Agenda

Canterbury Water Management Strategy Waimakariri Zone Committee

Monday 2 September at 4pm

Council Chamber 215 High Street, Rangiora

Members:

Claire Aldhamland John Cooke (Te Ngai Tūāhuriri Rūnanga) Tim Fulton (WDC Councillor) Ruby Gill-Clifford (Youth Representative) Erin Harvie Martha Jolly Carolyne Latham Claire McKay (ECan Councillor) Arapata Reuben (Te Ngai Tūāhuriri Rūnanga)





Chairperson and Members <u>CWMS WAIMAKARIRI ZONE COMMITTEE</u>

AGENDA FOR THE MEETING OF THE CANTERBURY WATER MANAGEMENT STRATEGY WAIMAKARIRI ZONE COMMITTEE TO BE HELD IN THE COUNCIL CHAMBER, 215 HIGH STREET, RANGIORA ON MONDAY 2 SEPTEMBER 2024 COMMENCING AT 4PM.

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

BUSINESS

KARAKIA

- 1. <u>BUSINESS</u>
 - 1.1 Apologies
 - 1.2 Welcome and Introductions
 - 1.3 <u>Register of Interests</u> Advice of any changes or updates.

2. <u>OPPORTUNITY FOR THE PUBLIC TO SPEAK</u>

3. <u>REPORTS</u>

3.1 <u>Taranaki Creek 'letterbox' survey – update – Murray Griffin (CWMS</u> <u>Facilitator-Waimakariri)</u> 7 – 12

RECOMMENDATION

THAT the CWMS Waimakariri Zone Committee:

(a) **Receives** this update with consideration to the Committee's 2021-2024 CWMS Acton Plan Priorities.

3.2 <u>Ashley Rakahuri Work Programme – Update – Murray Griffin (CWMS</u> <u>Facilitator-Waimakariri)</u> 13 – 29

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RECOMMENDATION

THAT the CWMS Waimakariri Zone Committee:

(a) **Receives** this update with consideration to the Committee's 2021-2024 CWMS Acton Plan Priorities.

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4. <u>COMMITTEE UPDATES – M GRIFFIN (CWMS FACILITATOR, ECAN)</u>

- 4.1 Waimakariri Water Zone Committee Working Groups.
- 4.2 Environment Canterbury Reports.
- 4.3 Waimakariri District Council Updates.
- 4.4 Kaiapoi Wetlands Press Article.
- 4.5 Action points from the previous Zone Committee meetings.

RECOMMENDATION

30 – 39

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THAT the CWMS Waimakariri Zone Committee:

(a) **Receives** these updates for information.

5. COMMITTEE SCHEDULE AND PRIORITIES FOR 2024

5.1 <u>Zone Committee Schedule and Priorities – Review Discussion–</u> <u>Murray Griffin (CWMS Facilitator- Waimakariri)</u>

RECOMMENDATION

THAT the CWMS Waimakariri Zone Committee:

(a) **Review** its schedule for the remainder of 2024.

6. <u>CONFIRMATION OF MINUTES</u>

6.1 <u>Minutes of the Canterbury Water Management Strategy Waimakariri Zone</u> <u>Committee Meeting – 1 July 2024</u>

RECOMMENDATION

41 – 46

THAT the CWMS Waimakariri Zone Committee:

(a) **Confirms** the Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held on 1 July 2024, as a true and accurate record.

7. <u>GENERAL BUSINESS</u>

KARAKIA

NEXT MEETING

The next meeting of the CWMS Waimakariri Water Zone Committee is scheduled for Monday 11 November 2024 at 4pm.

AGENDA ITEM NO: 1.1	Register of Interests
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Waimakariri Water Zone Committee

MEETING DATE: 2 September 2024

WAIMAKARIRI WATER ZONE COMMITTEE Register of Interests – at 20 August 2024

Keeping a Zone Committee Members' declarations of interest register allows Zone Committees to identify and manage a conflict of interest when it arises.

The Office of the Auditor General notes a conflict of interest can arise when: "A member's or official's duties or responsibilities to a public entity could be affected by some other interest or duty that the member or official may have."¹

If a member is in any doubt as to whether or not they have a conflict of interest, then the Member should seek guidance from General Counsel, Environment Canterbury, the Zone Facilitator, and/or refer to the following guidance: <u>https://oag.parliament.nz/2020/lamia</u>

Types of Interest to be documented in the register:

- Employment, trade or profession carried on by the Member or the Member's spouse for profit or gain.
- Company, trust, partnership etc for which the Member or their spouse is a director, partner or trustee, or a shareholder of more than 10% shares.
- Address of any land in which the Member has a beneficial interest and which is in the area of the Zone Committee.
- The address of any land where the landlord is Environment Canterbury, Mackenzie District Council or Waitaki District Council and:
 - The Member or their spouse is a tenant; or
 - The land is tenanted by a firm in which the Member or spouse is a partner, a company of which the Member or spouse is a director, or a Trust of which the Member or spouse is a Trustee.
- Any other matters which the public might reasonably regard as likely to influence the Member's actions during the course of their duties as a Member.
- Any contracts held between the Member or the Member's spouse and Environment Canterbury, Mackenzie District Council or Waitaki District Council. Including contracts in which the Member or their spouse is a partner, a company of which the spouse is a director and/or holds more than 10% in shares, or a Trust of which the Member or their spouse is a trustee (noting that no committee member should be a party to a contract with Environment Canterbury or the relevant TLA if that value is more than \$25,000 per annum).

Zone Committee members are to ensure that the information contained in this register is accurate and complete.

¹ Office of the Auditor General Good Practice Guide – Managing Conflicts of Interest: Guidance for public entities

Name	Committee Member Interests
Claire Aldhamland	- Teacher – Rangiora High School
John Cooke	 Director/Shareholder – Executive Limousines 2015 Limited Director/Shareholder – Express Hire Limited Director/Shareholder – Testpro Limited Director/Shareholder – Acropolis Wedding and Event Hire Limited Director/Shareholder – Pines Beach Store Limited Director/Shareholder – Coastal Dream 2005 Limited – 4Ha property, Kaiapoi Interim Trustee – Section 6 Survey Office Plan 465273 Ahu Whenua Trust Member – Kaiapoi Club executive Trustee on several Māori land blocks, all located in Otago
Ruby Gill-Clifford	- Student at University of Canterbury - 2023/24 summer work at Tūhaitara Coastal Part Trust
Cr Tim Fulton	 Waimakariri District Councillor Freelance Writer in the agricultural business sector Contracted to write a book on Central Plains Water Scheme
Erin Harvie	 Director – Bowden Consultancy Limited, trading as Bowden Environmental Co-ordinator – Waimakariri Landcare Trust Member – NZ Hydrological Society Member – NZ Institute of Primary Industry Management Involvement with Cust River Water User Group
Martha Jolly	 Veterinary surgeon (Companion animal) PhD Student in Water Resource Management (2nd year) Volunteer assistant the Styx Living Laboratory Trust Volunteer educator Vets for Compassion Volunteer clinician SPCA NZ Member – Forest and Bird NZ
Carolyne Latham	 Farmer – Sheep and Beef Director – Latham Ag Ltd Consulting Shareholder – Silver Fern Farms, Farmlands Registered Member – New Zealand Institute of Primary Industry Management
Cr Claire McKay	- Canterbury Regional Councillor - Dairy grazing - Ihenga Holdings – Partner (with spouse)

	 McKay Family Trust – Trustee (spouse also a Trustee) Shareholder – Waimakariri Irrigation Limited, Ravensdown Ltd, Fonterra, and Farmlands Member – Federated Farmers, Irrigation NZ Water take and use consents CRC: 050222.1
Arapata Reuben	- Trustee – Tuhono Trust - Member – National Kiwi Recovery Group - Rūnanga Rep – Christchurch/West Melton Water Zone Committee - Rūnanga Rep – Ashburton Water Zone Committee

AGENDA ITEM NO: 3.1	SUBJECT MATTER: Taranaki Creek 'letterbox' survey – update		
REPORT TO: Waimakariri	Water Zone Committee MEETING DATE: 2 September 2024		
REPORT BY: Murray Griffin, ECan Facilitator			

PURPOSE

This agenda item provides the Water Zone Committee with an update on the survey results of the Taranaki Creek fish passage 'letterbox'.

RECOMMENDATION

That the Zone Committee

Receive – this update for its information, and with consideration to the committee's 2021-2024 CWMS Acton Plan priorities.

BY WHO

This update is provided by:

 Chloe Armour, Senior Biodiversity Officer – Regional Programmes, Environment Canterbury

BACKGROUND

Taranaki Creek Letter Box

Surveying has recently taken place to ascertain the effectiveness of the Taranaki Creek fish passage 'letterbox'.

A high catch rate on the upstream side of the gate indicates that the 'letterbox' is a popular upstream pathway for a number of fish species.

The recent article (4 July), attached as **agenda item 3.1 – 1**, provides a good overview of this work.

Waimakariri ZIPA recommendations

The following recommendations from the Waimakariri Zone Implementation Programme Addendum 2018 (ZIPA) relate to this item:

D1.3	Protecting and	Rec 1.9	That Environment Canterbury work
Recommendations	enhancing aquatic		with Ngāi Tūāhuriri and
 Improving stream 	biodiversity		Department of Conservation to
health			identify the types of activities and
			controls needed to protect the
			aquatic habitat of the threatened
			Canterbury mudfish and amend
			plan provisions to ensure
			protection at key sites in
			waterbodies including the
			following:
			 Tutaepatu Lagoon
			 Taranaki Creek

			 Eyre River tributaries Coopers Creek tributaries Mounseys Stream tributaries
D1.3 Recommendations – Improving stream health	Ngāi Tūāhuriri values and aquatic ecosystems	Rec 1.21	That Environment Canterbury prioritise on the ground projects for Taranaki Creek, given its significant value to Ngāi Tūāhuriri and proximity to Kaiapoi Pā, particularly those related to: • reducing and removing sources and legacies of deposited fine sediment • improving the quality of habitat for mahinga kai species • removing barriers to native fish passage • removal of invasive fish species

The Waimakariri ZIP (2011) – noted the following issue of concern under the principles of Kaitiakitanga:

e) Redesigning the flood gates on lowland streams where fish passage is impeded. Without being able to pass upstream, most native fish cannot fulfil their lifecycle.

"Fish letterbox" a gamechanger for fish passage in local waterway

Date: 04 Jul 2024 Category: <u>News</u> | <u>Biodiversity</u> | <u>Flood protection</u> | <u>Rivers</u> Zone(s): <u>Waimakariri</u>



Our scientists and engineers

find an innovative solution to help fish travel up and down Taranaki Creek.

Many of New Zealand's native fish species like īnanga/whitebait or tuna/eels are migratory, traveling up and down rivers and streams and the ocean to complete their life cycles.

<u>Structures</u> like dams, culverts or floodgates can block their passage and cut them off from important breeding grounds or food sources.

The problem is, many of these structures, like floodgates, are essential for protecting the land and infrastructure around waterways.

Recently, our surface water ecologists, biodiversity staff and river engineers were struck with this very problem at Taranaki Creek in the Waimakariri District. The creek flows into the Ashley River/Rakahuri Estuary and is an important through route for native species – it's also very prone to tidal flooding.

