

# **Canterbury Water Management Strategy Waimakariri Zone Committee**

## **Agenda**

**Monday 11 June 2018**

**4.00pm**

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

***Members:***

David Ashby (Chair)  
Grant Edge (Deputy Chair)  
Carolyn Latham  
Judith Roper-Lindsay  
Gary Walton  
Cameron Henderson  
Michael Blackwell  
Arapata Reuben (Te Ngai Tūāhuriri Rūnanga)  
Cherie Williams (Te Ngai Tūāhuriri Rūnanga)  
Sandra Stewart (WDC Councillor)  
Claire McKay (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 11 JUNE 2018** commencing at **4.00PM.**

Adrienne Smith  
Committee Advisor

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

**BUSINESS**

PAGES

**KARAKIA**

1 **APOLOGIES**

**REGISTER OF INTERESTS**

6 - 7

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

**CONFIRMATION OF MINUTES**

1.1 **Minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting – 12 March 2018**

*RECOMMENDATION*

**THAT** the CWMS Waimakariri Zone Committee:

- (a) **Confirms** the minutes of the Canterbury Water Management Strategy Waimakariri Zone Committee meeting, held on 12 March 2018, as a true and accurate record.

*(These minutes will be circulated separately)*

**MATTERS ARISING**

2 **OPPORTUNITY FOR PUBLIC TO SPEAK**

- 3 **COMMITTEE UPDATES** – Zone Committee Members, M Griffin (CWMS Facilitator, ECan) A Arps (Waimakariri Zone Delivery Manager, Ecan) 8 - 9
- 3.1 **CWMS Regional Committee meeting, 13 March 2018** – Caroline Latham, (Waimakariri Zone Regional Committee Representative) 10 - 11
- 3.2 **Omnibus Plan Change 2019** - Andrea Richardson, (Senior Planner) 12 - 13
- 3.3 **Letter to Canterbury Regional Council – Zone Committee Powers** - (Wynn Williams Lawyers) 14 - 15
- 3.4 **Canterbury Southern Black-backed Gull/Karoro Strategy** – Mike Bell, Wildlife Management International Ltd, Frances Schmechel and Donna Lill (ECan) 16 - 19
- 3.5 **Waimakariri River Regional Park Corridor** 20 - 25
- RECOMMENDATION*
- THAT** the CWMS Waimakariri Zone Committee:
- (a) **Receive** these updates for its information and with regard to the committee's 5 Year Outcomes, drafting of the Land and Water Solutions Programme recommendations, and 2018 community engagement priorities.
- 3.6 **Applications for Immediate Steps Funding Easterbrook Road Community Planting**– Jason Butt (ECan) 26 - 31
- RECOMMENDATION*
- THAT** the CWMS Waimakariri Zone Committee:
- (a) **Approves** the application for Immediate Steps Funding to the Easterbrook Road Community Planting for \$49,710.
- OR
- (b) **Declines** the application for Immediate Steps Funding to the Easterbrook Road Community Planting for \$49,710.
- 3.7 **Applications for Immediate Steps Funding Dagnum Habitat Restoration Project**– Jason Butt (ECan) 32 - 36
- RECOMMENDATION*
- THAT** the CWMS Waimakariri Zone Committee:
- (a) **Approves** the application for Immediate Steps Funding to the Dagnum Habitat Restoration project for \$8.000.

OR

- (b) **Declines** the application for Immediate Steps Funding to the Dagnum Habitat Restoration project for \$8.000.

3.8 **Applications for Immediate Steps Funding Kanuka Row** – Jason Butt (ECan)

*RECOMMENDATION*

**THAT** the CWMS Waimakariri Zone Committee:

- (a) **Approves** the application for Immediate Steps Funding to the Kanuka Row project for \$8.000.

OR

- (b) **Declines** the application for Immediate Steps Funding to the Kanuka Row project for \$8.000.

*This application is for \$8,000 for a \$12,000 project. The total project requires:*

*\$4,000 for weed control*

*\$4,000 for soil scrape to remove weeds and provide a seed bed for Kanuka and other dryland plant species*

*\$4,000 for planting at northern margin to intercept nutrients from neighbouring farmland.*

*(Further Information relating to this application will be circulated separately)*

4 **DRAFT LAND AND WATER SOLUTIONS PROGRAMME - UPDATE**– Murray Griffith (ECan)

37 - 38

*RECOMMENDATION*

**THAT** the CWMS Waimakariri Zone Committee

- (a) **Receives** and endorses the proposed schedule for drafting of the Land and Water Solutions Programme recommendations, and 2018 community engagement priorities

5 **UPDATE ON KAIAPOI RIVER REHABILITATION PROJECT AQUATIC PLANTING 2018**– Janet Fraser (Utilities Planner, Waimakariri District Council) and Andrew Arps (Waimakariri Zone Manager ECan)

39 - 41

*RECOMMENDATION*

**THAT** the CWMS Waimakariri Zone Committee

- (a) **Receives** this update report about the Kaiapoi River aquatic and terrestrial planting and proposed navigation channel dredging project.

- 6     **GENERAL BUSINESS AND FUTURE MEETING PRIORITIES** – Dave Ashby  
(Committee Chairperson)

- 7     **KARAKIA**

- 8     **NEXT MEETING**

The next meeting of the Zone Committee is scheduled to be held on  
July 9<sup>th</sup>.2018.

# WAIMAKARIRI ZONE COMMITTEE

## Register of Interests – at May 2018

Name	Committee Member Interests
<b>David Ashby</b>	<ul style="list-style-type: none"> <li>- Director/shareholder: Pineleigh Farm Limited</li> <li>- Director/shareholder: Dave Ashby Rural Consultants Limited</li> <li>- Shareholder: Waimakariri Irrigation Limited</li> <li>- Member: Cust Main Drain Water User Group</li> </ul>
<b>Michael Backwell</b>	<ul style="list-style-type: none"> <li>- Director/ Shareholder Blackwells Limited , Kaiapoi</li> <li>- Treasurer, North Canterbury Clay Target Association</li> <li>- 4HA property, Tuahiwi.</li> </ul>
<b>Grant Edge</b>	<ul style="list-style-type: none"> <li>- Director: Edge Landscape Projects Ltd, Edge Plants Ltd, and Edge Products Ltd</li> <li>- Member: NZ Institute of Landscape Architects</li> <li>- Member: Urban Design Forum</li> <li>- Member: QEII National Trust</li> <li>- Member: NZ Forest &amp; Bird</li> <li>- Member: Heritage NZ</li> <li>- 1ha property Fernside (shallow bore user)</li> </ul>
<b>Cameron Henderson</b>	<ul style="list-style-type: none"> <li>- Dairy Farmer - Groundwater irrigator</li> <li>- Member - NZ Institute of Primary Industry Management</li> <li>- Member - NZ Dairy Environment Leaders Forum</li> <li>- Chairman - DairyCan - Canterbury Dairy Environment Leaders Forum</li> <li>- Treasurer and Vice Dairy Chair - North Canterbury Federated Farmers</li> </ul>
<b>Carolyn Latham</b>	<ul style="list-style-type: none"> <li>- Farmer: Sheep, beef and racehorse agistment</li> <li>- Director of Latham Ag Ltd Consulting</li> <li>- Shareholder: Silver Fern Farms, Farmlands</li> <li>- Registered Member: New Zealand Institute of Primary Industry Management</li> <li>- Member: Canterbury Ice Hockey Association</li> </ul>
<b>Claire McKay</b>	<ul style="list-style-type: none"> <li>- Dairy Farmer</li> <li>- Irrigator and shareholder: Waimakariri Irrigation Ltd</li> <li>- Holder of Groundwater take and use consents in Cust groundwater allocation zone</li> <li>- Holder of Effluent discharge consents</li> <li>- Member: Federated Farmers</li> <li>- Member: DairyNZ Dairy Environmental Leaders forum</li> <li>- Member: P21 Canterbury Industry Advisory Group</li> </ul>
<b>Arapata Reuben</b>	<ul style="list-style-type: none"> <li>Trustee – Tuahiwi Marae</li> <li>Trustee – Tuhono Trust</li> <li>Trustee – Mana Waitaha Charitable Trust</li> <li>Member - National Kiwi Recovery Group</li> <li>Rūnanga Rep and Chair – Christchurch – West Melton Water Zone Committee</li> <li>Rūnanga Rep Ashburton Water Zone Committee</li> </ul>
<b>Judith Roper-Lindsay</b>	<ul style="list-style-type: none"> <li>- Director/ecologist: JR-L Consulting Ltd.</li> <li>- Land-owner/small-scale sheep farmer, Ashley downs</li> <li>- Fellow: Environment Institute of Australia and New Zealand (EIANZ)</li> </ul>

