

Canterbury Water Management Strategy Waimakariri Zone Committee

Agenda

Monday 3 February 2020

3.30pm

***Council Chambers,
Waimakariri District Council,
215 High Street Rangiora***

Members:

Michael Blackwell (Chair)
Cameron Henderson (Deputy Chair)
David Ashby
Erin Harvie
Carolyn Latham
Judith Roper-Lindsay
Wendy Main
Arapata Reuben (Te Ngai Tūāhuriri Rūnanga)
John Cooke (Te Ngai Tūāhuriri Rūnanga)
Sandra Stewart (WDC Councillor)
Megan Hands (ECan Councillor)

Chairperson and Members

CWMS WAIMAKARIRI ZONE COMMITTEE

Agenda for the meeting of the **CANTERBURY WATER MANAGEMENT STRATEGY WAIMAKARIRI ZONE COMMITTEE** to be held in the **WAIMAKARIRI DISTRICT COUNCIL CHAMBERS, 215 HIGH STREET, RANGIORA** on **MONDAY 3 FEBRUARY 2020** commencing at **3.30PM**.

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

BUSINESS

PAGES

1. BUSINESS

1.1 KARAKIA

1.2 APOLOGIES

1.3 WELCOME AND INTRODUCTIONS

1.4 REGISTER OF INTERESTS

Advice of any changes or updates.

4 - 5

2. OPPORTUNITY FOR THE PUBLIC TO SPEAK

- 2.1. WIL consultant Dan Cameron will provide an update to the committee on the biodiversity/wetland project located in the Burgess Stream catchment area.

6

3. COMMITTEE APPOINTMENTS FOR 2020

7

- 3.1. The committee shall confirm its Chair, Deputy Chair and CWMS Regional Committee for 2020.

RECOMMENDATION

THAT the CWMS Waimakariri Zone Committee:

- a) **Appoints**As Chairperson.
- b) **Appoints**As Deputy Chairperson.
- c) **Appoints** As CWMS Regional Committee for 2020.

4. **COMMITTEE UPDATES – M Griffin (CWMS Facilitator, ECAN)**

8-15

- 4.1. CWMS Regional Committee Update – 10 December meeting report from Carolyn Latham.

RECOMMENDATION

THAT the CWMS Waimakariri Zone Committee:

- d) **Receives** this update for its information and regarding the committee's work programme and community engagement priorities for 2020.

- 4.2. Kaiapoi South Regeneration Map

5. **CONFIRMATION OF MINUTES**

Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting – 2 December 2019

16 - 25

RECOMMENDATION

THAT the CWMS Waimakariri Zone Committee:

- a) **Confirms** the minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held on 2 December 2019, as a true and accurate record.

Matters Arising

6. **GENERAL BUSINESS**

KARAKIA

NEXT MEETING

The next meeting of the CWMS Waimakariri Water Zone Committee is scheduled for the 2 March 2020 at 3:30pm.

WAIMAKARIRI WATER ZONE COMMITTEE

Register of Interests – at 1 January 2020

Name	Committee Member Interests
David Ashby	<ul style="list-style-type: none"> - Director/shareholder – Pineleigh Farm Limited - Director/shareholder – Dave Ashby Rural Consultants Limited - Shareholder – Waimakariri Irrigation Limited - Member – Cust Main Drain Water User Group
Michael Blackwell	<ul style="list-style-type: none"> - Director/ Shareholder – Blackwells Limited, Kaiapoi - Treasurer – North Canterbury Clay Target Association - 4Ha property, Tuahiwi
John Cooke	<ul style="list-style-type: none"> - Director/Shareholder – Executive Limousines 2015 Limited - Director/Shareholder – Express Hire Limited - Director/Shareholder – Secure Property Management 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
Erin Harvie	<ul style="list-style-type: none"> - Shareholder – Bowden Consultancy Limited, trading as Bowden Environmental - Member – NZ Hydrological Society - Associate member – NZ Institute of Primary Industry Management - Involvement with Cust River Water User Group
Cameron Henderson	<ul style="list-style-type: none"> - Dairy Farmer - Groundwater irrigator - Member – NZ Institute of Primary Industry Management - Member – NZ Dairy Environment Leaders Forum - Chairman – DairyCan - Canterbury Dairy Environment Leaders Forum - Chairman – North Canterbury Federated Farmers
Carolyn Latham	<ul style="list-style-type: none"> - Farmer – Sheep, beef - Director – Latham Ag Ltd Consulting - Shareholder – Silver Fern Farms, Farmlands - Registered Member – New Zealand Institute of Primary Industry Management
Wendy Main	<ul style="list-style-type: none"> - Dairy Farmer – Trinity Holdings (2001) Ltd - Registered Nurse - Member Federated Farmers - Consent to Farm and related consents for water and effluent with ECan - Shareholder – Silver Fern Farms, Farmlands, LIC
Arapata Reuben	<ul style="list-style-type: none"> - Chair – Ngāi Tūāhuriri Rūnanga - Trustee – Tuahiwi Marae - Trustee – Tuhono Trust - Trustee – Mana Waitaha Charitable Trust - Member – National Kiwi Recovery Group

	<ul style="list-style-type: none"> - Rūnanga Rep and Chair – Christchurch/West Melton Water Zone Committee - Rūnanga Rep – Ashburton Water Zone Committee
Judith Roper-Lindsay	<ul style="list-style-type: none"> - Director/ecologist – JR-L Consulting Ltd. - Land-owner/small-scale sheep farmer, Ashley downs - Fellow – Environment Institute of Australia and New Zealand (EIANZ)
Sandra Stewart	<ul style="list-style-type: none"> - Self-employed journalist - Land-owner, 4Ha Springbank – sheep & dogs

AGENDA ITEM NO: 3	SUBJECT MATTER: Burgess Stream Project – update
REPORT TO: Waimakariri Water Zone Committee	MEETING DATE: 3 February 2020
REPORT BY: Murray Griffin, Facilitator, ECan	

PURPOSE

This agenda item provides the Zone Committee with an update on the biodiversity/wetland enhancement project located in the Burgess Stream catchment. An introductory briefing on this project was presented to the zone committee at the 2 December 2019 meeting.

