



Christchurch West Melton Water Management Zone Committee AGENDA

Notice of Meeting:

A meeting of the Christchurch West Melton Water Management Zone Committee will be held on:

Date: Thursday 23 March 2017

Time: 4.30pm

Venue: **Fendalton Service Centre**

Cnr Clyde and Jeffreys Roads

Membership

Chairperson Arapata Reuben Tuahuriri Runanga

Suzanne Furkert Community Representative Deputy Chairperson Councillor Pauline Cotter Christchurch City Council

Members Councillor Debra Hasson Selwyn District Council

Tom Lambie Environment Canterbury

Herewini Banks Te Hapu o Ngati Wheke/Rapaki

Les Wanhalla Te Taumutu Runanga

Andrew Congalton Community Representative Chris Kelliher Community Representative

Robert Wynn-Williams Community Representative

Kevin Brown Community Representative Lance Kenyon Community Representative

17 March 2017

Principal Advisor Diane Shelander Senior Policy Analyst

Tel: 941 8304

Christchurch City Council

Zone Facilitator Lesley Woudberg Tel: 027 706 4273 **Environment Canterbury**

Committee Advisor Liz Ryley Tel: 941 8153 **Christchurch City Council**









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1. Apologies

At the close of the agenda no apologies had been received.

2. Confirmation of Previous Minutes

That the minutes of the Christchurch West Melton Water Management Zone Committee meeting held on <u>Thursday</u>, <u>23 February 2017</u> be confirmed (refer page 5).

3. Matters Arising from the Minutes

4. Deputations by Appointment

There were no deputations by appointment at the time the agenda was prepared.

- 5. Identification of Urgent Items
- 6. Identification of General Public Contributions









Christchurch West Melton Water Management Zone Committee OPEN MINUTES

Date: Thursday 23 February 2017

Time: 6.00pm

Venue: Avon Rowing Club

Kerrs Reach, Wainoni

Present

Chairperson Arapata Reuben Tuahuriri Runanga

Deputy Suzanne Furkert Community Representative
Chairperson Councillor Pauline Cotter Christchurch City Council

Members Tom Lambie Environment Canterbury

Chris Kelliher Community Representative

Robert Wynn-Williams Community Representative

Kevin Brown Community Representative Lance Kenyon Community Representative

22 February 2017

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Christchurch City Council

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Teoti Jarden opened the meeting with a mihi/karakia.

The agenda was dealt with in the following order.

1. Apologies

Committee Resolved CWZC/2017/00001

It was resolved on the motion of Member Reuben, seconded by Member Furkert that apologies from Herewini Banks and Councillor Debra Hasson, be accepted.

Member Reuben/Member Furkert

Carried

2. Confirmation of Previous Minutes

Committee Resolved CWZC/2017/00002

Committee Decision

That the minutes of the Christchurch West Melton Water Management Zone Committee meeting held on Thursday, 24 November 2016 be confirmed.

Note: There were no minutes from 26 January 2017 as the meeting was not held due to unforeseen circumstances.

Councillor Cotter/Member Kenyon

Carried

3. Matters Arising from the Minutes

Kevin Brown asked if an invitation had been sent to the Water Race Committee to attend the Zone Committee meeting, as noted on page 8 of the previous minutes. The Committee was informed that Murray England, Asset Manager Water Services, Selwyn District Council, would attend the March 2017 meeting.

The Committee members were informed that as part of an Environment Canterbury water conservation campaign launch, a notice was sent out with rates notices about conserving water.

It was noted that no feedback had been received in relation to the Five Year Integrated Work Plan.

4. Deputations by Appointment

There were no deputations by appointment.

5. Identification of Urgent Items

Lesley Woudberg will provide an update on the fire on the Port Hills later in the meeting.





6. Identification of General Public Contributions

Nil.

7. Working of the Zone Committee 2017

Each year the Committee is required to elect the Chair, Deputy Chair and the Committee's Regional Representative. Nominations were called for the positions.

Committee Resolved CWZC/2017/00003

Joint Committee Decision

That the Christchurch West Melton Water Management Zone Committee elect:

2.1 Arapata Reuben as Chair for 2017

Suzanne Furkert as Deputy Chair for 2017

Les Wanhalla as Regional Representative for 2017, subject to his acceptance*.

- 2.2 Meet 6pm- 9pm on the fourth Thursday of the month as set out the following schedule:
 - 26 January
 - 23 February Kerrs Reach (Lower Avon and Red Zone)
 - 23 March Fendalton Service Centre
 - 27 April
 - 25 May
 - 22 June
 - 27 July
 - 24 August
 - 28 September
 - 26 October
 - 23 November

2.3 Organise its work into the following working groups:

Urban Contaminants Working Group	Andrew Congalton – Chair
	Pauline Cotter
	Suzanne Furkert
	Tom Lambie
Cashmere Stream	Ken Rouse – Chair
	Arapata Reuben
	Herewini Banks
	Les Wanhalla
Liaison with community groups	Suzanne Furkert
Styx Living Laboratory	
Avon /Ōtakaro Network	
Heathcote/Ōpāwaho network	
Estuary Ihutai Trust	
Groundwater/Drylands	Chris Kelliher – Chair
	Robert Wynn-Williams
	Kevin Brown





Communication/Engagement	Arapata Reuben – Chair
	Suzanne Furkert
Biodiversity - Immediate Steps	Lance Kenyon – Chair
	Les Wanhalla
	Tom Lambie
	(Note Arapata Reuben
	stepped down from this
	working group)

^{*} The Committee received advice following the meeting that Les Wanhalla accepted the nomination to the Regional Committee.

Member Wynn-Williams/Member Kelliher

Carried

8. Ōtākaro/Avon River Corridor Regeneration Plan

Comments

Robb Kerr and Eric Hennephof from Regenerate Christchurch spoke about the process underway to develop a plan for the redevelopment of the residential red zone along the Ōtākaro /Avon River corridor.

The Zone Committee can add value by holding a workshop with Regenerate Christchurch and communities of interest along the river.