Thinking outside the box

The old top-hung flood gate that was in place at the creek, almost totally blocked fish passage at some points of the tide cycle.

To get past at high tide, fish had to be able to dive down under a small gap along the bottom of the gate.

We needed an innovative solution.

In 2019, our engineers found that the flood gate needed replacing due to leaks – and the opportunity arrived to try something new.

Working together, engineering, science and biodiversity staff came up with the "fish letterbox".



Taranaki Creek floodgate fish passage letterbox

The team built a vertical slot into the new flood gate to act exactly like a letterbox gap. Only a small amount of water would be able to get through when the main gate was closed, and fish could use the letterbox to swim up or downstream. If flooding is a concern, the letterbox could be manually shut.

Biodiversity advisor Chloe Armour said the process was very much an experiment, especially in trying to find the right size and placement of the slot.

"We were trying to have the maximum impact for migrating fish and the minimum impact on water levels," she said.

Did the experiment work?

The proof is in the pudding, or in this case, the net.

To monitor the effectiveness of the letterbox, a fyke net was cut down to size and posted through the upstream side of the floodgate to catch migrating fish heading upstream. It was left out for 24 hours or two tide cycles.

The results from 24 hours of traffic through the fish letterbox slot:

SPECIES	COUNT	LENGTH RANGE IN MM
Shortfin eel (Anguilla australis)	20	500-950
Whitebait	367	49-57
Īnanga (Galaxias maculatus)	8	73-119
Giant bully (Gobiomorphus gobioides)	2	94-174
Unidentified bully (Gobiomorphus)	3	40-94
Estuarine tripplefin (Forsterygion nigripenne)	2	66-103

The experiment was a success.

"These results showed that the letterbox was a popular upstream pathway for a wide variety of fish species," Chloe said.

"It's a good indicator that it's made a positive impact for the fish that live in the estuary and this creek."

What we learned

As with any experiment, our engineers and biodiversity staff have taken away learnings that they'll put in place next time, and there are still lots of questions to answer.

"For future designs, we'll build in a deeper letterbox slot, stretching down to lower tidal levels to make the gap available to fish for longer periods of time," said Chloe.

Staff will also make changes to the monitoring, separating day and night sampling so they can see which species are travelling through when.

"We have learned a lot from this, and we plan to keep picking up these opportunities to improve fish passage as structures get upgraded on our land," Chloe said.

"We also hope this project inspires other public and private landowners to look at ways to support fish passage as they upgrade their own in-stream infrastructure."



Find out more about <u>managing instream structures</u> on your land.

Putting the net through the letterbox for monitoring

Environment Canterbury © 2024 Retrieved: 12:52pm, Tue 30 Jul 2024 https://www.ecan.govt.nz/get-involved/news-and-events/2024/fish-letterbox-a-gamechanger-for-fish-passage-inlocal-waterway/

AGENDA ITEM NO: 3.2	SUBJECT MATTER: Ashley Rakahuri Work Programme – update	
REPORT TO: Waimakariri	Water Zone Committee MEETING DATE: 2 September 2024	
REPORT BY: Murray Griffin, ECan Facilitator		

PURPOSE

This agenda item provides the Water Zone Committee with an update on the recent work programme priorities led by Environment Canterbury, and specifically:

The Braided River Revival / Whakahaumanu Ngā Awa ā Pākihi programme of work, including:

- the Rangiora Reach Masterplan implementation
- the Rakahuri Berm Transition (Central Government co-funded works)

RECOMMENDATION

That the Zone Committee

Receive – this update for its information, and with consideration to the committee's 2021-2024 CWMS Acton Plan priorities.

BY WHO

This update is provided by:

• Greg Stanley, Regional Lead – Braided River Revival, Environment Canterbury

BACKGROUND

Rangiora Reach Masterplan

A copy of the Rangiora Reach Masterplan is provided as agenda item 3.2 – 1.

Waimakariri Zone Committee - 3 July 2023 Meeting - Agenda Item 4 - 3

Rangiora Reach Masterplan

www.thrivespacesandplaces.nz

DATE: 20/12/2022 Revision: Final



CONTEXT

The purpose of this masterplan is to guide future development and management of the Rangiora Reach, located along the Ashley River/Rakahuri. The masterplan will ensure cohesive and clearly communicated landscape planning can occur across agencies managing the land, and contribute to a living, thriving river system. It reflects community values and priorities such as:

Significance to Ngāi Tūāhuriri:

The Rakahuri River and its catchment has strong mahinga kai associations for Ngāi Tūāhuriri hapū. The river and its associated tributaries, wetlands and lagoons were known as the food basket of Kaiapoi pā.

The Ngāi Tahu Claims Settlement Act (1998) describes mahinga kai as "the customary gathering of food and natural materials and the places where those resources are gathered." The concept includes species, places, and practices, including cultivation. Mahinga kai are central to Ngāi Tahu culture, identity and relationship with landscapes and waterways of Te Waipounamu.

The deeds of purchase for land across Canterbury came with promises of reserves, schools, hospitals, and access to mahinga kai which were not fulfilled. The Rakahuri was one of the three waterways (the others being Waimakariri and Ruataniwha/Cam) that continued to sustain Ngāi Tūāhuriri during the ongoing alienation from their land and resources.

Since the late 1800's the Rakahuri has been managed with an emphasis on flood control and land preservation rather than mauri (an intrinsic life force) or mahinga kai. The substantial physical modification of the river and its tributaries has had significant effects on the relationship of Ngāi Tūāhuriri and their culture and traditions with this ancestral river. The loss of mahinga kai has impacted how the hapu exercise manaakitanga (hospitality) and whakawhanaungatanga (relationship building).

The restoration of the Rakahuri as a mahinga kai will require a "ki uta ki tai (mountains to the sea)" approach and this is beyond what can be achieved by a masterplan. However, the masterplan is an opportunity to highlight the associations Ngāi Tūāhuriri hold with the Rakahuri, and their aspirations for its revival.

"Ahi ka is about being brought up on the river and our continuous use over seven generations. It is about the river being more precious to us than any possession we may have. It is very hard to explain - it is how we live, it is what we know, it is what we have been taught. The Rakahuri is part of who we are."

-Ngāi Tūāhuriri Kaumātua

Ongoing flood protection

The Rangiora Reach is a highly developed area of the Rakahuri adjacent to several thriving communities including Rangiora, Ashley Township, and Loburn. As a result, the river berms play a critical role in protecting these communities from flooding. Much of the river berm in the Rangiora Reach is vested in Environment Canterbury for flood protection and includes a number of critical flood protection assets including:

- Primary and secondary stopbanks that contain high river flows and enable the area in between the stopbanks to function as a floodway, should the primary stopbank fail, passing flood water around the Cones Road/Inland Scenic Route 72 bridge and returning it to the river downstream
- Deliberately planted vegetation to protect the riverbanks from erosion and deflect/slow flows to reduce the risk of damage and breaches both in the immediate vicinity and further downstream
- Rock and dirt groynes designed to redirect and slow down high river flows.

Climate change

In May 2019, Environment Canterbury declared a climate emergency, highlighting both the urgent need to address the issue, and the work already being done in response. Climate change presents significant challenges, risks and opportunities – it's already impacting ecosystems and communities around the world, with increasingly frequent and severe storms, floods and droughts; melting polar ice sheets; sea level rise and coastal inundation and erosion; and impacts on biodiversity including species loss and extinction. Changes to air temperatures, soil, and weather patterns will ultimately mean changes to land use which is why deliberate and long-term planning on how land is used is essential, to ensure communities increase their resiliency to climate change. Rapid and far-reaching transitions are needed, with everyone having a part to play in delivering the change required.

BELOW: Stopbanks are a vital piece of flood protection infrastructure used along the Rangiora Reach.



Landscape and natural character

The Rakahuri is a globally rare, braided river ecosystem with a very specific combination of climate and geology, causing ever-changing and highly dynamic channels or braids that weave across a wide, dry, gravelly riverbed known as the braidplain. This ever-changing, diverse environment gives rise to a unique ecosystem of plants, animals, and invertebrates, the most visible of which are the braided river birds.

Indigenous biodiversity

The Rakahuri is considered 'outstanding' in terms of its wildlife and conservation values and was recently classified as a river of national importance. The Rangiora Reach is home to a number of indigenous and threatened species unique to the braided rivers of the Canterbury Plains.

These include:

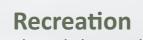
- Bird species dependent on healthy braided river habitats include the wrybill/ngutu pare, black-fronted tern/tarapirohe and black-billed gull/tarāpuka
- Invertebrates including endangered butterfly species such as the Canterbury plains
 Boulder copper and the New Zealand blue butterfly
- Fish species including tuna/eel and pātiki/flounder
- Native plants including Muehlenbeckia complexa, Melicytus alpinus, Kunzea serotina, Sophora prostrata, Sophora microphylla and Podocarpus totara.

Future planning for these areas is crucial, to understand the present values and how we can work together to provide the best chance for these rare ecosystems and species to survive.

Photos of bird species dependent on braided rivers (from left): juvenile black-fronted tern in flight, black-billed-gull chicks, wrybill. Images sourced from Environment Canterbury.







The Rakahuri is also highly valued by the community for its recreational values. The river is home to a wide range of water and land-based recreation and leisure activities, including:

- Cycling and mountain biking
- Walking, running and hiking
- Dog walking
- Swimming
- Fishing and whitebaiting
- Picnic
- Motorcross and 4WD activities
- Horse riding.

The Ashley Rakahuri Regional Park is operated by Environment Canterbury. It opened in October 2012 and encompasses the Rakahuri and berm area from the Ōkūkū River confluence downstream to the Ashley Estuary. The Ashley Rakahuri Regional Park Management Plan* describes the key recreational uses of the park area and sets out the management for these areas and activities.

*To learn more about the Ashley Rakahuri Regional Park Management Plan visit <u>www.ecan.govt.</u> <u>nz/ashley-rakahuri-regional-park/</u>

Braided River Revival

Rangiora Reach is one of nine reaches that make up the Ashley Rakahuri Revival Strategy, which is part of Environment Canterbury's Whakahaumanu Ngā Awa ā Pākihi / Braided River Revival – a programme initiated by Environment Canterbury that takes a landscape scale approach to the development and implementation of actions for river revival across Waitaha/Canterbury. The programme seeks to empower the cohesion of local communities by integrating their shared vision, determination, funding, and delivery of enhancement projects.

To learn more about the Braided River Revival Programme visit <u>www.ecan.govt.nz/braided-rivers/</u>

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MASTERPLAN PROCESS

1. Background and scoping

consultation

3. Draft masterplan development

4. Feedback on draft masterplan

5. Development of final masterplan

We are here

6. Masterplan adoption and implementation **COMMUNITY VALUES**

Since early 2022, we've been gathering information about what the community most values about the Rangiora Reach area, and what they'd like to see happen here. This final masterplan is a way forward to honour the key community values while ensuring flood protection, biodiversity enhancement, mahinga kai, and recreational values are upheld during future development and management of the area.