<b>Sandra Stewart</b>	<ul style="list-style-type: none"> <li>- Self-employed journalist</li> <li>- Land-owner, 4ha Springbank – sheep &amp; dogs</li> </ul>
<b>Gary Walton</b>	<ul style="list-style-type: none"> <li>- Director, Walton Farm Consulting Ltd</li> <li>- Director &amp; Shareholder, Loburn Irrigation Co</li> <li>- Trustee, Rugby World Heritage Trust</li> <li>- Ashley Rugby Football Club (Inc.)</li> <li>- Farmer, sheep &amp; cattle, Loburn</li> </ul>
<b>Cherie Williams</b>	<ul style="list-style-type: none"> <li>- Member: Mana Whenua Working Party</li> <li>- Tangatiaki / Kaitiaki</li> <li>- NZTA Northern and Southern Bypass Rūnanga Representative</li> </ul>

<b>AGENDA ITEM NO: 3</b>	<b>SUBJECT:</b> Committee Updates
<b>REPORT TO:</b> Waimakariri Water Zone Committee	<b>MEETING DATE:</b> 11 June 2018
<b>REPORT BY:</b> 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 with regard to the committee's 5 Year Outcomes, drafting of the Land and Water Solutions Programme recommendations, and 2018 community engagement priorities.

## COMMITTEE UPDATES

The following updates are tabled for the committee:

### 1. CWMS Regional Committee meeting – 13 March 2017

The last Regional Committee Working Groups meeting was held on Tuesday 13 March. The next Regional Committee meeting will be held on Tuesday 12 June.

- Carolyn Latham, the Zone Committee's CWMS Regional Committee representative, has provided notes on the 13 March Working Group meeting which is provided as **agenda item 3-1**.
- 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. Omnibus Plan Change 2019

The memo provided as **agenda item 3-2** is to inform the Zone Committee that Environment Canterbury is undertaking an 'omnibus' plan change to the region-wide provisions of the Canterbury Land and Water Regional Plan (LWRP), which will be publicly notified in mid-2019.

This memo is for information purposes only in recognition that the Waimakariri Zone Committee is currently in a sub-regional planning process. Environment Canterbury has committed to undertake omnibus plan changes reasonably regularly (the next in approximately 2022) and so there will be future opportunities for involvement.

### 3. Letter confirming the powers of Zone Committees

A letter is provided to inform all Zone Committees on their powers, as **agenda item 3-3**.



#### 4. Canterbury Southern Black-backed Gull/Karoro Strategy

The memo provided as **agenda item 3-4** is to inform all Zone Committees and stakeholders of the development of a Southern Black-Backed Gull/Karoro strategy for Canterbury and inviting participation in this process.

#### 5. Waimakariri Zone Delivery – Update

Zone Delivery Manager, Andrew Arps, will provide an update for the committee on current Zone Delivery team priorities and actions.

He will also provide an overview of one of the priority projects proposed to contribute to the Waimakariri Land and Water Solutions programme currently being developed by the committee. An overview of the Waimakariri River Regional Park corridor is provided as **agenda item 3.5**.

##### ○ Biodiversity

Three applications are tabled for the committee's consideration as follows:

- **Agenda item 3-6:** Easterbrook Road Community Planting
- **Agenda item 3-7:** Dagnum
- **Agenda item 3-8:** Kanuka Row

#### 6. Action List

An updated list of action points from previous meetings will be tabled with the committee to confirm completed items and ongoing follow-up.

#### RECOMMENDATIONS

- The Zone Committee are asked to receive these updates for its information and with regard to the committee's 5 Year Outcomes, drafting of the Land and Water Solutions Programme recommendations, and 2018 community engagement priorities.

## **CWMS Regional Committee Meeting 13<sup>th</sup> March 2018**

1. 2017 Regional Committee Annual Report – is close to release.
2. Zone Committee Updates:

*Waimakariri ZC* – An update was provided to the RC. Ecan were asked what they were doing to manage the Christchurch water situation. Ecan staff advised they were still investigating the deep groundwater movement under the Waimakariri River and that it was currently being managed through the Waimakariri Zone Committee's sub-regional process. The Christchurch City Councillor Sarah Templeton, expressed some concerns around the process, and possible impacts on the high quality drinking water source for the city, which they had no control over.

*Kaikoura ZC* – Earthquake recovery still dominates every aspect of infrastructure including water. Silt loading in hill fed rivers is likely to remain high for many years from continuing landslides. A number of major science studies are underway. Ecan's science team have briefed the ZC on the state of surface and groundwater post-earthquake. The Ecan LTP proposes to delay the sub-regional planning process from 2019 to 2026-27 as engagement is very difficult at this stage as people are very busy with recovery. With on the ground work driven by the Zone committee and post-earthquake funding and science work, it is possible that the water quality improvements needed to get the area to a green Nutrient Allocation Zone are achievable.