Regenerate Christchurch will be providing material to the Zone Committee to review and provide comment on http://www.regeneratechristchurch.nz/residential-red-zone/.

There will be a number of events organised by Regenerate Christchurch for the Zone Committee to identify a representative for.

Committee Resolved CWZC/2017/00004

Joint Committee Decision

That the Christchurch West Melton Water Management Zone Committee:

1. Notes the process underway to develop the Ōtākaro/Avon River Corridor Regeneration Plan.

Councillor Cotter/Member Kelliher

Carried

Improving Recreation and River Health in the Lower Avon/Ōtākaro River Comments

A memo from Nicolas Head to John Benn, Department of Conservation, was tabled and read at the meeting about Canadian Geese being beneficial in helping to maintain lake edge turf communities.

Committee Resolved CWZC/2017/00005

Joint Staff and Committee Decision





That the Christchurch West Melton Water Management Zone Committee:

- 2.1 Note the report on issues, possible solutions and actions currently underway or planned to improve recreation and river health in the lower Avon River/Ōtākaro.
- 2.2 Agree to the following recommendations to the Christchurch City Council for short to medium term actions:
 - Multi-agency and community approach to getting rid of flag iris and other invasive weeds, and replacing with long exotic grass and native plantings in suitable locations. Provide advice on how volunteers can be involved effectively with removing these weeds.
 - Quick removal of large debris in river. Have a Christchurch City Council ranger, contractor or volunteer (if appropriate) go out 1-2 times a week in a motor boat and drag/lift the islands/debris and remove from the water (to above high tide mark or dispose appropriately).
 - Advertise "Snap Send and Solve" with recreational users.
 - Reduce weed in bottom of river, and floating on the top, to a greater extent and during more of the year so that the impact it has on water recreation is significantly reduced.
 - Support creation of a transitional dual cycle and walkway from Barbadoes Street to the Estuary. Include some park benches where possible.
 - Add public toilets at Kerrs Reach and at the Mahinga Kai exemplar site. These could be transitional facilities such as portaloos or container toilets that can be moved.
 - Provide more education to the public that Canadian Geese are a pest, like the possums of our rivers.
- 2.3 Agree that the Christchurch West Melton Zone Committee ask the Christchurch City Council to provide a report by 1 June 2017 of what is required to achieve these actions, including annual and long-term planning and budgeting requirements.
- 2.4 Agree that the Christchurch West Melton Zone Committee actively search for opportunities to support the above actions.

Member Furkert/Member Kenyon

Carried

10. Update Working Groups

The Committee received updates on the following Working Groups:

- Urban Contaminant
- Rural Catchment
 - A map was tabled showing the land affected by the Port Hills fire to March 2017 and Lesley Woudberg provided a verbal update about the affected areas





- Groundwater/Drylands
 - A map of the Selwyn District Council water races was tabled at the meeting and will be emailed to the Committee members
- Communication and Engagement
- Biodiversity Immediate Steps Funding
 - The Working Group has received around 12 applications to the Immediate Steps Funding
- Regional Committee
- Liaison with Community Groups

Committee Resolved CWZC/2017/00006

Joint Staff and Committee Decision

That the Christchurch West Melton Water Management Zone Committee:

- 1. Receives the information in the report.
- 2. Provides feedback on the activities of each Working Group.
- 3. Provides guidance on the next steps proposed by each Working Group.

Councillor Cotter/Member Brown

Carried

11. Facilitator Update

The Annual Report was reviewed and the following comments made:

- Suzanne Furkert requested an addition under Key Milestones to refer to work relating to brake pads that is being undertaken; and an addition under Key work programmes underway about brake pads and heavy metals.
- Robert Wynn-Williams requested under CWMS targets "what have we achieved", to be changed to "what has been achieved in the zone".
- Any further comments about the Annual Report are to be provided to Lesley by Monday 27
 February 2017.

A copy of the Ōpāwaho/Heathcote Stormwater Management Plan was tabled at the meeting and a copy will be made available to members if requested by them.





Paul Hulse advised the Committee that he has taken on the role of Zone Delivery Manager for a one year period. He introduced James Tricker to the meeting. James will be acting as Zone Committee Manager during that period.

Committee Resolved CWZC/2017/00007

Joint Staff and Committee Decision

That the Christchurch West Melton Water Management Zone Committee:

- 1. Notes the upcoming events.
- 2. Agrees that the Christchurch West Melton Water Management Zone Committee approves the Christchurch West Melton Annual Report 2016 (Attachment A) subject to amendments as agreed at this meeting subject to the edits requested.
- 3. Notes that the Annual Report will be presented by the Zone Committee Chair to the:
 - a. Christchurch City Council 23 March 2017
 - b. Environment Canterbury (Date TBC)
- 4. Notes landowners in the Selwyn Waihora Zone have been reminded of their responsibility to meet nutrient management limits and apply for consent to farm (7 February 2017).
- 5. Notes the area affected by the fires last week.
- 6. Notes the update on the Ōpāwaho/Heathcote Stormwater Management Plan.

Member Reuben/Member Kenyon

Carried

Teoti Jarden closed with a mihi/karakia.

Meeting concluded at 8.12PM.

CONFIRMED THIS 23RD DAY OF MARCH 2017

ARAPATA REUBEN CHAIRPERSON





7. Water Races - Selwyn District Council

Reference: 17/272525

Contact: Murray England murray.england@sdc.govt.nz 03 347-2800

1. Purpose of Report

1.1 This report provides information on the water race system managed by Selwyn District Council.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Receive the report on the water race system managed by Selwyn District Council.

3. Report

We estimate that the water race system accounts for approximately 0.3 cubic meters per second of the water coming into the Christchurch groundwater system. Total inputs are estimated as 13.4 cubic meters per second.

The water race network in central Canterbury began over 120 years ago and was established to provide reliable water source for agriculture. The primary purpose of the water race network today is essentially the same, although the network faces pressure from other resource users such as recreational, cultural, fisheries and wildlife users.

