

ASHBURTON WATER MANAGEMENT ZONE COMMITTEE AGENDA

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

DATE: Tuesday 31 May 2016

TIME: 1:00 pm

VENUE: Council Chamber
2 Baring Square East
Ashburton

MEETING CALLED BY: A Dalziel, Chief Executive, Ashburton District Council
B Bayfield, Chief Executive, Environment Canterbury

ATTENDEES: Mr Chris Allen
Mr Ben Curry
Mr Craig Fowles
Mr Gordon Guthrie
Mr Bill Thomas
Mrs Jackie Wright
Mr John Henry (Te Runanga o Arowhenua)
Mr Arapata Reuben (Te Ngai Tuahuriri Runanga)
Cr Stuart Wilson (Ashburton District Council)
Commissioner David Caygill (Environment Canterbury)

Zone Facilitator

Olivia Smith

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Committee Advisor

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Tangata Whenua Facilitator

Peter Te Rangihiroa Ramsden

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Environment Canterbury



4 Register of Interests

Representative's Name and Interest	
Chris Allen	<ul style="list-style-type: none"> • Farm owner of sheep, beef, lambs ,crop • Water resource consents to take water from tributary of Ashburton River and shallow wells • National board member Federated Farmers of New Zealand • Member of Ashburton River Liaison Group
David Caygill	<ul style="list-style-type: none"> • Deputy Chair – Environment Canterbury Commissioners • Chair - Business NZ's Energy Council
Ben Curry	<ul style="list-style-type: none"> • Chief Executive Officer – Rangitata Diversion Race Management Limited
Craig Fowles	<ul style="list-style-type: none"> • Technical Manager at ANZCO Foods Canterbury Ltd • Director of freshwater consultancy Biosortid Ltd
Gordon Guthrie	<ul style="list-style-type: none"> • CEO Electricity Ashburton Limited (t/a EA Networks) • Director – Barrhill Chertsey Irrigation (incl. Water Utilities Limited) • Farming partnership – Winchmore (Ashburton North branch)
John Henry	<ul style="list-style-type: none"> • Chairman of Arowhenua Runanga • Chairman Tangata Tiaki-Kai Tiaki Committee • South Canterbury representative on Mahinga Kai Hi Ika Komiti • Member of Arowhenua Company Ltd • Ngai Tahu representative on Central South Island Fish and Game • Governance member of South Canterbury Trap and Transfer program • Member of Orari-Temuka-Opihi-Pareora Water Zone Committee
Arapata Reuben	<ul style="list-style-type: none"> • Trustee – Tuahiwi Marae • Trustee – Tuhono Trust • Trustee – Mana Waitaha Charitable Trust • Member - National Kiwi Recovery Group • Rūnanga Rep and Chair – Christchurch – West Melton Water Zone Committee
Bill Thomas	<ul style="list-style-type: none"> • Farm owner of Longbeach Estate Ltd (sheep, beef, lambs, arable, dairy) • Member of Eiffelton Irrigation Scheme
Stuart Wilson	<ul style="list-style-type: none"> • Ashburton District Councillor and Chair of Service Delivery Committee • A son who is a Director of Mayfield Hinds Irrigation Co and RDR
Jackie Wright	<ul style="list-style-type: none"> • Employed by Canterbury District Health Board • Married to Ashburton District Councillor, Russell Ellis • Committee member South Rakaia Bach Owner's Association • Shallow Bore user • Dry land owner breeding Dexter cattle (Wakanui area, low acreage)

Minutes of a meeting of the **Ashburton Water Management Zone Committee** held on Tuesday 26 April 2016, commencing at 1pm in the Council Chamber, 2 Baring Square East, Ashburton.

Present

Donna Field (Chair), Chris Allen, Commissioner David Caygill, Ben Curry, Gordon Guthrie, Bill Thomas, Cr Stuart Wilson, Jackie Wright and John Henry.

In attendance

Environment Canterbury: Olivia Smith (Facilitator), Peter Ramsden (Tangata Whenua Facilitator), Stacey McAllister (ADC Committee Secretary).

Approximately 15 members of the public attended the meeting.

1 Welcome and Karakia

The Chair welcomed everyone to the meeting and the opening karakia was offered by Peter Ramsden.

