

## ASHBURTON WATER MANAGEMENT ZONE COMMITTEE AGENDA

A **Meeting** of the Ashburton Water Management Zone Committee will be held as follows:

**DATE:** Tuesday 29 August 2023

**TIME:** 1:00 pm

**VENUE:** Council Chamber, 137 Havelock Street, Ashburton

**MEETING CALLED BY:** Hamish Riach, Chief Executive, Ashburton District Council  
Stefanie Rixecker, Chief Executive, Environment Canterbury

**ATTENDEES:** Chris Allen  
Adi Avnit  
Clare Buchanan  
Angela Cushnie  
Genevieve de Spa  
Bill Thomas  
Sidinei Teixeira  
TBC (Te Runanga o Arowhenua)  
Arapata Reuben (Te Ngai Tuahuriri Runanga)  
Les Wanhalla (Te Taumutu Runanga)  
TBC (Tangata Whenua Facilitator)  
Councillor Richard Wilson (Ashburton District Council)  
Councillor Ian Mackenzie (Environment Canterbury)  
Mayor Neil Brown (Ashburton District Council)

**Zone Facilitator**

Dave Moore

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**Environment Canterbury**

**Committee Advisor**

Carol McAtamney

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**Ashburton District Council**

**Tangata Whenua Facilitator**

TBC

**Environment Canterbury**



# Ashburton Zone Committee Meeting

Tuesday 29 August 2023

Meeting Commences: 1.00pm

## Order of Business

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## 4 Register of Interests

Chris Allen	Farm owner of sheep, beef, lambs, crop Water resource consents to take water from tributary of Ashburton River and shallow wells Member of Ashburton River Liaison Group
Adi Avnit	Mid Canterbury Community Vehicle Trust - Treasurer
Clare Buchanan	Head of Environment & Innovation at Align Farm Align Farms holds an irrigation resource consent to take water from shallow wells hydraulically linked to the Ashburton river Align Farms holds MHV water and Fonterra Shares Align Farms suffered significant flood damage on their support block
Neil Brown	Mayor Acton Irrigation Limited - Director Irrigo Centre Limited - Director Acton Farmers Irrigation Co-operative Limited - Director Browns Farm Limited – Director and Shareholder
Angela Cushnie	Owner of Country Copy, a communication and promotion business based in Mid Canterbury Freelance writer for Latitude Magazine Kanuka Mid Canterbury Regeneration Trust - Trustee Hinds Reserve Board Committee member Mid Canterbury Catchment Collective - Coordinator
Genevieve de Spa	Owner of Kakariki Camps focusing on ‘Head, Hands, Heart’ approach to biodiversity education Contractor and member of Staveley Campsite Committee (Previous recipient of Immediate Steps Funding) Rakaia Environmental Enhancement Trust
Ian MacKenzie	Environment Canterbury Councillor
Arapata Reuben	Trustee – Tuhono Trust Trustee – Mana Waitaha Charitable Trust Member - National Kiwi Recovery Group Rūnanga Rep – Christchurch – West Melton Water Zone Committee
Bill Thomas	Farm owner of Longbeach Estate Ltd (sheep, beef, lambs, arable, dairy) Member of Eiffelton Irrigation Scheme Hekeao/Hinds Water Enhancement Trust – Settler Director of Longbeach Estate & Longbeach Dairies
Sidinei Teixeira	Chemistry Teacher at Christ’s College Masters student at Lincoln University Studying Masters in Water Resource Management Intern at MHV Water (groundwater scientist) Past Head of Scient at Mt Hutt College Passionate about use of natural resources sustainability
Les Wanhalla	Returning good health and mauri O Te Waihora/Lake Ellesmere Kaitiakitanga, Whakapapa Rugby league, life member, honorary south Kiwi Trustee – Central Plains Water for Selwyn District Council
Richard Wilson	

## 5 Confirmation of Minutes

### Unconfirmed Minutes

**Minutes** of a meeting of the **Ashburton Water Management Zone Committee** held on Tuesday 23 May 2023, commencing at 1.00pm at Staveley Camp, 133 Sawmill Road, Staveley.

#### **Present**

Councillor Richard Wilson, Chris Allen, Adi Avnit, Clare Buchanan, Angela Cushnie, Genevieve de Spa, Bill Thomas (Chair) and Les Wanhalla

#### **In attendance**

Environment Canterbury: Dave Moore (Facilitator), Sandy Bowman (minutes) Henry Winchester, Cameron Smith

Hekeao Hinds Lowlands Catchment Group: Tina Bayer and Willie Leferink

1 members of the public in attendance

#### **Online**

Heather McCarron, Sidinei Teixeira, and Kate Doran

#### **1 Welcome**

Genevieve de Spa opened the meeting with a Karakia.

#### **2 Apologies**

**That** apologies for absence be received on behalf of Mayor Neil Brown, Councillor Ian Mackenzie and Arapata Reuben.

Bill Thomas/Chris Allen

Carried

#### **3 Extraordinary Business**

Nil.

#### **4 Register of Interests**

Nil.

#### **5 Confirmation of Minutes**

That the minutes of the Ashburton Water Management Zone Committee meeting held on 28 March 2023 be taken as read and confirmed.

Bill Thomas/Les Wanhalla

Carried

#### **1. Matters Arising**

Nil.

**6 Correspondence**

**Inward:**

Nil.

**Outward:**

Nil.

**7 Public Contributions**

Nil.

**8 Ōtūwharekai Working Group Update**

Cameron Smith (ECan) presented on behalf of Judith Earl-Goulet

Paper attached to the agenda

Cameron Smith referred the Committee to Pages 8 & 9 of the agenda setting out the workstreams with updates delivered by agencies and organisations.

There is extensive work taking place at Ōtūwharekai across all the organisations, agencies and individuals that have a role to play in protecting and restoring the health of this unique and important environment.

- Ag Research keen to visit the area at the end of the month and NiWA is working on wetlands and on individual farm level.
- Ashburton District Council working on authorised and non-authorised vehicle access.
- The Ministry of the Environment, Hon David Parker, releasing report tomorrow on the assessment where the lakes are today and will be publicly available on the website.

Zone Committee disappointed they were not included in the consultation process with their approach to the report.

Bill Thomas commented there was no input from Zone Committees on how it was to be done and to handle situations carefully when we haven't been consulted. Also, no prior advice given on the release of the report is unfortunate. Les Wanhalla to bring this point up at the next Rūnanga Hui.