The Selwyn District Council manages and maintains three networks. Uses of the network pay for the service and management/maintenance of the system.

The Paparua network service 2,965ha with the Christchurch City Council boundary. Christchurch City Council contributes (approximately \$80,000/yr) to the management/maintenance of the Paparua water race network in recognition of the environmental and amenity values provided.

With changing water use and supply the Selwyn District Council continually reviews the management of the water race networks it is responsible for.

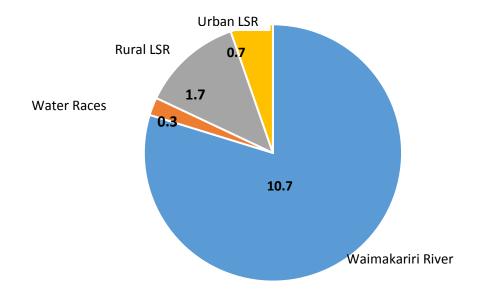
http://www.selwyn.govt.nz/my-property/5waters-services/water-races





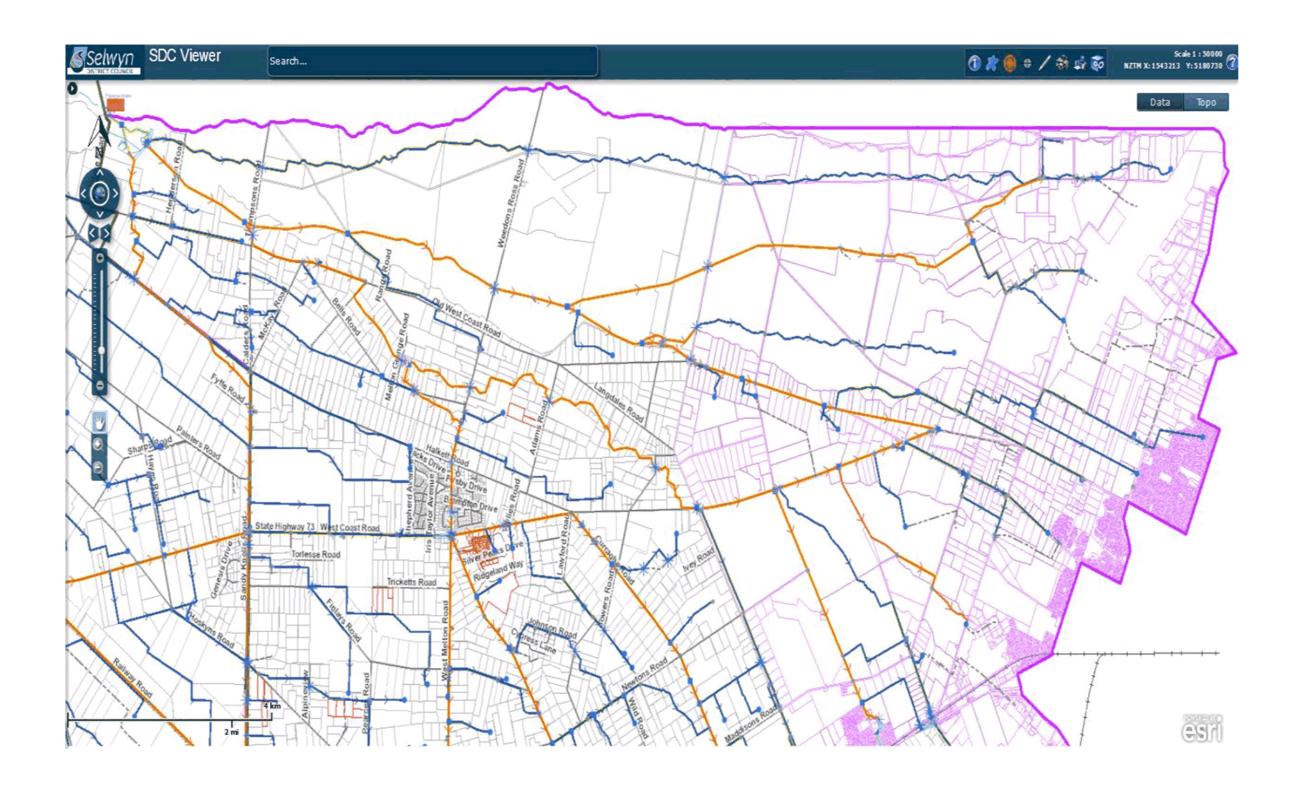
INPUTS (RECHARGE) in cubic meters per second

LSR = land surface recharge (seepage through soil)



Attachments

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8. Groundwater/Drylands Working Group

Reference: 17/273704

Groundwater/

Contact: Drylands Working

chris.kelliher@rabobank.com

Enter phone.

Group – Chris Kelliher

1. Purpose of Report

- 1.1 This report is to inform the Zone Committee of the progress the Working Group has made to achieve its objectives which are:
 - Know how much water is available for use
 - Understand the landownership pattern within the "protection zone"
 - Understand the threats to Christchurch's groundwater system
 - Identify how the Working Group can protect this resource for future generations.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

- 1. Receives the Groundwater/Drylands Working Group report.
- 2. Agrees as the next step to safeguard the groundwater quality and flows for multiple uses (as per the Christchurch West Melton Zone Implementation Programme Priority Issue 4.1).