Key considerations, as noted by the community, for the future of this area includes:

- Education regarding flood protection values, and the biodiversity present via interpretation signage
- Wayfinding throughout the entire site

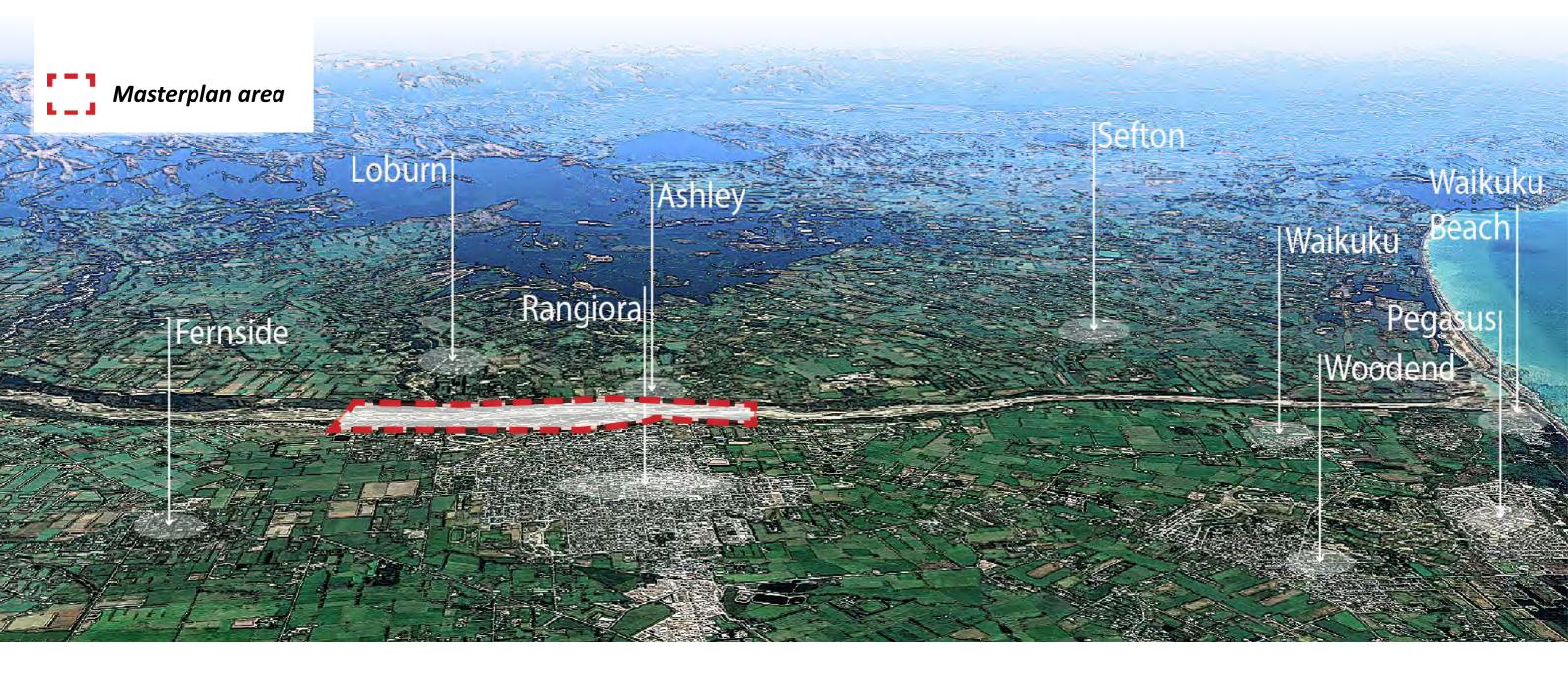
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- Signage to delineate recreational use types in areas for safety and to provide clear information on the trails network opportunities
- Improve the Cones Road area with planting, a carpark extension, a mountain biking skills area, and investigate further interventions accommodating for flood control work
- Improve the carpark surfacing and layout in some access areas
- Identify key biodiversity areas and include protection and enhancement strategies where appropriate in the masterplan
- Review the flood control work plan along with flood modeling to determine what areas require modification
- Introduce extensive native planting to attract native birdlife, and consider selected exotic species where they attract native birds as well
- Enhance the amenity values of the site through the introduction of exotic and native feature planting
- Work with clubs and volunteer groups to refine their suggestions for the site.
- Consideration and of horse riding trails and amenities
- An enhanced recreational space that will cater for various users
- Less access to areas prone to flytipping
- Cycle barriers which can be passed through without dismounting
- Limited dog access during breeding season
- Restricted vehicle access.

While we haven't been able to include every suggestion, conversations will continue and we look forward to identifying future opportunities to increase or enhance provisions for those suggestions such as through Braided River Revival. We are committed to continue working with those who use and value the area to ensure a space for all to enjoy.



Located 35 km north of Christchurch City, the Rakahuri lies just north of Rangiora. This masterplan is for the Rangiora Reach of the Rakahuri, identified below.



SPATIAL CONTEXT

HABITAT FOR NATIVE SPECIES

RIVER BIRDS

Rangiora Reach provides vital nesting habitat for several key native and endemic bird species that are currently threatened or declining in numbers. These species rely on the braided form of the river to raise chicks in nests concealed in the riverbed.

Protection of these areas has involved prohibiting access to the riverbed during nesting times, and ensuring the river fairway is kept clear of larger woody weed species. Extensive rat trapping along the banks of the river has also proven successful and is continually monitored by Ashley Rakahuri Rivercare Group (ARRG).

BELOW: Map summarising nesting sites recorded by ARRG from 2004 - 2021. The recorded nesting sites include native and endemic species as shown in the images below.

Data and photos replicated with permission from ARRG.

BUTTERFLIES

The Reach area also provides habitat for several endemic butterfly species. The species listed below rely on varied natural features within the reach area. The common copper occurs in open country and is a short-lived butterfly with individuals only known to live one to two weeks. Known host plants are Muehlenbeckia sp/ pohuehue.

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The Canterbury plains Boulder copper frequents such as clover, trefoil. riverbeds, stream edges and shingle beds. It is often overlooked because of its small size and its habit of flying close to the ground over its host plant Muehlenbeckia axillaris, sunning itself on stones or shingle, from which it absorbs heat. Males are a shining purple / yellow (photographed), with females an orange blue colour.

The New Zealand blue's habitat is in river terraces. This endemic species has already been displaced

throughout most of New Zealand by hybridisation with the invasive Australian blue butterfly species. Only populations in the south-east of the South Island are still unaffected. Known hosts plants include lowgrowing native brooms (Carmichaelia Winter copper sp) and low-growing legume plants Lycaena 'canterbury common copper' Image source: Rob Herd



Canterbury plains Boulder copper





Ngutu pare/ wrybil



Poaka/ pied stilt



Tarāpuka/ black-billed-gull



Tūturiwhatu/ banded dotterel



Lycaena sp. Image source: Brian Patrick



Zizina oxlevi Image source: Angela Moon-Jones

IRD NESTING SITES AND NOWN BUTTERFLY HABITAT

(Nest data supplied by ARRG, Butterfly habitat locations supplied by ARRG and Waimakirir District Council)

Map Key

- 2021 Nesting sites
- 2004-2020 Nesting sites
- 2022 Boulder copper butterfly habitat



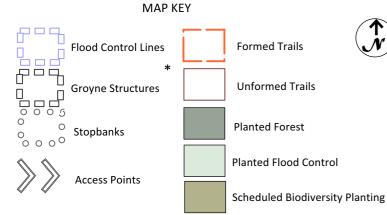
Tarapirohe/ black-fronted tern



Torea/ pied oystercatcher



SITE ANALYSIS



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*Flood control lines are zones identified by river engineers that require vegetation clearance in order to have clear fairways for flood protection. These zones are calculated using flood capacity data and take into account natural character and biodiversity values for the individual river.

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Issues from stakeholder and community consultation

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- Ongoing flood control works sometimes compromised by recreational users of the reach
- Use of the reach area for recreational purposes is anticipated to grow in popularity due to population growth in Rangiora and other nearby townships

To Rangiora

- Cones Road requires development to bring back the amenity value the community has missed
- Safety improvements in trail areas near to where vehicles are involved
- Limited awareness/education opportunities about site history, cultural values and flood protection works and biodiversity.

consultation

- areas
- of flood management
- ٠
- space for concessionaires

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Opportunities from stakeholder and community

• Use of the reach area as a Biodiversity Enhancement Node by including better fairway management for birds, improved habitats in springs and side braids, intensive and extensive riparian planting, and linkages up and downstream • Existing recreation access points across the site are frequent and well maintained. Some areas may require larger carparking

 Accentuate access points as key nodes throughout the site • Access points could be a focus for community planting and weed /pest control at the same time as providing areas with exotic planting and recreational amenity within the constraints

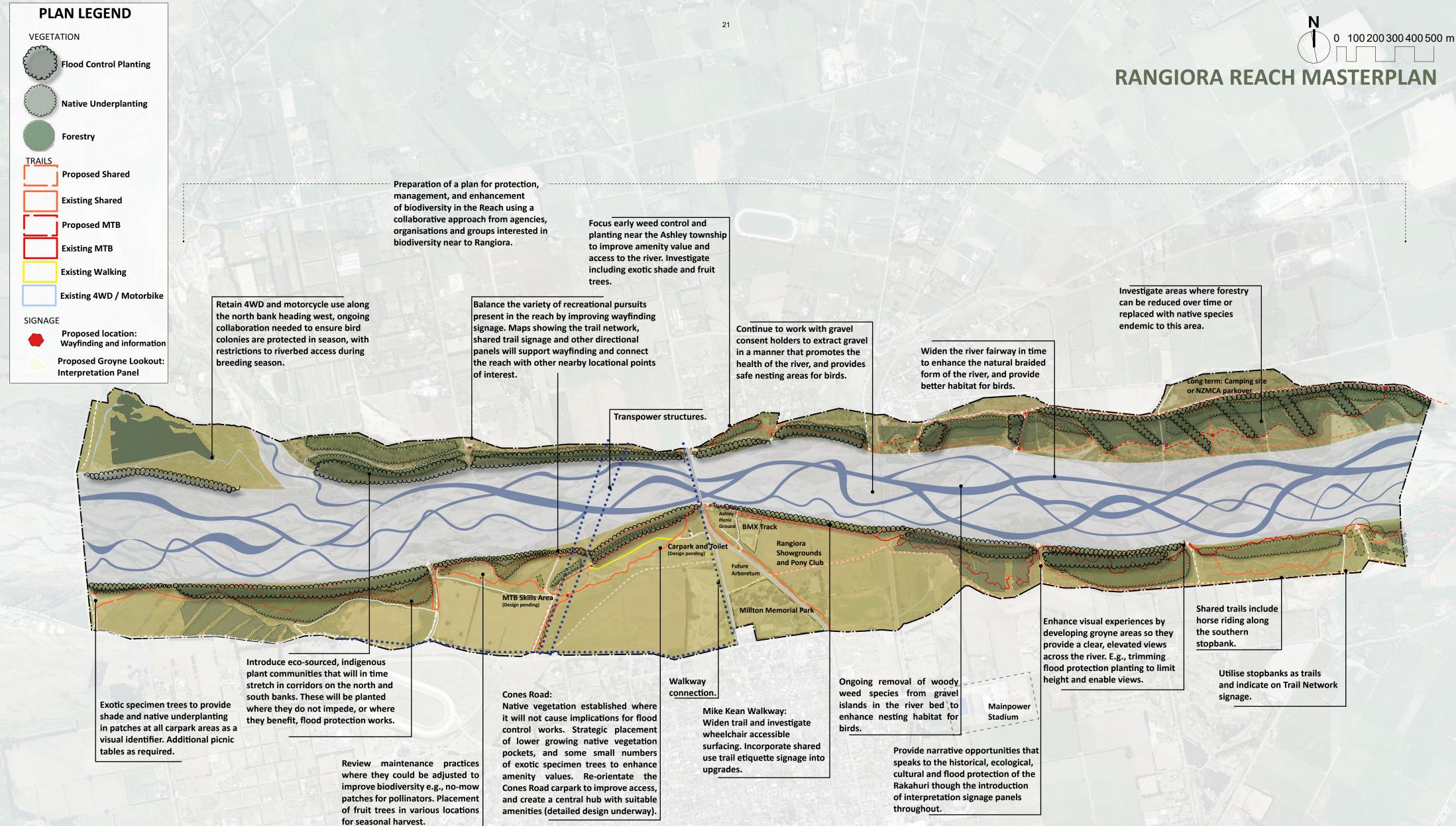
Develop main visitor area at the Cones Road entry