Report received by Bill Thomas

**9 2022/23 Season Water Quality update for Ōtūwharekai/Ashburton Lakes**

Presented by Dr Tina Bayer (ECan)

Paper attached to agenda

The summary of 2022/2023 monitoring with ongoing monitoring of water quality shows that all lakes continue to fail to meet LWRP TL1 objectives. Te Puna-a-Taka/Lake Clearwater has improved to the previous year but a continual decline in water quality of Ōtūroto/Lake Heron.

- Not achieving trophic level state of lakes for this year's target.
- Little indication of 5 year improvement in TL1 yet except Emily.
- Nitrogen levels high the last 2 years due to the volume of rain.
- Lake Clearwater very concerned with the loss of resilience of this lake. Clearwater has improved compared to 2020/2021. Seven piezometers installed to gain data. Data has been really variable and is being monitored to June 2023. Ashburton District Council

- decommissioned long-drops (deadline passed) in the village, but high organic material remains and looks to be ongoing.
- Lake Heron – problem child with run away algae and highest for any lake in New Zealand.
  - Lakes continue to fail to meet LWRP objectives for TLI.

During the presentation there was a slide which Tina described as ‘one to take home’ however, this was not included with the papers in the agenda. She promised to forward to the Facilitator, Dave Moore, for him to distribute to the committee.

Bill Thomas thanked Tina and commented he will watch with great interest. Tina promised to send out her report to the committee.

## 10 Committee Updates

**Dave Moore** approached the zone committee whether they would prefer the normal 27 June meeting, or a workshop in its place to look at the action plan and see if there is anything that needs to be changed. Also set up for the next financial year 2023/2024.

**Angela Cushnie** imperative consult with community in planning for next year, particularly for critical points such as regional planning, freshwater management etc and need conservations with Rūnanga. What are the pinch points and what is the zone committee’s role in this and to be adaptable. This is an opportunity to engage going forward. Also there has been a delay in the CWMS Regional Committee being formalised due to partnership issues. Trying to understand the process and where at and what’s coming next and to be informed of key dates. Honouring Zone Committees what went before.

**Cameron Smith** agreed that there has been a lack of communication with the zone committees and has taken their comments on board. Environment Canterbury’s partnership with Rūnanga; there is presently a lot of work underway in this area and public engagement is scheduled for July. Work around the partnership is massive and is at a high level. Andrew Parrish (Planning) is coming back with a plan in June and it is a very tight timeframe. A timetable will be set what is determined and when, and when being brought down to a community level, what is going on, and how to engage/consult.

Environment Canterbury and Ashburton District Council consult with the community, with input from the Ashburton Zone Committee. Unless advised otherwise, carry on with current goals. Final plan roll out through to vision objectives looking like the end of this year, no firm decisions until then.

**Chris Allen** commented that there is a lot of science known in this catchment and to work out vision and next methods. Goals still valid going forward, refine and use as a guide until the end of 2024.

**Genevieve de Spa** suggested treaty training for members of the Zone Committee and community either a one or two day. Consensus that a two day one would be more beneficial and check if adequate budget available.

Genevieve made the suggestion the Zone Committee be involved in a weekend event in October at Staveley Camp. To involve the community and other groups to participate. If successful it could be an annual event in the future.

At this meeting no decision made if the 27th June date is to be a meeting or a workshop.

## 11 Zone Committee Action Plan Budget

Dave Moore advised Zone Committee a decision has to be made at this meeting, as invoicing has to be completed by 20 June in order to be processed before the end of the financial year.

### 11.1 Action Plan Fund

Applications	Allocated
<b>Hekeao Hinds Water Enhancement Trust Brett Painter</b> Maintenance of planting at South Hinds and Maronan Ealing Road	\$8,000
<b>Carters Creek Enhancement Project</b> This is a waterway under pressure from both urban and lifestyle/rural environments and has been of great concern to the community for some time. This application is for science funding to complement Environment Canterbury's work in the background.	\$15,000
<b>Hekeao Hinds Lowlands Catchment Group</b> To monitor the reduction in nitrate (and possibly other nutrients) from this site to demonstrate how such a construction can be completed 'off stream'. Wish to install another sensor in the outflow from the wetland to quantify the nitrate reduction. Benefit that Information could assist other groups.	\$10,000
<b>Pudding Hill Weed Control</b> Weed control in reserve and grasslands and has public access and is a popular area with the community. It is a Ashburton District Council and Environment Canterbury project.	\$8,000
<b>Ecological Garden Mt Hutt College</b> To provide an educational native garden at the school. A plan drawn and work towards eco-sourcing plants and a living laboratory would be the ideal tool to teach our rural students sustainability and ways to make farming less harmful to the environment.	\$8,000
<b>Ashburton River Planting – Adele Webb</b> To improve the appearance of the area along the west Ashburton riverbank and contribute to creating a corridor of native vegetation to eventually link with other native plantings eastwards in the Trevor's Road and Chalmers Avenue area.	\$1,000
<b>TOTAL</b>	<b>\$50,000</b>

## 12 Other Business

Angela advised Ashburton District Council biodiversity hui coming up in early June and suggested pulling together. It is a big bold ambitious project and helpful if the Zone



Committee lend a hand. Ashburton Zone Committee have a seat at the table with the presence of Adi Avnit.

**Next meeting**

The next meeting of the Ashburton Water Zone Committee will be held in the Ashburton District Council Chamber at 1:00pm on Tuesday 27 June 2023.

The meeting closed at 3.02pm with a Karakia by **Gen de Spa**.

Dated this 29<sup>th</sup> day of August 2023 \_\_\_\_\_

# Our Mid Canterbury Vision

Mid Canterbury's intergenerational vision is for a thriving and resilient community who are environmentally responsible, culturally respectful, economically viable and socially cohesive, recognising these aspirations are interdependent on one another and underpinned by water.

## Our Foundations: Environmental, Cultural, Social and Economic

### Environmental

Through responsible stewardship and sustainable practices, we will preserve and enhance the health of our water, land, biodiversity and ecosystems to ensure they remain a source of life, prosperity and wellbeing for generations to come.

