

ASHBURTON WATER MANAGEMENT ZONE COMMITTEE AGENDA

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

DATE: Tuesday 28 March 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
James Meager (Te Runanga o Arowhenua) (via MS Teams)
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

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Ashburton District Council

Tangata Whenua Facilitator

TBC

Environment Canterbury



Ashburton Zone Committee Meeting

Tuesday 28 March 2023

Meeting Commences: 1.00pm

Order of Business

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 - Gen de Spa
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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
James Meager	Rakaia Catchment Environmental Enhancement Society Committee – Arowhenua Representative Resident at Ross Farms, Laghmore – no financial interest (150ha arable cropping) Founder and Principal, Oath Advisory National Party Candidate for Rakaia
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 Master student at Lincoln University Studying Masters in Water Resource Management Intern at MHV Water (groundwater scientist) Past Head of Science 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 24 January 2023, commencing at 2.15pm in the Council Chamber, 137 Havelock Street, Ashburton.

Present

Mayor Neil Brown, Councillor Ian Mackenzie, Chris Allen (Acting Chair), Adi Avnit, Angela Cushnie, James Meager and Genevieve de Spa

MS Teams – Clare Buchanan

In attendance

Environment Canterbury: Dave Moore (Facilitator), John Benn (DOC) and Carol McAtamney (minutes)

0 members of the public in attendance

1 Welcome

James Meager opened the meeting with a Karakia.

Acknowledgement

A moment's silence was observed for Councillor Rodger Letham. Cr Letham had recently been appointed as the ADC representative on the Zone Committee in October 2022 following the Local Body Elections.

2 Apologies

That apologies for absence be received on behalf of Bill Thomas, Les Wanhalla, Ian Mackenzie and Sidinei Teixeira

Meager/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 22 November 2022, be taken as read and confirmed.

Meager/de Spa

Carried

1. Matters Arising

Nil.

6 Correspondence

Inward:

Nil.

Outward:

Nil.

7 Public Contributions

Nil.

8 Zone Committee Action Plan Budget

\$50k has been allocated by Environment Canterbury to support the Ashburton Zone Committee's Action Plan initiatives in this financial year (1 July 2022 to 30 June 2023)

It was agreed that further workshops be set up to undertake more work on a strategy plan.

An application for funding has been received from Hekeoa/Hinds Water Enhancement Trust for native plant maintenance at NRR1 (South Hinds), MAR12 (Maronan Ealing Road) and MAR17 (Lennies Road) sites. It was agreed to defer this request until the March or April meeting for a decision.

9 Committee Updates

An Ōtūwharekai Open day has been scheduled for Saturday 25 February, 11.00am to 2.00pm.

10 Other Business

- Predator control programme at Staveley Camp – would like to engage with this project when the committee undertakes their visit.
- On the agenda the Tangata Whenua Facilitator is listed as Brad Waldon-Gibbons, he is no longer in this role and is to be removed.

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 28 March 2023.

The meeting closed at 2.31pm with a Karakia by James Meager.

Dated this 28th day of March 2023 _____ (Chair)

HUI/MEETING: Ashburton Canterbury Zone Committee	
AGENDA ITEM NO: 8	KAUPAPA/SUBJECT: Boundary Drain Variable Flow Trial – Five Year Review
KAITUHI/AUTHOR: Adrian Meredith, Kimberley Dynes, Maria Captein	WĀ/MEETING DATE: 28 March 2023

Purpose

To update the Zone Committee on the results of the review of water quality, habitat and environmental flow data from the Boundary Drain Variable Flow Trial, at the conclusion of its five-year consent trial.

Recommendation

That the Ashburton Water Management Zone Committee receives this presentation as a briefing on the results of the Boundary Drain Variable Flow Trial.

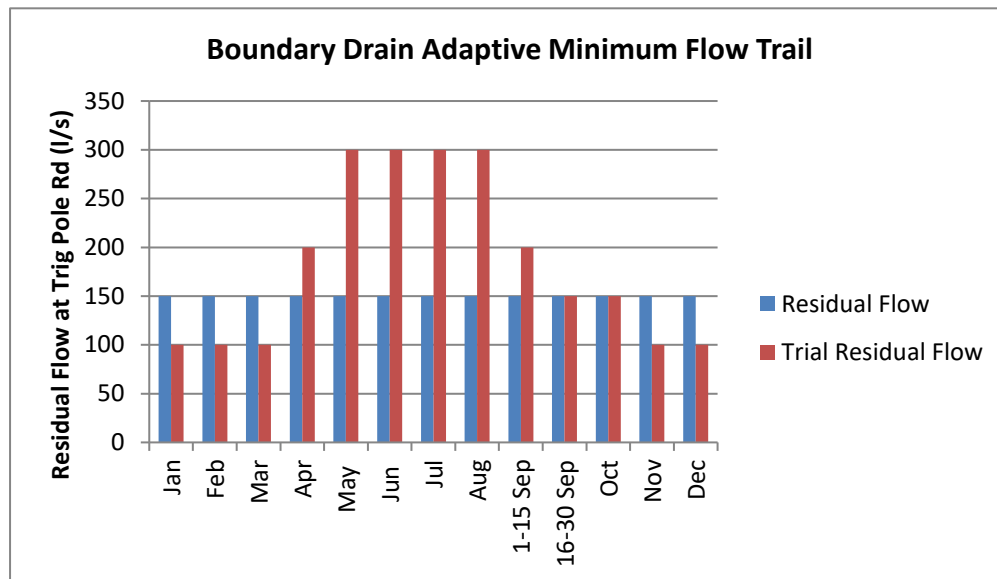
Boundary Drain Variable Flow Trial Five Year Review

1. Background

In 2017, consent was granted to a user group for a variable minimum flow regime for surface water takes on Boundary Drain. This variable flow regime was developed via the process of the Hinds Drain Working Party recommendations, which informed on the development of Plan Change 2 (PC2) to the Canterbury Land and Water Regional Plan. The Boundary Drain variable minimum flow trial recommendation came from a place where PC2 did not address flow and allocation rules, so left the HDWP to develop a process. The HDWP recommended a trial based on a consent of variable flows instead for water takes tied to a single flow at a single site on Boundary Drain. Prior to the minimum flow trial, the minimum flow for water takes connected to Boundary Drain was 150 L/s. This was a standardized minimum flow for the whole year. The trial involved a 5-year consent to trial the efficacy of the variable minimum flows. The minimum flows were as follows:

- i. 100 litres per second in January, February, and March;
- ii. 200 litres per second in April;
- iii. 300 litres per second in May, June, July, and August;
- iv. 200 litres per second from 1 September to 15 September;
- v. 150 litres per second from 16 September to 30 September, and October; and
- vi. 100 litres per second in November, and December.