BACKGROUND

Burgess's Stream, near Eyreton, has been identified as a focus area for the first stage of Waimakariri Irrigation Limited's (WIL) biodiversity project which is designed to restore and enhance local waterways.

The project focuses on 1600 hectares of shareholder land in the Burgess Stream and Old Eyre River catchment. Within that area, 6.3 hectares have been selected by the irrigation company as potential sites for riparian planting and wetland restoration.

Burgess's Stream contains a cluster of springheads, along with pockets of native species which makes it an ideal site for restoration.

BY WHO

This update will be provided by:

Dan Cameron – Landscape Architect

Paul Reece – Environmental consultant, Waimakariri Irrigation Ltd.

RECOMMENDATIONS

That the Zone Committee receive this briefing for its information and consider options for how this project can be further supported.

AGENDA ITEM NO: 4	SUBJECT MATTER: Committee Appointments for 2020
REPORT TO: Waimakariri Water Zone Committee	MEETING DATE: 3 February 2020
REPORT BY: Murray Griffin, Facilitator, ECan	

PURPOSE

This agenda item provides the Zone Committee the opportunity to confirm its appointed positions for 2020.

These appointments are in accord with the Zone Committee's Terms of Reference, which state that the committee make these appointments each year as part of the committee's refreshment process.

Committee Membership 2020

Following the Zone Committee refresh conducted in May and June 2019, and the Local Government Elections in October 2019, the Waimakariri Water Zone Committee membership is:

- **Community Representatives**

David Ashby, Carolyne Latham, Judith Roper-Lindsay, Erin Harvie, Wendy Main, Michael Blackwell and Cam Henderson

- **Ngāi Tūāhuriri Rūnanga representatives**

John Cooke and Arapata Rueben

- **Council Representatives**

Sandra Stewart (WDC) and Megan Hands (ECan)

2020 Appointments

In August 2019 the committee confirmed Michael Blackwell as Chairperson, Cameron Henderson as Deputy Chairperson, and Carolyne Latham as the CWMS Regional Committee representative. All three have confirmed they are happy to continue in these roles for 2020 should the committee be agreeable to this, and there are no other nominees for these positions.

- The committee shall then accept nominations for the position of Chairperson for 2020.
- The committee shall then accept nominations for the roles of and Deputy Chairperson and CWMS Regional Committee representative for 2020.

Should there be more multiple nominees for any of these positions the appointment process shall be undertaken by a simple ballot vote.

RECOMMENDATIONS

That the Zone Committee appoints its Chair, Deputy Chair, and CWMS Regional Committee representative for 2020.

AGENDA ITEM NO: 5	SUBJECT: Committee Updates
REPORT TO: Waimakariri Water Zone Committee	MEETING DATE: 3 February 2020
REPORT BY: Murray Griffin, CWMS Facilitator – Waimakariri, ECan	

PROPOSAL

This agenda item provides the committee with an overview of updates for review.

RECOMMENDATIONS

The Zone Committee are asked to receive these updates for its information and regarding the committee's work programme and community engagement priorities for 2020.

COMMITTEE UPDATES

The following updates are tabled for the committee:

1. CWMS Regional Committee

The previous Regional Committee meeting was held on Tuesday 10 December 2019. Summary notes from this meeting are provided by Carolyn Latham as **agenda item 5-1**.

The link to the CWMS Regional Committee papers is provided below:

<https://ecan.govt.nz/data/document-library/?Search=regional+water+management+committee%2C+agenda&documentTypes=-1&pageSize=12&start=1&sortDir=desc>

2. Plan Change 7 (Waimakariri) Update

The final submissions count is 558 for PC7 and 28 for PC2 (586 in total). Please refer to the following link to review these submissions:

<https://ecan.govt.nz/get-involved/news-and-events/2019/proposed-plan-change-7-submissions-published/>

Hearing timeline – it is anticipated the hearing starting sometime in the first half of this year, but the actual timing has not yet been set by the Independent Hearing Panel.

A Summary of Decisions Requested – has been published on the ECan website, and the opportunity to lodge a further submission is now closed. ECan officers are now reviewing submissions and preparing recommendations to be considered by the Hearing Panel.

For more information, go to:

<https://ecan.govt.nz/your-region/plans-strategies-and-bylaws/canterbury-land-and-water-regional-plan/change-7/>

3. Waimakariri Water Zone Committee – Communications

Two articles have been released since the committees previous meeting in December 2019. The first provides a profile on Makarini Rupene and his role at ECan as *Pou Matai Ko – Cultivating & Understanding of Mahinga Kai*. This was followed up with a further profile on Stuff. Please refer to the links below to read these articles:

Link – <https://www.ecan.govt.nz/get-involved/news-and-events/zone-news/waimakariri/raising-mahinga-kai-awareness-in-the-waimakariri/>

Link – <https://www.stuff.co.nz/environment/118144258/cultural-adviser-helping-locals-understand-the-importance-of-healthy-land-and-water>

The second article provides an overview of Waimakariri Irrigation Limited's progress with Farm Environment Plans. The article highlights a willingness to proactively improve farming practices has seen 89 percent of Waimakariri Irrigation Limited (WIL) shareholders achieve an A or B Farm Environment Plan (FEP) audit during the 2018/19 season, an increase of 21 percent from 2016/17. Meanwhile, C audit grades have decreased from 28 percent in the 2016/17 season to 9 percent in 2018/19, while just one farm received a D audit grade. Please refer to the links below to read this article:

Link – <https://www.ecan.govt.nz/get-involved/news-and-events/zone-news/waimakariri/commitment-to-change-lifts-environmental-audit-grades/>

Annual Report 2018

A draft of the committee's 2018 Annual Report has been provided for the committee for its review.