1. **Healthy State of the Environment:** Rivers are healthy, swimmable, and abundant with life. Aquatic ecosystems flourish, people can enjoy the amenity and recreational value of the environment and mahinga kai opportunities.
2. **Management of Natural Resources:** Ensuring that natural resources are managed in a way that preserves the health and integrity of existing ecosystems, protecting flora and fauna and maintaining the ecological balance, while still providing for the viability of the community. The community's management and use of natural resources needs to reflect the need for flexibility over time and the interconnected nature of the resources.
3. **Sustainability:** The sustainability principle aims to ensure that human activities are conducted in a manner that meets the needs of the present without compromising the ability of future generations to meet their own needs. Humans have an interdependent relationship with natural resources, we depend on them to thrive, they depend on us to thrive. It involves adopting practices that are environmentally responsible, socially equitable and economically viable over the long term.
4. **Climate Change:** Natural resources are managed to adapt and optimise outcomes in the face of a changing and more variable climate, and natural hazards are managed for the protection of our community.
5. **Ambitious and achievable targets:** These foundations highlight the importance of long-term knowledge to guide practical management, community involvement, and decision-making. Our community is conscious of all costs and trade-offs, and clear regulations in achieving sustainable water and soil management and environmental conservation, recognising human habitation and the delays between catchment action and evidence of this in the environment.

### Cultural

These key foundations reflect a desire for an inclusive, respectful and diverse community for all cultures, respecting the bi-cultural relationship with mana whenua, and the role of Te tiriti in promoting unity for common and shared outcomes now and for generations to come.

1. **Striving for an inclusive Community:** Our vision is to foster a united and inclusive community.
2. **Growing Understanding and Respect:** We envision a future where there is an opportunity for all cultures to develop a deeper understanding of each other's values and aspirations. By encouraging transparent and respectful relationships, we aim to navigate differences and collaborate toward shared goals for a sustainable and prosperous community.

## Social

This foundation includes a diverse and thriving community that is socially cohesive. We prioritise health and education, safe environments, and strong infrastructure to create opportunities, stability and support our families and businesses.

1. **Health and Well-being:** Healthy communities are underpinned by a healthy environment. They enable the physical and mental health of all community members to be met.
2. **Strong, Safe Community:** Close-knit, engaged, inter-generational, collaborative communities, with strong identities where safety and security is paramount. Supporting local families, schools and community amenities underpins our social fabric.
3. **Interdependence within our community:** Our strong and thriving business and urban community is driven and supported by a strong and viable rural and farming economy.
4. **Quality Infrastructure and amenities:** The desire for well-maintained roads, bridges, civic centres, schools, communication networks, water delivery, energy, sports and cultural facilities to support Mid Canterbury residents and visitors to our district.
5. **Local Control and Decision-Making:** The preference for community-led decision-making to give certainty and balance between necessary regulations and the ability to change, innovate and deliver on the community's long term collective vision.

## Economic

These key foundations reflect the desire for a prosperous, sustainable and adaptable community that maintains economic viability while caring for the environment and future generations.

1. **Economic Viability and Resilience:** Creating a diverse and profitable economy while ensuring generational environmental, social, and cultural resilience. Interlinked urban, rural and farming businesses create local employment and education opportunities.
2. **Critical Infrastructure:** Our strong economy has been founded on generational investment in critical infrastructure. The future resilience and prosperity of Mid Canterbury will be determined by continued investment in significant infrastructure at regional, local and business levels.
3. **Regulatory Certainty and Flexibility:** Seeking stable and clear regulatory regimes with long-term certainty to enable planning and investment, while also allowing flexibility for businesses and the community to adapt and diversify. Progress towards goals at a pace that optimises the time to adapt our use of resources, ensuring that no part of the community is disadvantaged or pays a disproportionate cost.
4. **Primary Production:** Food and fibre production underpins the economic prosperity and social cohesion of our community, supported by access to reliable water, natural resources and resilient infrastructure.
5. **Community Collaboration and Empowerment:** Recognising the importance of collaboration between decision makers, stakeholders and strategic partners. Regionally relevant and well researched information is critical in ensuring our whole community has a say in the use of resources and local development.

These principles and the overarching vision have been formed following extensive engagement with the Mid Canterbury community. We have held 29 sessions in halls, living rooms, businesses and meeting places across Mid Canterbury. 622 members of our community have taken the time to provide their views and then a working group of rural and urban leaders have worked together to ensure that the outputs genuinely reflect the feedback that was received, which has then been circulated back to the community for further feedback prior to finalisation of the draft.

**26 June 2023**

**Dear Ashburton Water Zone Committee members,**

The newly-formed Carters Creek Catchment Group would like to express our thanks for the grant made at your last meeting to support the work of our group.

The opportunity to speak at your meeting and outline our intentions was appreciated.

We are committed to resolving the sources that are contributing to poor water quality in Carters Creek, in particular the e-coli of human descent issue and higher than normal phosphate levels

We look forward to reporting back to you in the coming months on our progress.

Yours sincerely,

Willy Leferink

**Chairman  
Carters Creek Catchment Group**

Keith Gundry  
46 Grove St  
Tinwald, Ashburton 7700  
Mob - 0272256461  
Email - Kgun\_dry@hotmail.com

To  
Mr Bill Thomas  
Chair of the Ashburton Water Zone Committee

Dear Bill

I would like to bring to your attention the concerns of urban Tinwald residents adjoining Carters Creek. On the 23rd of July, a number of properties were again inundated with water from excessive storm water flows from Carters Creek.

During large rain events excess stormwater significantly increases the flow in the creek, causing water to inundate properties and damage to properties. The regulatory of these flooding and level of these events is of great concern to property owners adjoining the creek. Past efforts to communicate concerns have not led to any action. Each flood event is undermining the integratory of the riverbank, property, and buildings. As well as causing stress and unknown amount of time and costs cleaning up and repairing from each flood.

It is very clear that the creek is not properly equipped to handle excess storm water flows through urban Tinwald. As rate payers of ADC and ECAN we are writing to you for action.

What we are demanding

- Bank stabilisation and remediation work to fix the creek.
- Diversion/flood overflow channel above Tinwald to lower intensity of flooding events.
- Increasing size of Culverts through Tinwald.

Please find below individual properties owners abbreviated comments and attached photos showing the extend of the flooding.