These minimum flows were for either Boundary Drain where the minimum flow site was listed in the consent as “Trigpole Rd”, or a combined low flow for Boundary Drain and Morrows Drain at Lower Beach Rd where the minimum flow site was listed as “Lower Beach Rd”.



The change in minimum flows were adapted to increase water take reliability over the summer months, which are the critical periods for irrigation, whilst taking into account the higher flow requirements for migration and life stages of aquatic species outside these months. Other conditions of the consent trial included a fresh protection clause that water takes shall cease for 24 hours if greater than 25mm of rain is recorded. This is to allow for assessing the influence of freshes on hapūa opening/migration potential and maintaining drain habitat. The consent trial also stipulated that a management plan must be implemented and maintained. The Management Plan for Boundary Drain Variable Flow Trial sought the following outcomes:

- a. Increased flow variability, including fresh protection
- b. Maintained or Enhanced Fish Migration & Recruitment
- c. Maintained or Enhanced Fish Spawning
- d. Maintained or Enhanced Fish Habitat
- e. Maintained or Enhanced on farm economic benefits
- f. Maintained or Enhanced Cultural Values

A monitoring regime was implemented to assess the achievement of these outcomes over the 5-years of the consent trial. Monitoring was carried out by Fish and Game for fish and habitat monitoring; Environment Canterbury for hapūa openings, water quality, invertebrate, algal growth and flow/rainfall monitoring; consent holders for water take volume, record of shut down during fresh protection periods, economic assessments and provide assistance for cultural monitoring. Now that the 5-year trial period is complete, the purpose of this briefing is to report back on the findings of this monitoring and assess the effect of the adaptive minimum flow regime on the environmental objectives (outcomes a-d) of the trial. Richard Allibone from Water Ways Consulting was contracted in late 2022 to summarize the monitoring data that addresses outcomes a-d.

2. Summary of Boundary Drain Flow Variation Trial Five Year Review (Allibone, 2022)

The five-year period of the trial covered off two distinct flow regime periods. 2017-2019 was during a series of high flow events and the minimum flow limits were only triggered for a short period in early March 2017. Low flows were not observed again until early 2020, followed by an extended period of lower flows through 2020 and 2021 until the May 2021 floods in Mid Canterbury. While the 5-year length of the flow trial captured a spectrum of various flow regimes, it only captured one season where low flows were observed for a prolonged duration. During this time there were several triggers of the minimum flow. The hapūa was observed to be closed for a lengthy period during this period of summer low flows, when stream flows were not large enough to sustain a continuously open mouth.

Assessment of Flow Trial Environmental Objectives (A-D)

- a. *Increased Flow Variability, including Fresh Protection*

The effect of the flow trial on flow variability appears to be minimal. This is likely related to rainfall and flows being above the variable minimum flows for much of the trial. However, fresh protection is potentially an important factor for opening the hapūa and more knowledge is required to determine if the flows required to maintain hapūa openings were appropriate.
- b. *Maintained or Enhanced Fish Migration and Recruitment*

The hapūa was observed to be closed for a prolonged period when flows dropped below 150 l/s. This occurred during the summer migration periods of common and bluegill bullies into the drain, and inanga and Torrentfish outmigration in the late summer/autumn. Recruitment is therefore reliant on these species migrating during the restricted open periods. Recruitment appears to not only be limited by hapūa openings, but potentially by other limiting factors that could include available habitat, water quality and/or prey food source.

While fish migration and recruitment appears to have been maintained, there is no evidence it has been enhanced.
- c. *Maintained or Enhanced Fish Spawning*

Spawning data for the species present in Boundary Drain is difficult to determine. Therefore, data has only been collected for Brown Trout. Spawning data was variable between years but did not show an influence on spawning for the monitoring event that was captured during lower flows. Fish survey data suggests adult spawning brown trout are rare in Boundary Drain. Therefore, spawning may be restricted by the number of resident spawning adults, as opposed to available spawning habitat. Fish spawning appears to have been maintained throughout the trial but has not been enhanced.
- d. *Maintained or Enhanced Fish Habitat*

Fish habitat in Boundary Drain appears to be limited by diversity of habitat type, with run habitat being the dominant type. Modelling data shows that differences in habitat available at various flows is often small between 100-200 l/s and the variable minimum flow is not likely to alter habitat availability significantly. The key message from the report was that flow alone is not the only restricting factor of habitat suitability for the fish species present. Water quality and macroinvertebrate food

sources also influence the suitability of the habitat. Whilst the habitat was “maintained”, it was considered to be of poor quality in general.

In the lower reaches of Boundary Drain, the Morrows Drain Diversion transfer of water lead to a reduction in flow in lower Boundary Drain through much of the trial, and thus led to a reduction of habitat availability in the lower Boundary Drain. Habitat availability modelling indicated that the transfer of water from Boundary Drain to Morrows Drain is likely to result in a decline in available habitat for fish species in the lower Boundary Drain as a result of the lower flows.

Key messages:

Fish migration and recruitment, spawning, and habitat outcomes of the Boundary Drain Variable Flow Consent trial were maintained, however there is no evidence that they were enhanced. Flow variability alone is unlikely the only controlling factor of maintaining fish migration, recruitment, spawning or available habitat. The survivability of fish populations may be influenced by lack of preferred habitat, the effects of poor water quality and/or a limited macroinvertebrate food source. The Morrows drain diversion needs to be resolved more adequately to enable the trial to be more definitive.