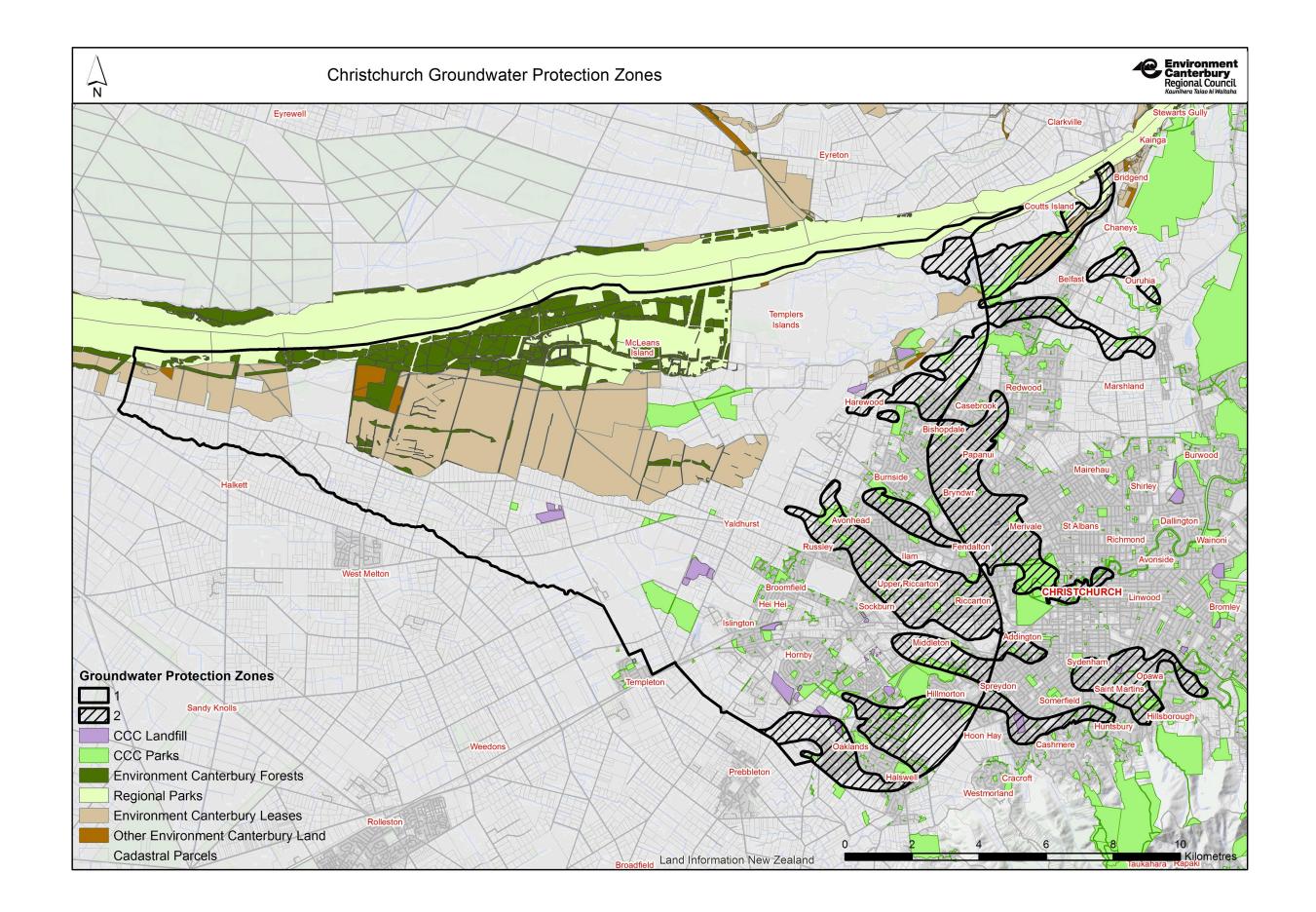
3. Report

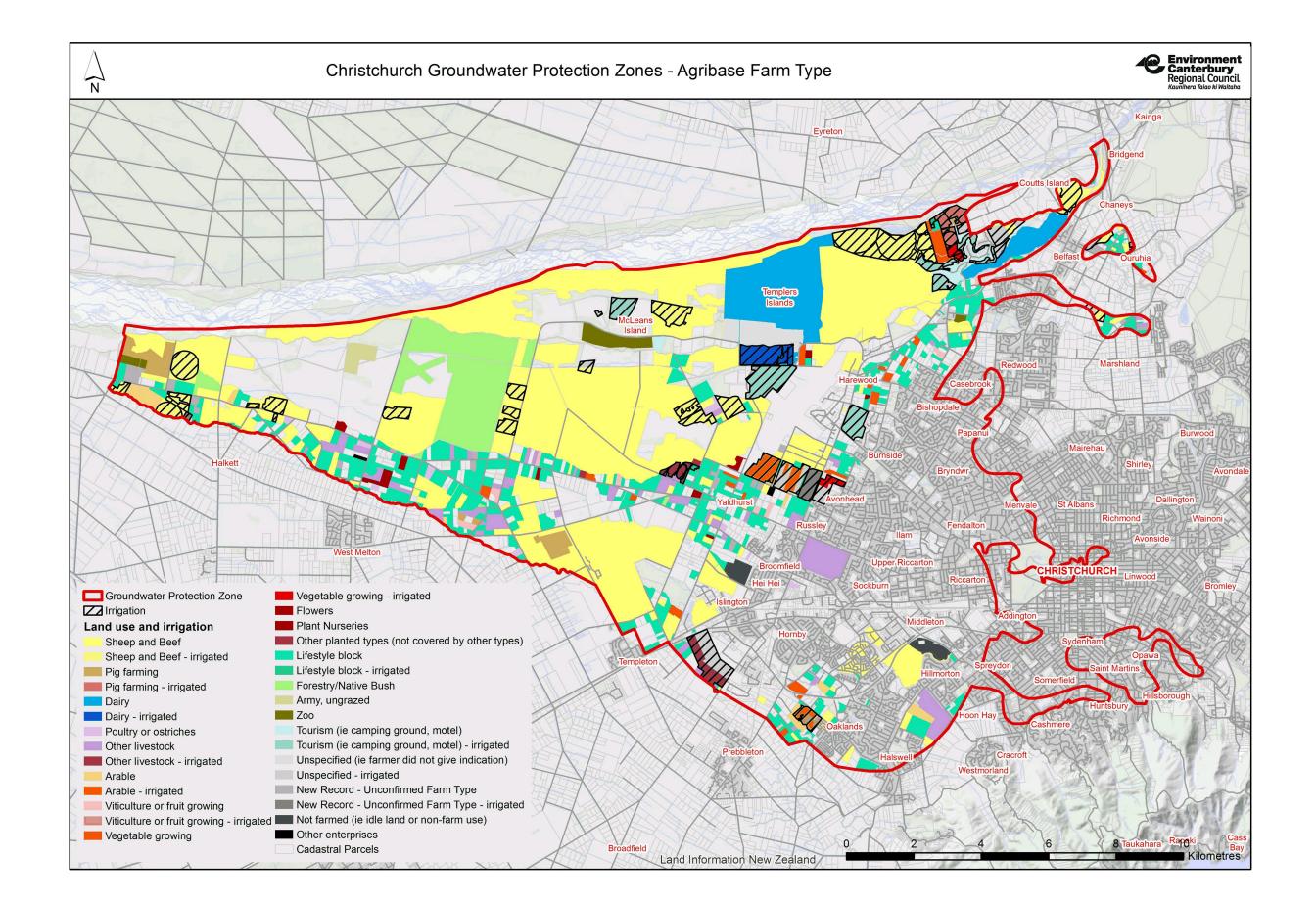
The Working Group has undertaken a number of field trips to ground truth the Agribase land use maps. The Group now has a good understanding of current land use and the nutrient load. The Group also has checked (using the Overseer model) some of the nutrient budgets of landholdings, including Environment Canterbury land.