Kind Regards,

Keith Gundry

"These periods of excess water flows are undermining the riverbanks which is undermining integrity of the creek banks causing them to slowly sub side. Without immediate remediation, there is a real risk of serious damage to property during future flooding events. As part of storm water system it is not fit for purpose to handle excess storm water."

*Keith Gundry - 46 Grove St*

"I am also over the flooding of Carters creek, every time we have an average rain fall. There hasn't been more rain than normal over the past 5 or 6 years, as the weather man has said Canterbury has been in rain deficit for the past 3 to 4 years and is only starting to get back to average rain fall. The creek never used to be this bad. When I moved here over 20 years ago the creek only flooded once every 5 or 6 years, now it floods 2 or 3 times every year. Over the last few floods I have had 1 1/2 to 2 meters of water through my section each time, that takes several meters of my section away with it and leaves me with all the bags of rubbish and branches with outdoor furniture included from the sections above me. Since the latest event my driveway curbing is now being undermined. The only improvement I have seen in the past year or so is we no longer get sewerage flowing through the whole section so thanks ADC for that."

*Pam Bell - 49 Grove St Tinwald.*

"After flooding events a large amount of rubbish accumulates on the property which is potentially contaminated and is a serious health risk. The continued damage to land and property from flooding is a serious concern and very stressful. It takes a lot of time and effort after each event to cleanup and repair my place with no help from ADC or ECAN. It also worries me that it has the potential to decrease my property's value and future ability to sell."

*Sandy Linton - 4 Millibrook Place*

"In the latest flooding we encountered I noticed more water than I have seen and at a higher level for a longer period of time. One point near my property boundary the bank has eroded over many floods and is noticeably getting close to my fence. Also the level of water from the last flood forced the water to come up through my drainage pipes causing sewage onto my lawn and also under my house. I was unable to do washing or use the toilet until the creek level had dropped to a low level which was probably a 36 hour timeframe from the peak of the flow. The stormwater drain on the road doesn't cope with significant amount of rainfall or is constantly blocked causing water over the footpath and flowing into the corner of my property."

*55 Thomson Street*

"It is so frustrating to be told each time this flooding happens:

- There is no where for the water to go....
- We have had so much rain....
- There is no money.....
- It is not our responsibility....
- Snap solve send always refers to someone and we never hear back !

We need a solution for this devastating flooding that effects our properties and mental wellbeing!! Or at least a plan moving forward? The flooding each time to my property and my surrounding neighbours, is devastating and heartbreaking let alone the rubbish, sludge, debris that is left behind that we all have to clean up on a regular basis it seems."

*Jill Tait - 5 Millibrook Place*

"We consider the beauty and wildlife of the creek to be an asset to this neighbourhood. We have spent a fair amount of time and money on upgrading our section of the creek. However, we get frustrated and disheartened when it floods and leaves large amounts of debris in the creek and on our property. After the recent flood of 23-24 July we pulled out just over 2 tonnes of debris which ECAN collected. Something needs to be done about the poor drainage and floods."

*Cameron Hay - 6 Millibrook Place*

Millibrook Place

























Grove St







HUI/MEETING: Ashburton Water Management Zone Committee	
AGENDA ITEM NO: 8	KAUPAPA/SUBJECT: HHWET analysis of monitoring data for 2022-23
KAITUHI/AUTHOR: Brett Painter (HHWET)	WĀ/MEETING DATE: 29 August 2023

## Purpose

To update the Zone Committee on the Hekeao Hinds Water Enhancement Trust's (HHWET) analysis of monitoring data for 2022-23

## Recommendation

That the Ashburton Water Management Zone Committee receives the report.

## Introduction

HHWET's overarching aim is improved ecosystem health while maintaining social/cultural cohesion and economic viability. Following on from the formational project governance groups, HHWET are progressing an Integrated Catchment Management (ICM) approach for the Hekeao Hinds Plains. To date HHWET has trialled and implemented concepts to improve groundwater (Managed Aquifer Recharge - MAR) and Hekeao Hinds River (Near River Recharge - NRR) ecosystem health. HHWET has also undertaken case studies for a concept to improve on-farm nutrient management (irrigation nutrient recycling). In addition, HHWET are leading and/or supporting the trialling and implementation of relevant concepts that have been initiated by other parties (e.g., Targeted Stream Augmentation - TSA, Bioreactors and Constructed Wetlands). HHWET are also aware and/or involved in on-farm projects, in particular through membership of the Hekeao Hinds Science Collaboration Group.

Analysis of HHWET monitoring data for 2022-23 (Year 7) has recently been completed. This analysis shows continued clear ecosystem health improvements in receiving groundwater and Hekeao Hinds waterways when the influence of rainfall is accounted for. A dual (stockwater and MAR) use trial of an Ashburton District Council water race has also been successfully completed recently. This provides an alternative distribution system for MAR water when the MHV Water distribution system is at full capacity or is shut down for maintenance. Two eClean bioreactors have been installed beside Northern Drain (awaiting operational consents) and preliminary consenting / design assessments are underway for lower catchment constructed wetlands. Consenting processes continue for an increase from 15 to 35 MAR sites, an increase from 1 to 3 NRR sites, plus additional use (for MAR / NRR purposes) of RDRML-consented water.

These environmental infrastructure components in combination with on-going improvements on-farm comprise the current iteration of the Integrated Catchment Management (ICM) scheme for the Hekeao Hinds Plains. The MAR component of this approach (maximum 3700 l/s and average of ~2400 l/s) is significantly smaller than assessed during development of Plan Change 2 to Canterbury's LWRP (maximum 6000 l/s and average 4000 l/s). This reduction has been enabled through an evidence-based targeted approach to MAR / NRR

development, plus the addition of TSA, bioreactor and constructed wetland components. Existing and proposed take / use consents for MAR / NRR re-purpose water that is currently consented for a different purpose (stockwater and hydro-generation). The eClean bioreactor is non-consumptive for water and the constructed wetland design seeks to minimise water losses through bed recharge and evapotranspiration. The current ICM scheme is therefore anticipated to result in an improved environmental footprint and reduced long-term operational costs compared with the original PC2 concept.



<b>HUI/MEETING:</b> Ashburton Zone Committee	
<b>AGENDA ITEM NO:</b> 9	<b>KAUPAPA/SUBJECT:</b> Zone Committee updates
<b>KAITUHI/AUTHOR:</b> Dave Moore	<b>WĀ/MEETING DATE:</b> 29 August 2023

### **Purpose**

To update the Committee on actions from the previous meeting, relevant information and upcoming engagement opportunities.