*Ashburton ZC* – The focus for 2018 is Ashburton River, particularly the hydraulically connected abstractive consents and their relation to the minimum flow increase in 2023 to 6 cumecs all year. The MAR pilot site continues to receive 110l/s and effects are monitored downgradient. A Near River Recharge site on Hinds River is awaiting consents and final construction. 12 on-farm mini-MAR sites have been constructed to test the transmissivity of the aquifers, 3 are operational. Barhill Chertsey Irrigation scheme FEP audit results for 2016/17 were 38% A grades, 52% B, 5% C, 5% D. The RDR scheme reported 35% A grades, 63% B, 1% C, 1% D. It was noted that if there is a substantive change in practice or management, irrigation companies require the FEP to be re-audited. Ecan staff advised it would be possible to construct an indicator of FEP results, available to the public, once sufficient data was in place.
3. CWMS Quick Guide: The committee provided feedback on a draft CWMS Quick Guide which has been developed by Ecan to succinctly summarise the CWMS to date. A copy will be available at the Watershed symposium and the "next steps" section will be a key focus of the symposium where participants will be asked to consider what the CWMS could look like in 5-10 years.
4. LAWA Campaign: The purpose of this campaign was to motivate people to use and enjoy water sites knowing that they were safe in terms of water quality. It was also hoped to change people's views of water quality in Canterbury. Christchurch was targeted in Ecan's campaign. The web site had 50000 hits nationally and 13000 in Christchurch. 50 sites were monitored weekly. The Canterbury District Health Board promoted and supported the site. Generally the campaign was considered to be very successful and there will be a follow up campaign. One of the RC members pointed out that LAWA wasn't actually directly related to the CWMS targets and therefore was this the best use of funding given it didn't actually contribute to any of the targets. Ecan advised it wasn't purely about CWMS it was also about Ecan and communications. However there was concern that if there are limited CWMS resources, are other projects such as campaigning to get people to use copper-free brake pads, not getting done. To be looked into regarding the targets.
5. Irrigation NZ: INZ reported they had 750 people across NZ complete their training programmes for effective irrigation and water use in the last year, demonstrating that changes are happening.

INZ is working with multi-stakeholders on a project to utilise data (such as water use) and information from FEP's to demonstrate how change is happening on-farm and counter misinformation. However privacy is a major issue, having a secure place for the data to be held. A set of principles will be needed as the information will be free and can be used commercially. Benchmarking is not included in this project but could evolve. Funding for the project is from the Sustainable Farming Fund. Generally the irrigation schemes have driven change faster and are a long way ahead of non-scheme irrigating farmers who rely on industry sector or Ecan advice.

6. Urban Stormwater Opportunities: This was proposed for consideration as part of the RC's 2018 work programme. CCC are doing a lot of urban water monitoring. Catchments are often all or partially underground and sampling is done through manholes, or in various stormwater ponds and waterways. Urban catchments are complex with a baseflow condition and a stormflow condition. Zinc, Copper, Lead, DRP, N are all issues along with emerging issues such as other types of pollution and plastic. Public awareness of the issues is very low, but behavioural change is needed. CCC are trying to get changes at central government level, for example for copper-free brake pads, and need the support of other organisations such as Ecan. But promotion is also needed, rather than waiting for a law change. This is a matter all ZC should be considering. Good quality copper-free brake pads can be fitted for only an additional \$15, but how do you get the community to spread the word? The copper-free alternative is made of carbon, they last a similar amount of time, and there is some carbon dust from them. Canterbury University are developing a filter for Zinc coming off roofs, which is indicating a 90% reduction. The mussel shells used then render the Zinc inert and safe to dispose.

7. 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>

Carolyn Latham  
Waimakariri Water Zone Committee RC Rep



<b>AGENDA ITEM NO: 3-2</b>	<b>SUBJECT:</b> Omnibus Plan Change 2019
<b>REPORT TO:</b> Waimakariri Water Zone Committee	<b>MEETING DATE:</b> 11 June 2018
<b>REPORT BY:</b> Andrea Richardson, Senior Planner	

## Memo

Date	22 May 2018
To	OTOP, Hurunui-Waiapu and Waimakariri Zone Committees
CC	
From	Andrea Richardson, Senior Planner

## Omnibus Plan Change 2019

### Purpose

To inform the Zone Committee that Environment Canterbury is undertaking an 'omnibus' plan change to the region-wide provisions of the Canterbury Land and Water Regional Plan (LWRP), which will be publicly notified in mid-2019.

This memo is for information purposes only in recognition that your Zone Committee is currently in a sub-regional planning process. Environment Canterbury has committed to undertake omnibus plan changes reasonably regularly (the next in approximately 2022) and so there will be future opportunities for involvement.

### Rationale and timing for Omnibus Plan Change

The Omnibus Plan Change will cover a range of issues to ensure the regional planning provisions in the LWRP are responsive to new directives from central government, emerging environmental issues, and changes in matters that are strategic priorities for Environment Canterbury.

Key milestones for the Omnibus Plan Change include public engagement on potential plan changes to address the regionally significant issues in October-November 2018, consultation on the draft plan in March-April 2019, public notification of the proposed plan change in mid-2019, a public hearing on submissions on the plan change in early 2020 and a decision to be notified by mid-2021.

### Topics for Omnibus Plan Change

For your information, the list of significant region-wide topics that are proposed to be covered in the Omnibus Plan Change is attached to this memo.

**Attachment 1: Proposed Regionally Significant Topics for Omnibus Plan Change 2019**

Topics	Rationale
<b>Braided Rivers</b>	The protection of the natural character of braided rivers is one of Environment Canterbury's priorities, and in order to ensure braided rivers are protected we need to define the edge of the 'bed' of the river.
<b>Tangata Whenua values</b>	Some controlled and restricted discretionary rules constrain the ability of a decision maker to consider effects on tāngata whenua values because the rule does not list this effect as one of the matters that may be considered.
<b>Indigenous freshwater species and habitats, and salmon spawning sites</b>	There has been incremental loss of indigenous freshwater species and habitats, and this plan change seeks to amend rules to increase protection. Identification and protection of new salmon spawning sites is also proposed.
<b>National Policy Statement for Freshwater Management</b>	Region-wide provisions need to give effect (as far as practicable) to the recent amendments to the National Policy Statement for Freshwater Management, which requires Councils to establish freshwater management units and limits to achieve freshwater outcomes.
<b>Horticultural operations</b>	To avoid soil-borne diseases, horticultural growers typically rotate the type of crop grown on a land parcel. The rules in the LWRP regulate farming activities according to a nitrogen limit that is derived from a historic land use. The plan change will investigate options to better provide for rotational and lease-hold arrangements.
<b>National Environmental Standards for Plantation Forestry</b>	Review and (if necessary) amend LWRP provisions to ensure they are consistent with the new National Environmental Standards for Plantation Forestry.

14 May 2018

Attention Catherine Schache  
Canterbury Regional Council  
PO Box 345  
Christchurch 8140

### CONFIRMATION OF POWERS OF ZONE COMMITTEES

1. Forest & Bird has recently lodged an Application for Declarations in the Environment Court calling into question the extent of the Canterbury Water Zone Committees' (**Zone Committees**) powers. Of particular concern to Forest & Bird is the question of whether Zone Committees can enter into agreements with third parties in relation to the review of conditions of resource consents issued by Environment Canterbury.
2. You have asked us to confirm what powers Zone Committees have in relation to such agreements.

### Powers of the Zone Committees

3. The Zone Committees are joint committees between the Canterbury Regional Council and the relevant District Council/s within the zone. The Zone Committees are required to act in accordance with the relevant Joint Committee Agreement (between the Regional Council and the District Council/s), and the Terms of Reference for the Zone Committees.
4. The Terms of Reference for the Zone Committees determine the powers and responsibilities (if any) that are delegated to the Zone Committees by the relevant Councils. These Terms are largely identical across the Zone Committees. They contain a number of limitations to the Zone Committee's powers, and expressly provide that *"the Committee does not have the authority to commit any Council to any path or expenditure and its recommendations do not compromise the Councils' freedom to deliberate and make decisions"*.<sup>1</sup>
5. In respect of the powers of the Zone Committees:
  - a. A Zone Committee does not have the power to enter into an agreement with a third party that purports to bind Environment Canterbury. Accordingly, a Zone Committee should ensure that it does not enter into an agreement with a third party that purports to bind Environment Canterbury, including in respect of initiating a section 128 review of the conditions of a resource consent.