4. Ashley/Rakahuri River Vegetation Restoration project

At the 2 December meeting, the Ashley/Rakahuri River Vegetation Restoration project was mentioned. This project aims to address the invasive weed proliferation in the upper catchment. Andrew Arps, ECan North Canterbury Zone Manager, will provide an update on this project.

5. Ashley/Rakahuri Braided River Programme

Andrew Arps, ECan North Canterbury Zone Manager, will provide a short update on this project in advance of a fuller briefing to the committee at the 2 March meeting.

The Ashley/Rakahuri Braided River programme is an ECan initiated programme of work focused on supporting a whole of catchment approach addressing the natural character of braided rivers in Canterbury. The Ashley/Rakahuri will be the first braided river in the region to be addressed through this programme.

6. Kaiapoi River salinity monitoring

Adrian Meredith, ECan Principal Scientist – Water Quality and Ecology, will provide a short update on the monitoring of salinity in the Kaiapoi River as requested at the 2 December zone committee meeting. The key points of this update are:

- Salinity monitoring loggers continues to be maintained in the river. River flows indicate salinity intrusion up the Kaiapoi River will not have occurred this year until soon after new year.

- Preliminary discussions with NIWA staff on establishing a salinity predictive model. Although this is unlikely to be funded until next financial year.
- Some additional water quality monitoring approaches will be considered for programmes in the next financial year

7. Silverstream nitrate monitoring

The graphic below is from Silverstream Harpers Road, which has been identified as a Waimakariri Zone nitrate hotspot. Since July last year (2019) the nitrate concentration has been remarkably stable, showing a stable winter Nitrate-nitrogen concentration of approximately 9.7 mgN/l then gradually decreasing to a stable summer concentration of approximately 9.0 mgN/l. This trend clarifies the Silverstream remains a high nitrate spring fed stream and is not appreciably reducing this year.

Fig 1: Silverstream – Harpers Road: Nitrate monitoring for the period July 2019 to present



8. Impact of chemical use on aquatic life die off in Waimakariri waterways – update

A report by ECan on this topic was requested by this zone committee at the 2 December 2019 meeting. While work on a report has not been initiated over the intervening Festive Season, investigations into the die off of aquatic life in several locations and associated chemical use into waterways, as suggested by Michael Bate and presented to the committee at previous meetings, have been undertaken.

The option of trial waterway areas where chemical application is eliminated (as best as is possible) to monitor habitat recovery is another consideration for ECan and WDC staff.

Previous investigations undertaken on this topic

The committee received a WDC report on the use of glyphosate, prepared by CAREX, at the 13 November 2017 meeting (pages 29-50 of the meeting agenda papers).

The CAREX report is titled “Persistence and ecological consequences of glyphosate to control aquatic weeds in Waimakariri lowland waterways”. The aims of this study were to investigate the persistence of glyphosate in the stream water and sediment following spraying and the effect of glyphosate on the freshwater invertebrates and fish in sprayed waterways.

The work found that glyphosate was present in the water column for 1-2 days following spraying, but quickly bound to sediment and broke down. It also found that Freshwater invertebrates and fish were not affected by the use of glyphosate to control emergent macrophytes.

9. Waimakariri River flow gauging

- A. At the request of the Zone Committee at the 2 December meeting, M Griffin has followed up on the schedule for undertaking the proposed Alpine Rivers section of the Canterbury Land and Water Plan. The ECan Annual Plan 2019/20 confirms this proposed Plan Change is scheduled for 2026/27 (target 4.1h, page15, ‘all other areas of the region’).
- B. In addition, the following update is provided by Adrian Meredith on the flow gauging site in the lower Waimakariri River below the SH1 Bridge.
 - It has been noted that the channel profile of the Waimakariri River has significantly moved away from the right bank into the centre of the bed at Old Highway Bridge. ECan staff promptly re-gauged this site soon after new year to ensure flow ratings remained accurate for river flow management. Ratings varied very little with the new bed structure.

10. Camwell Park wetland ponds diversion from No. 7 Drain

In late 2019 concerns were raised by the public about the diversion of water from No. 7 Drain to the wetland ponds in the Camwell Park subdivision. The public concern was twofold – on the one hand, concern that water was continuing to be diverted to these ponds when other irrigators were on full restrictions. On the other hand, there was indignation from Camwell Park residents now accustomed to these ponds being a natural feature of the subdivision environs when the diversion was temporarily stopped.

Link to this media article - <https://www.stuff.co.nz/the-press/news/north-canterbury/117890807/subdivision-residents-furious-after-ecan-blocked-off-waterway-filled-with-wildlife>

In December, ECan and WDC staff met with Camwell Park residents to hear their concerns. They also investigated the ponds to determine the ecological values, and the state of the diversion from the No. 7 Drain.

While these investigations are ongoing, and the issue is not resolved, the following points have been clarified to date:

- Following this unconsented diversion being temporarily stopped there was a reinstated flow, estimated at approximately 20l/s, from No. 7 Drain into the Camwell Park subdivision. This reinstated flow is estimated to be at a significantly higher flow rate than the previous diversion flow rate, due to the engineering work undertaken by WDC at the time of reinstating the flow.
- This flow is significantly higher than what is required to maintain the wetland ponds in the Camwell Park subdivision and a significant 'overflow' of excess water was identified flowing through the subdivision to Lineside Road.
- Standard control systems, such as gate installed upstream of the culvert, or a throttling collar, could reduce the flow rate significantly to the level required to maintain the three ponds in the subdivision. This has been estimated at approximately 2 to 3l/s.
- This reduced flow rate into the Camwell Park subdivision would likely be a negligible impact on the No. 7 Drain flow regime and the associated irrigators.
- This reduced flow rate is still being investigated to determine the consenting obligations for this previously unconsented diversion from No. 7 Drain.
- The ecological values were assessed as being a locally significant amenity and wildlife area, but unlikely to be significant as historical or regional biodiversity assets. The ponds would continue to provide local benefits as amenity, wildlife, and firefighting assets.
- The excessive flow travelling through the Camwell Park subdivision beyond the ponds, and down the Lineside Drain catchment are an unauthorised diversion of water between catchments. They serve no notable benefit and may contribute to detrimental effects in and from the Lineside Drain catchment.