3. Future Scenarios – consenting and flow/allocation.

The 2017 flow trial consent was adapted specifically for the flow and allocation requirements of Boundary Drain. In the absence of flow and allocation policies from PC2, the intention of the Hinds Drains Working Party recommendations for Boundary Drain was that the findings from the consent trial could be rolled out to other perennially flowing spring-fed waterways in the Hekeao/Hinds Plains with water takes and minimum flows. The variable flow regime aimed to capture key migration periods for fish that required higher flows for passage and habitat, while ensuring irrigation reliability during the critical summer months. The higher winter flows also consolidated winter habitat requirements (spawning and nursery waters) while restricting winter flow harvesting to storage.

Since 2017, we have had numerous iterations of the National Policy Statement for Freshwater Management (NPS-FM), and the development of Te Mana o te Wai. These resources need to be considered for the next steps. The future state of Boundary Drain also needs to be considered, with the LWRP requiring nitrogen loss reductions of

- (i) 15% by 1 January 2025
- (ii) 25% by 1 January 2030
- (iii) 36% by 1 January 2035

Should water and habitat quality be improved in the future, more weight would be put on low flow as the limiting factor of fish migration, recruitment, spawning or available habitat.

New consent application

The trial group have submitted a new consent application CRC222325 – to take and use surface water from Boundary Drain under s124 to continue the original trial consent

(CRC172449) for a further 5 years. In this proposed further trial, data would be gathered to inform the future ECan plan, due to be notified in 2024.

This application is currently under a s92 hold pending further information to be provided to the consent planners, which includes reference to this report and rūnanga's comment.

Implementing Te Mana o te Wai

Te Mana o te Wai is the fundamental concept of freshwater management.

⁴ **Te Mana o te Wai** refers to the fundamental importance of water. It recognises that protecting the health of freshwater also protects the health and well-being of the wider environment. Implementation is informed by six principles (Mana whakahaere, Kaitiakitanga, Manaakitanga, Governance, Stewardship, Care and Respect) and a hierarchy of obligations that are to be prioritised in implementing the NPSFM 2020. This hierarchy – in order - is:

- the health and well-being of water bodies and freshwater ecosystems;
- the health needs of people (such as drinking water); and
- the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

The Canterbury vision of Te Mana o te Wai is currently being developed in partnership with Tangata Whenua and will be included in the next regional Plan, however, Te Mana o te Wai principles are now being applied to Environment Canterbury's consenting process, as per the below March 2023 Environment Canterbury Technical Advice Note summary.



Technical Advice Note

NPSFM 2020 and Te Mana o te Wai – Impacts for consent processing (March 2023)

Disclaimer: This memo does not constitute legal advice and should not be relied upon as such.

Executive Summary

The National Policy Statement for Freshwater Management 2020 (NPSFM 2020) took effect on 3 September 2020 and has significant impacts on consent processes. In particular:

- Tangata whenua must be actively involved in decision-making related to freshwater and Environment Canterbury will therefore seek technical input from rūnanga via Tangata Whenua Advisory services regarding applications for consent.
- Applications for resource consent with the potential to impact on freshwater must include an assessment of the relevant provisions of the NPSFM 2020 to be receipted under s88 of the RMA;
- The significance of adverse effects for notification decisions are informed by the NPSFM 2020. Whether a proposal prioritises the health and well-being of waterbodies and freshwater ecosystems is relevant in assessing the significance of an adverse effect; and
- Decision makers must "have regard to" the relevant provisions of the NPSFM 2020 when making final decisions on consent applications. These need to be 'weighed' against other matters in s104 of the RMA, but the NPSFM 2020 carries 'considerable weight' and inconsistency with the hierarchy of obligations is likely to mean consent should be declined.

Initial advice has already been provided by Te Rūnanga o Arowhenua as part of the standard process for consent application CRC222325, which indicates further discussions for how Te Mana o te Wai will be implemented and incorporated into future plans. The monitoring and results conducted in this trial and the proposed continued trial will be an important part of informing future policy for the Hinds area.

Management Plan for Boundary Drain Variable Minimum Flow Trial

Objectives and Outcomes

The objective is to trial a flow sharing regime which maintains or enhances the existing natural, economic, and cultural values of the Boundary Drain Catchment.

The outcomes sought are:

- a. Increased flow variability, including fresh protection
- b. Maintained or Enhanced Fish Migration & Recruitment
- c. Maintained or Enhanced Fish Spawning
- d. Maintained or Enhanced Fish Habitat
- e. Maintained or Enhanced on farm economic benefits
- f. Maintained or Enhanced Cultural Values

The achievement of these outcomes will be assessed as over the five year trial period that these values have at least been maintained, or patterns have not degraded against those recorded at the beginning of the trial period.

Monitoring Regime

Monitoring activities which will contribute to the assessment of each outcome are identified in the table below. Each monitoring activity is described in more detail below the table. All of the monitoring will be combined to assess the success of the trial against its objective.

<u>Objective</u>	<u>Flow</u>	<u>Migration</u>	<u>Spawning</u>	<u>Habitat</u>	<u>On farm</u>	<u>Cultural</u>
Monitoring activity						
Flow	✓					
Rainfall	✓					
Takes	✓					
Fresh Protection	✓					
Electric Fishing		✓	✓	✓		
Habitat Assessments				✓		
Trout Spawning			✓			

Seine Netting		✓	✓			
Low Flow Blockages		✓		✓		
Hāpua opening		✓				
Invertebrates				✓		
Algae				✓		
Water Quality				✓		
On farm					✓	
Cultural						✓

Flow monitoring – drain flows will be monitored at three sites via telemetered Environment Canterbury flow monitoring sites – Boundary Drain at Trig Pole Road; Morrows Drain at Lower Beach Road; Boundary Drain at Lower Beach Road, locations shown in map attached. These three sites are maintained by Environment Canterbury.