---

<sup>1</sup> We note that the Kaikoura Zone Committee has slightly amended Terms of Reference that instead state *"No Committee shall have the authority to commit any Council to any path or expenditure and shall operate in such a way as it does not compromise those Councils' freedom to deliberate and make such decisions as it deems appropriate."* We consider this clause has the same effect as the limitation of powers clauses in the other Zone Committees' Terms of Reference.

- b. A Zone Committee can make recommendations to Environment Canterbury in respect of its decision making powers, including as to the review of resource consents in the relevant zone, in light of its objectives to oversee the implementation and delivery of their Zone Implementation Programme (**ZIP**). The recommendations could include whether or not the Zone Committee considers that it is appropriate to carry out any reviews, and the timing and staging of any such reviews. However, any such recommendations are not binding on Environment Canterbury.
- c. A Zone Committee could enter into an agreement (best framed as a memorandum of understanding) with a third party as to the basis on which the Zone Committee might make recommendations to Environment Canterbury. For example, in light of a third party carrying out particular actions/works in the catchment.
  - i. A memorandum of understanding may be appropriate given the Zone Committee's broad objectives to oversee the delivery and implementation of the ZIP, as the ZIP recommendations also encompass other environmental outcomes and non-regulatory actions.
  - ii. Any memorandum of understanding should make it explicit that the Zone Committee is simply making recommendations to Environment Canterbury, and that both parties (i.e., the Zone Committees and any third party) understand that such recommendations will not and do not bind Environment Canterbury.
  - iii. We consider that such a memorandum of understanding would not be unlawful, provided that it does not purport to bind the Council, as such an arrangement would not fetter a statutory discretion or power.
  - iv. The Council would need to consider any recommendations simply as recommendations, and will need to turn its own mind to the exercise of its review power (noting that the contents of the Zone Committees' recommendations may be a relevant factor when deciding whether or not to exercise that power).

Yours faithfully  
**Wynn Williams**



**Philip Maw / Kirstie Wyss**  
Partner / Associate

P + 64 3 379 7622  
E [philip.maw@wynnwilliams.co.nz](mailto:philip.maw@wynnwilliams.co.nz) / [kirstie.wyss@wynnwilliams.co.nz](mailto:kirstie.wyss@wynnwilliams.co.nz)

<b>AGENDA ITEM NO: 3-4</b>	<b>SUBJECT:</b> Canterbury Southern Black-backed Gull/Karoro Strategy
<b>REPORT TO:</b> Waimakariri Water Zone Committee	<b>MEETING DATE:</b> 11 June 2018
<b>REPORT BY:</b> Mike Bell, Wildlife Management International Limited, Frances Schmechel and Donna Lill – Environment Canterbury	

## PURPOSE

To inform all Zone Committees and stakeholders of the development of a Southern Black-Backed Gull/Karoro strategy for Canterbury and inviting participation in this process.

## BACKGROUND

Southern Black-backed Gull/Karoro (SBBG) numbers have increased significantly following the clearance of native vegetation and the shift to an agricultural economy in New Zealand. SBBG are one of the native species which have adapted well to land use changes. Pasture has provided gulls with more foraging area, and easier access to food. SBBG have also readily adapted to new human derived food sources - especially rubbish tips and offal.

In Canterbury, an estimated 30,000 pairs of SBBG are breeding (so over 60000 individuals), predominately on braided rivers (see attached map, with this data collected during an aerial survey on the region's major braided rivers in 2016). Based on historical accounts prior to land clearance and conversion to agriculture, SBBG will have only nested as single pairs and not formed the super large or abundant colonies we see today.

Research on braided rivers have highlighted that SBBG are a significant predator of braided river dependent birds, many of which only breed on these rivers and have declining populations (i.e. wrybill, black-fronted tern, and kaki/ black stilt). The gulls predate the eggs and chicks of most species found on braided rivers. We have direct evidence (through direct observation or video surveillance) of SBBG predating black-billed gull, black-fronted tern, banded dotterel, and wrybill nests (see figure 1).

## DISCUSSION

Environment Canterbury has contracted Wildlife Management International Ltd (WMIL) to develop a Canterbury Southern Black-backed Gull Strategy. As part of developing this strategy stakeholder meetings will be held to provide you with some background context and, most importantly, to listen to your views.

This is the first stage of developing the Strategy and we have no clear views formed yet. We are very interested to learn about the stakeholders' relationship with Southern Black-backed Gull/Karoro, with braided rivers generally and with the other (in many cases endangered) birds which depend on braided rivers.



**ACTION**

We look forward to your attendance at meetings to be held:

- Tūhaitara Coastal Park (1 Woodend Beach Rd, Woodend Beach) – Monday 2<sup>nd</sup> July, 10am-12pm
- Ashburton (Seniors Centre, 206 Cameron St) - Tuesday 3<sup>rd</sup> July, 1pm-3pm
- Waihao Marae (26 Maori Rd, Morven) – Wednesday 4<sup>th</sup> July, morning (time to be confirmed)

If you are interested in attending one of these meetings please contact Donna Lill, 027-460-2885, dwoodley@hotmail.com so that we can provide you with further information prior to the meeting.

If you are unable to attend one of these meetings and have information which you would like to provide to our team please call Donna to discuss.

We welcome you to forward this invitation on to other groups and individuals who may wish to input into the strategy.

**RECOMMENDATIONS**

To engage in the process to develop a Southern Black-Backed Gull/Karoro strategy for Canterbury.