### **Recommendation**

The Zone Committee receive the update and provides Feedback.

### **Report**

#### **1. Te Tiriti Workshop**

Environment Canterbury are running Te Tiriti (Treaty of Waitangi) workshops for Zone Committee members over the next 3 to 4 months. These are typically two-day workshops with a maximum of around 20 attendees. The workshop could also include members of neighbouring Zone Committees. The Facilitator is seeking feedback on location and date preferences.

#### **2. Progress Report**

The Ashburton Water Zone Committee's Progress report was presented to Environment Canterbury's Land and Water Committee by Chair Bill Thomas on 28 June and was well received.

The report can be found at <https://www.ecan.govt.nz/get-involved/council-and-committee-meetings/view/2023/06>. Click on the + beside Water and Land Committee and download the agenda paper. The report starts on page 37.

<b>HUI/MEETING:</b> Ashburton Water Zone Committee	
<b>AGENDA ITEM NO: 10</b>	<b>KAUPAPA/SUBJECT:</b> Wai Connection – Tatai Ki Te Wai
<b>KAITUHI/AUTHOR:</b> Dave Moore	<b>WĀ/MEETING DATE:</b> 29 August 2023

### Purpose

1. To update the Zone Committee on the Wai Connection project.

### Recommendation

2. That the Ashburton Water Zone Committee receives the presentation from Jessica Halsey, Wai Connection Regional Manager, and provides feedback.

### Report

3. Wai Connection – Tatai Ki Te Wai is a Mountains to Sea Conversation Trust (MTSCT) community catchment group engagement project. The project offers on-the-ground support to assist with catchment issues through tailored, catchment-specific change.
4. 'Wai Connection' is supporting the Government's Essential Freshwater (EF) package, which is part of a new national direction to protect and improve our rivers, streams, lakes, and wetlands. It's a \$21 M project, with \$18 M of this provided by the Essential Freshwater Fund (EFF) and will run until the end of June 2025.
5. EOS Ecology is the MTSCT provider organisation responsible for delivering 'Wai Connection' in Waitaha/Canterbury. They have funding to support up to 15 catchment groups across the whole Canterbury region, which will be divided up between North, Mid, and South Canterbury. Along with the Canterbury Regional Manager and three Catchment Coordinators, EOS will also support catchment groups with their wider engagement and science teams.
6. EOS are also the 'Wai Connection' National Technical Support Team providers. This includes helping develop the project's science and resource content at a national level – providing science, GIS, data and design capabilities to all regions, coordinators and catchments throughout the running of the project. Alongside MTSCT, they will also be working on the development the 'Wai Connection' project website, plus a separate online platform to house citizen science data.
7. Deciding which catchments to focus on will involve conversations with Iwi, hapū, Canterbury Regional Council, district councils, project partners and catchment groups, and collaboration in the region. EOS will be hosting a regional hui, undertaking initial engagement, and creating plans that can focus resources in the right places. The goal is to bring everyone together to make decisions that are best for each catchment.
8. More information can be found in the attached booklet.



## Waitaha/Canterbury Region Project Providers & National Technical Support Team for:



'Wai Connection – Tatai Ki Te Wai' is a Mountains to Sea Conversation Trust (MTSCT) community catchment group engagement project. The project offers on-the-ground support to assist with catchment issues through tailored, catchment-specific change. We work to build community involvement, equity, and a shared vision of ecological sustainability as the basis of a healthy community.

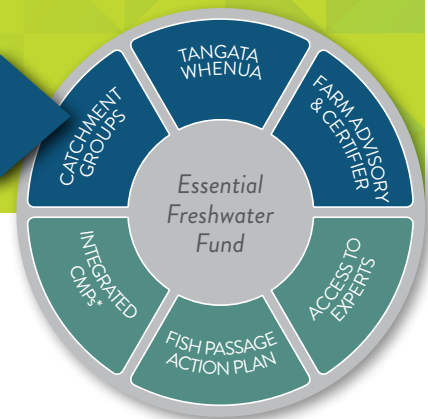
'Wai Connection' is supporting the Government's *Essential Freshwater (EF)* package, which is part of a new national direction to protect and improve our rivers, streams, lakes, and wetlands. It's a \$21 M project, with \$18 M of this provided by the *Essential Freshwater Fund (EFF)*, and will run until the end of June 2025.

'Wai Connection' helps empower community catchment groups by providing knowledge, tools and expert support to help identify issues in their local catchment. We connect people with their

waterway, and promote collaboration between local catchment groups, NGO's, hapū/iwi, Regional Council, Central Government, and primary industry working within the catchment – helping deliver on the aims of the *EF* package.

The *EFF* covers six focus areas, with 'Wai Connection' sitting within 'Catchment Groups':

\* *CMPs* = Catchment Management Plans



EOS Ecology is the MTSCT provider organisation responsible for delivering 'Wai Connection' in Waitaha/Canterbury. We've funding to support up to 15 catchment groups across the whole Canterbury region, which will be divided up between North, Mid, and South Canterbury. Along with our Canterbury Regional Manager and three Catchment Coordinators, we'll also support your catchment journey with our wider engagement and science teams.

We are also the 'Wai Connection' National Technical Support Team providers. This includes helping develop the project's science and resource content at a national level – providing science, GIS, data and design capabilities to all regions, coordinators and catchments throughout the running of the project. Alongside MTSCT, we'll also be working on the development the 'Wai Connection' project website, plus a separate online platform to house citizen science data.

Deciding which catchments to focus on will involve conversations with Iwi, hapū, Canterbury Regional Council, district councils, project partners and catchment groups, and collaboration in the region. We'll be hosting a regional hui, undertaking initial engagement, and creating plans that can focus resources in the right places. The goal is to bring everyone together to make decisions that are best for each catchment.



Supporting landowners and communities to engage with the *EF* package, and supporting you to ensure community aspirations are communicated to Regional Councils will help achieve effective on-the-ground action – providing lasting freshwater health improvements in your catchment.