Takes – Measuring of all takes will allow for naturalised flow records to be created to assess the impact of the variable minimum flow regime on stream flows. All takes from Boundary Drain will be measured and recorded as outlined in condition 13 of this consent. This is the responsibility of each consent holder.

Rainfall – To identify if the chosen rainfall parameter for invoking fresh protection achieves its function by reviewing the frequency of its occurrence and the level of fresh flow that is generated. Rainfall will be monitored at the Hinds Plains rain gauge site at Willowby, shown on attached map, maintained by the Environment Canterbury.

Fresh Protection – Together with rainfall records these records will be used to review the effectiveness of the fresh protection plan – specifically the if the amount of rain and the timing of response to shut down takes has an effect on hāpua opening and the role of freshes in maintaining drain habitat. Records of shutdowns for fresh protection shall be recorded including date, start and end time of shut down as per the Boundary Drain Fresh Protection Plan. This is the responsibility of the consent holders.

Electric Fishing - Electric fishing to identify fish species present, estimated population size in the representative flowing sections, and size distribution of individual species to identify age classes and therefore any possible impact on survival/breeding success due to environmental factors identified in other monitoring. Annual electric fishing of four representative reaches to determine native and sports fish species diversity and abundance by exclusion netting of sites

and multiple pass electric fishing will be completed in late September to mid-October annually by Central South Island Fish and Game (locations shown in map attached).

Habitat Assessments – Habitat Assessments will be undertaken to assess the state of habitat using key indicators of width, depth, substrate (including accumulation of fine sediment), algae cover and type (to assess if nuisance levels of algae growth aren't occurring) and invertebrates presence/absence will be completed by visual analysis at each of the four representative electric fishing reaches in September and October, and April and May annually by Central South Island Fish and Game.

Trout Spawning – Trout spawning surveys to identify distribution of suitable spawning habitat and any changes in its use that may indicate a change in adult trout population size and/or spawning habitat availability will be completed annually in July-August covering the whole length of the drain by Central South Island Fish and Game.

Seine Netting – The hāpua is an important habitat for breeding and completion of life cycles for native fish. Seine nets will be used to sweep representative habitat areas of the hāpua and samples will be assessed for native species present, life stages and size distribution of individual species to identify age classes and therefore any possible impact on native fish recruitment due to environmental factors identified in other monitoring. Seine netting will be completed in the Boundary Drain hāpua annually during late September to mid-October to assess for native fish recruitment. Netting will be completed by Central South Island Fish and Game, with nets and assistance provided by Environment Canterbury.

Low Flow Blockages / Contingency Plan – An assessment of blockages, barriers and dry reaches will be completed through the catchment when the combined flow of Boundary and Morrows Drains at Lower Beach Rd is at 100 L/s. If any blockages, barriers or dry reaches are found, then these areas will be reassessed to determine at what flows these are overcome. Assessments will be undertaken by Central South Island Fish & Game with assistance from consent holders. This will allow for the assessment of whether 100 L/s is an appropriate level for summer minimum flows.

Hāpua Opening – Monitoring of the frequency of hāpua openings will be undertaken via daily photos. This will allow for the assessment of the increased opportunity for recruitment and if the change in flow regime and fresh protection is effective in increasing openings. Environment Canterbury will establish a camera and undertake this monitoring.

Invertebrates – Macroinvertebrates will be monitored at two sites annually. Trig Pole Road and Lower Beach Road on Boundary Drain by Environment Canterbury as per the State of the Environment monitoring guidelines and utilising kick net sampling. Macroinvertebrates are an indicator of health of instream ecology and water quality, and sampling will allow for assessment if species present at the start of the trial remain available.

Algae – Algae will be monitored at two sites annually - Trig Pole Road and Lower Beach Road on Boundary Drain by Environment Canterbury as per the State of the Environment monitoring guidelines. This sampling will monitor the levels of nuisance algae growth as an indicator of maintenance of stream health.

Water Quality – Water quality monitoring will be undertaken quarterly at the Trig Pole Road site assessing comprehensive water quality indicators as part of Environment Canterbury’s State of the Environment monitoring. This is an ongoing monitoring site and can be used to assess changes in water quality that are caused by changes in the broader catchment and will allow additional assessment of the impact that this may have on other indicators being monitored. Monthly monitoring of nitrate-N and conductivity will be undertaken at two sites, Poplar Road at Davison’s Road and Trig Pole Road shown in attached map, by the Hinds Community Monitoring Programme (which is contributed to by Hinds Drains Working Party, Ashburton Zone Committee, Central South Island Fish & Game, Department of Conservation, FAR, Beef & Lamb, DairyNZ and Environment Canterbury). Nitrate-N is one of the key water quality indicators of increased intensification of land use and again can be used to assess the impact that changes in nitrate-N may have on other indicators being monitored. Changes in water quality are unlikely to be entirely attributable to the changes in minimum flow but including them is sensible and important to look at the broader health of Boundary Drain.

On-Farm Economic Impact – The impact on changes of availability of irrigation water will be assessed in accordance with the methodology developed by MacFarlane Rural Business. It is proposed that changes to irrigation days will be recorded by consent holders. In April, May, June, July, August, 1-15 September for days where the actual flow is less than the new consented minimum flow but greater than 150 L/s the consent holders will note any days where they would have irrigated but could not due to higher minimum flows. For November, December, January, February and March water take data will be used to determine days of flows between 150 L/s and 100 L/s where irrigation was used when it could not have been under previous consents. The number of days will then be used to calculate an average value for impact of increased or

reduced irrigation availability on farm. Environment Canterbury will pay for MacFarlane Rural Business to develop the methodology and assess the data. Consent Holders will record and provide data.

Cultural Monitoring – A Cultural Opportunity Mapping Assessment and Response (COMAR) assessment will be undertaken at the start and end of the trial to determine changes in cultural values. Te Rūnanga o Arowhenua will undertake this assessment, along with assistance from landowners providing access to sites as required.