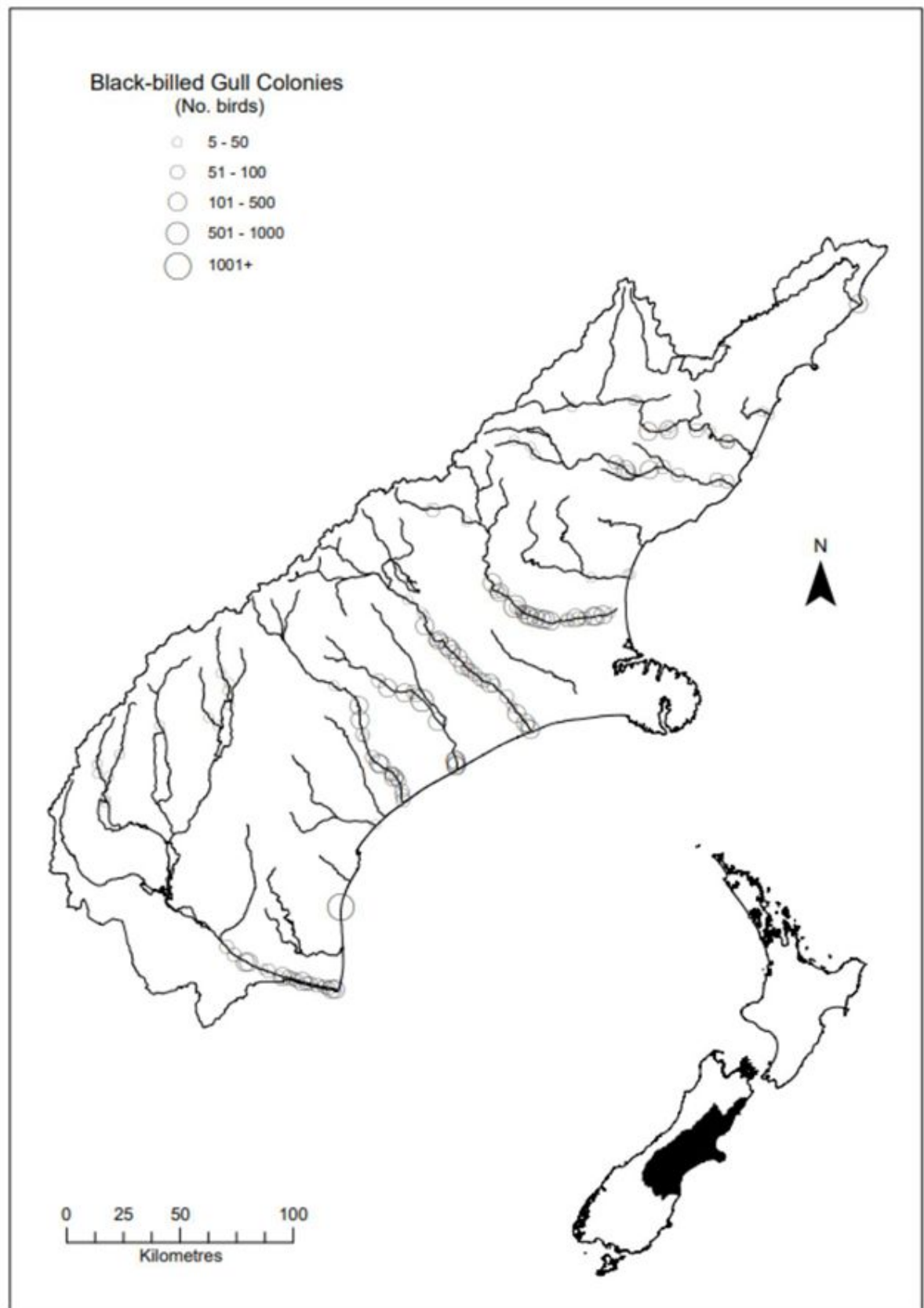
Figure 1. Images of Southern Black-backed Gull/Karoro predating braided river bird nests.

A) SBBG carrying off black-billed gull chick, Wairau River Marlborough.



B) SBBG predating BFT nest, Clarence River, Canterbury.





# WRRP CORRIDOR



March 2018

Actions taken and progress made at the corridor sites along the Waimakariri River as part of the Waimakariri Zone

Both progress and pitfall have been experienced at each of the following sites. All of the sites have been incorporated into an integrated management contract which will come into effect July 1<sup>st</sup> 2018.



# WRRP Corridor

## ACTIONS TAKEN AND PROGRESS MADE AT THE CORRIDOR SITES ALONG THE WAIMAKARIRI RIVER AS PART OF THE WAIMAKARIRI ZONE

### THE SITES

A series of sites lie along the northern bank of the Waimakariri River Regional Park and comprise the corridor concept in the Waimakariri Zone. The sites have varying degrees of existing Biodiversity value and work seeks to both enhance and protect the existing native species as well as restoring absent species or processes. The corridor concept installed plantings of native shrubs at each of these sites amongst works installed from other Environment Canterbury budgets and also made recommendation for particular works including weed-control or soil scraping. The sites are listed below and shown in Figure 1.

1. Groyne Zero Bush
2. Poyntz Road Backwater
3. Dog Trial Road Wetland
4. Dixons Bay Bush
5. Smith's Stream
6. Kanuka Remnant
7. Baynon's Bush
8. Dagnum dryland site
9. McIntoshes

**Figure 1:**



**Figure 1** shows the nine sites comprising the corridor concept on the north bank of the Waimakariri River.

### Groyne Zero Bush 1 | ONE



An extensive area has been planted at Groyne Zero Bush with a high degree of successful establishment. The site contains several large *Sophora microphylla*, *Kunzea serotina* & *Pittosporum tenuifolium*. The plantings have been successfully maintained to present and will continue to be so under the maintenance contract in the coming year. Soil scraping, noxious weed control and further planting will be performed by the Parks and Rivers teams to continue the establishment of the site.

### Poyntz Road Backwater 2 | TWO

The site at Poyntz Road Backwater has struggled to establish in the dry and exposed conditions with heavy losses in the planted shrubs. Several *Pittosporum tenuifolium* & *Phormium tenax* have successfully established and comprise the bulk of the planted area. Previous plantings have seen the successful establishment of a strong band of the species mentioned as well as *Coprosma robusta*, *Hoheria augustifolia* & *Plagianthus regius*. Future work will focus on enhancing the wetter areas with further *P. tenax* and allowing the further establishment of *Typha orientalis* in the open water spaces. The increasing shade and organic matter in the soil will continue to make growing conditions more favorable and further enhancement of the site will be approached by Parks and Rivers in future.

### Dog Trial Road Wetland 3 | THREE



Dog Trial road Wetland is one of the more successful sites and with strong maintenance and a slight change to planting technique, will establish rapidly to become a strong piece of solid swamp-forest habitat. Large areas have been cleared of willow and blackberry and planted in robust native species. There have been deaths in the drier patches but survival has been good. Future work will focus on better canopy-management and more sub-canopy planting as well as killing willow out of the standing-wet areas to the North-East of the main site.

**FUNDING OPPORTUNITY:** Willow control East of enhancement site.

## Dixon's Bay Bush 4 | FOUR



Dixon's Bay Bush has successfully established and maintenance is on-going. Plantings will be maintained for 2-3 more years before providing sufficient shade to exclude grasses and woody weeds. Future work will focus on the killing of *Clematis vitalba* on site with potential works extending the site to the west beneath the dappled light of the broken willow canopy.

## Smith's stream 5 | FIVE



An extensive area has been planted at Smith's stream following engineering works re-battering the flood control banks. The plants have been maintained, mulched and watered throughout a volatile growing season and have established well. Several more years of maintenance will be required to ensure a full establishment. Further works at the site will focus on ongoing maintenance and infill planting of any patches that are struggling particularly badly.

## Kānuka Remnant 6 | SIX



A number of plants were planted into the bund between the Kānuka remnant and the adjacent farmland but these failed to thrive with only a small number of plants making it through the year. Plants installed beneath the willow canopy however, did very well with several Matai now established. As well as planting, a large set of willow were killed and an area of soil scraped off. Future work will focus on installing a fence around the remnant and continuing to under-plant the willow band along the south with suitable shrubs as well as annual scrapes.



## Baynon's Bush 7 | SEVEN



Baynon's bush was incorporated into the biodiversity weeding contract this financial year and so has received additional noxious pest control as part of our annual contract. Plantings in the sub-canopy are doing well but continue to grow alongside fiercely competitive *Sambucus nigra*, *Clematis vitalba* & *Hedera helix* along with a host of other things. The mature plantings along the western margin are seeing successful recruitment including a tōtara seedling presumably from Kaiapoi or somewhere nearby. Future works will focus on the ongoing weed control and enhancement works along the eastern margin and south along the old creek-bed with the intention of maximizing natural recruitment.