ECan Zone Lead, Marco Cataloni, and Principal Scientist – Water Quality and Ecology, Adrian Meredith, will speak to this update and respond to any questions regarding to next steps in addressing this issue.

11. Ngahere Rongoā (Wahi whero)

In December 2019, a briefing was provided to the Kaiapoi – Tuahiwi Community Board by Makariri Rupene (Ngāi Tūāhuriri / ECan Pou Matai Ko – Cultivating & Understanding of Mahinga Kai – Northern Zone Delivery Team) and Al Blackie on the proposal to facilitate the planting of native wetland and Podocarp forest, Ngahere Rongoā, to service Tūāhuriri Rūnanga. Please refer to the map providing an indication of the proposed site for this forest, situated in the Kaiapoi red zone, as **agenda item 5-2**.

This red zone mahinga kai project would create an edible forest, consisting of two plant communities, a wetland and a Podocarp.

Wetlands:

This will be the smaller community nestled against the lake, Courtenay and Kaiapoi awa. It will consist of native groundcovers, rushes, tussocks, ferns and flax.

Podocarp:

This will be the larger community running along the river and into the wetland. It will consist of native tall trees like Matai, other smaller trees, ground covers, shrubs, ferns, ground covers and flax. Edible plants to be selected, such as the Karamu, Manuka and Koromiko etc.

Further to the above, it is suggested that a pontoon is reserved for traditional waka. This will allow waka from local iwi to dock, further enhancing local iwi and Maori identity within the area. Action has been undertaken to remediate the Courtney Floodgate.

Next Steps

The briefing to the Kaiapoi – Tuahiwi Community Board confirmed the following next steps to advance this proposal were recommended:

1. Rūnanga Endorsement
In order to ensure this report reflects Rūnanga aspirations, this preliminary report is endorsed by Ngai Tūāhuriri Rūnanga.
2. Voicing the Aspiration
This report is tabled and endorsed at the next Regeneration steering group meeting.
3. Kotahitanga – unified approach
A project team developed to plan, design and deliver the project.

12. WDC 'ZIPA projects and related 3 Waters work

Sophie Allen will provide a verbal update on work being undertaken by the WDC 3 Waters team.

CWMS Regional Committee Meeting Report

10th December 2019

1. Braided River Project – the RC received an update on the Regional Braided Rivers Immediate Steps Programme. The RC IMS fund has provided \$110,000 alongside other funding streams for a project in the Upper Rangitata and Upper Rakaia catchments. These areas are already rich in biodiversity and threatened species meeting the criteria of protecting what remains, and a coordinated weed and pest programme has made significant improvements for example to threatened river bird nest counts. The project is reliant on landowners and other organisations such as LINZ, DOC, Meridian, Genesis working together. The Upper Rangitata Landcare Group was formed in 1999 by local landowners and it was noted that having an existing group such as this is a significant advantage and other groups should be encouraged. John Benn from DOC also advised that DOC now have dedicated rangers for the Lower Waitaki and Rangitata Rivers which will provide further impetus and a more holistic approach. The RC supported inclusion of Ashburton lakes in the project.

2. Selwyn Te Waihora field trip – The RC reflected on the November field trip to Selwyn Te Waihora to see the progress being made by the Te Waihora Weed Strikeforce. Weeds were noted as the biggest management issue for wetlands, and it was agreed that a dedicated team gains a greater understanding of the issues and distribution of weeds in the area and has wider resources of knowledge. Hydrology was identified as an important factor, along with building relationships with local landowners so that the gains made are continued into the future. Some concerns were expressed about the type and level of herbicide used and whether it could impact on the lake. The Ahuriri wetland restoration was also discussed and a key factor noted was the involvement of the whole community from the start, to avoid conflicts later on. Technical support from river engineering staff was also important, in order to show landowners and lessees in the area that what was proposed wasn't going to result in increased flooding.

3. Recreation & Amenity Report Update – The proposed work programme was discussed again however it was felt that the recommendations lacked specificity. It was concluded that there may be some merit in developing a “tool” to assist zone committees with community engagement in terms of considering recreation and amenity.

4. Youth Ropu - Applications closed on 20 December 2019 for the Ecan Youth Ropu. This is a voluntary group for young people aged 14-24 representing iwi and different parts of Canterbury and Christchurch, with the aim of building the relationship between Ecan and young people to empower each other to be good kaitiaki of the environment.

5. Location of Agenda Papers:

<https://www.ecan.govt.nz/data/document-library/?Search=regional+water+management+committee%2C+agenda&documentTypes=-1&pageSize=12&start=1&sortDir=desc>

Refer also to the attached email from Lesley Woudberg dated 19th December 2019 with additional information and reading material.

Carolyn Latham
Waimakariri Water Zone Committee RC Rep



KEY

	REGENERATION AREA		
	MIXED-USE BUSINESS		HERITAGE AND MAHINGA KAI AREA
	RURAL		UTILITY
	RECREATION AND ECOLOGICAL LINKAGE RESERVE		EXISTING RESERVE
			PRIVATE PROPERTY
			KEY WALKING/CYCLING LINK

Boundaries within regeneration areas are approximate only and subject to survey.

SCALE 1:7500 @ A4

UPDATED 26/04/2019

MINUTES OF THE MEETING OF THE CANTERBURY WATER MANAGEMENT STRATEGY WAIMAKARIRI ZONE COMMITTEE HELD IN THE WAIMAKARIRI DISTRICT COUNCIL CHAMBERS, 215 HIGH STREET, RANGIORA ON MONDAY 9 SEPTEMBER 2019 AT 4.00PM.