Annual Review

A key part of the development of this recommendation from the Hinds Drains Working Party and ongoing management of the trial is based on the relationships, discussions and agreement from the partners involved.

An annual meeting will be held in July each year for the length of the trial inviting consent holders, Environment Canterbury, Department of Conservation, Central South Island Fish & Game and Te Rūnanga o Arowhenua. This meeting will review all of the monitoring data collected to the date of the meeting. Partners will discuss the progress towards achieving the trial objectives and outcomes. If any of the outcomes or values/patterns are not being maintained, for instance any negative impacts on an individual outcome, then partners will agree to modifications required to continue the trial for the following year. Any decisions for changes to management or monitoring of the trial will be recorded in writing and forwarded to all parties in August following the meeting.

At the completion of the trial a report will be compiled by all parties to assess the success of the full trial against the objective and outcomes. This will be presented to consent holders, all HDWP partners, the Ashburton Zone Committee and Environment Canterbury.

Consultation

This management plan has been developed in consultation with:

- Craig Fleming, Boundary Drain Trial Group
- Peter Lowe, Hinds Drain Working Party
- Mark Webb, Central South Island Fish & Game
- Adrian Meredith, Environment Canterbury

- Karl Russell, Te Rūnanga o Arowhenua (with regard to Cultural Monitoring)
- Rosemary Miller, Department of Conservation (provided comment on draft)

Attachments

- Map showing sampling locations

Boundary Drain

Information has been derived from various sources, including Environment Canterbury Regional Council's databases. Boundary information is derived under license from LINZ Digital Cadastral Database (Copyright Reserved). Environment Canterbury Regional Council does not give and expressly disclaim any warranty as to the accuracy or completeness of the information or its fitness for any purpose.

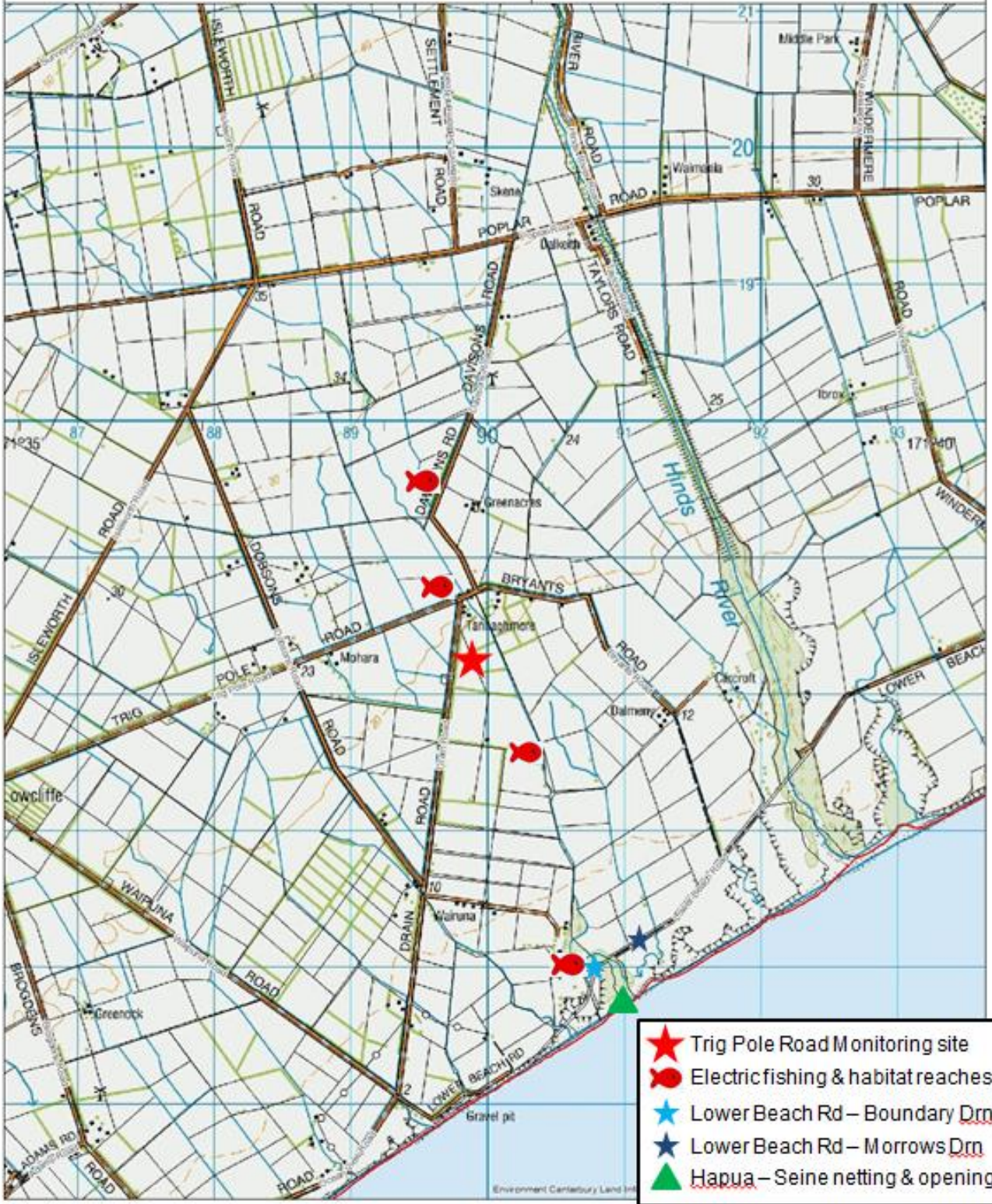
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0 0.5 1 1.5 2 Kilometres

Scale: 1:25,000 @A3

Map Created by Environment Canterbury on 7/02/2017 10:54:55 a.m.