## Dagnum Dryland 8 | EIGHT



Weed Control and plant protection was performed at Dagnum Dryland each year for the last three years—one large effort being funded by the zone team which included the targeted control of *Lythrum salicaria* and the installation of plant cages to protect against rabbit grazing. In December 2016 a large fire burnt across the northern half of Dagnum destroying cages and killing over 4 acres of vegetation. During its treatment 'wet water' containing soap and waste water from a pig farm was applied at various places across the fire zone creating some unfortunate high-nutrient patches. Management of this nutrient-disturbance is still being figured out but in the mean-time, the cages have been repaired and much of the dryland vegetation has successfully regrown following good rain spells through summer. Future works will look to establish native dryland shrubs into strips of lower-lying depressions where gorse is dominant. *Discaria toumatou* will be supplemented with further *Melicytus alpinus* & *Olearia adenocarpa* in line with the site's management plan. Furthermore, a pair of suitable sites lie either side of Dagnum and would be suitable for planting with taller native shrubs and may result in funding applications in coming years.

**FUNDING OPPORTUNITY:** Establish further corridor sites nearby to Dagnum installing taller dry-tolerant native species not-suitable at Dagnum



## McIntoshes 9 | NINE



McIntoshes fishing area has seen the slow-establishment of a set of salt-tolerant estuarine species along the northern margin of the highly-tidal land at the base of the stop-bank. The plants continue to grow through the dense swards of *Schoenoplectus pungens* and other intertidal grasses with maintenance have been partially taken over by a keen angler in the form of routine line-trimming. Plans are to extensively excavate, shape and repatriate the grassed space at the entranceway, simultaneously removing the large *Cortaderia selloana* which occupy the riparian margin; work listed in the corridor project which is outstanding.

# Easterbrook Road Community Planting



Clockwise from left: Field drain intersection, looking east. Broad setback on south side (Ashby property), looking east. Intersection of roadside drain from Mountvista Road into subject waterway, looking west from road.

## Project Summary

The project brings a community of people together to revegetate a stretch of waterway from the springhead near the No 4 Drain to Fernside Rd. The springhead is surrounded by saturated soils and contains a number of naturally occurring native plants, including one species that is very rare in the Ecological District. Twelve landowners will assist one another to get plants planted and maintained to the point that the plants are able to survive unaided. The result will be a 1.8km length of waterway and springhead restored.

## Project Map





## Project Details

<b>Project CWMS Zone</b>	Waimakariri
<b>Project Location</b>	Fernside – Mountvista and Easterbrook Rd area.
<b>Nature of Project</b>	Creation, Enhancement, Protection
<b>Habitat Type</b>	Coastal and Land Vegetation, Wetlands
<b>Project Aim (objectives and overall vision)</b>	The protection and overall improvement of the wetland at the head of this waterway and 1.8kms of stream.
<b>Project Outcomes (what the project will achieve)</b>	Shade and bank stabilisation
<b>Actions proposed to achieve outcomes</b>	Planting and fencing
<b>Supporting Organisation/Community Group</b>	Andrew (Andy) Earl

## Funding Requested

From ECAN	From Other Sources	Estimated Total (Applicant)
\$49,710.00	\$136,045.00	\$185,755.00

## Funding Detail

Task / Resource	Type	Paid for by	Units	Unit Type	Cost Per Unit *	Total Costs *
Weed control	Woody weed control for planting	Immediate Steps	1	Each	\$1,000.00	\$1,000
Weed control	Site preparation spray	Landowner	12600	Metre	\$0.55	\$6,930
Plants	Various RX90 grade ecosourced (Low Plains ED) plants	Immediate Steps	8500	Each	\$2.95	\$25,075
Plant protection	Individual plant guards	Immediate Steps	8500	Each	\$1.15	\$9,775
Planting	Community planting	Other	8500	Each	\$2.00	\$17,000
Plant protection	Installation of plant guards	Other	8500	Each	\$2.50	\$21,250
Maintenance	Weed control spraying	Landowner	12600	Metre	\$4.40	\$55,440
Maintenance	Weed control spray	Immediate Steps	12600	Metre	\$1.10	\$13,860
Weed control	Woody weed control	Landowner	12600	Metre	\$2.00	\$25,200
Other	Plant guard removal and disposal	Landowner	8500	Each	\$0.10	\$850
* All costs exclude GST				<b>Council Contribution</b>		<b>\$49,710</b>
				<b>All Other Contributions</b>		<b>\$126,670</b>
				<b>Total Project Funding</b>		<b>\$176,380</b>

## Ecological Assessment

### Fundamental Project Criteria

#### 1. Reflects the Canterbury Biodiversity Strategy's Guiding Principles

Y	Focuses on protecting and maintaining what remains
Y	Focuses on restoring what has been lost

#### 2. Contributes to the Canterbury Biodiversity Strategy's Goals (1-6)

Y	Protects or maintains the health of significant habitats and ecosystems
Y	Restores the natural character of degraded indigenous habitats and ecosystems
Y	Increases the integration and sustainable use of indigenous species in modified environments (e.g. farm, urban, lifestyle blocks).
Y	Enhances the public's awareness, understanding and support of biodiversity
Y	Encourages, celebrates and supports action by landowners and communities to protect, maintain and restore biodiversity
	Improves the range and quality of knowledge and information about Canterbury's biodiversity for its sustainable management

#### 3. Project Viability

Y	Project is feasible, cost-effective and an efficient use of funds.
Y	Project will realistically achieve outcomes/gains it is aiming to.
Y	Project is sustainable (e.g. any ongoing or future management requirements are identified and affordable).
	No other potential costs (e.g. consent costs) that may make the project less viable and/or affordable

#### 4. Landowner Support

Y	Project has landowner support
---	-------------------------------

#### 5. Eco-sourced Plants

Y	Eco-sourced plants being used
	Not applicable

#### 6. Is some or all of the work required under the Regional Pest Management Strategy?

	RPMS
--	------

#### 7. Is some or all of the work required under a District/Regional Council Plan?

	District/Regional Council Plan
--	--------------------------------

#### 8. Proportion of cost

0	Protection
0	Restoration
100	Creation
0	Monitoring

Existing Ecological Values		
Criteria	Score (0 - 3)	Comments
Representativeness	1	A small portion of the site is wetland with associated wetland values - namely a small suite of common plants and one locally rare species.
Rarity or Distinctiveness	2	The inclusion of an area of wetland in the project area qualifies as wetlands have been reduced to less than 10% in the Low Plains ED. The presence of <i>Carex sinclairii</i> in the wetland springhead is unusual for the area. This species is locally common around Te Waihora but is not recorded elsewhere on the Canterbury Plains and I could find no other record from the Low Plains ED.
Diversity and Pattern	1	Upon completion there will be a relatively low diversity of habitats, with freshwater aquatic, a narrow riparian strip with some parts up to 20m, and a small wetland/spring head.
Ecological Context	1	The wetland at the western end of this project is the source of the stream and provides a degree of buffering which will be increased as a result of this project. As the wetland area is a relatively small portion of the project site I have scored this low.
Project Protects a Threatened Environment	2	The site is in the Low Plains ED and the project is a combination or restoration planting and wetland protection.
Project Protects a Wetland or Coastal Dunes	2	The site has a small but significant area of wetland.
Project Protects Rare or Threatened Species	0	No threatened species were observed at the site. <i>Carex sinclairii</i> , which is present, is rare in the ED.
<b>Sub-total</b>	9	

Potential Ecological Values (in 10-15 years time – based on likely change)		
Criteria	Score (0 - 5)	Comments
Project Design is Effective/Addresses Key Threats	1	The project will increase the setback from the waterway. The planting will increase habitat diversity and provide shade and overhead cover for the waterway. Several sediment traps will also result from this project.
Project Potential/Positive Impact Ecologically	1	Riparian habitat will benefit from planting and instream values will have a greater degree of protection from adjacent land use.
Value for Money or Cost-benefit	1	Much of the value of this project comes from community engagement and it is reach restoration from headwaters.
<b>Sub-total</b>	3	Planting projects are inherently poor value for money. There is a measure of intangible value in collective effort and capacity building within the community to restore and protect ecosystems.