Information about key findings and next steps will be tabled at the meeting.

Attachments

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В₫	Agribase Farm Type	19









9. Port Hills Fire - Recovery

Reference: 17/276300

Lance Kenyon

James Tricker

Contact: Cr Tom Lambie

lesley.woudberg@ecan.govt.nz

027 706 4273

Lesley Woudberg

1. Purpose of Report

1.1 This report is to provide the Zone Committee with an:

- update on the fire recovery work underway on the Port Hills
- opportunity to discuss the role of Immediate Steps biodiversity funding in the fire recovery.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

- 1. Receives the report on the Port Hills Fire Recovery.
- 2. Agrees to make the fire affected catchments in the Christchurch West Melton zone a priority for 2017/18 Immediate Steps allocation (\$100,000) for the zone.

3. Report

From Monday 13 February 2017 major fires caused significant damage to private and public lands in the central and southern Port Hills areas. They also caused damage to a number of the residences and infrastructure in the area. The fire burnt 1645 hectares and has a perimeter of 51 kilometres. Approximately 90% of the area affected is in private ownership.

The impact on the natural environment is significant and includes burnt pine forests, native vegetation and restoration sites, and grasslands.

There is a major concern of erosion following de-vegetation of the hills which are primarily on unstable loess soils. The downstream waterways are likely to be impacted.

Some recreation features are affected. The most significant is the Canterbury Adventure Park. Some of the infrastructure is not damaged but the Park will be closed for some time to repair damage and remove burnt trees and re-establish a vegetation cover.

The City Council has established a number of task groups to co-ordinate various aspects of the fire recovery. One task group focuses on the natural environment and includes representatives from the Christchurch City Council, Environment Canterbury, Selwyn District Council, Department of Conservation and Ngāi Tahu. The purpose of the group is to work together to co-ordinate action with landowners and the community and make the best use of resources. A focus of immediate action is the re-establishment of vegetation cover and management of erosion and sediment risk.

Actions to date

Regular meetings Natural Environment Task Group (James Tricker ECan)





- 10 March meeting with experts in revegetation, hosted by the Christchurch City Council and Banks Peninsula Conservation Trust (Lance Kenyon and Cr Tom Lambie CWMZC)
- 14 March Banks Peninsula Zone Committee agreed to direct its remaining Immediate Steps funding for 2016/17 (\$35,000) to recovery of the Ohinetahi Bush Reserve and adjacent fire affected land (Lesley Woudberg)
- 15 March meeting with landowners (Helen Greenep ECan).

Possible approach for Christchurch West Melton Zone Committee

The Zone Committee may wish to reconsider its priorities for Immediate Steps funding for 2017/18 and make the fire affected catchments in the zone a priority. This would allow staff to be proactive and encourage landowners in the catchments to actively manage their increased erosion/sediment discharge risk and plant indigenous species particularly in and around waterways.

Attachments

There are no attachments to this report.





10. Update Working Groups - 23 March 2017

Reference: 17/274770

Contact: Lesley Woudberg lesley.woudberg@ecan.govt.nz 027 706 4273

1. Purpose of Report

1.1 This report updates the Committee on the activities of each Working Group over the last month and the next steps each group are working on.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Receives the report.

3. Report

Urban Contaminant Working Group - Andrew Congalton

Priority catchments: Addington, Riccarton and Haytons

What are we trying to achieve in 5 years (2020)

- Addington Brook improve catchment health contact recreation by 2020 and swimmable by 2030 (linking to Zone Implementation Programmes (ZIP's)
 - Meets agreed standards as set out by the 5 year 'living' Integrated Catchment Management
 Plan to be developed by June 2017
- Riccarton Stream improve catchment health (linking to ZIP's)
 - Meets agreed standards as set out by the 5 year 'living' Integrated Catchment Management
 Plan to be developed by 2018
- Haytons Brook improve catchment health (linking to ZIP's)
 - Meets agreed standards as set out by the 5 year 'living' Integrated Catchment Management
 Plan to be developed by 2018

What have we done since we last met?

- The Christchurch-West Melton Zone Committee Office 365 shared space is now active, members will shortly receive an email on how to access and use Urban Contaminant Working Group documents that are are being populated in the space
- Hayton's programme ECan and CCC staff are continuing to identify and work with the higher risk businesses in the catchment to ensure practices meet minimum stormwater standards and encourage best practice

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- A Masters student from the University of Canterbury (funded by ECan) is in the early stages of a project focusing on Hayton's catchment.
- Meetings with key partners and stakeholders are continuing to build agreement on planned action to pull together a holistic catchment management plan for Addington
- Further investigations into the hotspots in Addington Brook have been underway on a property by property basis and ECan is working with several businesses in this area to reduce risks to the stormwater network and consequently the Brook

Next steps

- Prepare a plan of action involving all agencies and groups involved in the Addington catchment by June 2017.
- Continue to work track down the main sources of contamination in the Haytons catchment and work with business to develop plans for improvement.