- ★ Trig Pole Road Monitoring site
- 🐟 Electric fishing & habitat reaches
- ★ Lower Beach Rd – Boundary Drain
- ★ Lower Beach Rd – Morrows Drain
- ▲ Hapua – Seine netting & opening

HUI/MEETING: Ashburton Water Management Zone Committee	
AGENDA ITEM NO: 9	KAUPAPA/SUBJECT: Social Media Guidelines
KAITUHI/AUTHOR: Kim Whitwell	WĀ/MEETING DATE: 28 March 2023

Purpose

To update the Zone Committee on guidelines for social media use.

Recommendation

That the Ashburton Water Management Zone Committee receives this update and considers how it would like to use social media.

Report

This kaupapa (topic) relates to communicating and engaging with the community across all of the Zone Committee Action Plan priorities and specifically to the Action Plan objective:

- **Utilising our members' communications channels** such as newsletters, news media and social media to educate and promote mahinga kai and tangata whenua values.

Kim Whitwell, *Principal Communications and Engagement Advisor* from Environment Canterbury, will discuss the social media options and guidelines and receive questions. Kim's presentation *Social Media Guidelines for Water Zone Committees* is attached.



Social media guidelines for water zone committees

Rangitata River, Canterbury

A bit of background...

- The purpose of this document is to provide zone committee members with the guidelines for **leveraging their own social media networks** to tell the story of what's happening in their water zone.
- In July 2021, the Canterbury Water Facebook page was disestablished following a gradual drop in engagement from its followers. It was decided that, while the page included a lot of content about the water zones, it wasn't effectively reaching the local audience that zone committees need to be connecting with.
- Environment Canterbury's communications team wants to encourage and empower zone committee members to use their own social media channels to share news/updates/events on behalf of their committee. This is more of a **'locals talking to locals'** approach.
- A lot of zone committee members already have an established social media network with those in their local catchments; whether it's friends and family, colleagues, connections/commitments with other community organisations. These guidelines will help to **leverage these pre-existing networks and suggest ways to connect with more people in the community.**
- The Environment Canterbury communications team is still here to answer questions and provide advice you might need for sharing zone committee news through your own social media networks.



Why use social media?

- It allows individuals, organisations and media to **connect with people instantaneously**, tell their stories directly and participate in **conversations relevant to them**.
- Through social media, water zone committee members are encouraged to **share information, events and stories**.
- We recommend **using your own social media channels** and leverage your own relationships to share zone committee information.

Facebook

- The most popular social media platform with over **one billion users**.
- Primarily used for people to share photos and videos, send messages and **stay connected with people and groups or businesses**.
- The **preferred social media channel for water zone committees** to engage with community.
- The most popular social media channel in **rural areas**.
- An easy channel to engage with **community groups**.

Personal Facebook profile

- If you are comfortable, we recommend utilizing your existing connections through your own **Facebook profile**.
- This is a great way to share water zone committee information and stories with your friends and family, and those who have a shared interest.
- Encourage your Facebook friends to **share their opinion** on your post - or even **share the post** itself.
- Posting to your own page first can be a great way to **test which content resonates** with people the most, before you consider posting in other places.

Facebook pages and groups

Facebook Page:

- A public page is usually created to **promote businesses, organisations, and causes**.
- Pages have 'fans' or 'followers'.
- Posts are public and are generally **available to everyone** on Facebook.
- People who manage a page are called **page admin**. They make posts to the page.

Facebook Group:

- Provides a space for people to communicate about shared interests. They can be **created by anyone**.
- There is more privacy around a group, and posts are mostly only **visible to group members**.
- The group admin can accept or decline new members and can remove posts that are against group guidelines.
- **Posts can made by any group member**.

Connecting with local groups and pages

Think about the local community **groups** and **pages** that people in your water zone follow. Are there local groups or pages that have an environmental focus? Outdoorsy focus? Volunteer focus?

Connecting with local Facebook Groups:

- You can become a 'member' of a **group** you wish to connect with.
- Once you're a member, you can post to the group from your personal Facebook profile.

Connecting with local Facebook Pages:

- Remember, **only admins can post content to a page**, so if you want to share content on a local page, you would need to **contact the page admin directly** (via Facebook messenger or – if you know the admin personally – by email).
- The Environment Canterbury communications team can help you with creating and sending content through to a page admin.

Local groups and pages in your zone

Christchurch West Melton


Local Facebook Groups:

- | | |
|--------------------------------|----|
| 1. Cashmere Neighbourhood | 5. |
| 2. Wigram Skies Community Page | 6. |
| 3. Halswell Community Group | 7. |
| 4. | 8. |

Local Facebook Pages:

- | | |
|------------------------------------|--|
| 1. Ōpāwaho-Heathcote River Network | 5. Avon-Heathcote Estuary Ihutai Trust |
| 2. Cashmere Stream Care Group | 6. |
| 3. Avon-Ōtākaro Network | 7. |
| 4. Styx Living Laboratory Trust | 8. |

Example Facebook posts

 [Redacted Name]
Aug 6


Hey Wigram! 🙌 Are you passionate about our local environment? 🌱 Perhaps you have some ideas for protecting the health of our local awa (rivers).

Come and share your ideas at the next Christchurch West Melton water zone committee meeting:

- 💧 Monday 7 July
- 💧 Wigram Village Green, Harvard Community Lounge
- 🕒 6pm

Learn more about the committee:
bit.ly/chch-westmelton-water-zone

[Show Less](#)



👍 Like 💬 Comment ➦ Share

Example: invitation to a meeting



 [Redacted Name]
Aug 8

📸 Awesome group of volunteers planting along the Cashmere Stream today 🌱

With support from the Christchurch West Melton Water Zone Committee, the **Cashmere Stream Care Group** has been able to plant 2,500 natives.