PRESENT

Michael Blackwell (Chairperson), Dave Ashby, Erin Harvie, Carlyne Latham, Judith Roper-Lindsay, Wendy Main, Erin Harvey (arrived at 5pm) Arapata Reuben (Te Ngai Tūāhuriri Rūnanga representative), John Cooke (Te Ngai Tūāhuriri Rūnanga representative) and Sandra Stewart (Councillor Waimakariri District Council).

IN ATTENDANCE

B Stokes (Farmer), R Johnston (Farmer), S Dyer (Farmer), L Pocock (Oxford Famers) M Bate (Kaiapoi Resident), J Ensor (Mandeville Residents Association), J M^cLeach (Waimakariri A&P), B Walton (Waimakariri Irrigation Ltd), D Camron (Waimakariri Irrigation Ltd), P Reese (Waimakariri Irrigation Ltd), G Cleary (WDC Manager Utilities and Roding), O Davies (WDC Drainage Assistant Manager), J Fraser (WDC Utilities Planner), G Bennett (WDC Stormwater Engineer), K Simpson (WDC 3 Waters Manager), D Lewis (WDC Land Drainage Engineer), A Mace-Cochrane (WDC Summer Intern Engineer), A Meredith (ECan), T Davie (ECan), M Griffin (CWMS Facilitator, ECan) and T Kunkel (WDC Governance Team Leader).

1 BUSINESS

1.1 Karakia

A Reuben provided the karakia to open the meeting.

1.2 Apologies

Moved: D Ashby

Seconded: J Roper-Lindsay

Apologies were received and sustained from Cameron Henderson and Megan Hands for absence.

CARRIED

1.3 Welcome and Introductions

The Chairperson welcomed all the members present. He requested the CWMS Waimakariri Zone Committee members to introduce themselves to the people present. Officials and members of the public were also given an opportunity to introduce themselves.

1.4 Register of Interests

Item 2.1 - J Roper-Lindsay declared that she was contracted by Waimakariri Irrigation Ltd to work on the biodiversity study discussed in Item 2.1. However, she has not worked for Waimakariri Irrigation Ltd in the last six months.

1.5 **Confirmation of Minutes**

Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting – 9 September 2019

Moved: J Roper-Lindsay

Seconded: D Ashby

THAT the CWMS Waimakariri Zone Committee:

- (a) **Confirms** the Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held on 9 September 2019, as a true and accurate record.

CARRIED

1.6 **Matters Arising**

J Roper-Lindsay requested an update of the proposed Memorandum of Understanding (MOU) between ECan and Waimakariri District Council staff, regarding the roles and responsibilities to deliver the ZIPA. G Cleary advised that the MOU has not yet been signed.

2. **OPPORTUNITY FOR THE PUBLIC TO SPEAK**

2.1 **D Cameron and P Reese – Waimakariri Irrigation Limited (WIL)**

D Cameron advised that they wished to update the Committee on the work that WIL had been doing regarding biodiversity. Last year WIL started a stock-take to review the biodiversity of the sites in the scheme. Firstly, sites were identified where biodiversity needed to be protected, and then opportunities for enhancing and restoring biodiversity were identified. Special attention was given to the four main waterways, namely the Cust River, the Burgess's Stream, Hunter's Stream and the Old Eyre River as the enhancement of these areas could have a positive impact on water quality.

D Cameron reported that Burgess's Stream contained a cluster of springheads and pockets of native species, which made it an ideal site for biodiversity restoration. The farmers in the area were also willing to work on a joint project to enhance water quality.

P Reese stated that a lot of work had been done to identifying various potential biodiversity opportunities along Burgess's Stream. WIL has submitted funding applications for the proposed projects to numerous organisations, but unfortunately no funding was forthcoming. It was therefore decided to only focus only on a small area. Again, the farmers in the area were willing to participate in biodiversity restoration projects, and this opportunity should not be lost.

P Reese advised that a monitoring system would be installed on Burgess's Stream to ensure that all the required data would be available to guarantee the project's success. He expressed his concern that there seem to be a lack of 'district guidance' and coordination. WIL was therefore looking for direction from the CWMS Waimakariri Zone Committee on how to proceed.

D Cameron stated that WIL wished to give the farmers an opportunity to be pro-active and to show them the way forward. They were therefore requesting the CWMS Waimakariri Zone Committee's support for the proposed project.

In response to questions, D Cameron reported that WIL wished to launch three or four projects with Burgess's Stream as their first attempt. After investigation, it was concluded that it would be better to concentrate on wetland restoration in the area, as it may be easier to secure funding for wetland restoration.

C Latham enquired whether they had considered establishing a Catchment Group. D Cameron confirmed that a Catchment Group had already been established for Burgess's Stream. Other Catchment Groups would be established in the areas where future projects would be launched.

B Walton advised that WIL's aim was to get the structure of the projects right from the outset. However, currently there do not seem to be much coordination between the various Catchment Groups. He acknowledged that Catchment Groups may need to be managed by an overarching structure in future.

D Cameron advised that currently WIL was seeking funding support for the identified project in the Burgess's Stream catchment area. This would assist in getting farmers' buy-in in to future biodiversity projects.

J Roper-Lindsay stated that the project may qualify for Ministry of Business, Innovation and Employment funding (IMS funding). She also recommended that WIL should reach out to ECan officials for assistance. It was agreed that the possibility should be investigated further.

C Latham enquired if the Next Generation Farmers Trust would be involved in the project. P Reese advised that some of the Trust members were involved with the project because they resided in the catchment area. The Trust, as an organisation, has not been liaised with.

M Blackwell stated in light of the fact that WIL had additional information in support of the proposed Burgess's Stream wetlands project, they should submit a formal proposal to the next CWMS Waimakariri Zone Committee meeting for consideration.

2.2 R Johnston – Farmer

R Johnston expressed his distress regarding the environmental damage caused by the Ashley River on the frontage of his property. He again invited the Committee to visit his property and inspect the damage.

R Johnston advised that he made a formal presentation to ECan on 30 October 2018 regarding his property's Ashley River frontage. After numerous attempts to obtain a response from ECan on this matter, he was still unsuccessful. He has again requested a written response from ECan last week.