Accommodate for the requirements of recreational visitors;

wayfinding, shade /shelter, rest areas, carparking, longer term:

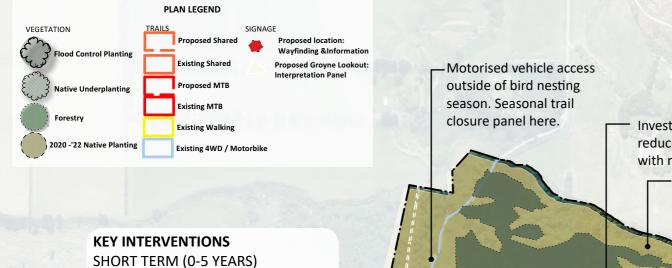
The maturity of existing planting provides a valuable nursery canopy for a native understory planting.

PAGE





PAGE 8



- Updating of wayfinding and interpretation signage
- Continue and increase subcanopy planting
- Upgrade trails e.g., resurfacing were needed
- Review maintenance requirements and budget for works.

MID TERM (6 - 12 YEARS)

- Installation of new recreational trails
- Investigate future of forestry planting in alignment with other regional land use strategies
- Flood control planting and expansion of river corridor in alignment with flood control works
- Review masterplan.

LONG TERM (12 - 30 YEARS)

- Connect sub-canopy planting
- Flood protection planting established allowing a wider river flow path.

Wayfinding upgrade: trail network and river engineering interpretation at groyne.



- Investigate if forestry can be reduced over time here, or replaced with native species.

> Consider planting native fire resistant species in buffers around forest and/ or large dry areas.

Improve habitat in springs and side braids by intensive and extensive planting.

Flood protection planting reviewed in tandem with widening of river flow path

works.

Existing flood control line

Potential butterfly habitat enhancement area.

> Wayfinding to give clear information on trail types, length and location within wider network, interpretation panels as appropriate.

Extensive native planting minimum of two planted rows back from the front edge of flood control planting and three metres from MTB trails edges.

> Potential butterfly habitat enhancement area.

22

RANGIORA REACH MASTERPLAN Detail page 1 of 3

Formalise carpark and trail network wayfinding panel.

Gradual planting of native species for habitat using exotic tree cover as nursery group for revegetation

.....

Groyne lookout. -

Trail network wayfinding panel.

Potential butterfly habitat enhancement area.Placement of fruit trees in various locations near carparking area for seasonal harvest.

PAGE 9

.....

PLAN LEGEND GETATION SIGNAG osed Shared Wayfinding &Informat nd Control Plan Existing Shared Proposed Groyne Lookout terpretation Panel oosed MTR Existing MTB Transpower Structures Forestry **Existing Walking** 2020 -'22 Native Pl Existing 4WD / Motorbik

Extensive native planting two metres from trail edges. Option for fruit and shade trees and clearing areas for community picnics.

Wayfinding to give clear information on trail types, length and location within wider network, interpretation panels as appropriate. Flood protection planting reviewed in tandem with widening of river flow path.

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Wayfinding to give clear information on trail types, length and location within wider network, – interpretation panels as appropriate.

Extensive native planting minimum of two planted rows back from the front edge of flood control planting and three meters from MTB trails edges.

Potential butterfly habitat enhancement area. Trail network wayfinding panel.

020 80 140 200 m

Ν

MTB skills course location.

Carpark area extended and toilet proposed. Wayfinding to give clear information on trail types, length and location within wider network, interpretation panels as appropriate.

Connect Millton Memorial Park with reach area to create recreational linkages via wayfinding, planting and trail interventions. Ongoing monitoring and removal of woody weed species to promote habitat for birds. In some places gravel extraction can be tailored to promote braided river form and protect nesting birds from pests.

23

RANGIORA REACH MASTERPLAN Detail page 2 of 3

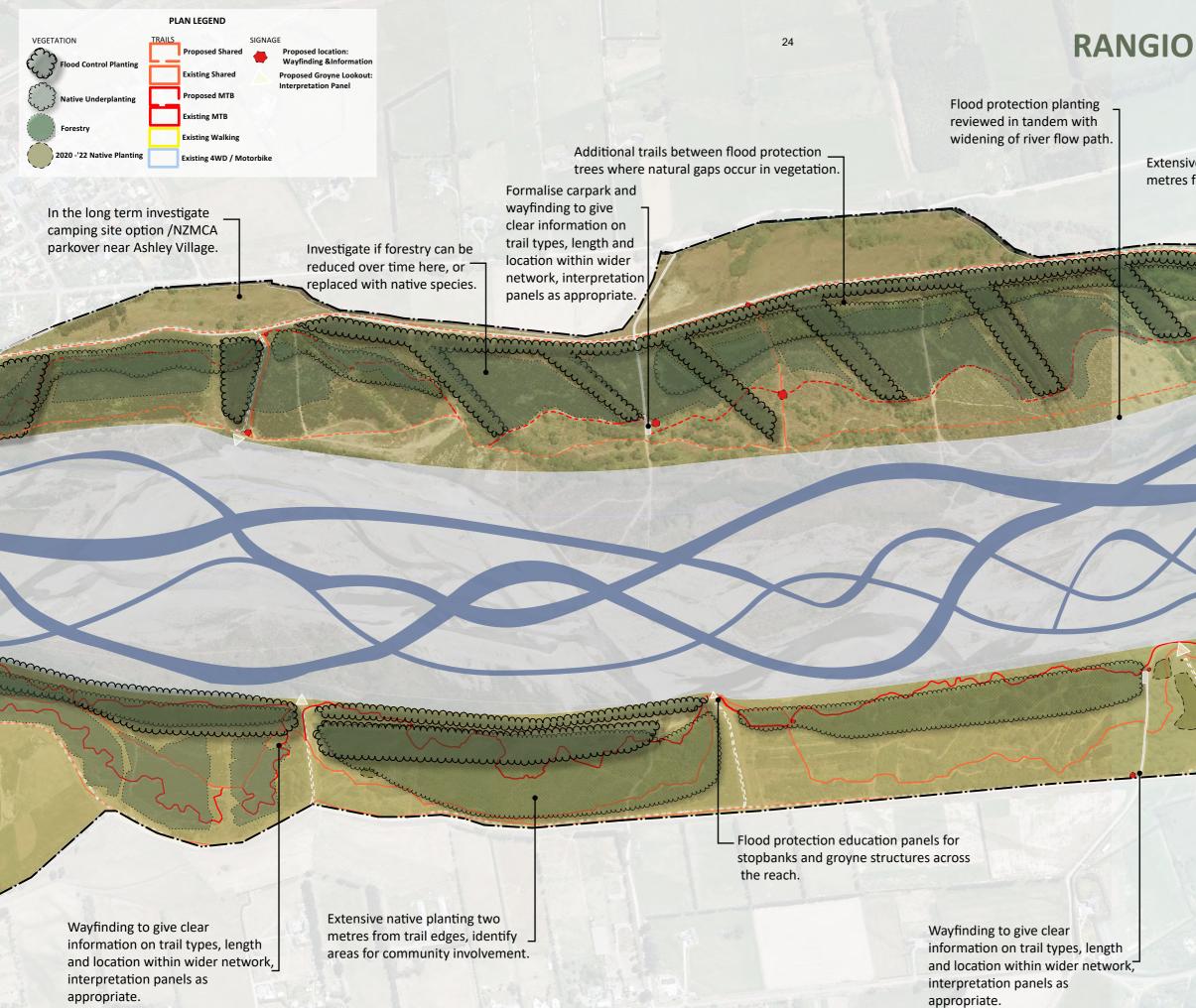
Investigate if forestry can be reduced over time here, or replaced with native species.

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KEY INTERVENTIONS

SHORT TERM (0-5 YEARS)

- Updating of wayfinding and interpretation signage
- Establishment of dryland node plantings
- Widen Mike Kean walkway to accommodate shared use
- Expand Cones Road carpark
- Establish mountain bike skills course
- Provide pedestrian and cycle connections to the site from Rangiora and Ashley Village.



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020 80 140 200 m

RANGIORA REACH MASTERPLAN Detail page 3 of 3

Extensive native planting two metres from trail edges.



- Updating of wayfinding and interpretation signage
- Continue and increase subcanopy planting and identify areas for community planting.
- Upgrade trails e.g., resurfacing where needed
- Review maintenance requirements and budget for works
- Develop a plan for protection, management, and enhancement of biodiversity in the reach.

MID TERM (6 - 12 YEARS)

- Installation of new recreational trails
- Investigate future of forestry planting in alignment with other regional land use strategies
- Flood control planting and expansion of river corridor in alignment with flood control works
- Review masterplan.

PLANTING STRATEGY

The open node strategy seeks to install nodes of native plants that follow succession patterns. Over time, these will establish into areas of native vegetation dispersing into the wider environment.

This approach mirrors that of a natural braided river – where flooding would wipe out vegetation. The braided-river adapted species would start to grow, occupying a site, building and capturing sediments and layering organic matter – giving way to the next species then the next. Certain plant species grow better together with different types of soils or shelters already established. The shelter of the willow or poplar can offer some of the benefits that the previous plant community would have had.

Typically, our two primary planting strategies are sub-canopy planting installations and dryland node installations. These build on the successional behaviours of the plants and emphasise growth in protection rather than depending on plants to tolerate what can be hard and arid conditions to establish in.





BELOW: Example of native sub-canopy planting proposed under flood control planting.



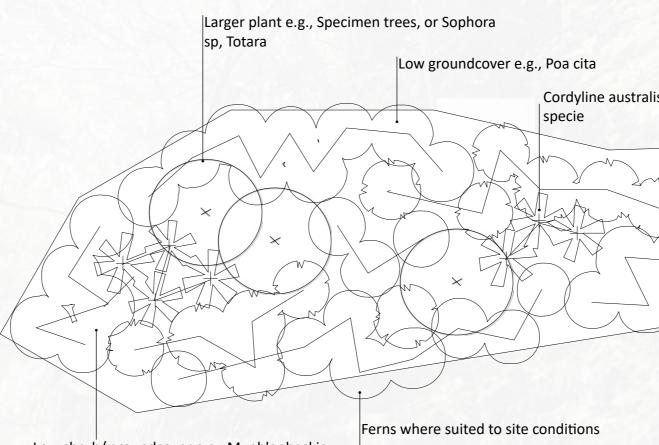
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SUGGESTED PLANT SPECIES LISTS

DRYLAND NODE PLANT LIST

Dryland node species are tolerant of dry, arid conditions and are intended to be an early step towards improving biodiversity in exposed sites such as Cones Road, South Bank.