Rural Catchment Working Group - Arapata Reuben

Priority catchment – Cashmere

Cashmere Catchment Working Group - Arapata Reuben

What are we trying to achieve in 5 years (2020)

- Reduce sediment getting into Cashmere Stream (and therefore the Heathcote/Ōpāwaho and Avon-Heathcote Estuary/Ihutai)
- Improve ecosystem health

What have we done since we last met?

- Port Hill fire recovery has become a focus
- Lance, Tom and staff from both councils attended and contributed to a meeting convened by Christchurch City Council and Banks Peninsula Conservation Trust that focused on developing approaches using native species to revegetation parts of the Port Hills (10 March 2017).
- Both the Cashmere Stream Care Group and Heathcote/Ōpāwhao Network are concerned about the effects of the fire on the health of the river.
- A joint Port Hills Fire Natural Environment Recovery working group has been convened using expertise/resources from both councils to develop a plan ready for implementation.

Next steps

- Fire recovery could be a possible focus for Immediate Steps funding in the 2017/18.
- Possibly look to the ZC to help facilitate a drop in session for landowners where they could access expert advice on a range of issues they are facing.



Groundwater / Drylands Working Group - Chris Kelliher

What are we trying to achieve in 2 years (2018)?

- Know how much water is available for use.
- Vunderstand the landownership pattern within the protection zone.
- Understand the threats to Christchurch's groundwater system.
- Identify how we can protect this resource for future generations.

What have we done since we last met?

- Ground "truthed" the land use map, developed a nutrient budget and had access to overseer budgets for the Environment Canterbury land and well as some land in private ownership.
- UoC/ECan are supervising a student over 2016/17 summer to investigate and map springs and drying reaches of streams.

Next steps?

 Given what we've found out about the nutrient load of current land uses in the groundwater protection zone – now we can identify where the greatest risks lie and focus our attention on how we can protect the resource for future generations.

Communication and Engagement – Arapata Reuben

What are we trying to achieve in the next 5 years (2020)?

- Raise awareness
 - o State of the waterways, their values and issues
 - o Actions individuals and groups can take
 - Individual and groups doing good stuff
- Inspire action

What have we done since we last met?

- Met to develop a plan for the coming year focusing on
 - o Raise awareness and understanding of CWM water resource





- Raise awareness of what rural landowners are doing ie what is happening in the zones adjacent to CWM
- Raise awareness of kool stuff happening in CWM
- o Raise awareness of what we can each do
- o Keep people informed on what is happening regarding Port Hills fire recovery
- CCC/ECan working together on fire recovery stories
 - o Update committee website with table of plant species with their fire rating

Next steps

- Report to Christchurch City Council (6 April) on issues/progress to achieve the CWMS targets in the Christchurch West Melton Zone
- Clear plan of action for the coming year

Biodiversity - Immediate Steps Funding - Lance Kenyon

What are we trying to achieve in the next 5 years (2020)?:

- Increase indigenous species diversity, abundance and improved ecological health by providing funding to individuals, landowners and community groups.
- Raise awareness of biodiversity and ecological values of the Christchurch West Melton zone





What have we done since we last met?

- Seven applications received now in assessment of Immediate Steps applications
- Development of a feedback form for successful applicants

Next steps

- Meet with Sub-group to prioritise applications
- Identify biodiversity implications of the Port Hills fire and actions the ZC can take.

Regional Committee - Les Wanhalla

The Regional Committee's next meeting is 11 April 2017.

Liaison with community groups – Suzanne Furkert (supported by Shelley Washington)

What are we trying to achieve in 5 years (2020)?

• Ensure we complement and build on each other's work to improve the health of Christchurch's water resources.

What have we done since we last met?

Next Steps

- Review where we should focus our effort for greatest affect
 - o Community Boards, network groups and other community groups and schools

Attachments

There are no attachments to this report.





11. Facilitator's Update - 23 March 2017

Reference: 17/273511

Contact: Lesley Woudberg lesley.woudberg@ecan.govt.nz 027 706 4273

1. Purpose of Report

1.1 This report is to inform the Zone Committee of:

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

- 1. Receives the Facilitator's report.
- 2. Notes the upcoming events.

3. Report

3.1 Upcoming Events

Event	Audience	Comment
New Brighton Cubs Group Water Efficiency 21 March	8-11yr olds	
OECD NZ Environmental Performance Review released 21 March	NZ General	
Ōtākaro Avon River Corridor Community Day 25 March 10-3pm	Community Ōtākaro Avon River	Haeata Community Campus 240 Breezes Rd, Wainoni https://engage.regeneratechristchurch.nz/Otakaro-avon-river-corridors-community-day
Zone Committee Annual Reports to Christchurch City Council 6 April	Council	
Environment Aotearoa Freshwater update MFE April (TBC)	NZ General	
Mother of all Clean Ups 13 May	Community	Last year 1300 people got out along the river collecting litter

3.2 Final Zone Committee 2016 Annual Report

Attached for the Zone Committee's information.





Attachments

No.	Title	Page
Α <u>Π</u>	Christchurch West Melton Annual Reports November 2016	31









Working with the community to deliver their aspirations for fresh water

The Christchurch West Melton Zone has a mix of spring fed-streams and rivers, aquifers, short steep hill-fed creeks, and shares the large braided expanse of the lower Waimakariri River with the Waimakariri Zone.

A significant portion of the zone is highly urbanised, with more than 360,000 people living; working, travelling and recreating in and alongside valued waterways within the zone.

(CWMS) VISION:

66 To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework.

The Christchurch City Council (City Council) and central government have played significant roles in delivering Canterbury Water Management Strategy (CWMS) goals as the city rebuilds following the 2011-12 earthquakes.

