forum and iwi as the reform programme progresses next year.

4. Next steps

The Ministry agreed to send the Forum a list of bullet points/key messages on the purpose and benefits of the reform.

The Forum noted written feedback would be provided on the Ministry's consultation document in February.

Draft meeting notes

Canterbury Mayoral Forum: Canterbury's social policy network

Date: Monday 31 January 2022
Time: 3.00pm to 4.00pm
Venue: Meeting by Microsoft Teams
[Click here to join the meeting](#)

Attendees: Mayoral Forum:

Mayors: Sam Broughton (Mayor Selwyn, Chair Canterbury Mayoral Forum); Dan Gordon (Mayor Waimakariri); Lianne Dalziel (Mayor Christchurch City)

Chief Executives: Hamish Riach (Chief Executive, Ashburton; Chair, Chief Executives Forum)

Regional Public Service Commissioner

Ben Clark

In attendance:

Jim Palmer (Chair, Greater Christchurch Partnership); Maree McNeilly (CMF Secretariat)

Apologies: Dawn Baxendale, (CE, Christchurch City)

Item	Person
1. Welcome, introductions and apologies	Sam Broughton
2. Confirmation of agenda	Sam Broughton
3. Rebuilding a strong Canterbury social policy network	
• post-earthquake arrangements	All
• current issues	
• potential actions	
4. Next steps	Sam Broughton

Purpose of this meeting was to discuss the arrangements for social policy interagency networks.

Pre-earthquake there was a Christchurch – Social Policy Interagency Network (C-SPIN), made up of officers from across local and central government that developed structures to build trusted relationships across agencies and would expand/contract/change as required, but was in continuous existence.

Following the earthquake CERA developed a social recovery network, which replaced the C- SPIN, however once CERA no longer existed the social recovery network was disbanded and C-SPIN was not stood up again.

The Regional Leadership Group (co-chaired by the Regional Public Service Commissioner and CE Christchurch City Council) has a community welfare group (CDEM) and accommodation sub-group.

It is considered that there is a need for a social policy interagency network similar to what was around pre-earthquakes that would be in continuous existence for the region. Such a group may be at the Greater Christchurch Partnership level, or broader Canterbury regional level.

Action: The secretariat is to investigate the current arrangements for social policy across agencies and report back to the CMF on current arrangements and possible options for implementing a network such as C-SPIN.

Investigations will include the Greater Christchurch Partnership and Regional Leadership Group secretariats



6 December 2021

Mayor Neil Brown
Ashburton District Council

By email: mayor@adc.govt.nz

Kia ora Neil

Three waters reform

Thank you for your letter of 5 November seeking the view of the Canterbury Mayoral Forum on whether the Forum intends to seek legal advice on the Government's decision to mandate the three waters reform process.

As you know, we discussed this at the Mayoral Forum meeting on 19 November and agreed that the Forum would not seek legal advice.

Nga mihi

A handwritten signature in black ink, appearing to be "S Broughton", is shown.

Sam Broughton
Mayor, Selwyn District
Chair, Canterbury Mayoral Forum

Mayors standing together for Canterbury.

Secretariat, E: secretariat@canterburymayors.org.nz W: www.canterburymayors.org.nz
C/- Environment Canterbury, PO Box 345, Christchurch 8140 T: 03 345 9323

Ashburton District Council • Canterbury Regional Council • Christchurch City Council • Hurunui District Council
Kaikōura District Council • Mackenzie District Council • Selwyn District Council • Timaru District Council
Waimakariri District Council • Waimate District Council • Waitaki District Council



29 November 2021

Vicky Robertson
Secretary for the Environment and Chief Executive
Ministry for the Environment
Wellington

By email: Vicky.Robertson@mfe.govt.nz

Kia ora Vicky

Resource Management Reform workshop

As you will know, the Ministry for the Environment is currently arranging workshops for mayors, chief executives, senior staff and iwi/Māori around the country to provide an update on the resource management reform programme and get feedback on roles and responsibilities in the new system.

The Canterbury Mayoral Forum supports and understands the significance of the resource management reform process and wants to be actively involved in the development of the new bills. We made a comprehensive submission to the Resource Management Review Panel and the exposure draft of the Natural and Built Environments bill, appearing before the select committee in support of our submission. We do not underestimate the task ahead for the Ministry in achieving the Government's timeline for implementation of the reform process and want to make a positive contribution to the process.

Given the importance of the reform process, all ten Canterbury mayors, the chair of Environment Canterbury and the majority of our council chief executives travelled to Christchurch to attend this meeting in person.