R Johnston advised that he and ECan officials did an aerial inspection of the Ashley River and it was clear that the invasive weed growth occurring was worse than previously anticipated. He stated that the proposed Ashley River Vegetation Restoration Project could have a positive impact on the frontage of his property. He therefore requested additional information on the project.

R Johnston stated that it was imperative to secure National Government funding to protect the river frontages in the Waimakariri against ongoing erosion.

M Blackwell requested M Cataloni, the Waimakariri Zone Delivery Lead, to ensure that R Johnston received the working schedule of the proposed Ashley River Vegetation Restoration Project.

2.3 M Bate – Kaiapoi Resident

M Bate showed videos taken of various rivers in the Waimakariri and other districts. M Bate expressed his concern regarding the high level of algae found in these rivers and also about the lack of aquatic life in the rivers. Many fish species that were historically found in Waimakariri rivers cannot currently be found.

M Bate stated that the rivers were full of rotting vegetation and that this, and the lack of aquatic life could only be attributed to chemicals being released into the rivers.

M Bate also showed photos taken of various streams and expressed a concern that although there were regenerative vegetation planting on the banks of the streams, it did not result in aquatic life returning to the streams.

W Main sought clarity on which chemicals were causing the problems with aquatic life. M Bate was of the opinion that it was mostly Glyphosate weed-killers being released in to the waterways.

J Roper-Lindsay enquired if M Bate has raised his concerns about the Halswell River with the Christchurch West Melton Water Zone Committee. M Bate confirmed that he had not contacted the Christchurch West Melton Water Zone Committee. He had however raised the issues with ECan on numerous occasions.

Councillor S Stewart stated that M Bate has raised the issues on many occasions and speculated on what was causing the problems in the waterways. There however needed to be more clarity regarding these issues to enable the CWMS Waimakariri Zone Committee to deal with the concerns. She therefore requested ECan to submit a written report, expressing their views on this matter, to a subsequent CWMS Waimakariri Zone Committee meeting.

In closing, M Blackwell requested M Cataloni ensure that the abovementioned report was submitted.

3. ZIPA IMPLEMENTATION UPDATE – S Allen (WDC Water Environment Advisor and M Griffin (ECan CWMS Facilitator)

K Simpson, advised that the aim of the report was to update CWMS Waimakariri Zone Committee on the progress being made by the WDC with the implementation of the Zone Implementation Programme Addendum (ZIPA) recommendations up until 21 November 2019. He highlighted the following issues:

- The progress made with the WDC's drainage review.
- The fish survey work undertaken November 2019 to establish fish passage issues and design requirements for remediation at Plasketts Road (No. 3 Drain) and Cust Main Drain.
- The native planting and public amenity projects in the South Brook and Taranaki Streams.
- The Cam River Enhancement Fund.
- The progress with the Kaiapoi River tidal plantings with wetland plants.
- The Inanga spawning area improvements had been scoped for Taranaki Stream, McIntosh Drain and Courtenay Stream.
- The testing of private drinking wells as part of the pilot nitrate study in Cust and Eyreton.

J Roper-Lindsay noted that the report aligned the updates given with various ZIPA recommendations. In her opinion, the updates did not necessary reflect the intention of the ZIPA recommendations. She also expressed a concern that the CWMS Waimakariri Zone Committee and the Land and Water Working Group had not had an opportunity to discuss the ZIPA recommendations. K Simpson welcomed the feedback and reminded the CWMS Waimakariri Zone Committee that the reporting on the implementation of the ZIPA recommendations were a work in progress.

Councillor S Stewart reported that the Land and Water Working Group was now a Committee of the WDC Council. The Committee would welcome input from any relevant organisations and groups. The membership of the Committee would be reviewed in April 2020 to ensure that the Committee remained relevant.

G Cleary explained that the aim of reporting on the ZIPA recommendations in this manner was to guard against duplication of work being done by the WDC and ECan. The WDC and ECan liaised on many levels regarding the implementation of ZIPA recommendations and not only the CWMS Waimakariri Zone Committee.

In light of the possible duplications of work, D Ashby enquired if the WDC was aware of the extensive work done by Professor Jon Harding on stream ecology. He also expressed a concern that the Central Drainage Advisory Group have not been briefed about the drainage review. D Ashby stated that there are drains within the Waimakariri Zone, such as the Flaxton Road Drain, that are in a state of neglect and needed immediate attention. He enquired what the WDC's plans are for dealing with these issues, taking into consideration the limited resources.

K Simpson advised that they would be briefing the Central Drainage Advisory Group about the proposed review once the scope of the review has been finalised. He stated that the WDC would be prioritizing the work to be done on the drainage system. Currently the WDC was focusing on the improvement of fish passages, hence the work being done on Plasketts Road and Ashworth Road Drains. As studies have shown that there may be several fish species in these two areas. K Simpson also stated that the WDC would take note of the work done by Professor Jon Harding and the Canterbury Waterway Rehabilitation Experiment (CAREX).

In response to questions, K Simpson confirmed that the staircases at the abovementioned drains were protecting some of the indigenous fish species by preventing predators to move past these past obstacles. Any fish passages being installed therefore needed to ensure only the right fish species would be able to pass through them.

A Meredith advised that the installation of mussel spat ropes or ramps were being considered at the abovementioned drains to allow native fish, such as bluegill bully, to pass.

M Blackwell enquired as to when the results of the pilot nitrate study of private drinking wells would be available. K Simpson stated that the results of both the Cust and the Kaiapoi studies should be available by March 2020.

A Meredith, updated the CWMS Waimakariri Zone Committee on the progress being made by ECan Science with the implementation of the ZIPA recommendations. He concentrated on the work being done with the installation of fish passages on the Courtenay and Kairaki Creek Streams.

M Griffin advised that ECan was currently developing a spreadsheet to track the ZIPA recommendation implementation in more detail. The spreadsheet would serve as the future reporting framework for ZIPA implementation.