Substantial efforts have been directed to repair and replace stormwater, wastewater, and drinking water infrastructure. Anchor projects such as the Avon Precinct and planning for the 'red zone' are now underway.

In general, the groundwater resource is in pretty good shape - the challenge is to keep it this way. Around 155 groundwater bores are used across the city for the public water supply that services urban Christchurch and Lyttelton Harbour (including Lyttelton, Governors Bay and Diamond Harbour).

With the exception of the north-west of Christchurch, all the bores have the highest Ministry of Health risk grading possible for a secure groundwater supply. The City Council is currently deepening the wells in the north-west to provide greater safety and security of supply. River flows of the Pūrākaunui/Styx, Ōtākaro/Avon and Ōpāwaho/Heathcote rivers and their tributaries have been affected by low groundwater levels following two years of low winter recharge. The main contaminants to these streams and rivers are sediment, heavy metals, E. coli and nutrients.



The Christchurch West Melton Zone

The zone is bordered by the Waimakariri River to the north and the Pacific Ocean to the east. It follows the Summit Road along the crest of the Port Hills to above Governors Bay before cutting back towards the Waimakariri River. It falls within the Christchurch City and Selwyn District Council boundaries.

The expansive wetlands that once covered large areas of the zone have always been an important place to live and gather food for Ngāi Tahu. Three rūnanga consider the zone part of their takiwā - Ngāi Tūāhuriri Rūnanga, Te Hapū ō Ngāti Wheke/Rāpaki and Te Taumutu Rūnanga.

Key milestones January - December 2016

The CWMS and the zone committee support, drive and celebrate on-the-ground actions to deliver sustainable benefits from water. In 2016 the committee:

- Allocated more than \$160,000 to 14 biodiversity projects and streamlined the process to assess applications
- Supported the community surrounding Paeroa Reserve to improve the health of Riccarton Stream by removing sediment; creating riffles to increase oxygen in the stream, and hosting a community planting day
- Worked with the Cashmere Stream Care Group to host an Erosion and Sediment Control workshop for industry
- Worked with Avon-Ōtākaro Network to host a workshop (October) with recreational groups to provide the latest data on water quality and seek further ideas to improve the recreational experience of the lower Ōtākaro/Avon River
- Engaged experts from the University of Canterbury to share the latest information on Christchurch's ground and surface water following two years of low winter ground water recharge
- Worked with the University of Canterbury to develop a model (MEDUSA model) to help predict stormwater contaminants in an urban catchment - case study Addington Brook
- Raised awareness of copper in brake pads prompting Environment Canterbury to seek alternatives in it's own vehicle fleet.



Christchurch West Melton Zone Committee

Delivering community water aspirations - selected highlights Whaka Inaka Project brings people together to improve habitat

The committee joined with EOS Ecology, the University of Canterbury, Te Rūnanga o Ngāi Tahu, Department of Conservation, Gelita, Cassels and Sons and many others to fund and support the Whaka Īnaka Project in the lower Ōpāwaho/Heathcote River.

The purpose of the project was to identify potential whitebait or īnaka spawning habitats along the river. The surprise finding was that this reach of river has the potential to be one of the longest īnaka spawning reaches in the

Another exciting aspect of this project was the involvement of 16 schools to help monitor the project. Students presented their findings to the zone committee and City Council and asked that changes be made to the management of river banks to improve the spawning habitat.

The City Council has subsequently agreed to trial a revised mowing regime along the river banks of the lower Pūrākaunui/Styx, Ōtākaro/Avon and Ōpāwaho/ Heathcote rivers. This is a great example of sound science and community engagement coming together to make a real difference.



Ōpāwaho/Heathcote River, November 2016

There is still plenty of work to do before we can eat inaka/whitebait caught in our rivers and boast the longest and healthiest spawning site in the South Island. The committee hopes to continue to work with the community to further improve inaka/whitebait habitat in the area in 2017.

Enhancing the health of Cashmere Stream



The Cashmere Stream project is a great example of how landowners, community groups, councils and the zone committee can come together to achieve more than anyone could do on their own.

The Cashmere Stream in the headwaters of the Öpāwaho/Heathcote River, has been identified by the committee as a priority catchment for sediment control. Sediment is one of the main contaminants that plagues the Ōpāwaho/Heathcote River. Now that the problem has been identified, the

The work being undertaken by Christchurch City Council on the stormwater scheme in the area and the relationship between the Cashmere Stream Care group and landowners have provided an opportunity to improve the health of Cashmere Stream and create an inviting habitat for kēwai (freshwater crayfish).

The committee contributed more than \$40,000 through its Immediate Steps Biodiversity Fund to help with sediment removal; re-create meanders and riffles and add logs to increase the variety of habitats and oxygen in the water, and plant native plant species along the riparian margin.

Supporting community engagement - Paeroa Reserve/ **Riccarton Stream**

Volunteers got their hands dirty during a community planting day in September at Paeroa Reserve in Riccarton. The plants were funded by the committee and specially selected and eco-sourced to suit the area.

The committee has supported the renewal project in collaboration with other groups such as Riccarton West Neighbourhood Support Group, Riccarton-Wigram Community Board, Christchurch City Council and the Riccarton Neighbourhood Police Team.

The local Rattray Street Kidsfirst Kindergarten has planted and adopted a section of the project.









CWMS targets - what has been achieved in the zone

Ecosystem health and biodiversity	\$164,258 was allocated to 14 biodiversity projects across the zone.
Natural character of braided rivers	Waimakariri River Regional Park – recreation, amenity, flood protection Plan Change 4 to the Land and Water Regional Plan
Kaitiakitanga	Participation of Manawhenua in the zone committee has increased understanding of cultural issues and the importance of waterways for mahinga kai.
Drinking water	Ongoing improvements to the security of the city's drinking water supply include deepening bores in it's north-west supply zone.
Recreational and	Te Papa Ōtākaro/Avon River Precinct - passive recreation facilities have been added
amenity opportunities	Participated in the "mother of all clean-ups" with 1300 other community members in May 2016. Hosted a workshop with recreational groups at Kerrs Reach (October 2016) to share the latest information on water quality and gather ideas to improve the lower Ōtākaro/Avon River for recreation.
Water use efficiency	CCC summer water conservation campaign was launched on 1 December. In addition a conservation campaign focusing on north-west of the city was part of the overall improvements to its security of supply. Regular drought updates are being received from Environment Canterbury.
Irrigated land area	No specific action
Energy security and efficiency	No specific action
Regional and national economies	Protecting and improving the sustainability and security of Christchurch's water resources underpins the city's ongoing resilience and prosperity.
Environmental limits	Implementation of water quantity and quality limits are contained in the Land and Water Regional Plan.