Unfortunately our members were incredibly disappointed by the workshop. We have since received an email from Janine Smith acknowledging some of our concerns. While the email and follow up so soon after the workshop is appreciated, we still consider that providing you with our feedback on the workshop will assist the Ministry as it rolls out these meetings across the country.

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Purpose of workshop

The initial email to our secretariat noted that the objectives of the workshop were to:

- provide an overview of the proposed decision-making in the new resource management system, including the role of Māori and local government from the national to the local level
- hear and gather the views and perspectives of Māori, local government, and sector stakeholders
- respond to and build on feedback received to date
- provide a general overview of the resource management reform to audiences who have a limited understanding or limited engagement to date, and support preparation for submissions to Select Committee in 2022.

Although all these topics were covered at the workshop, we felt it was a presentation rather than the opportunity for collaboration we had hoped for. It seems these objectives are too broad to cover effectively in such a short session.

Our understanding was that the workshop was for the Canterbury Mayoral Forum (Canterbury mayors and chair, with support from council chief executives) and the chairs of the ten Canterbury Papatipu Rūnanga. Our secretariat was asked to forward the invitation to senior staff; however, as we understood that the workshop was to be at a governance level, rather than technical, we asked our secretariat not to do this.

Papatipu Rūnanga

We advised the Ministry that while the Canterbury Mayoral Forum has a relationship with the chairs of the ten Canterbury Papatipu Rūnanga they are not part of our normal Mayoral Forum meetings, and that invitations to a Ministry for the Environment engagement meeting should come direct from the Ministry. We have learnt from the three waters engagement processes led by the Department of Internal Affairs that invitations to the Papatipu Rūnanga chairs should come from the organisation leading the event.

We understand that the invitations to the chairs of Papatipu Rūnanga were sent within a week of the workshop, which we consider disrespectfully short notice for such a significant engagement, particularly given our members had around four weeks warning. We are aware that the chairs of the Papatipu Rūnanga wish to engage directly with the Crown in the first instance, so they did not attend the workshop.

Following this engagement the Canterbury Mayoral Forum would appreciate the opportunity to be included in future engagement with Ngāi Tahu and the Ministry, which Janine has advised us is proposed for the new year. Collectively we can add so much more to this reform process than individually and are encouraged to hear that the Ministry will work with Minister Parker's office to bring him into these discussions.

Meeting arrangements

We were very disappointed that only one Ministry staff member attended in person, with the remainder, including the presenter, joining the meeting virtually. Our secretariat advised the Ministry early in the planning process that face-to-face engagements are of much greater value to both our members and the Ministry.

We understand the need for flexibility around COVID-19 alert levels, but we understand there was never an intention for Ministry staff to attend in person. Given that this is such an important topic

we find this incredibly disappointing. It was challenging for the presenter to hold the floor for two hours virtually, and meant the session ran as a presentation rather than a workshop.

Understanding our region

During the workshop it became apparent that the Ministry staff present (except Caroline Hart) had little understanding of our region and the key governance groups within it, including Canterbury's history with spatial planning, the work of Christchurch City Council and Waimakariri District Council following the earthquakes, and the Greater Christchurch Partnership¹. This resulted in frustration from our members who had to make several basic corrections, including where Canterbury or Christchurch had already done what the Ministry was suggesting and where our region has significant experience relevant to the reform process.

We suggest the staff presenting the workshop take time to prepare for their audiences.

Lack of partnership approach with local government

Local government has asked central government repeatedly over many years to be treated as a key partner in reform processes, rather than simply a stakeholder. These messages have been ignored and we fear this is happening again now with the resource management reform process.

We felt that the workshop was arranged so that the Ministry could tick the consultation box, rather than as a genuine attempt to work with us to co-design a new system. We urge the Ministry to take a more collaborative approach to support the development of a resource management system that serves our country and communities well.

We trust these comments have been useful for the Ministry and look forward to continued engagement with you as the reform progresses.

Ngā mihi



Sam Broughton
Mayor, Selwyn District
Chair, Canterbury Mayoral Forum

CC: Toby Adams, Co-Chair Local Government Steering Group
Janine Smith, Co-Chair Local Government Steering Group

¹ Greater Christchurch Partnership comprises Christchurch City Council, Environment Canterbury, Selwyn and Waimakariri District Councils, Te Rūnanga o Ngāi Tahu, New Zealand Transport Agency, Canterbury District Health Board



Sam Broughton
Chair, Canterbury Mayoral Forum

Email: sam.broughton@selwyn.govt.nz

Tēnā koe Sam,

Thank you for your letter on behalf of the Canterbury Mayoral Forum. My team has told me the discussion with the Forum was very rich and I understand our thanks have been passed onto members, thanking them for their time to meet with us.