2 Deputations

3 Apologies

Craig Fowles, Arapata Reuben (Te Ngai Tuahuriri Rununga)

4 Extraordinary Business

- **Chair Resignation**

Donna Field has accepted a position working for the Ashburton Zone Implementation Team for ECAN. Donna's last meeting will be today and she will start her new position on the 16 May. She is very sad that she can't do both but it would be a conflict of interest.

5 Register of Interests

No changes

6 Confirmation of Minutes

- **South Rakaia Bach Owners**

The minutes were amended to record that Jackie Wright had asked if Council had similar problems with the water treatment plant electronics.

That the minutes of the Ashburton Water Management Zone Committee meeting held on 29 March 2016, as amended, be taken as read and confirmed.

Curry/Allen

Carried

6.1 Matters Arising

Nil

7 Hinds Drains Working Party Recommendations

Peter Lowe, Chair of the Hinds Drains Working Party, thanked the Zone Committee for support over the last two years. Peter also thanked the other working party members for their hard work and dedication. He also acknowledged the input of other community members.

Peter summarised the main recommendations:

- Boundary drain trial
- Managed Aquifer Recharge trial
- Recharge of Hinds River
- Coastal strip recommendation
- Monitoring and effectiveness

Chris Allen asked Peter to highlight the key reasons why the committee should support this recommendation. Peter advised that this package of recommendations allows for more water and will enhance ecosystem health.

That the final recommendation of this plan be adopted.

Thomas/Allen

Adopted

The Chair thanked Peter Lowe and the group for the huge amount of hard work and time that was invested in creating in this large document.

Next steps with recommendations:

Olivia Smith explained that the next step is for the recommendations to be presented at ECAN and ADC Council Meetings. Following the formal adoption of the recommendations, the implementation phase will begin. Some recommendations will become part of a plan change to the Land and Water Regional Plan. Thereby becoming policies and rules. Other non-statutory recommendations, such as those which involve practical actions on the ground, will be coordinated by Donna Lill's zone team and delivered by ECAN staff, industry groups, landowners and the wider community.

8 Zone Delivery Update

Donna Lill was welcomed to the meeting and invited to provide an update on current Ecan recruitment for the Ashburton Zone Team.

Ben Curry queried how much RMA experience was required for the RMO Monitoring & Compliance role, due to concerns that this may put people off the roles. Donna Lill advised that training would be provided in this area if required.

Donna explained that compliance work will be done locally and/or from Christchurch. There is a requirement of 3 – 3.5 people to do all of the work in Ashburton District and there will be 2 appointed locally so the other 1 -1.5 will be sourced from Christchurch. She also explained that Ian Brown will continue to work one day a week in the Land Management Advisor role and that David Ashby will continue doing Sensitive Lakes work and Orange Zone farmers consent.

9 IMS Biodiversity Projects

Four projects were presented for consideration. The projects were sent to the zone committee biodiversity working group for consideration prior to the meeting.

- Donna Lill explained that it's recommended that if the committee are to fund a project over \$10k they must carefully consider a projects legal protection. In response to this, the biodiversity working group's recommendation is that three projects over \$10, 000 will be supported up to \$10k because there was no permanent legal protection such as a QEII covenant.
- Ben Curry asked if the committee can fund a project exceeding \$10,000 despite lack of

permanent legal protection. Donna Lill explained that the committee could commit to funding over the \$10,000 limit and that in such case the legal protection length would be relative to project cost, up to a maximum of 25 years (e.g. \$10,000 could be 10 years, and \$15,000 could be 15 years).

- Ben Curry commented on what the implications would be if the Coldstream and Wetland project were to be scaled back to \$10,000. Donna Lill confirmed that this would mean that planting will be minimised to reduce cost and that further funding could be applied for the following year.
- David Caygill enquired about total funding allocated for this financial year and was interested to know if there are other projects coming in May/June. Donna explained that the current allocation is \$434,620 leaving \$65,438, this leaves sufficient funds to allocate originally proposed budget amount of \$59,218 for all four projects. Donna also explained that a project can be forward funded from the next budget if required.
- David Caygill proposed an option to committee for consideration. This included reducing the cost of two projects to \$10,000 whilst funding the Coldstream and Wetland project in full due to the projects nature and high ecological score.
- Stuart Wilson enquired as to whether the fencing involved in the project was a legal requirement under the current planning framework to exclude stock. Donna Lill advised that the fencing is undertaken at owners cost and that this funding is for plants and plant guards.
- After discussion the Committee agreed that the allocation of funds would be:
 - Flynn Stream Stage 2 – \$8,688
 - Coldstream and Wetland Stage 2 – \$20,450
 - Upper Flynn Stream Stage 3 – \$10,000 (reduction based on EOFY)
 - Smith River Terrace – \$10,000 (reduction based on EOFY)

Field/Guthrie

Carried

10 Farm Environment Plans

Ian Brown, Senior Resource Management Advisor provided a presentation on Farm Environment Plans (FEP) (hard copies were provided).