Key work programmes underway

Ecosystem health and biodiversity

- Continue to work with willing landowners to undertake actions on the ground to protect and enhance ecological health and biodiversity of spring heads and waterways.
- Revisit and evaluate the success of previously funded projects.
- Build on existing initiatives to encourage schools and community groups to become involved in the care and wellbeing of the city's water.

Reducing contamination of the city's waterways

- Continue to work with University of Canterbury to refine the MEDUSA stormwater model and develop and trial management scenarios.
- Work with others to raise the awareness of contaminants such as sediment, zinc, copper and E. coli and pursue options to reduce these at their source.

Recovering from the Port Hills fire

 Work with landowners, councils and others on revegatation and sediment control.

Recreation and amenity

 Develop a strategy to improve the recreation experience along the lower Ōtākaro/Avon River.

Education and Communication

- Continue to provide a forum to present and discuss sound science and raise awareness of the challenges that face urban streams, including the actions that we all can take.
- Raise awareness and appreciation of the value of our water resource to our City and its surroundings.
- Continue to take opportunities to engage with communities where they are (e.g. Affirm Wainoni Park, organise community planting days, clean-ups etc).

Challenges and opportunities

The aftermath of the Christchurch earthquakes will continue to exert a significant influence on the health of streams, rivers and the estuary.

The unprecedented level of construction and development throughout the city provides opportunities to connect communities with the city's water resources through projects like Te Papa Ōtākaro/Avon River Precinct and stormwater projects in the Ōpāwaho/Heathcote catchment. The regeneration of the Ōtākaro/Avon corridor and red zone land will provide further opportunities in 2017.

Polluted waterways are not just a rural problem. A real challenge for the committee is to raise awareness of urban stream issues caused by flushes of stormwater containing heavy metals, sediment, nutrients and *E. coli* contamination, and litter entering our waterways.

New tools such as the MEDUSA model will provide a sound scientific basis on which the committee can continue to raise awareness, and assist with work with communities, industry and government to find solutions.

The committee will continue to provide a forum where the latest science and understanding of the local water resources can be discussed, debated and further developed.



Te Papa Ōtākaro/Avon River Precinct







Improving recreational opportunities – lower Ōtākaro/Avon River

The lower Ōtākaro/Avon River is used for a multitude of different recreational activities. The committee held a workshop because it identified a need to share the latest water data with users and gather ideas on what could be done to improve the recreational experience and complement future red zone projects.

The Institute of Environmental Science and Research explained the results of an investigation to track down the main sources of E. coli contamination - the limiting factor for contact recreation involving the river. The results showed that wildfowl are the main source of contamination during dry weather but dog and human sources increase during wet weather.

The Christchurch City Council described how there was a significant increase in wastewater overflows into the river after the earthquakes but these have steadily decreased to pre-earthquake levels as the wastewater network has been repaired. Last year there were no wet weather overflows and three dry weather overflows. The City Council has budgeted \$82 million over the next 10 years to continue to improve the network and reduce the incidence of overflows.

Since the workshop the committee has continued to work with the Avon-Ōtākaro Network to prioritise the issues and actions it can champion and to complement the work of Regenerate Christchurch in the red zone. The committee will finalise its strategy in early in 2017.



Zone committee members reflect a diverse range of community views

Each of the Canterbury region's 10 zone committees includes four to seven community members whose membership is regularly refreshed to ensure a wide range of perspectives is

All current members are listed below. For profiles, visit the committee's page at www.ecan.govt.nz/myzone.

Arapata Reuben (Chair), Ngāi Tūāhuriri Rūnanga

Suzanne Furkert (Deputy Chair), Community member

Cr Pauline Cotter, Christchurch City Council

Cr Debra Hasson, Selwyn District Council

Cr Tom Lambie, Environment Canterbury

Herewini Banks, Te Hapū o Ngāti Wheke/Rāpaki

Les Wanhalla, Te Taumutu Rūnanga

Andrew Congalton, Community member

Chris Kelliher, Community member

Robert Wynn-Williams, Community member

Kevin Brown, Community member

Lance Kenyon, Community member

It all starts with sound science

The committee has played an important role in providing a forum for discussing the science of the water resource in the zone and identifying where more information is required.

The University of Canterbury Waterways Centre and technical staff from Christchurch City Council and Environment Canterbury have led discussions on how our groundwater and surface water systems interact.

These discussions have helped explain why and how often reaches of small streams to the west of the city have dried out and where some reaches are artificially augmented, and posed the question of whether further augmentation should be undertaken. These discussions have also promoted further modelling of the groundwater system.

The HydroECo Research Group of the University of Canterbury has worked with the committee to develop a model to predict the amount of contaminants coming from the Addington catchment in various rain events. Addington Brook, a tributary of the Ōtākaro/Avon River, was found to be a significant source of contamination. The research helps predict the type and amount of contaminant that is likely to be generated by certain surfaces in certain rain events. It has quantified the amount of zinc from roofs, copper from carparks and sediment from all surfaces. The next stage of this work will be to model different management options and then trial their effectiveness.

Committee member Dr Suzanne Furkert undertook further research on how other countries are phasing out copper in brake pads. Suzanne found that in general, people are not aware of the problem or that alternatives

The committee will continue to raise awareness of both urban contaminants in 2017 and explore opportunities for action at both local and central government levels.

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