If you want to know more about the Committee and other projects we're helping with, visit our page: bit.ly/chch-westmelton-water-zone

#PlantingDay #CashmereStream

[Show Less](#)



25 👍 Like 💬 Comment ➦ Share

Example: showing a project in action/community involvement



Facebook post top tips (1/2):

Feature	Recommendation	Purpose
Post impact (‘know, feel, do’ model)	<ul style="list-style-type: none"> What do you want your audience to know, feel and do? Encourage engagement. 	Adds value, educates, engages and entertains.
. Length	<ul style="list-style-type: none"> Keep posts simple using bullet points to break up ideas. 	Increases readability and allows info to be consumed quickly and easily.
. Tone of voice	<ul style="list-style-type: none"> Caring, positive, and conversational Use ‘us’ and ‘we’ where possible. 	Shows empathy, is personable and approachable.
. Te Reo Māori	<ul style="list-style-type: none"> Place names/words/phrases Tohutō/macrons. 	Acknowledges tangata whenua and educates.

Hey Wigram! 🌱 Are you passionate about our local environment? 🌿 Perhaps you have some ideas for protecting the health of our local awa (rivers).

Come and share your ideas at the next Christchurch West Melton water zone committee meeting:

💧 Monday 7 July
 💧 Wigram Village Green, Harvard Community Lounge
 🕒 6pm

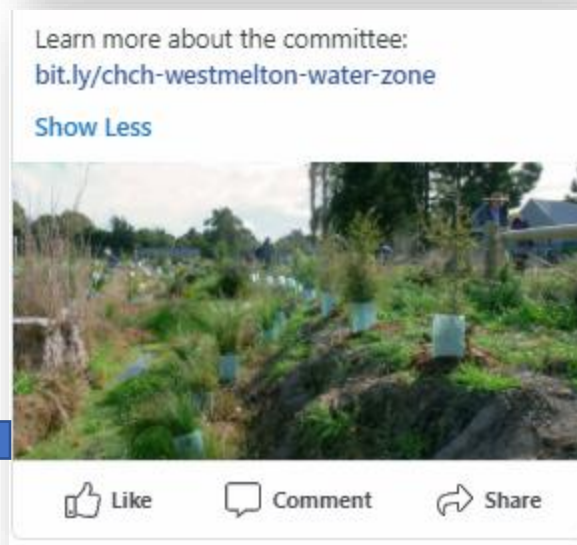
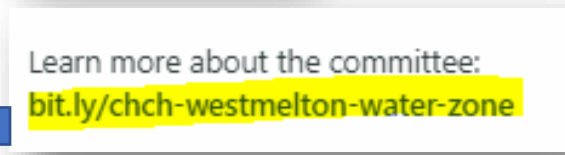
Hey Wigram! 🌱 Are you passionate about our local environment? 🌿 Perhaps you have some ideas for protecting the health of our local streams and rivers...

ideas for protecting the health of our local awa (rivers).



Facebook post top tips (2/2):

Feature	Recommendation	Purpose
Emojis	<ul style="list-style-type: none"> • Use where they make sense • Start/end of sentences • Avoid replacing words with emojis. 	Adds personality and colour.
Links	<ul style="list-style-type: none"> • Shorten long external links using Bit.ly • See web team to shorten internal links • Double check your links aren't broken. 	Keeps your post tidy and concise.
Tagging	<ul style="list-style-type: none"> • Tag relevant stakeholders' accounts. 	Shows courtesy, collaboration and invites stakeholders to share your post.
Hashtags	<ul style="list-style-type: none"> • Check if your post aligns with trending #hashtags • Handy for campaigns or a series of posts • Limit to 1-2. 	Helps your content be discovered and connects your post to a theme or conversation.
Photo/video credit	<ul style="list-style-type: none"> • Credit the photographer • Check you have permission to share content • Follow standard social media sizes. 	Gives appreciation, respect and ensures consistency.



Responding to comments

Once you've made a post, you may receive some discussion or questions in the comments section. This is great – **discussion and comments equals engagement.**

Tips for responding to questions in the comments section:

- **Be timely** - respond as soon as you can so you can ensure answers are factually correct and you're seen to be actively engaged in the content you are sharing.
- **If you don't know the answer to a question, that's ok.** You can still reply to the comment but say something like: "Great question! I'll just need to check the details. Let me get back to you on that one." Once you have the answer, go back to that person.
- **Spell-check** your response before you send your reply.
- Provide as much information as you can – **links to more information** are always helpful.
- **Avoid** posting people's **private information** (e.g. address or phone number).
- **Be wary of 'trolls'** on Facebook. There is no need to respond to comments/questions that you know are from someone who is just trying to rally hate or mock. Avoid engaging with these people.
- If someone asks a curly question or wants to get in touch with someone from Environment Canterbury, please **let your communications advisor know.** They will coordinate gathering more information or contact details if it's required.

Coming up with content ideas

Always be looking for photo/video opportunities that would help with a post:

- Local signage (e.g. reducing sediment signs).
- Local flora/fauna.
- Natural health indicators of local streams/rivers.
- People at planting days – **make sure you have their permission** and let them know where you intend to share the photos. (It's ok if someone doesn't want to be photographed. If permission isn't possible, try to take photos without faces in them).

Other tips:

- If you use a photo that someone else has taken, remember to **credit them** in the Facebook post.
- Your communications advisor can help with content ideas.
- Facebook prioritises content that is informative and entertaining from friends and family first. It targets posts to users that are specific or related to the way they engage with the platform. For this reason, aim to create or share content that **sparks conversation** and engagement and tell stories that **connect emotionally** with your audience.

Other social media platforms

While we suggest Facebook as the key social media platform for promoting water zone committees, there are other platforms that you may want to consider or already use.

We only suggest these platforms if you are confident in using them:

Neighbourly:

- For posting to 'local neighbourhoods' from personal profiles.

Linkedin:

- For sharing achievements and key messages from the committee, or success stories and events from the community.
- If you already have an established LinkedIn network, we encourage you to post to your personal LinkedIn profile.

While these are different social media platforms, the guidelines we've provided for posting on Facebook are still relevant.



Environment Canterbury Regional Council

Kaunihera Taiao ki Waitaha

Taking action together to shape a thriving and resilient Canterbury, now and for future generations.