Our EOS Ecology ‘Wai Connection’ team have funds to work with up to 15 catchments over the whole Canterbury region for the duration of the project (2023–2025). A regional hui will help to identify catchments which fulfil the project requirements. Once a catchment has been selected for support we can provide the following assistance to help you engage with the *EF* package and Regional Councils:

[www.waiconnection.nz](http://www.waiconnection.nz)



## REAL SUPPORT FROM REAL PEOPLE



Our EOS Ecology ‘*Wai Connection*’ **Regional Manager** will oversee all support provided Canterbury-wide.



The North, Mid and South Canterbury project regions will each have their own EOS Ecology ‘*Wai Connection*’ **Catchment Coordinator** to provide regular, on-the-ground support to the individual catchments in their sub-region. They’re just a phone call or email away. They’ll provide support via facilitation (e.g., of project plans, networking introductions, hui, events etc.), restoration planning, advice, admin, in-catchment delivery of community-based freshwater monitoring training and (if relevant) whitebait spawning surveys.



Help connect you with people/organisations who can assist with Freshwater Farm Plan development.



Help connect you with other catchment groups and communities within your wider catchment/region (e.g., through hosted meetings, workshops, arranging regional hui to share best practice, events etc). We can also assist with bridging any gaps between local authorities and your catchment group if needed.



Provide support to help you find funding to develop monitoring/restoration plans for your catchment, and/or implement the restoration/intervention efforts you’ve identified.



Ongoing support for landowners, community members and our EOS Ecology ‘Wai Connection’ team members will be provided through the NZLT ACE learning programme, and the NZLT-MTSCT ‘Community of Practice’ framework. This also provides access to regional and national freshwater-related events, groups and networks.





## SCIENCE EXPERTISE



Help you develop your catchment monitoring plan, including helping determine key knowledge gaps about the state of your catchment, and how best to fill these gaps.



Assist with implementing your catchment monitoring programme. This will include providing community-based freshwater monitoring training and (where relevant) whitebait spawning surveys. It could also include delivery of the EOS Ecology 'Nature Agents' – Ngā Kaitaunaki Taiao' programme – a schools-based freshwater monitoring and participatory science programme. For coastal catchments we may also be able to implement other key habitat-specific monitoring and engagement programmes, including our 'Environment Investigators' programme (based on the MTSCT 'Whitebait Connection' (WBC)) and 'Experiencing Marine Reserves – Te Kura Moana' (EMR) programmes, among others.



Help you identify what actions (restorations and interventions) could be needed to improve the state of your catchment's freshwater.



## RESOURCES & ONLINE TOOLS



We will be producing a guide that provides summary information about the EF package, and its aims – to protect and improve freshwater quality and ecosystem health in waterbodies across New Zealand. This includes links to all relevant government policy documents, formal guidance and fact sheets. It will also be available to all on the 'Wai Connection' website.



Produce a resource for each catchment that provides you a map-based summary of the current state of your catchment based on currently available environmental data. It will include key interpretation of your data to help you identify focus areas/topics for your catchment. This will be produced by our **'Wai Connection' National Technical Support Team** (scientists, GIS specialists, science interpreters and designers), and be provided as a hardcopy and an online interactive map.



We'll also provide ongoing support for knowledge sharing through the provision of a national online citizen science portal, where you'll be able to store your environmental data, have it interpreted, access resources/mapping tools and share your catchment stories. The aim is to have this site up and running towards the end of the 'Wai Connection' project in 2025.

### PLEASE NOTE:

'Wai Connection' is currently not intended to substantially fund the items detailed in the bullet points below. However, should such things be needed, then we can help look for funding to support them:

- Expenses related to specialist equipment (such as real-time loggers) and specialist laboratory testing (such as water quality testing) for your monitoring programme.
- Costs related to physical restoration/interventions (such as technical designs, consenting, construction, plants etc).



## ABOUT US...

EOS Ecology provides industry-leading expertise in surface water ecology (freshwater, estuary and coastal ecosystems), public engagement and science communication. Since 2001, our team of scientists and science communicators have worked towards environmental improvement with government, consultants and industry around New Zealand. We also use this expertise to educate and engage – developing and delivering participatory science programmes to school students of all ages, and working with community groups towards positive environmental outcomes. We've been working with MTSCT since 2016.

We are well regarded in Canterbury for our ecological knowledge, restoration efforts, and work with schools, communities, catchment groups and citizen science outreach programmes – including [www.natureagents.co.nz](http://www.natureagents.co.nz) and [www.streamed.org.nz](http://www.streamed.org.nz).

Our team consists of academically qualified and commercially experienced scientists, geospatial/data specialists, engagement specialists, science interpreters and graphic designers. We work for the environment. We're committed to a people-first, collaborative, kaitiakitanga/guardianship-based approach to projects, which we undertake with integrity and a can-do attitude. Our staff are committed to achieving the best possible environmental outcomes on every project we participate in, through respectful interactions with all stakeholders and collaborators.

Evidence-based science is at the heart of all our actions and recommendations. We don't cut corners, and we're politically neutral.

To find out more about 'Wai Connection – Tatai Ki Te Wai' in Canterbury, please contact:



JESSICA HALSEY  
EOS Ecology – ENGAGEMENT SERVICES MANAGER

'Wai Connection' Regional Manager | E [jessica@eosecology.co.nz](mailto:jessica@eosecology.co.nz) | P 027 271 8887



SHELLEY McMURTRIE  
EOS Ecology – PRINCIPAL SCIENTIST

'Wai Connection' National Technical Support Manager | E [shelley@eosecology.co.nz](mailto:shelley@eosecology.co.nz) | P 027 220 9566



HUI/MEETING: Ashburton Water Management Zone Committee	
AGENDA ITEM NO: 11	KAUPAPA/SUBJECT: Ōtūwharekai / Ashburton Lakes Catchment Group application for funding
KAITUHI/AUTHOR: Dave Moore	WĀ/MEETING DATE: 29 August 2023

## Purpose

For the Zone Committee to consider the Otuwharekai / Ashburton Lakes Catchment Group's request for funding for a portable nitrate sensor.

## Recommendation

That the Ashburton Water Management Zone Committee receives the Otuwharekai / Ashburton Lakes Catchment Group's request for funding for a portable nitrate sensor, and decides whether to recommend the funding request to Environment Canterbury.

## Report

The Ōtūwharekai / Ashburton Lakes Catchment Group requests funding of \$10,000 from the Ashburton Zone Committee's Action Plan fund for the purchase of a portable nitrate sensor.