Councillor S Stewart enquired how long the salinity monitors on Kaiapoi River and the Nitrate data logger on the upper Silverstream catchment had been in place and when the data would be available. A Meredith advised that the salinity monitor was not in during the winter months due to the high water levels of the Kaiapoi River. It was however re-installed about three weeks ago. Details on the availability of the data would be provided to CWMS Waimakariri Zone Committee in February 2020. The Nitrate data logger on the upper Silverstream catchment had been in place for the last four to five months.

With regard to Zone Delivery, M Cataloni reported that the Riparian and Forrest planting projects were progressing well. More planting of larger species would take place in autumn 2020 and then the maintenance programme would commence. ECan was available to provide the CWMS Waimakariri Zone Committee with support with the implementation of the Ashley/Rakahuri River Action Plan. The preparation of which would be completed in the first quarter of 2020 with the ground work commencing in the second quarter. It was important that the work being done by the CWMS Waimakariri Zone Committee on this project be promoted.

J Roper-Lindsay enquired if the abovementioned Ashley Rakahuri River Action Plan was drafted by David Owen, ECan's Principal Biodiversity Advisor Braided Rivers. If so, she expressed a concern that the Action Plan may not begin implementation in the first quarter of 2020. She also requested that the Plan be revised to take into consideration the concerns about erosion along the Ashley/Rakahuri River, between Waikuku and Ashley Gorge, as previously raised by R Johnston.

M Cataloni confirmed that the Ashley/Rakahuri River Action Plan was drafted by D Owen. He undertook to follow-up with D Owen regarding the proposed implementation timeframe and to ensure that the Plan took note of the erosion along the Ashley/Rakahuri River.

In response to questions, M Cataloni advised that the Caring of the Cam pamphlet was being distributed to members of the public at drop-in sessions and was available on ECan's Website. C Latham suggested that given the importance of lifestyle blocks in the Waimakariri zone, the ECan Lifestyle Block pamphlet needed to be more district specific.

D Ashby agreed, and confirmed that a lot of work had previously been done by ECan and especially by ECan's Principal Biodiversity Advisor – Wetlands, Jason Butt, on Lifestyle Blocks in the Waimakariri zone. He therefore recommended that ECan's Lifestyle Block pamphlet needed to include this information. D Ashby also suggested that M Cataloni liaise with Angus McLeod, ECan Senior Communications Advisor, on this matter.

C Latham stated that from previous interaction with Lifestyle Block owners, there seem to be confusion about water takes as a 'permitted activity'. It may be beneficial to launch an information campaign during the summer advising people how much water they were permitted to use. M Cataloni confirmed that educational leaflets on 'permitted activity - water take' would be distributed throughout Canterbury over the summer.

Moved: D Ashby

Seconded: J Roper-Lindsay

THAT the CWMS Waimakariri Zone Committee:

a. **Receives** these the following reports for review and their information:

1. 'Zone Implementation Programme Addendum Capital Works Programme - 2019/20' Report to Land and Water Working Group.
2. 'Cam River floodgate automation for saline intrusion prevention' Report to Utilities and Roading Committee meeting of 19 November 2019.
3. 'Urban Stormwater Water Quality Baseline Results and issues identified' Report to Utilities and Roading Committee meeting of 19 November 2019.
4. Top 10 tips spotting and stopping sediment.
5. Lifestyle Block Factsheet good management practices.
6. ECan Fish Screens Regional Update.

CARRIED

4. STORMWATER NETWORK CONSENT APPLICATIONS PROGRESS AND IMPLICATIONS – J Fraser (WDC Utilities Planner)

J Fraser updated the CWMS Waimakariri Zone Committee on the progress made with the logging of the District's Stormwater Network Discharge consent application for

Oxford. She advised that the key source contaminants discharged into the Oxford urban stormwater network appeared to be from a single point source discharge.

J Fraser reported that the data from the water quality sampling done identified E.coli in the urban stormwater network. The Cust Main Drain and Findlay's Drain had mainly rural catchments and it was likely the high E.coli levels in these drains, in during the wetter months, had rural sources. There was also high E.coli levels in the Flannigan Drain in December which was mostly urban, indicating that the E.coli in the drain potentially had an urban source in wet weather. The high E.coli levels could be attributed in part to the wastewater overflows within the Pearson Drain or Flannigan Drain catchments, both of which were mainly urban with only relatively small rural inflow.

J Fraser advised that Dissolved Reactive Phosphorous (DRP) was also assessed in the 2016 Oxford baseline study. DRP exceeded the LWRP guideline value through the whole network in the wet weather. The exceedances increased in correlation with the quantity of rainfall. Of particular interest, DRP in Oxford was greater at the downstream end of the Pearson Drain than at its upper end. This indicated an urban source for some of the phosphorous in this drain. In contrast, the levels of DRP remained fairly constant between the upper and lower ends of the Findlay's Drain and Cust Main Drain. These were both mainly rural catchments and the results in these drains indicated that DRP also has rural sources in the Oxford area.

J Fraser also advised that the only exceedances of the Total Suspended Solids (TSS) Guideline Value was in the Pearson Drain in the wetter August and December months. The highest TSS was from the upper Pearson Drain monitoring site, indicating the sediment discharge may be from a rural source.

J Fraser reported that the upper Findlay's Drain consistently had high exceedances of zinc during each sample occasion. A review of the aerial photos and LIDAR contours shows the upper Findlay's Drain was situated immediately south of a very large private vehicle wrecking yard located on Bay Road. It was assumed that the recurrent zinc discharge may be from discharges directly from this property. A possible other source was a sawmill at the head of Pearson Drain.

In conclusion, J Fraser highlighted the various actions proposed to deal with the abovementioned problems. Including a proposed detention basin with crushed mussel shells in the forebay of the vehicle wrecking yard located on Bay Road.

D Ashby expressed a concern about the large volume of crushed mussel shells that would be needed and the additional problems this may cause, such as an increase in seagulls. A Reuben reported that this was a new technology that has been trialed in Christchurch on down pipes and it seemed to be working. J Fraser advised that the WDC would be working with the owners of the vehicle wrecking yard and the sawmill to find solutions for the zinc contamination problem.