- Poa cita/wī
- Austroderia richardii/toetoe
- Phormium tenax/harakeke ٠
- Coprosma propingua/miki
- Coprosma crassifolia/mikiminki
- Coprosma intertexta
- Muehlenbeckia complexa/pohuehue
- Melicytus alpinus •
- Kunzea serotina/kānuka, makahikātoa
- Sophora prostrata/kowhai
- Sophora microphylla/kowhai
- Podocarpus totara/tōtara. ٠



Low shrub/ groundcover e.g., Muehlenbeckia

SUB-CANOPY PLANT LIST

Sub-canopy species are planted underneath mature planting areas such as exotic trees. The flood control planting provides opportunities to integrate native sub-canopy species amongst flood control vegetation in locations suitable for additional planting.

- Aristotelia serrata/makomako
- Austroderia richardii/toetoe ٠
- Coprosma crassifolia / mikimiki ٠
- Coprosma propinqua/miki
- Cordyline australis/tī kōuka
- Corokia cotoneaster/korokio ٠
- Dacrycarpus dacrydioides/kahikatea
- Festuca novaezealandiae/pātītī taranui ٠
- Griselinia littoralis/kāpuka ٠
- Veronica salicifolia/koromiko
- Hoheria angustifolia/houhere •
- Kunzea serotina/kānuka, makahikātoa
- Leptospermum scoparium/mānuka ٠
- Melicytus alpinus

- Melicytus ramiflorus/māhoe
- Muehlenbeckia complexa/pohuehue
- Ozothamnus leptophyllus/tauhinu
- *Phormium tenax/harakeke*
- Pittosporum eugenoides/tarata
- Pittosporum tenuifolium/kohūhū
- Plagianthus regius/mānatu
- Poa cita/wī
- Podocarpus totara/tōtara
- Prumnopitys taxifolia/mataī
- Pseudopanax arboreus/whauwhaupaku
- Pseudopanax crassifolia/horoeka ٠
- Sophora microphylla/kowhai
- Streblus heterophyllus/tūrepo.

SPECIMEN TREES AND FERNS LIST

Specimen trees to provide shade and autumn colour whilst also building on the existing exotic trees throughout the site. Specimen trees suggested to be planted at carpark entry points and picnic areas to enhance visual amenity and seasonal colour. Fruit trees to be confirmed.

Common Name	Latin Name	Comments	Summer Colour	Autumn Colour
		Sterile cultivar specimen tree for		
Pin Oak	Quercus sp	shade and autumn colour	Green	Red / Yellow
		Sterile cultivar specimen tree for		
Poplar	Populus sp.	shade and autumn colour	Green	Yellow
		Sterile cultivar specimen tree for		
Plane Tree	Platanus sp.	shade and autumn colour	Green	Yellow / Brown
	Liquidambar styraciflua	Sterile cultivar specimen tree for		
Sweetgum	'Rotundiloba'	shade and autumn colour	Green	Red / Purple
Common Name	Latin Name	Comments		
Tī kōuka	Cordyline australis			
Aruhe	Pteridium esculentum	_		
	Botrychium australe and			
Pānako	Botrychium biforme			
Harakeke	Phormium tenax			

Cordyline australis or similar medium sized

Left: Example of node planting layout. Species and form will vary between nodes but will retain similar planting forms and overall theme.

TRAIL AND INFORMATION SIGNAGE

Community feedback indicated improved signage was required throughout the reach. As a result, enhanced wayfinding, and informative signage throughout the area through the introduction of trail network maps, shared trail signage and other direction panels will be installed throughout the reach (see locations on masterplan, page 8). This will include other nearby local points of interest as well as the wider trail networks.

Wayfinding



ABOVE: Example of current wayfinding signage installed along the reach. These panels would benefit park users with an upgrade and to include shared/single use trail information, trail length and carpark names. Historic and/or cultural narratives could be included in some places along with biodiversity education panels.

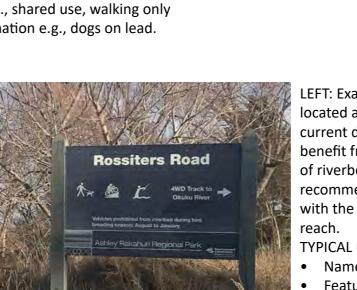
TYPICAL FEATURES:

- Wider site context e.g., reach area
- Locations of key features e.g., carparks, stopbanks
- Trail names and locations.



ABOVE: Example of a simple yet effective directional marker used to delineate trails and user groups. **TYPICAL FEATURES:**

- Name and direction of trail/s
- Trail type e.g., shared use, walking only
- Other information e.g., dogs on lead.



LEFT: Example of accessway signage which are located at most river/road entry points. The current design works well. Some panels may benefit from a future upgrade and the addition of riverbed closure and trail closure options recommended for flooding events and to assist with the ongoing management operations of the

- **TYPICAL FEATURES:**
- Name of entry point
- Features within proximity to entry e.g., parking, angler access.

Cultural and historical information



ABOVE: Example of historical interpretation information board used in the facing sides at the Cones Road entrance. TYPICAL FEATURES:

- River history and context
- Biodiversity
- Flood control/engineering ٠
- Cultural history as appropriate.

Waimakariri Regional Park. Recommended installing a similar structure with two



ACKNOWLEDGEMENTS

This plan is the result of collective inputs from individuals, community groups and stakeholders. The project team would like to acknowledge those who have participated in developing the masterplan, and those who will contribute further as we refine the masterplan into a final operational version.

The masterplan process has involved input from Environment Canterbury, Waimakariri District Council, The Ashley Rakahuri Rivercare Group, Mahaanui Kurataiao Ltd (in consultation with Te Ngāi Tūāhuriri Rūnanga). Values and aspirations for the masterplan area were explored with the wider community, stakeholders and other clubs that utilise and enjoy the Rangiora Reach of the Ashley River/Rakahuri.

This work connects and complements work being undertaken by other organisations such as the Ashley Rakahuri Rivercare Group, Waimakariri District Council, the Department of Conservation and others.











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AGENDA ITEM NO: 4	SUBJECT MATTER: Committee Updates	
REPORT TO: Waimakariri	Water Zone Committee MEETING DATE: 2 September 2024	
REPORT BY: Murray Griffin, CWMS Facilitator, ECan		

PURPOSE

The purpose of the agenda item is to provide the committee with an overview of updates to be tabled.

RECOMMENDATION

That the Zone Committee:

Receives these updates for its information.

COMMITTEE UPDATES

The following updates will be addressed with the committee:

1. Zone Committee Working Groups

1.1 Biodiversity Working Group

Martha Jolly notes the Biodiversity Working Group (BWG) is ticking along nicely. Applications for the Environmental Awards 2024 closed in mid-August, and judging starts over the next couple of weeks. Top projects will receive a visit from the judging panel made up of Zone Committee members, WDC and ECAN ecologists, and a member of the Waimakariri Biodiversity Trust. Awards will be presented alongside the Mayoral Community Awards in October.

1.2 Lifestyle Block Working Group

Carolyne Latham notes the Group is continuing to promote the Top Ten Tips (TTT) at any opportunity e.g. North Canterbury Vets have been distributing them, and at the University of the Third Age (U3A) talk in early August. Compass FM have also offered to host the zone committee again and TTT might be a topic for that.

1.3 Monitoring Working Group

Erin Harvie will provide a short update at the meeting.

2. Environment Canterbury Updates

Councillor Claire McKay will lead this update.

2.1 Changes to Council's Committee Structure

Councillor McKay will outline Environment Canterbury's new committee structure, developed to align with the Long-Term Plan 2024-34, and Council's impact framework and 3 core services.

On 24 July 2024, the Council discharged five Standing Committees and established two new standing committees. The two new standing committees are a Strategy and Policy Committee and a Regional Delivery Committee. The purpose of the new committees will be:

- Strategy and Policy: to provide advice and recommendations to Council or other Committees on the development of positions or approaches on current or emerging issues of local, regional and national significance.
- Regional Delivery: to provide governance oversight of the organisation's delivery of the three core services.

2.2 Committee Meetings

Please find the link below for the inaugural Strategy & Policy committee meeting held on 14 August. This meeting addressed the following topics of interest to the zone committee:

- o item 7.1. Strategy & Policy Committee's forward work programme.
- item 7.2. Plan Change 8 Recommendation to Proceed to Consultation
- item 8.1. Canterbury Regional Policy Statement Review Update on Clause 3 Consultation
- item 8.3. Council submissions, including the Canterbury Regional Council's submission on the Resource Management (Freshwater and Other Matters) Amendment Bill (Attachment 8.3.1)
- The 14 August Strategy & Policy committee meeting also included a high-level summary of clause 3 feedback received on the draft Regional Policy Statement. This can also be downloaded from the link provided below.
- Council Meeting agendas can be viewed and downloaded from this link: <u>Council and committee meetings: Current month | Environment Canterbury (ecan.govt.nz)</u>

3. Waimakariri District Council updates

Councillor Tim Fulton will lead this update.

3.1 Council Meetings

The Waimakariri District Council adopted its Long-Term Plan for 2024-34 at its Tuesday 2 July meeting.

Council Meeting agendas can be viewed and downloaded from this link: <u>Minutes & Agendas | Waimakariri District Council</u>

3.2 Council Reports for the committee

A Roading and Utilities committee report (August) is included in the meeting papers on the management of Avian Botulism.

o agenda item 4 – 1: Avian Botulism Management 2023-24 report.

4. Kaiapoi Wetlands – Press Article

A copy of the 9 August Press article on the Kaiapoi Wetlands supported by the zone committee through the CWMS Action Plan Budget for 2023/24 is provided as **agenda item 4 – 2**

5. Action points from the previous zone committee meetings

- An update on the water quality sampling at Tutaepatu Lagoon.
- An update on the Kaiapoi River salinity logger data.

WAIMAKARIRI DISTRICT COUNCIL

REPORT FOR INFORMATION

FILE NO and TRIM NO:	SEW-03-01-04-13.01 / 240701105914	
REPORT TO:	UTILITIES AND ROADING COMMITTEE	
DATE OF MEETING:	20 August 2024	
AUTHOR(S):	Sophie Allen (Water Environment Advisor)	
SUBJECT:	Avian Botulism Management 2023/24	1-1 - 1
ENDORSED BY: (for Reports to Council, Committees or Boards)	General Manager	Chief Executive

1. <u>SUMMARY</u>

- 1.1 This report summarises the occurrence, costs and management of avian botulism during the 2023-24 season at the Waimakariri District Council Wastewater Treatment Plants (WWTP) and Kaiapoi Lakes.
- 1.2 There was a minor outbreak at the Kaiapoi Wastewater Treatment Plant (WWTP) with a total of 375 birds for the 2023-24 season collected by ecological contractors. Other coastal Waimakariri District Council wastewater treatment plants had low numbers of birds collected by ecological contractors, with no avian botulism outbreak detected; Rangiora WWTP (53 birds), Woodend WWTP (4 birds) and Waikuku WWTP (1 bird), and Kaiapoi Lakes (2 birds).