The Catchment Group wish to use the sensor to:

1. Building the knowledge of the Group as to the nitrate levels in water on their properties from the high springs to the lower streams.
2. Monitor differing management regimes and their impact on nitrate levels on their properties and leaving their properties.
3. Through monitoring, identify any seasonal variations in nitrate levels and develop an understanding as to why these variations may have occurred.

This project will enhance the other water monitoring in the area with a greater number of sites and the portable meter will allow more regular monitoring.

## Alignment with Ashburton Water Zone Committee Action Plan Objectives

This project relates to the following Action Plan objectives:

1. We will work towards improving ecosystem health and meeting biodiversity targets by:
  - Supporting the Ō Tū Wharekai / Ashburton Lakes recovery project by keeping abreast of the project implementation and assisting with recommendations where appropriate, which may include community engagement and education.
2. We will support measures to enhance recreation and amenity targets by:
  - Supporting the Ō Tū Wharekai / Ashburton Lakes recovery project to arrest the decline in high-country lake water quality for contact recreation by assisting with the implementation of recommendations where appropriate, which may include community engagement and education.

Attachments:

- Funding Request
- Follow up clarifying questions and response



## Application for funding - Zone Committee Action Plan Budget 2022/23

### Applicant details

<b>Organisation (if applicable):</b>	<b>Ashburton Lakes Catchment Group - Ashburton</b>
<b>Contact name:</b>	<b>Phillip Everest - facilitator</b>
<b>Contact email:</b>	<b>p.everest@xtra.co.nz</b>
<b>Contact phone number:</b>	<b>0274323965</b>

### About your project

*The amount of information and detail we would like you to provide is in proportion to the amount of funding you are requesting. If it is smaller amount, then a simple description of your project, who's involved and what you will be doing, along with a simple budget is sufficient.*

<b>Project name:</b>	<i>On farm monitoring Otuwharekai Ashburton Lakes Catchment Group</i>
<b>CWMS zone where the activity will occur:</b>	<i>Otuwharekai Ashburton Lakes catchment</i>
<b>Provide a brief project summary:</b>	
<p><i>As part of developing a response to the Otuwharekai lessons – learnt report the group had identified insufficient ‘in stream’ background monitoring has been completed to develop strategies that will assist in the long term water quality of the Otuwharekai Ashburton Lakes.</i></p> <p><i>The group has completed some sampling for analysis at local laboratories and eDNA samples already.</i></p> <p><i>Due to the geographic location, it is has become apparent that a portable Nitrate sensor in the area would significantly increase the regularity of sample analysis and the number of sites to be analysed.</i></p>	
<b>Describe the outcomes or impacts of this project:</b>	
<p><i>Outcomes or impacts are what will change or who will benefit from this work, including enduring benefits. For example, fencing off springheads will improve biodiversity and improve stream health.</i></p> <p><i>By improving knowledge of what is happening in the area already, and monitoring it, we will be able to develop more strategies to make further improvements to our environmental footprint, while being mindful of economic viability.</i></p>	

**List the key outputs of the project:**

*An output describes what your group is proposing to do and is measurable. For example, install 250 m of fencing, or train 25 volunteers. Outputs are important and may be used as milestones in a funding agreement.*

1 Building the knowledge of our Group as to the nitrate levels in water on our properties from the high springs to the lower streams.

2 Monitor differing management regimes and their impact on nitrate levels on our properties and leaving our properties.

3 Through our monitoring, identify any seasonal variations in nitrate levels and develop an understanding as to why these variations may have occurred.

**Please state how the project aligns with the relevant Zone Committee's 2021-24 Action Plan:**

*All action plans can be found as a link at the bottom of the ["What's happening in my zone" page on the Environment Canterbury website.](https://www.ecan.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/) (<https://www.ecan.govt.nz/your-region/your-environment/water/whats-happening-in-my-water-zone/>)*

**Otuwharekai Ashburton Lakes is a significant work stream for the Ashburton Zone Committee and Environment Canterbury****Tell us what activities you're intending to do and when you intend to have the project completed (timeline):**

There has been water monitoring completed in the area but this project will enhance that knowledge further with a greater number of sites and the portable meter will allow more regular monitoring.

The project will be on going for a number of years ( at least 5- 10 years to develop trends) but interim progress could be reported annually.

**Tell us about the project management, including leadership and financial oversight:**

The Ashburton Lakes Catchment Group stands on its own but functioning under Mid Canterbury Catchment Collective. We have chair (Kerry Harmer), treasurer (Philip Todhunter) and secretary (Anne Todhunter).

We have a quote from Lincoln Agritec for the equipment provided an order is placed prior to 30 June 2023.

**List any other groups or organisations you are partnering with on this project, such as community groups, schools etc:**

At this stage the project will only involve the current Run Holders in the area.

**How will you engage the community on the project:**

This is a significant piece of work that needs to be completed urgently, as identified in the Otuwharekai Ashburton Lakes lessons – learnt report.

**Do you know of any cultural values associated with this site?:**

YES

<b>If yes, what engagement has occurred or is planned (if any) with local Papatipu Rūnanga about this project?:</b>	
There is on going engagement with Arowhenua in the Otuwharekai working group.	
<b>Please provide an accurate location with grid reference and/or map (if relevant to your project):</b>	
Otuwharekai Ashburton Lakes -	
<b>Who owns the land?:</b>	
<i>Attach evidence of permission from the landowner, or their representative.</i>	
Local run holders who are all members of the Ashburton Lakes Catchment Group	

## Funding details

*Please attach a budget to your application if one has been prepared. Your budget should include estimates of income and expenditure, including other funding and in-kind contributions. You should show clearly what you are planning to spend the Action Plan funds on if successful. We would like more detail if your application is for a larger amount*

<b>How much funding are you requesting?</b>	\$10,000
<b>If you are successful with this application, what components of your project will you spend the money on?:</b>	
<i>If you have a project budget, please attach it to your application.</i>	
The funding from the Zone Committee will be used to fund the purchase of a portable nitrate sensor.	
<b>Have you applied to or received funding from other organisations for this project?:</b>	No
<b>If yes, please provide details below or note if it is included in your attached budget.</b>	
Included in attached budget.	
<b>Is the project receiving any other monetary or “in-kind” contributions from your organisation or others e.g. manpower, use of resources, facilities and equipment?</b>	YES
<b>If yes, please provide details below:</b>	
The Ashburton Lake Catchment group will be investing their time and resources to obtain and analyse the samples.	