Toitū te marae o Tāne, toitū te marae o Tangaroa, toitū te iwi.

www.ecan.govt.nz

HUI/MEETING: Ashburton Water Zone Committee	
AGENDA ITEM NO: 10	KAUPAPA/SUBJECT: Zone Committee updates
KAITUHI/AUTHOR: Dave Moore	WĀ/MEETING DATE: 28 March 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. Upcoming events

31 March Southern Zone Committees Hui, Waihao Marae Morven

1 May Rakitata Revival Field Trip

We would like to make this a combined OTOP and Ashburton ZCs field trip with open invitations to any Lower and Upper Waitaki members who wish to attend.

We are timing this to coincide with the launch of the draft Rakitata Revival Strategy, which has been developed by DOC and Arowhenua, with input from other partners and provides key actions to work towards the goal of restoring the mauri of the Rakitata River. More info about the programme is online at <https://www.doc.govt.nz/our-work/freshwater-restoration/nga-awa/rakitata-river-restoration/>. The partners are ECan, DOC, Arowhenua, Central South Island Fish & Game, Ashburton District Council, Timaru District Council and LINZ. We are thinking of meeting somewhere close to the river, perhaps the Ealing Hall for morning tea and an overview of the project and discussions on Zone Committee's involvement. Initial thoughts are to keep the group relatively small (logistically achievable). However, there will be opportunities for Catchment Groups, etc to have workshops on the strategy if they wish. Then we would visit a couple of sites such as McKinnon's Creek Hatchery and perhaps Ian Thornton's wetland. Lunch and discussions to finish.

23 May Meeting / working bee at Staveley Camp

2. Ōtūwharekai Information Day

A pop-up information day, held at Te Puna-a-Taka/Lake Clearwater on February 25th, was a successful event that drew a good turnout from the public.

Co-hosted by the Ashburton Water Zone Committee and the Ōtūwharekai Working Group, the day was an opportunity for people to learn more about the work underway to restore the area's lakes.

Attendees included hut-holders, Forest and Bird, and farmers – who put their questions to the groups and agencies involved with the working group and zone committee.

Environment Canterbury followed up with stakeholders after the event, and shared content about the day:

- A news story was published on Environment Canterbury's website, and shared with local media: [Strong turnout to Ōtūharekai pop-up event | Environment Canterbury \(ecan.govt.nz\)](https://www.ecan.govt.nz/news/strong-turnout-to-otuharekai-pop-up-event/) (PDF version also attached)
- A variation of the news story has been published in the Southern News (part of a one-page regular newspaper advertorial), sent as an e-newsletter to those signed up to the Ōtūharekai Working Group mailout list, and included in the hut-holders' newsletter.
- A video was posted to Environment Canterbury's Facebook page, and published on YouTube. Members of the working group and zone committee were invited to share this. [\(13\) Ōtūharekai water quality discussion - YouTube](https://www.youtube.com/watch?v=13Otuharekai)

Photos of Zone Committee members at the event







Strong turnout to Ōtūwharekai pop-up event

Date: 03 Mar 2023

The beauty of the Ōtūwharekai/Ashburton Lakes was impossible to miss at a recent pop-up event, where people had the chance to learn more about initiatives to improve the lakes' water quality and health.

Hut-holders, farmers, and conservation groups were among those who attended. They put their questions to the groups and agencies involved with the Ōtūwharekai Working Group and the [Ashburton Water Zone Committee](#).

Causes and actions

Most questions were centred around the causes of the lake water degradation, and whether current actions were helping improve water quality. Environment Canterbury scientists were on-hand to explain that although it's too early to see an improvement trend yet, the extra scientific data gathered is helping shape a better understanding of the issues with algae and nutrients in the lake. The team also had their monitoring gear on display, including the tools used to measure water clarity and colour.

There were also live native fish displays from [Central South Island Fish & Game Council](#) and information about stream surveys from the [Department of Conservation](#). [Ashburton District Council](#) highlighted requirements for visitor behaviour in the area, and the [Ministry for Primary Industries](#) talked about the support they can provide to local farmers.

Forest and Bird showcased the range of voluntary pest control and biodiversity work they're carrying out in the area. Younger visitors had fun learning about human impacts on waterways and everyone enjoyed the sausage sizzle, run as a fundraiser by the local [Fire and Emergency NZ](#) crew.



Department of Conservation (DOC) ranger Ian Fraser presented information about stream surveys and the area's wider biodiversity

On-the-ground work

The event highlighted the on-the-ground actions underway by the Ōtūwharekai Working Group (made up of Papatipu Rūnanga with connection to the area, councils, crown agencies and landowners) and other organisations to restore and enhance this special location. These actions include nutrient reductions on-farm, additional science investigations, the removal of long-drop toilets at the settlement, and biodiversity surveys.

Ōtūwharekai Working Group Co-chair Judith Earl-Goulet was thrilled to see others wanting to learn more about ways they can help.

"It's not just about protecting water quality – but the area's wider biodiversity, including bird life. All of us have a role to play in protecting the mana of this environment," she said.

To find out more visit our [Ōtūwharekai homepage](#).



Children's activities included the popular 'Tuna & Drains' game

HUI/MEETING: Ashburton Water Management Zone Committee	
AGENDA ITEM NO: 11	KAUPAPA/SUBJECT: MCCC Water Science Update project
KAITUHI/AUTHOR: Dave Moore	WĀ/MEETING DATE: 28 March 2023

Purpose

To update the Ashburton Water Zone Committee on the Mid Canterbury Catchment Collective's Water Science Summary report to the.

Recommendation

That the Ashburton Water Management Zone Committee receives the report and provides feedback.

Report

In the 2021/22 financial year the Ashburton Water Zone Committee recommended \$6,000 of its Action Plan fund for MCCC for development of catchment science information. MCCC engaged University of Canterbury MSc student Romy Van Der Boom on a summer scholarship to collate historical water quality and quantity data over the summer of 2022/23.

Romy Van Der Boom and Phill Everest (MCCC) will present a report summarising the work completed.