D Ashby enquired if a denitrification wall could be used as a groundwater filter. K Simpson advised that there were numerous natural solutions that could be investigated to remove the zinc discharge as close as possible to the source.

Moved: W Main

Seconded: C Latham

THAT the CWMS Waimakariri Zone Committee:

- a. **Receives** this Briefing paper.
- b. **Notes** the ongoing processing of the Stormwater Network Consent Application for Oxford, introducing new regulation of stormwater quality and stormwater quantity.

CARRIED

5. **COMMITTEE UPDATES – M GRIFFIN (CWMS FACILITATOR, ECan)**

5.1 **CWMS Regional Committee**

C Latham advised that the previous Regional Committee meeting was held on Tuesday 10 September 2019.

5.2 **Plan Change 7 (Waimakariri) Update**

M Griffin reported that 558 submissions were received on the proposed by Plan Change 7 to the Land and Water Regional Plan. The submissions could be reviewed on the ECan website. It was anticipated that the hearings would commence at the in the first half of 2020, but the actual dates had not been set by the independent Hearing Panel.

5.3 **Waimakariri River Minimum Flow and Irrigation Cutbacks**

Dr T Davie, ECan's Chief Scientist, explained how the minimum flow of the Waimakariri River was calculated and the criteria used to determine irrigation cutbacks. T Davie advised that at the Old Highway Bridge, and at Otarama only the height of the river was being measured. He highlighted the complicated process the ECan used to estimate the flow of the river by using a rating curve. The minimum flow of the Waimakariri River was estimated at 41,000 litres per second at Old Highway Bridge.

In terms of the current Allocation Regime, there was 17,000 litres per second allocated for A permits, and 68,000 litres per second for B permits. AA permits (stock water schemes and community supply) were allocated 5,000 litres per second and did not have a minimum flow requirement. The volume of water taken from the river was measured through metering data.

T Davie advised that the minimum flow was calculated daily using the average of the previous 24-hours and published on the ECan website. Partial restrictions occur when it was anticipated that if the full volume of water was taken that the river would drop below its minimum flow level. In conclusion, T Davie explained the difficulties that may occur when trying to establish the minimum flow.

Councillor S Stewart enquired when the current consents would be reviewed. T Davie advised that the consents would be reviewed individually as they came up for renewal. ECan would, however, be moving the monitoring site for consents to the Otarama site upon renewal, as this would make the daily calculation of minimum flow much easier and more accurate.

Councillor S Stewart sought clarity on the stability of the Otarama site, and T Davie explained that the stability of the site was affected by the aggradation and degradation of the riverbed.

J Cooke asked if the 5,000 litres per second was the minimum take in terms of AA permits and T Davie confirmed that this was correct. It should however be remembered that other district councils also took water for stock water schemes under the AA permits and these were included in the 5,000 litres per second.

In response to questions, B Walton advised that, to his knowledge, the daily calculation of minimum flow started in 2009/10.

Councillor S Stewart enquired if consideration was given in 2009/10 when the current Allocation Regime became operational to the correlation between the salinity of the Kaiapoi River and the minimum flow of the Waimakariri River.

Recent investigations by A Meredith had found that the salinity of the Kaiapoi River was almost certain if the flow of the Waimakariri River dropped below 40,000 litres per second. T Davie was of the opinion that the abovementioned was not considered prior to the implementing the current Allocation Regime. He also did not think that the continuous raising of the sea level was taken into consideration.

In response to a question from M Bate, T Davie confirmed that the water temperature of the Waimakariri River was measured daily at the Old Highway Bridge and published on ECan's Website.

M Blackwell stated concerns raised about the flow of the lower part of the Waimakariri River. He assumed that no work would be done on the flow of the river until the Alpine Zone Review. He therefore requested M Griffin to ascertain when the proposed Alpine Rivers Zone review would be done as part of the Canterbury Land and Water Regional Plan.

5.4 Ashley/Rakahuri Biodiversity – Algal Bloom

A Meredith commented that the black mat algae bloom in the Ashley/Rakahuri River was especially prevalent in the section of the river between Rangiora and the State Highway One Bridge. The black mat algae was toxic and was therefore considered a health risk. A Meredith stated that most of the research done on the black mat algae in the Ashley/Rakahuri River was from a public health perspective.

With regard to biodiversity, black mat algae blooms changed the Fauna of the riverbed resulting in the poor food basis of native fish species disappearing. The black mat algae was also toxic to some aquatic life.

J Cooke asked if anyone was removing the algae bloom, to which A Meredith reported that the algae bloom was being removed by natural occurrences, such as floods. The artificial removal of algae was found to be very expensive and disruptive to the rivers. The removal of the algae bloom with chemical treatments had also not been successful.

In response to questions, A Meredith advised that algal blooms likely resulted from a combination of environmental factors including the availability of nutrients, water temperature, and ecosystem disturbance. However, the specific combination of these factors that triggered an algal bloom was still unknown.

M Blackwell expressed a concern that the black mat algae bloom was considered common in Waimakariri rivers, as this should not become the norm.

Moved: D Ashby

Seconded: E Harvie

THAT the CWMS Waimakariri Zone Committee:

- (a) **Receives** these updates for its information and regarding the Committee's Work Programme and Community Engagement Priorities for 2019/20.

6. GENERAL BUSINESS

J Ensor thanked Councillor C McKay and D Ashby for the work that they have done as part of the CWMS Waimakariri Zone Committee.

7. KARAKIA

A Reuben provided the karakia to close the meeting.

8. NEXT MEETING

M Blackwell thanked the Committee members, ECan and WDC staff and the members of the public for their continued support during the past year. He wished them a happy festive session and advised that the next CWMS Waimakariri Water Zone Committee meeting would be held on Monday 3 February 2020.

There being no further business, the meeting closed at 6:10pm.

CONFIRMED

Chairperson

Date