The Mid Canterbury Catchment Collective will be funding the facilitator to assist with the analysis and developing with the run holders any strategies that may reduce N loss in the catchment

## Working with us and Environment Canterbury

<b>In the last three years have you received funding or other support from Environment Canterbury for this, or any other project?*</b>  <b>If yes, what was the funding/support for, and when did you receive it?:</b>	no
<b>Are you intending on applying to another Environment Canterbury fund this financial year for this, or any other project?</b>  <b>If yes, what fund are you applying to?</b>	NO

## Additional information

**Do you have supporting information you would like to provide (optional)?:**

*Please attach any supporting information with your application.*

**Once completed, please send this application form to  
dave.moore@ecan.govt.nz**

## Clarifying questions to the Ōtūwharekai Ashburton Lakes Catchment Group - 19 July 2023

1. What additional parameters are being measured?
2. What assessments are being conducted in terms of biological, physical, and chemical aspects?
3. What will be the frequency of sampling?

Other comments that may be useful

The motivation behind their request for more information lies in their previous experiences with incomplete datasets. Many of datasets primarily focus on measuring nitrate levels. However, it is crucial to note that nitrate concentration alone does not provide sufficient information for in-depth analysis. While a nitrate sensor may capture fluctuations in nitrate concentration, there is a lack of supporting data to explain the underlying causes of these fluctuations. Consequently, considering additional parameters becomes vital in order to gain a more comprehensive understanding of the system. By incorporating a broader range of parameters, we can better elucidate the factors influencing nitrate levels and their fluctuations.

Ideally, it would be beneficial to collect samples at least once during each season for analysis of the water's chemistry or biology. Even if budget constraints only allow for the testing of major ions or the counting of invertebrates, such information can still be valuable for tracking pollution sources and assessing habitat health, among other factors.

They understand that cost is a significant concern, and therefore, careful consideration of the questions you aim to address would yield long-term cost savings. By thoughtfully planning the sampling strategy, it becomes possible to obtain more comprehensive answers at a reduced expense. Moreover, offering internships to university students could provide an opportunity to have samples analyzed at the university at a lower cost compared to engaging approved private laboratories. This suggestion aims to encourage exploration of options for monitoring additional parameters and answering crucial questions within budgetary constraints. I hope you find these suggestions worth considering in terms of expanding parameter monitoring when budgetary limitations arise.

## Response from Ōtūwharekai Ashburton Lakes Catchment Group - 23 July 2023

Re Otuwharekai / Ashburton Lakes Catchment Group – nitrate sensor application.

1 The Ashburton Lakes Catchment Group has had a 'Lessons learnt' report delivered to them, which amongst other matters, clearly identifies deficiencies in water quality records.,

2 None of the records that have been presented to the farmers has shown water quality measurements from spring source to Lakes and beyond.

3 If there are no records from samples taken before the water enters the farmed land, or through the farm land, it is extremely difficult for the farmers to understand what is happening in the Catchment.

4 Despite a number of requests through the 'Working group' and 'Officials group' for the balance of the 'silt core samples' from the Lakes 380 project to be analysed, to date this information has not been forthcoming which could be extremely useful.

5 Sampling undertaken by ECan, DOC, NIWA and others in the past, has not been as regular as is required to be able to make meaningful comments about any management practices that may be having an impact on surface water or ground water.

6 The proposed MONTHLY sampling of 8-9 water bodies from the 'source to the lake' by the Ashburton Lakes Catchment Group involves over 430 samples in a year.

7 The Ashburton Lakes Catchment Group has already completed two rounds of sampling. The latest round of sampling was expanded (including N,P E.Coli) following the knowledge gained and 'knowledge gaps' highlighted from previous on farm testing completed by the Group and financed from their own resources.

8 Whilst it would be nice to " complete a full biological, physical and chemical analysis " as you have requested, this is beyond our resources in terms of skill, time and financial. Perhaps this is the role of the 'Working Group' or the 'Officials Group' to get such work completed.

9 Our group is writing to the Science Team Leader at ECan – Tim Davies – to ascertain what science work they have planned in the catchment. We will await his reply so as not to unnecessarily duplicate resources.

10 You will be aware that with the support of the Zone Committee, the Mid Canterbury Catchment Collective employed a 'Summer student' to retrieve historical water quality results throughout Mid Canterbury.

Unfortunately the student was unable to access some critical historical records (1940-1990) through an ECan embargo during the summer break. We are hopeful this work may now be completed in the next couple of months.

We do not think this is a project suitable for a summer student as we are requiring analysis for the full 12 month period which does not fit within the Summer holiday program.

11 The cost of the nitrate only analysis of the proposed 430 samples alone is in excess of \$17000 plus travel and courier costs . (All up over \$21,000 with no account of sampling time estimated to be in excess of a further \$18,000)

12 The laboratory costs alone, for a 12 month monitoring program, for N, P and E.Coli is in excess of \$43,000.

The Group is anticipating this will likely be a program that continues for up to two years to obtain strong trend line analysis.

13 We have sought the Zone Committees support to purchase a Hydrometrics GW50 nitrate sensor manufactured by Lincoln Agritech Ltd with a RRP of \$10,700 +GST (unit \$9,950 plus training and delivery \$750) – NOTE – this was the price received for orders prior to the end of June 2023 with a price increase anticipated.

I trust this note will provide sufficient information for you and your Committee to consider favourably our application for the Otuwharekai Ashburton Lakes Catchment Group portable Nitrate Sensor.

The Group faces significant pressure from the Government and the Community to improve lake water quality. Without having adequate science to understand what levers, if any, they can pull it is extremely difficult to be able to make the progress the Regulators and the Community would like.

HUI/MEETING: Ashburton Water Management Zone Committee	
AGENDA ITEM NO: 12	KAUPAPA/SUBJECT: Carters Creek
KAITUHI/AUTHOR: Dave Moore	WĀ/MEETING DATE: 29 August 2023

## **Purpose**

To provide and update to the Zone Committee from the Carters Creek Catchment Group.

## **Recommendation**

That the Ashburton Water Management Zone Committee receives the report.

## **Introduction**

Janine Holland and Willie Leferink will update the Zone Committee on the activities of the Carters Creek Catchment Group.