2. <u>RECOMMENDATION</u>

THAT the Utilities and Roading Committee:

- (a) **Receives** Report No. 240701105914.
- (b) Notes the bird death numbers (431 birds) for the 2023-24 season at coastal Waimakariri District Council wastewater treatment plants (WWTPs), as collected by contractors, with a minor avian botulism outbreak at the Kaiapoi WWTP, and two birds collected at the Kaiapoi Lakes.
- (c) Notes that the WDC Avian Botulism Management Plan 2020, information leaflets and FAQ sheet will be updated with minor amendments before December 2024, including procedures if Highly Pathogenic Avian Influenza (such as H5N1) is suspected instead of avian botulism.
- (d) **Notes** that WDC staff and contractors will be advised of the low risk of avian botulism toxin being spread by contaminated clothing and footwear if standard hygiene practices are followed, so that appropriate actions can be taken if visiting poultry or dairy farms.
- (e) **Notes** that WDC staff will continue to proactively engage with any affected residents and/or concerned members of the public about avian botulism control.
- (f) **Circulates** this report to the Council, the Waimakariri Water Zone Committee, and the Community Boards for information.

3. BACKGROUND

- 3.1 An update on avian botulism and its management was presented to the Utilities and Roading Committee on 15 August 2023 (230601080981[v2]), 21 June 2022 (220420060318), 24 September 2019, (190905124322[v2]), 21 August 2018 (180719080426) and December 2015 (160301016953). These reports detailed the identification and management response of the disease at the Kaiapoi, Woodend, Rangiora and Waikuku WWTPs, and surrounding waterbodies.
- 3.2 Avian botulism is a paralytic disease of waterfowl, caused when toxin is released by bacteria commonly found in the substrates of lake and pond beds, including wastewater oxidation ponds. This toxin accumulates in aquatic invertebrates, which are then consumed by birds. The bacterium *Clostridium botulinum* is widespread in soil and requires warm temperatures, a protein source and an anaerobic (i.e. no oxygen) environment in order to become active and produce toxin. Decomposing vegetation and invertebrates combined with warm temperatures can provide ideal conditions for the botulism bacteria to activate and produce toxin.
- 3.3 Botulism is an intoxication (i.e. food poisoning) rather than an infectious disease. The affected birds show several consistent symptoms including weakness, lethargy and a progressive paralysis, which initially affects the legs and neck. Walking becomes difficult and paralysis of the neck means birds cannot hold their heads erect. For birds sitting on the water this inevitably leads to death by drowning.
- 3.4 Carcasses of dead birds are subsequently fed on by flies and their larvae, which then concentrates the botulinum toxin within the larvae and the bird-toxic maggot cycle commences. This leads to the deaths of subsequent waves of birds as they feed on the maggots in, and around, the dead bird carcasses.
- 3.5 Providing mildly affected birds with fresh water, shade and protection from predators may help them recover from the intoxication. Avian botulism antitoxin is available (potentially only overseas, such as in the USA), but requires special handling and must be given early in the intoxication. Birds that survive a botulism outbreak are not immune to future exposure to botulism toxin.
- 3.6 Avian botulism Type C, as identified at the Kaiapoi Wastewater Treatment plant, is not thought to be a risk to human health. Avian botulism Type E, which has not been identified in the Waimakariri District, does affect humans in rare cases.
- 3.7 Work boots, clothes and vehicles if contaminated with bird carcass material has been identified as a potential risk to poultry and dairy farms for spreading botulinum toxin, however this risk is much lower than the risk of contaminated feed or bedding material for example. WWTP staff and contractors are recommended to be advised of this low risk, so that appropriate actions can be taken if visiting poultry or dairy farms.

4. ISSUES AND OPTIONS

4.1. Figure 1 shows bird carcass numbers that have been collected by contractors at WWTPs and sometimes other ponds managed by WDC from 2013-24. In 2023-2024, 433 birds in total were collected from four WWTPs, primarily mallards and paradise shelducks, but also species such as New Zealand scaup were also collected. Note that cause of death is not confirmed by autopsy. There has been no significant outbreak of avian botulism since 2018-19 in the Waimakariri District. However, avian botulism is thought to have caused significant number of deaths (i.e. defined as an outbreak) in 2013/14, 2014/15, 2017/18 and 2018/19.

4.2. The species of each carcass collected is recorded by Keystone Ecology Ltd, who are experienced in bird identification. No species that are listed as rare or threatened by the Department of Conservation threat classification system were collected in 2023/24 or in previous year since species records have been collected. Department of Conservation classifies the royal spoonbill as naturally uncommon but increasing in range.

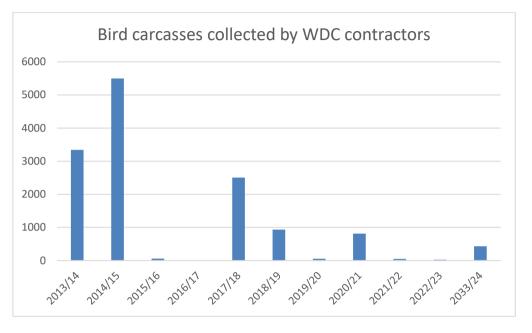


Figure 1: Bird carcasses collected 2013-24 by WDC contractors at all sites. NB data value may be slightly incorrect for the 2015-16 year, due to varying reports.

- 4.3. The first noted outbreak in the Waimakariri District was at the Kaiapoi Wastewater Treatment Plant (WWTP) in the summer of 2013/14. In total there were 3,336 birds that died at the Kaiapoi WWTP and 7 at Woodend WWTP. Most of the dead birds were paradise shelducks and mallards. The second outbreak in the summer of 2014/15 was more significant with a total of 5,499 dead birds over the summer period. The incidence of avian botulism was also more widespread with birds affected at the Kaiapoi, Woodend, Rangiora and Waikuku Beach treatment plants, at the Kaiapoi Lakes public area, the Pegasus wetlands and the Tūhaitara Coastal Park wetlands (Tutaepatu Lagoon).
- 4.4. In 2017/18 there were an estimated 2,505 bird carcasses collected by Council contractors. Any outbreaks in the summers of 2015/16, 2016/17, 2019/20, 2020/21, 2021/22 and 2022/23 were negligible (see Figure 1), due to likely factors such as weather (temperature and wind direction for example) that have not be analyzed. 2023/24 has been called a minor outbreak at the Kaiapoi WWTP with a total of 375 birds collected.

Amendments proposed to the Avian Botulism Management Plan 2020

- 4.5. The WDC Avian Botulism Management Plan 2020 (Trim 201103147380), information leaflets and FAQ sheet will be updated with minor amendments before December 2024, including;
 - 4.5.1. Procedures if Highly Pathogenic Avian Influenza (such as H5N1) is suspected instead of avian botulism.
 - 4.5.2. Recommended measures for WDC staff and contractors to minimise any risk of the spread of avian botulism toxin to poultry or dairy farms.
 - 4.5.3. An update on bird rehabilitation centre contact details.

Avian Influenza (Bird Flu)

- 4.6. Highly Pathogenic Avian Influenza (HPAI) is a disease that is highly contagious and often deadly in poultry, caused by highly pathogenic avian influenza A (H5) and A (H7) viruses; it is also known as bird or avian flu. HPAI viruses can be transmitted by wild birds to domestic poultry and other bird and animal species, including occasionally to humans. Strains of HPAI have been circulating globally for many years, with many countries having seasonal outbreaks in poultry every year.
- 4.7. In 2020, a new H5N1 strain of the virus emerged in both domesticated and wild birds across the northern hemisphere. It established in wild birds and began to spread, including to the United Kingdom, Europe, and the United States. In 2023, H5N1 was detected in the southern hemisphere. Since then, it has spread down through South America to the sub-Antarctic islands and the Antarctic peninsula near South America.
- 4.8. Although not currently in New Zealand, it is anticipated the H5N1 will reach New Zealand at some stage. Symptoms in birds can be similar to avian botulism symptoms, therefore ecological contractors handling dead birds have health and safety and reporting practices in place if HPAI is suspected.

Waterbird survey results from Kaiapoi WWTP and Brooklands Lagoon/ Waimakariri River mouth coastal wetland system).

4.9. Christchurch City Council undertook a wading bird survey at the Brooklands Lagoon/Lower Waimakariri, including at the Kaiapoi WWTP on 27/06/2024. As this was a wintertime survey, it cannot be compared to previous summary surveys that have been carried out in 2021-23 and which were reported in 2023 to the Utilities and Roading Committee as many species are migratory.

Avian Botulism monitoring at Bromley Wastewater Treatment Plant

- 4.10. Over the 2022-23 summer, Christchurch City Council confirmed that approximately 321 dead waterfowl were collected from Bromley WWTP wetlands as part of their annual avian botulism monitoring. It was also confirmed that 11 live waterfowl were taken from Bromley WWTP for recovery.
- 4.11. Since the summer of 2011/12, there have sometimes been avian botulism Type C outbreaks in the Bromley Wastewater ponds in Christchurch. In summer 2012 there was a large outbreak with 6,300 birds collected, with death attributed to avian botulism within the Bromley Oxidation ponds. The actual estimated number of bird deaths was over 7,000 due to a number unable to be recovered.
- 4.12. In 2013/14, two years after the Bromley WWTP outbreak, WDC experienced the first noted avian botulism outbreak for the District at Kaiapoi WWTP. It was speculated that the avian botulism outbreak at the Kaiapoi WWTP was related to the outbreak at Bromley spreading to the wider area, such as through the movement of sick waterfowl between the two locations.
- 4.13. The bacterium that causes avian botulism is naturally occurring and is likely always present at all WWTP wetland sites at low levels in sediments, so is not necessarily a new infection that is spread between sites. It is rather that an outbreak at one site, such as Bromley WWTP, leads to concentrated toxins being passed on via the 'carcass-maggot cycle'. This cycle is where birds eat the maggots of a carcass that has passed away from avian

botulism, where the toxin has accumulated then moves to another site before dying and producing maggots with the accumulated toxin.

Implications for Community Wellbeing

- 4.14. There are not implications on community wellbeing by the issues and options that are the subject matter of this report. An information pamphlet on Avian Botulism has previously been prepared (refer TRIM 190204012544) to address the community's concerns regarding the disease.
- 4.15. The Management Team has reviewed this report and support the recommendations.

5. <u>COMMUNITY VIEWS</u>

5.1. Mana whenua

Te Ngāi Tūāhuriri hapū are likely to be affected by or have an interest in the subject matter of this report as some waterfowl are taonga species, collected for mahinga kai.

5.2. **Groups and Organisations**

There are groups and organisations likely to be affected by, or to have an interest in the subject matter of this report such as Te Kōhaka o Tūhaitara Trust, North Canterbury Fish and Game, the SPCA, Community and Public Health, Department of Conservation, and Christchurch City Council.