I have discussed the matters you raised in your letter with my leadership team, and we acknowledge your expectations weren't met. We have taken your feedback on board, including the need to ensure our presenters are well briefed and well prepared.

I agree that meeting online is a distant second to meeting in person and you acknowledged in your letter our reasons for doing so. I would like to meet with Forum members in person before Christmas and my team has been speaking with your secretariat about arrangements. I understand 20 December is now confirmed. I will travel to Christchurch to meet with you, together with my Deputy Secretary of RM reforms, Janine Smith. We will need to share our approach to vaccination requirements prior to this meeting.

You have asked that the Forum be included in future engagement with Ngāi Tahu and the Ministry. I am happy to discuss this request with Ngāi Tahu, noting that the Ministry will be guided by them in our approach to engagement.

Looking ahead to the New Year, I am happy to support members of my leadership team meeting with the CMF and we will work with your secretariat to arrange this. We will work with the Minister Parker's office to include him in this meeting. We will look to meet in person, noting we will have a policy in place by then about travel, related to COVID.

On a related note, Mayor Dalziel has written to us and asked for time to discuss Christchurch City Council's experience with the replacement district plan change process post-earthquake. I suggest we look to include this specific item in our discussion either on 20 December or in February.

Ngā mihi,

A handwritten signature in blue ink, appearing to read 'Vicky Robertson'.

Vicky Robertson
Secretary

Ministry for the Environment | Manatū Mō Te Taiao

CC Lianne Dalziel

CMF Secretariat

CANTERBURY Mayoral Forum

A strong regional economy with resilient, connected communities and a better quality of life, for all.

9 February 2022

«First_name» «Last_Name»
«Rūnanga»
«Address_1»
«Address_2»
«Address_3» «Postcode»

Tenā koe Chair

Canterbury Mayoral Forum and Papatipu Rūnanga Chairs joint hui

I would like to sincerely thank you for your engagement with the Mayoral Forum last year, and for your willingness to begin building an enduring relationship together as Canterbury's leaders. While we know there is much work still to do, the Mayoral Forum believes there is real value in progressing our partnership and together focus on joint leadership for Waitaha, its people and communities.

It is with pleasure that I extend an invitation to all the chairs of the Canterbury Papatipu Rūnanga to meet with the Canterbury Mayoral Forum again in 2022. We propose that our first hui of the year be held on Friday 25 March from 10am to 12pm. Given current COVID-19 settings, the hui will be held online via Zoom.

At this hui the Mayoral Forum would like to discuss with you the current central government reforms as they affect local government; three waters, review into the future for local government, and the resource management reform process. We have invited Janine Smith, Deputy Secretary from the Ministry for the Environment to join us for the resource management reform discussion. Please let us know if there are additional items you would like to discuss as well.

I have asked the secretariat to forward a calendar invite to the hui and would appreciate if you could please advise by 10 March 2022 if you will be able to attend.

We are also proposing holding a second hui on 5 August, and we will send a calendar invite for this at the same time.

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We know there will be many challenges as 2022 progresses – as well as the ongoing COVID-19 situation, the significant government reform programme will impact across all our organisations and communities. The Forum looks forward to working together with you on how we can support each other as we address these challenges.

Canterbury Mayoral Forum Economic Development Group

As you may already be aware, the Canterbury Mayoral Forum Economic Development Group has recently been established with the intention of supporting the promotion of regional priorities for central government funding. The group is led by Hurunui Mayor Marie Black, and includes the mayors of Waimakariri, Mackenzie and Timaru districts, as well as representatives from regional economic development agencies.

It would be hugely beneficial to the region to have input from Papatipu Rūnanga chairs in these discussions, though we do recognise and appreciate the many demands on your time.

Meetings of the Economic Development Group have been scheduled for 2022 on 21 February, 30 May and 15 August. If you wish to join this group please advise our secretariat by emailing secretariat@canterburymayors.org.nz. We are happy to assist with the costs of attending these meetings.

Once again, thank you for engaging with us last year. We look forward to seeing you – albeit virtually – in March.

Ngā mihi



Sam Broughton
Mayor, Selwyn District
Chair, Canterbury Mayoral Forum