Other Criteria (non ecological or cultural)		
Criteria	Score (0 - 3)	Comments
Legally Protected	1	
Educational or Partnership Value	1	

Immediate Steps Criteria	
Criteria	Score (L, M, H)

Overall Assessment Scores		
Criteria	Score	Comments
Ecological Assessment Score (Existing and Potential) /39	12	While this is a planting project and planting projects tend to score low on assessment, it does draw together a community to restore and protect this reach of this stream which in itself has value. This project will hopefully serve to galvanise a wider community awareness of and action in local waterways. A small portion of the site is a wetland surrounding a spring that feeds the waterway and this project will serve to buffer and protect this wetland.
Cultural	Unknown	
Other Criteria Overall Rating		
Immediate Steps Rating		



# Dagnum Habitat Restoration

## Project Images



Clockwise from left: The diurnal leaf-roller moth "*Epichorista*" *siriana* (image courtesy of Mike Bowie). *Carmichaelia corrugata* (image courtesy of Brian Patrick). Dagnum dryland landscape, mossfield in foreground (image courtesy of Brian Patrick).

## Project Summary

This project augments and continues previous works on the Waimakariri Corridor Project. Control invasive weeds, focusing on weeds proximate to indigenous species. Remove grass sward from former braid channels along with topsoil to allow indigenous flora recruitment.

## Project Details

<b>Project CWMS Zone</b>	Waimakariri
<b>Project Location</b>	
<b>Nature of Project</b>	Creation, Enhancement
<b>Habitat Type</b>	
<b>Project Aim (objectives and overall vision)</b>	The site has some of the best dry plains habitat left in the High Plains Eco-District. a number of At-Risk and Threatened plants are holding on here with some even doing well. Weeds and lagomorphs (hares and rabbits) threaten many of these species. A number of long abandoned river braids have a sward of red fescue filling them - preventing all native species from occupying these depressions.
<b>Project Outcomes (what the project will achieve)</b>	Regeneration and recruitment of native flora.
<b>Actions proposed to achieve outcomes</b>	Soil and weed removal.
<b>Supporting Organisation/ Community Group</b>	Woods Simon



## Funding Requested

From ECAN	From Other Sources	Estimated Total (Applicant)
\$8,000.00	\$4,000.00	\$12,000.00

## Funding Detail

Task / Resource	Type	Paid for by	Units	Unit Type	Cost Per Unit *	Total Costs *
Earthworks	Excavator	Immediate Steps	1	Each	\$4,000.00	\$4,000
Weed control	Sweet briar and viper's bugloss	Immediate Steps	1	Each	\$4,000.00	\$4,000
* All costs exclude GST				<b>Council Contribution</b>		<b>\$8,000</b>
				<b>All Other Contributions</b>		<b>\$4,000</b>
				<b>Total Project Funding</b>		<b>\$12,000</b>

## Project Map



# Ecological Assessment

## Fundamental Project Criteria

### 1. Reflects the Canterbury Biodiversity Strategy's Guiding Principles

Y	Focuses on protecting and maintaining what remains
Y	Focuses on restoring what has been lost

### 2. Contributes to the Canterbury Biodiversity Strategy's Goals (1-6)

Y	Protects or maintains the health of significant habitats and ecosystems
Y	Restores the natural character of degraded indigenous habitats and ecosystems
Y	Increases the integration and sustainable use of indigenous species in modified environments (e.g. farm, urban, lifestyle blocks).
	Enhances the public's awareness, understanding and support of biodiversity
	Encourages, celebrates and supports action by landowners and communities to protect, maintain and restore biodiversity
	Improves the range and quality of knowledge and information about Canterbury's biodiversity for its sustainable management

### 3. Project Viability

Y	Project is feasible, cost-effective and an efficient use of funds.
Y	Project will realistically achieve outcomes/gains it is aiming to.
Y	Project is sustainable (e.g. any ongoing or future management requirements are identified and affordable).
Y	No other potential costs (e.g. consent costs) that may make the project less viable and/or affordable

### 4. Landowner Support

Y	Project has landowner support
---	-------------------------------

### 5. Eco-sourced Plants

	Eco-sourced plants being used
Y	Not applicable

### 6. Is some or all of the work required under the Regional Pest Management Strategy?

	RPMS
--	------

### 7. Is some or all of the work required under a District/Regional Council Plan?

	District/Regional Council Plan
--	--------------------------------

### 8. Proportion of cost

0	Protection
50	Restoration
50	Creation
0	Monitoring

Existing Ecological Values		
Criteria	Score (0 - 3)	Comments
Representativeness	3	One of the larger and better fragments of herbfield/mossfield left on the plains.
Rarity or Distinctiveness	3	The site contains a number of plant species that have been recently elevated to "threatened" status. Plants of eastern South Island drylands have suffered declines in recent years.
Diversity and Pattern	2	The site has a good representation of expected ecosystems for a recent river terrace. Mossfield, shrubland, herbfield and tussockland all being present to varying degrees.
Ecological Context	2	Excellent lizard habitat with a number of coprosma species providing food. A number of moth species that were formerly widespread on the Canterbury Plain and have subsequently been reduced to just a handful of populations on the plains have been recorded at the site.
Project Protects a Threatened Environment	2	
Project Protects Naturally Rare or Distinctive Habitat	3	As an old braid path this site is a naturally uncommon ecosystem.
Project Protects Rare or Threatened Species	3	Carmichaelia corrugata, Raoulia monroi and Muehlenbeckia ephedroides, are all Threatened and Zoysia minima, Rytidosperma exiguum, Coprosma and Pterostylis tristis are all At Risk.
<b>Sub-total</b>	18	

Potential Ecological Values (in 10-15 years time – based on likely change)		
Criteria	Score (0 - 5)	Comments
Project Design is Effective/Addresses Key Threats	3	
Project Potential/Positive Impact Ecologically	3	
Value for Money or Cost-benefit	3	
<b>Sub-total</b>	9	

Other Criteria (non ecological or cultural)		
Criteria	Score (0 - 3)	Comments
Legally Protected	0	The site is Ecan land but doesn't have reserve status.
Educational or Partnership Value	0	

Immediate Steps Criteria	
Criteria	Score (L, M, H)

Overall Assessment Scores		
Criteria	Score	Comments
Ecological Assessment Score (Existing and Potential) /39	27	
Cultural	Unknown	
Other Criteria Overall Rating		
Immediate Steps Rating		

<b>AGENDA ITEM NO: 4</b>	<b>SUBJECT:</b> Waimakariri Land & Water Solutions Programme – Update	
<b>REPORT TO:</b> Waimakariri Water Zone Committee		<b>MEETING DATE:</b> 11 June 2018
<b>REPORT BY:</b> Murray Griffin, CWMS Facilitator – Waimakariri, ECan		

### PROPOSAL

This agenda item provides the committee with an overview of the Waimakariri Land and Water Solutions Programme schedule for review at June 2018.