5.3. Wider Community

- 5.3.1. Although there is no legislative requirement, there is a social expectation of the Council to prevent outbreaks spreading to other wetland and lake areas, such as in the Selwyn District and Hurunui District (e.g. Lake Forsyth/Wairewa, Te Waihora/ Lake Ellesmere) or to poultry and dairy farms within Canterbury.
- 5.3.2. Gamebird hunters i.e., duck shooters may have reduced opportunities for hunting, and require clear communication on the severity and locations of outbreaks.
- 5.3.3. Birdwatchers, bird lovers and the general public could be saddened to see sick and dead birds at public locations. Rare or threatened birds could be affected, though no rare or threatened bird deaths have been recorded to date.
- 5.3.4. Opportunities for mahinga kai (customary food gathering) of waterfowl and tuna (eel) may be reduced. Clear communication is needed with appointed Tangata Tiaki (customary fisheries officers).
- 5.3.5. The wider community is not likely to be affected by, or to have an interest in the subject matter of this report.

6. OTHER IMPLICATIONS AND RISK MANAGEMENT

6.1. **Financial Implications**

- 6.1.1. There are no financial implications of the decisions sought by this report. This report is for information only.
- 6.1.2. This budget is an existing budget included in the Annual Plan for the operational cost of the wastewater treatment plants.
- 6.1.3. The cost of avian botulism management for 2023-24 was an estimated \$20,000 excl GST. A total of amount of \$32,273 was spent on avian botulism, midge emergence trap and midge larvae monitoring, which is carried out by the contractor Keystone Ecology Ltd in the same visit. The cost in 2022-23 was \$11,502, 2021-22 was \$19,525, 2018-19 was \$45,829, and 2017-18 was \$41,980 excl. GST for the bird collection by a contractor. The variation in cost per year

relates generally to an increased number of visits and/or hours required to retrieve bird carcasses.

- 6.1.4. The cost for bin rental, collection and disposal in 2023-24 was \$893 excl GST. The cost in 2022-23 was \$826, 2021-22 was \$1,070, \$3,081 for 2018-19, and \$5,773 excl. GST for 2017-18 for the waste disposal contractor. A change of contractor was made for 2023-24 which has likely led to cost savings, despite the minor outbreak at Kaiapoi WWTP.
- 6.1.5. Costs to-date have come from within WDC Wastewater budgets, including for areas such as stormwater ponds and reserve areas. This may need to be re-evaluated if significant costs arise from outside of WWTP areas.
- 6.1.6. The cost of management is thought to be reduced by efficient monitoring, quick response and a coordinated response with other parties, such as the Christchurch City Council.

6.2. Sustainability and Climate Change Impacts

- 6.2.1. The recommendations in this report do not have sustainability and/or climate change impacts. However, climate change will have a likely effect on avian botulism outbreaks in the future if there are warmer temperatures for longer durations for example.
- 6.2.2. WDC staff monitor for weather predictions of warmer winters and summers, to enact management options early, and reduce risk of a larger or widely dispersed outbreak.

6.3 Risk Management

6.2.1. There are no risks directly arising from the adoption/implementation of the recommendations in this report.

6.3 Health and Safety

- 6.2.1. There are no specific health and safety risks directly arising from the adoption/implementation of the recommendations in this report.
- 6.2.2. Health and Safety documentation and practices such as a Site-Specific Safety Plan will continue to be in place and reviewed when appropriate for WDC staff and contractors.
- 6.2.3. Risks to human health can be minimised by clear communication of risks to staff i.e. promoting the use of gloves when in contact with bird carcasses and implementation of contractors' Health and Safety Plans.
- 6.2.4. In 2014/15 eels in Tutaepatu Lagoon are thought to have consumed some of the carcasses, which led to over 20 observed eels deaths. This raises a potential health and safety issue, due to the fact eels are gathered as a food source.
- 6.2.5. Collection of bird carcasses from wetlands is restricted to retrieval of wind-blown birds from the water's edge due to the risk for humans to enter the wetlands with treated effluent. This can reduce the efficiency and timeliness of bird carcass collection, with some areas are unable to be safely accessed for carcass removal.
- 6.2.6. Outbreaks should be re-confirmed to be avian botulism Type C by the Ministry of Primary Industries at regular intervals, particularly if symptoms presented are atypical, particularly due to the possibility of High Pathogenicity Avian Influenza strain H5N1 arriving in New Zealand.

7. <u>CONTEXT</u>

7.1. Consistency with Policy

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

7.2. Authorising Legislation

7.2.1. The Local Government Act 2002 sets out the power and responsibility of local authorities, including the Council's role in providing wastewater services.

7.3. Consistency with Community Outcomes

- 7.3.1. The Council's community outcomes are relevant to the actions arising from recommendations in this report.
 - There is a healthy and sustainable environment for all.

7.4. Authorising Delegations

7.4.1. This report is for information only. No delegations apply.

News

Read online at thepress.co.nz

Kaiapoi regeneration evokes centuries-old wetland complex

An extended family is restoring the waterways on lands where they have lived for centuries. Will Harvie reports.

rnold Pohio reckons his ancestors lived north of the Waimakariri River for 300 years, perhaps longer.

The North Canterbury area was once a large wetland complex that stretched between the Waimakariri and Ashley-Rakahuri River at Waikuku. It was protected from the sea by high dunes along the coast, and drained north and south into both rivers

Ngāi Tūahuriri lived among these wetlands, creating temporary villages and pa, moving frequently to where eels (tuna) were easiest to catch, Pohio said.

European arrival changed this landscape entirely. The sinuous waterways were thinned, straightened and squared off into well-behaved drains. the water flushed out.

Remnants survived, including Tūtaepatu Lagoon in Tūĥaitara Coastal Park.

Even smaller fragments survived on private property, including on the Auld-Wakeman family farms and lands just north of Kaiapoi.

Viewed from above, their wetlands' shape suggests they were an oxbow (U-shaped)

lake, but it's also possible that shifting sand dunes left the looping shape, said Anna Veltman, a land management adviser at Environment Canterbury (ECan).

restoration is addictive.

About five years ago, Nicky Auld and her brother John Wakeman decided to restore their watery places. They grew up there and their mum had always wanted to do more for the swamp. Decades later, they are fulfilling that wish.

Job one was cutting out the invasive willow trees that blocked the light and prevented natural regeneration. Then came fencing out stock and planting natives such as carex secta, a water lover, as well as

kahikatea, which will hopefully grow for centuries

It was a huge job, done in small chunks, and still far from complete. But it was "addictive", Auld said. "Once you get going, you want to go back and do more.'

They also won financial Nicky Auld says ecological support from ECan and the Waimakariri District Council. IAIN MCGREGOR/THE PRESS

> Both saw ecological value in the sort-of original state of the family's wetlands, even if some of them had been grazed by stock.

Adult īnaga lived and spawned in them. Eels were almost certainly present. In theory, Canterbury mudfish (kōwaro) might be here and, if not, it was potential habitat for the nationally critical species, said Sophie Allen, a water environment adviser for the district council.

An Australasian bittern (matuku-hūrepo) frequented the area and was seen as recently as a few weeks ago. These birds were nationally critical, the worst possible conservation status.

The agencies saw value in the scale of the family's ambitions. In places, the new fences would have be set back an 8m from the water's edge, for example.

Some farmers, when fencing waterways, had been known to carve out the narrowest possible space for restoration because they wanted the land for crops and brows ing.

The Auld-Wakeman family bought and grew its own native plants. Wakeman discovered that carex divided nicely and thrived after replanting.

They have attracted the likes of Arnold Pohio to help out. The bushman and freezing works hand had collected firewood from the area for 50 years and was good at felling exotic trees. Auld named Pohio Wetland in his honour.

Like all the wetlands in this project, it did not show up by name on internet maps, including the detailed Topo Map NZ. The family came up with their own names. The grander ambition for ECan and the





Left: Arnold Pohio is helping restore the wetlands north of Kaiapoi, where his family has lived for centuries. Above: John Wakeman says farmers like him need a helping hand. Below: Pohio wetland, not squared up or narrow.





private land, restoration work under way in Tūhaitara Coastal Park, the Kaiapoi Lakes, flooded quarries and plenty of drains that could be linked.

None of this is cheap. The extended family got grants of \$41,700 from ECan's Waimakariri Water Zone Committee and top-up funding of \$25,000 from the Waimakariri District Council.

Loads of farmers wanted to contribute more to biodiversity and restoration, John Wakeman said, but they "needed a hand".

One of most invasive birds settling in at New Brighton?



Recent research suggests climate change could lead to a wider distribution of the myna in New Zealand, and the eventual colonisation of the South Island by the highly invasive pest birds.

Conservation **Keiller MacDuff**

A Christchurch conservationist is raising the alarm over a feathered pest, and crowd sourcing sightings of the highly invasive bird he says poses a serious threat.

The Indian myna, also called the common myna, is one of just three bird species to make it onto the International Union for Conservation of Nature (IUCN)'s list of the world's 100 worst invasive species.

While there have been sporadic sightings in Christchurch for some time, ornithologist Peter Langlands is concerned authorities are too relaxed due to a belief there's only one bird in the area, while he's convinced there's a pair.

Langlands' Facebook group, Christchurch Myna Watch, has close to 200 members keeping an eye out for the noisy import.

The myna is an agricultural pest that can

seriously damage crops, carry disease, compete with native fauna, and raid the nests of native birds, destroy eggs and tip out fledglings. Mynas also eat native skinks, geckos and insects such as weta.

The "quirky" birds were occasionally kept as pets, and it was possible those spotted in the wild had been deliberately released, Langlands said.

Environment Canterbury (ECan) principal biosecurity adviser Laurence Smith said the council had contracted a pest-control company to "investigate the bird's behaviours and patterns" to establish "the best time of the year to control them".

He confirmed one bird was shot late last month. However, the contractor reported it fell into a residential section, and was unable to retrieve it for autopsy or to determine its sex or age.

Langlands said it was disappointing no details were able to be gathered.

Smith said the council has received a

recent report of two more birds at New Brighton in addition to the one at South New Brighton.

The myna is not in the ECan regional pest-management plan, and does not appear on ECan's pest database. The only pest bird on it is the rook. The Canadian goose and sulphur-crested cockatoo are not officially listed as pests, but are described as of possible "interest to the public".

Mynas were being assessed, either for inclusion or through programmes "led by the community, industry or government organisations". Smith said.

The pest management plan is reviewed every 10 years, with the next review not due until 2028.

Langlands said there should be more urgency, especially given the risk the birds

could start breeding in August or September. If people see a myna they should take a photo and alert ECan, either at biosecurity@ ecan.govt.nz or through its website.

AGENDA ITEM NO: 5	SUBJECT MATTER: Zone Committee schedule and priorities – review discussion	
REPORT TO: Waimakariri	Water Zone Committee MEETING DATE: 2 September 2024	
REPORT BY: Murray Griffin, CWMS Facilitator, ECan		

PURPOSE

This agenda item provides the Water Zone Committee with an opportunity to review and discuss its schedule and priorities for 2024.

RECOMMENDATION

That the Zone Committee

Review – its schedule and confirm priorities for the remainder of 2024.

BY WHO

This update will be led by:

• Murray Griffin, Facilitator – Environment Canterbury

BACKGROUND

The committee's schedule for the remainder of 2024 is:

- 1 July Meeting
- 5 August Workshop
- 2 September Meeting
- 7 October Workshop/Field visit (TBC)
- 11 November Meeting

2 December – Workshop/Field visit (TBC)

27 January – Meeting

MINUTES OF THE MEETING OF THE CANTERBURY WATER MANAGEMENT STRATEGY WAIMAKARIRI ZONE COMMITTEE HELD IN THE RAKAHURI ROOM, 215 HIGH STREET, RANGIORA ON MONDAY 1 JULY 2024 COMMENCING AT 4.10PM.