Jackie Wright asked what the process is once the FEP has been filed. Ian said that if the landowner is part of an irrigation scheme then the scheme handles it. FEP are submitted as part of the consent process and then the consent conditions specify that the plan needs to be audited. The frequency of auditing depends on the grade received- the lower the grade, the more frequent the review. Ian advised that the Auditor accreditation process is being created currently.

Stuart Wilson asked how much weight they give to nitrogen figure loss. In response, Ian said the figure must be looked at in conjunction with practices.

David Ashby (Land Management Advisor, ECAN) was introduced to the group and asked about the FEP he developed for his property in Waimakariri. He advised that as part of his water supply agreement he must complete a FEP. He explained that a consultant came to his property with pre-populated FEP template and that to gather the information it took 1-2 hours on farm and 1-2 hours around the table.

Donna Field asked how the “word” is going to get out around FEPs, particularly to landowners that are not part of an irrigation scheme. Bill Thomas said a group is meeting next week in Hinds areas, initiated by Irrigation NZ. Workshops are also being held by Beef and Lamb. Donna Lill also commented that her team will work with industry to get the “word” out.

The Chair thanked Ian Brown and also thanked Dave Ashby for allowing the Zone Committee to use his example.

The Committee adjourned for afternoon tea from 2.33pm until 3.00pm.

11 CWMS infrastructure activities and opportunities in the Ashburton Zone

Report has been tabled.

Ben Curry advised the Committee that there would be an opening ceremony at the MAR site on 3 June. Jo Goodhew will be invited as will Zone Committee members.

RDR are holding an open day on Klondyke tomorrow in Hinds: 11am-2pm and Mayfield: 4-8pm.

12 Compliance and Monitoring Update:

Richard Purdon, Principal Resource Management Advisor welcomed the group and gave a presentation on Environment Canterbury's Compliance Monitoring Annual Report 2014/15, particularly the results for Ashburton Zone.

Main topics of interest:

- Compliance Monitoring Annual Report
- Pollution Hotline Complaints
- Enforcement

Compliance: Discussion on what the "unable to determine compliance" status means. It was explained that in the context of a surface water consent, this could mean that a water meter was not installed and therefore it was not possible to determine if the consented volume/rate of take had been exceeded. Questions were asked as to what action is being taken to address this. It was explained that ECAN are currently calling and sending letters to all consent holders that do not have a water meter

Richard Purden commented that the response in 2017 will be different to this year. Real time water monitoring is being introduced rather than assessing water take data at the end of a season. Consents for higher usage will require real time data monitoring.

Ben Curry asked if compliance resourcing was considered in the LTP. There was some uncertainty as to whether additional resources will be provided for future compliance.

Richard Purden explained the abatement, infringement (fine) and prosecution process. He noted that ponding of dairy effluent is the most common non-compliance. This provides an opportunity to assist people to help them improve their practices.

Jackie Wright asked if groundwater testing was done for assess the adverse effects that could result from ponding. Richard Purden explained that groundwater testing is not usually done for one off ponding non-compliance.

John Henry commented on the high levels of non-compliance and low levels of infringements. He said it was disappointing to see and hopes for improvement.

Bill Thomas asked if the Zone Committee could be provided with an update quarterly on non-compliance in the zone. Richard Purden advised that the information can be included in the Zone Manager's report.

Chris Allen asked if that when discussing compliance, the language used should be 'consent holders' opposed to 'farmers'.

13 E.coli Monitoring Ashburton River

Olivia Smith tabled report. She provided a summary of the report and explained that six E.coli samples, collected over the summer period, were sent for faecal source tracking testing (FST). The

FST was not effective as the E.coli levels were not high enough therefore it was recommended that the testing be undertaken again in Summer 2016/17.

The committee raised inconsistencies in the graph data. Olivia Smith will contact Adriane Meredith for further clarification.