### RECOMMENDATIONS

- The Zone Committee are asked to receive and endorse the proposed schedule for drafting of the Land and Water Solutions Programme recommendations, and 2018 community engagement priorities.

### WAIMAKARIRI LAND & WATER SOLUTIONS PROGRAMME – UPDATE

Since the last Zone Committee meeting in March 2018 the committee has reviewed a range of options as it prepares draft recommendations for wider consultation with the community.

Given the complexity of some of these issues and options the committee agreed to request a two-month extension to this process from ECan to enable additional engagement on the options being considered. It was agreed this additional time was an important step in enabling the zone committee to gather initial feedback on options from Ngāi Tūāhuriri, water users, consent holders and others.

Consequently, the Waimakariri Land and Water Solutions Programme schedule for the period until mid-2019 looks like:

- Review of options for the Waimakariri Land & Water Solutions Programme – Mar to July 2018
- Engagement on options – April to August 2018
- Draft recommendations for the Waimakariri Land & Water Solutions Programme – September 2018
- Draft ZIP Addendum consultation – September/October 2018
- Zone Committee sign-off final recommendations for Solutions Programme – November 2018
- Final Solutions programme recommendations to ECan and WDC councils – December 2018
- Informing the community on the final Land and Water Solutions Programme – January/March 2019
- Notify a sub-region plan change to the Land and Water Regional Plan in response to the ZC's recommendations – mid 2019.

**RECOMMENDATION**

- The Zone Committee are asked to receive and endorse the proposed schedule for drafting of the Land and Water Solutions Programme recommendations, and 2018 community engagement priorities.

<b>AGENDA ITEM NO: 5</b>	<b>SUBJECT:</b> Update on Kaiapoi River Rehabilitation Project
<b>REPORT TO:</b> Waimakariri Water Zone Committee	<b>MEETING DATE:</b> 11 June 2018
<b>REPORT BY:</b> Janet Fraser, Utilities Planner Waimakariri District Council & Andrew Arps, Waimakariri Zone Manager Environment Canterbury	

## PROPOSAL

This report provides the Waimakariri Water Management Zone Committee with a joint update from Environment Canterbury and the Waimakariri District Council on progress implementing proposals to improve water quality, navigability, flood hazard management, amenity and recreation in the Kaiapoi River.

Key projects scoped by the Kaiapoi River Rehabilitation Working Party (Working Party) to date which are currently being implemented are the aquatic and terrestrial planting programmes and navigation channel dredging design and consenting (channel dredging programmed for winter in 2018/19 or 2019/20).

Future projects programmed from 2020/21 onwards include a major sediment trap and slow water channel upstream of the Mafeking Bridge, and gravel beach with wetland and channel realignment at the elbow bend corner at Charles/Smith Streets.

All of these projects contribute to the collaborative approach that is being taken to establish a shared vision and plan for the Waimakariri North Branch Loop track. This refers to development of a 27km fresh water biodiversity focused recreational loop that brings the Waimakariri River Regional Park to the doorstep of Kaiapoi.

## AQUATIC PLANTING

The aquatic planting programme is testing feasibility of narrowing, constraining and meandering the Kaiapoi river channel. This is to assist flush and trap suspended sediment using a “soft engineering” natural rehabilitation approach.

The Waimakariri District Council expanded the upper river aquatic planting further east this year into the town centre moving as far east as the Williams Street Bridge. The focus was both on extending the planting into new areas whilst also increasing concentrations of plants in locations which were successful the previous year.

At the Mandeville Bridge there is evidence of planted raupo extending rhizomes across the intertidal zone. Schoenoplectus (sedge/ grey club-rush) is the most viable of all the aquatic plants in both well-lit and shaded locations. Raupo has been successful at the mid and high tide range in sunny locations. Juncus (rushes) and Eleocharis (spike sedge) were less successful in the original trial and were included in small numbers only this summer in sunny sites at the mid to high tide range.

Raupo from the Courtenay Confluence area was transplanted into the area between the Mandeville Bridge and Williams Street bridge at about the mid-tide level. The success of this transplanting will be assessed again in the summer of 2018/19.

## **TERRESTRIAL PLANTING**

Terrestrial planting organised by Environment Canterbury began in May 2018 in the following areas:

- From the Mandeville Bridge to the Williams Street Bridge (north bank – including space set aside for walking access from the top of the stopbank down to the river)
- Between the Charles/Smith Street corner and the Cam River mouth (north bank)
- Lower Raven Quay to the Courtenay Confluence (south bank)

The contractor is aware of the need to maintain “view shafts” to the river. Therefore in the planting areas, place will be set aside where shorter plants will be established on the lower river banks. Tall trees will be infill planted in clusters around the existing willows. This will provide wide areas for the public to be able to continue to view the river from the top of the stopbanks whilst enhancing biodiversity on the river margins.

## **COURTENAY CONFLUENCE**

An Environment Canterbury contract for willow control and infill planting works downstream of the Courtenay Confluence into the Kaiapoi Island will be largely completed by the end of June 2018. Some further planting will be undertaken later this year, through spring, together with follow up willow control work. Ongoing maintenance of all of the plantings will also be undertaken.

Where willows have been controlled, available open spaces are/will be infilled with indigenous plant species (aquatic and terrestrial) where suitable light/space is available. These works will enhance the existing habitat in this area and showcase for the community the concept and design of a “two stage low flow and flood channel”, including large riparian wetlands.

A species list stock-take of plants present along the banks/wetted edge margins of the Kaiapoi River through the Kaiapoi Island/Courtenay Confluence area into the town centre is in preparation. This will describe all those plant species naturally occurring on the river margins.

## **NAVIGATION**

Waimakariri District Council staff are working with Environment Canterbury and various consultants and contractors to scope detailed dredging and spoil dewatering designs and consenting for dredging a minimum 1.5m depth navigation channel from the Williams Street Bridge to the Kaiapoi River mouth.

The dredging of the channel will ensure the Coastguard can safely access the river out to the coast at low tide. It involves targeted removal of “high points” in the bed. The dredging will



address the risk that the Coastguard vessel could become grounded en-route to a rescue, or risk of engine or propeller damage at low tide.

## **FUNDING**

Waimakariri District Council staff are preparing detailed navigation dredging budget estimates, in conjunction with the estimates for dredging to enable berthing at the proposed new floating pontoons at the Kaiapoi Wharf, for presentation and decision at the Waimakariri District Council Long Term Plan budget deliberations on 29 to 31 May. Options to combine the two projects and associated budgets are being investigated. A cost share for the navigation component of dredging will also be discussed further with Environment Canterbury in coming weeks.

## **RECOMMENDATION**

### **That the Zone Committee:**

- (a) **Receives** this update report about the Kaiapoi River aquatic and terrestrial planting and proposed navigation channel dredging project.