PRESENT

C Latham (Chairperson), J Cooke (Te Ngāi Tūāhuriri Rūnanga representative), E Harvie (via Teams until 5.13pm), C Aldhamland, M Jolly, R Gill-Clifford (Youth Representative)

IN ATTENDANCE

S Allen (WDC Water Environment Advisor), M Griffin (ECan CWMS Facilitator) and A Smith (WDC Governance Coordinator), J Recker (WDC Stormwater and Waterways Manager) J Fraser (WDC Infrastructure Planner), J Benn (Department of Conservation), L Cardenas (WDC 3 Waters Compliance Officer), S Stewart (Deputy Chair Kaiapoi-Tuahiwi Community Board), M Bate (Kaiapoi resident), J Ensor (Chair Mandeville Residents Association),

<u>KARAKIA</u>

Ruby Gill-Clifford provided a karakia to open the meeting.

1. <u>BUSINESS</u>

1.1 Apologies

Moved Carolyne LathamSeconded John Cooke**THAT** apologies for absence be received and sustained from Ecan CouncillorC McKay, WDC Councillor T Fulton and A Reuben.

CARRIED

1.2 Welcome and Introductions

1.3 Register of Interests

There were no changes advised to the Register of Interest.

2. OPPORTUNITY FOR THE PUBLIC TO SPEAK

M Bate

M Bate expressed his concern at the loss of bird life on Kaiapoi Lakes and referred to Council report.

M Bate advised he had recently conducted a survey of fish life in Kaiapoi River, Cam Rivers, and at Skew Bridge, reporting that there was very little fish life at all to be seen. There was virtually no trout in the river, and he suggested that whatever was currently being done to fix the water environment was not working. Chemicals were having an impact on animal life. M Bate noted that there had been no discussion on this matter and believed this was a significant issue.

James Ensor

J Ensor spoke on nitrate levels in water and believes there were higher levels being recorded. Properties tested in 2023 near the Eyre River had shown levels of nitrate which were a concern.

James referred to minutes of recent meeting of the Oxford-Ohoka Community Board which included comment on the future of Water Zone Committees. Carolyne advised that all the Zone Committees were under review by the Canterbury Mayoral Forum. It was noted that there were different views in different Councils on the relationship they had with the Zone Committees in their areas and the benefit of them continuing.

3. <u>REPORTS</u>

The input of the public was valued by the Waimakariri Zone Committee, and to allow the public to ask questions on the reports presented, the Chairperson put the following recommendation.

Moved Carolyne Latham Seconded John Cooke

THAT the CWMS Waimakariri Zone Committee

(a) **Agreed** that Section 9.4 of the Standing orders be suspended for Items 3 and 4 to allow members of the public to ask questions prior to the item being moved.

CARRIED

3.1 <u>WDC Stormwater Drainage Watercourse Protection Bylaw Consultation –</u> <u>Update – Murray Griffin (CWMS Facilitator- Waimakariri)</u>

Jason Recker and Janet Fraser (WDC) presented this report and provided an update on the upcoming review of the WDC Stormwater Drainage Watercourse Protection Bylaw Consultation. The Bylaw was the mechanism that the Council can meet the requirements of the Canterbury Land and Water Regional Plan and would reduce a lot of consent costs. The Council would assume responsibility for the quality and quantity of all stormwater discharges into and from its reticulated stormwater systems. Industry discharging into urban areas would no longer need consents from ECan. Council would be relying on Schedule 2 of the Bylaw for consenting, which had increased the role of the Council and reduced the role of ECan as part of the consenting process.

Public Consultation opened on the Bylaw Review on 20th June and closes 20th July 2024.

C Latham asked was there doubling up between the Bylaw and the Land and Water Regional Plan. J Fraser provided an explanation of how the bylaw rules apply, with the Councils Bylaw coming under Environment Canterbury's legislation through the RMA.

C Latham expressed concerns that the rules of the Bylaw may add costs to developments and therefore the cost of housing.

C Latham asked if the Bylaw could make provisions for the inclusion of Catchment Management Plans? Sophie Allen suggested that any such plan would need to be endorsed by either ECan or Waimakariri District Council. C Latham said it would be an opportunity to keep any Catchment Groups involved.

J Recker advised that a district wide rate would apply for the Bylaw and the main matter being considered was educating people on the Bylaw, what it covers, and the

responsibilities of property owners.

If there was flooding issues in drains, J Recker said there was a small budget available for other drains that aren't rating specified.

M Bate noted the impact of the housing developments in the district that have occurred in recent years, and that the runoff from housing roofs goes straight into drains and the rivers.

Sophie Allen and Jason Recker responded to comments on recent flooding in the Cam River. Being a resident of Revells Road, J Cooke spoke on the flood which was caused by the bridges and when flooding occurs, the water breaks over either side of the bridges.

Moved Martha Jolly Second

Seconded John Cooke

THAT the CWMS Waimakariri Zone Committee:

(a) **Receives** this update with consideration to the Committee's 2021-2024 CWMS Acton Plan and Community Engagement Priorities.

CARRIED

4. COMMITTEE UPDATES – M GRIFFIN (CWMS FACILITATOR, ECAN)

4.1 Waimakariri Water Zone Committee Working Groups.

Biodiversity Working Group

The second Environmental Awards are to be held in conjunction with WDC community awards. The Application and communications went live two weeks ago. Still to determine a judging panel and judging to commence in August.

Lifestyle Working Group

An event was planned to take place at the Sefton Hall, on Tuesday 9 July, 7 – 9pm, co-hosted by the Sefton Saltwater Creek Catchment Group. This would include a talk to be conducted by Dr Charles Merfield, head of the BHU Future Farming Centre, Lincoln University. If people brought water samples along, there would be an opportunity for nitrate testing to be undertaken. It was stressed that the samples need to be brought in clean containers. Sophie Allen would be present at this evening to offer advice and information on this matter.

Monitoring Working Group

Erin provided an update on the group activities relating to the nitrate water testing in Mandeville. A possible date would be Thursday 11th July, from 9am to 11am. A venue was still to be arranged. Publicity of this testing would be done through the Mandeville Residents Association, Ohoka Group (through Niki Mealings) and Oxford-Ohoka Community Board members. Erin agreed to book the venue (Mandeville Sports Club).

There were offers of help from Zone Committee members on the day from Martha, Carolyne and Ruby. Sophie Allen has agreed to provide large maps of the areas. Murray to bring clean containers if still available.

4.2 Environment Canterbury Reports.

27 June was the final Land and Water Committee meeting. Included at this meeting

was a report on all the Water Zone Committees and their projects.

There was also a June update on the Zone Committee review. Murray agreed that this review update could be provided to members.

A report would be going to the Mayoral Forum, probably in August with options for the future of the Zone Committees. There could be approximately five options. It was expected a decision would be made by the Mayoral Forum in November.

Regional Policy Statement – a dedicated online session for all Zone Committee members would be on Friday 12 July at 12pm – 1pm. This was an early opportunity on what would be put forward, and for discussion at a workshop session in August. The formal public consultation process was being scheduled for November 2024.

4.3 Waimakariri District Council Updates.

Sophie Allen spoke on the publishing of an item on the impact of copper on the environment.

Murray to forward an update from Councillor Tim Fulton.

4.4 Ministry for the Environment – Our Land 2024 Report.

4.5 <u>Parliamentary Commission for the Environment – Going with the grain:</u> <u>Changing land uses to fit a changing landscape.</u>

Murray spoke on Items 4.4 and 4.5 which are complementary reports for reference of the Committee members.

4.6 Action points from the previous Zone Committee meetings.

Murray still to follow up on the analysis of the data from Kaiapoi River and hoping to provide something more substantial for the September meeting.

Moved John Cooke Seconded Martha Jolly

THAT the CWMS Waimakariri Zone Committee:

(a) **Receives** these updates for information.

CARRIED

5. REPORTS FOR INFORMATION

- 5.1 Soil Health and Water Quality Workshop invite 9 July.
- 5.2 <u>Water Quality Gap Analysis in the Waimakariri Report by Aqualinc.</u>

ECan had been testing deep wells in the Oxford Area.

5.3 Our Land and Water Case Study Overview – Waimakariri Landcare Trust.

5.4 Private Well Study Results 2023.

5.5 Rangiora stormwater monitoring programme 2021-23 annual report.

5.6 **Rangiora stormwater monitoring programme 2022-23 water quality results.**

5.7 <u>Zone Implementation Programme Addendum (ZIPA) Capital Works Programme</u> <u>2024-25.</u>

Moved Claire Aldhamland

Seconded Ruby Gill-Clifford

THAT the CWMS Waimakariri Zone Committee:

(a) **Receives** these reports for information.

CARRIED

6. <u>COMMITTEE SCHEDULE AND PRIORITIES FOR 2024</u>

6.1 <u>Zone Committee Schedule and Priorities – Review Discussion –</u> <u>Murray Griffin (CWMS Facilitator – Waimakariri)</u>

It was planned to schedule a Workshop session on the Regional Policy Statement in August. This was an opportunity for any matters that members would want the Committee to discuss.

Carolyne had attended a meeting with Mayor Dan Gordon, Gerard Cleary (General Manager Utilities and Roading) and ECan staff and Councillor Claire McKay on the future of the Zone Committees. The committee has a role as a "Connector" and that the Committee could work better with the local groups. Possibly the committee could work better as an entire group rather than split into different working groups.

Murray made mention of the community budgets at ECan and would this have an impact on Zone funding. The Budget had been "consolidated". At this stage, this was not known, and needed to be clarified.

It was also noted that there could be an urban field trip arranged on sites around Rangiora. Members were encouraged to make suggestions on items that the committee could discuss at the August workshop.

Moved Ruby Gill-Clifford

Seconded Claire Aldhamland

THAT the CWMS Waimakariri Zone Committee:

(a) **Review** its schedule and confirm priorities for the remainder of 2024.

CARRIED

7. <u>CONFIRMATION OF MINUTES</u>

7.1 <u>Minutes of the Canterbury Water Management Strategy Waimakariri Zone</u> <u>Committee Meeting – 6 May 2024</u>

Moved Ruby Gill-Clifford

Seconded Claire Aldhamland

THAT the CWMS Waimakariri Zone Committee:

(a) **Confirms** the Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held on 6 May 2024, as a true and accurate record.

CARRIED

8. <u>GENERAL BUSINESS</u>

Ruby advised that she had contacted the Youth Representatives at the other Zone Committees. To date she had heard back from two of the representatives and had planned to meet both these to discuss their roles in their Zone Committees. As Ruby would be stepping down from the committee at the end of 2024, she had also met with a working group from the Waimakariri Youth Council about her role and the work of the Zone Committee. She had already received feedback from a Youth Council member interested in the Youth Representative role on the Zone Committee. This would have to wait until the future of the Zone Committees was confirmed later in the year.

<u>KARAKIA</u>

NEXT MEETING

The next meeting of the CWMS Waimakariri Water Zone Committee is scheduled for Monday 2 September 2024 at 4pm. There would be a workshop on 5th August 2024.

There being no further business, the meeting concluded at 5.52pm.

CONFIRMED

Chairperson Carolyne Latham

Date