David Caygill requested that the text on Page 29, second paragraph, be changed from seabirds to braided river birds.

Chris Allen has asked for information specific to Ashburton at the next meeting on what swimability means and how it is graded.

14 Update on Other Matters

- **14.1 Regional Committee Meeting**

A short verbal summary was provided by Ben Curry and a written summary attached.

- **14.2 Plan Change 2 Appeals**

Please refer to attached.

- **14.3 CAREX Field Day**

The Canterbury University Freshwater research team hosted a field day to update the community on their drain management research. The day was well attended and information was provided on practical tools for improving drain management.

15 Meeting Summary/Action Point

16 Reports for Committee Information

- **16.1 Ashburton River monitoring results**

- **16.2 Consents Update**

David Just, Team Leader

David Caygill requested that we ensure pages are dated and include a CRC number.

Next meeting

The next meeting of the Ashburton Water Zone Committee will be held on Tuesday 31 May 2016, commencing at 1pm. A zone committee workshop with the Canterbury Primary Sector Group will be held in the morning) prior to the public zone committee meeting.

Due to the Chair's resignation and the Deputy Chair being absent at the next meeting, Chris Allen will chair the next meeting. Chair selection process will take place at the following meeting.

The Chair thanked attendees for their support during her time on the zone committee. The chair expressed how much she has enjoyed being part of the committee, since its inception, and was appreciative of the diverse knowledge she had gained. The Chair was regretful to leave the committee but excited at the opportunity to continue contributing to this important work in her new role as part of the ECAN Ashburton zone team.

The meeting concluded with a karakia by Peter Ramsden at 4.25pm.

Dated this 31 day of May 2016 _____(Chair)

Ashburton Zone Committee Report

Date 31 May 2016
Report to Ashburton Water Zone Committee
From Olivia Smith
Subject Upper Hinds Catchment: Stocktake of recommendations/actions

7 Hinds Drains Working Party Recommendations

Purpose

To provide the committee with an overview of zone committee recommendations, including planning provisions and actions, which pertain to the Upper Hinds/Hekeao Plains area.

Recommendation

The committee consider the update.

Background

The upper Hinds catchment (refer to Figure 1, 2) is significantly different to the lower hinds particularly in respect to the hydrology, state of water quality, quantity and current land use. The upper catchment has two branches of the Hinds River west of the Rangitata Diversion Race. Both of these are considered to be in relatively good condition compared to other small Canterbury hill-fed streams. It is estimated that the upper catchment comprises 9% of the Hinds Plains area. This area is dominated by hill country sheep and beef farming which is non-irrigated. Nutrients from land use move via surface runoff and soil interflow.

Figure 1: Map showing Upper and Lower Hinds/Hekeao Plains area.

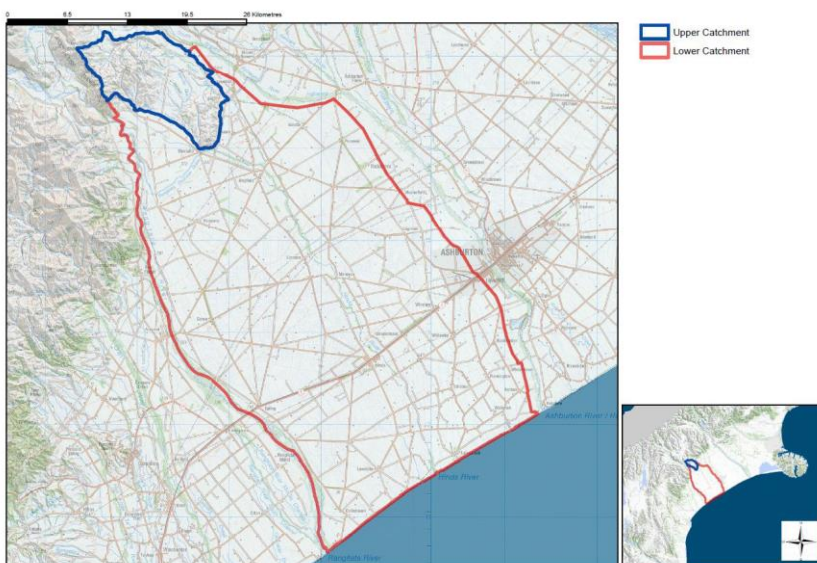
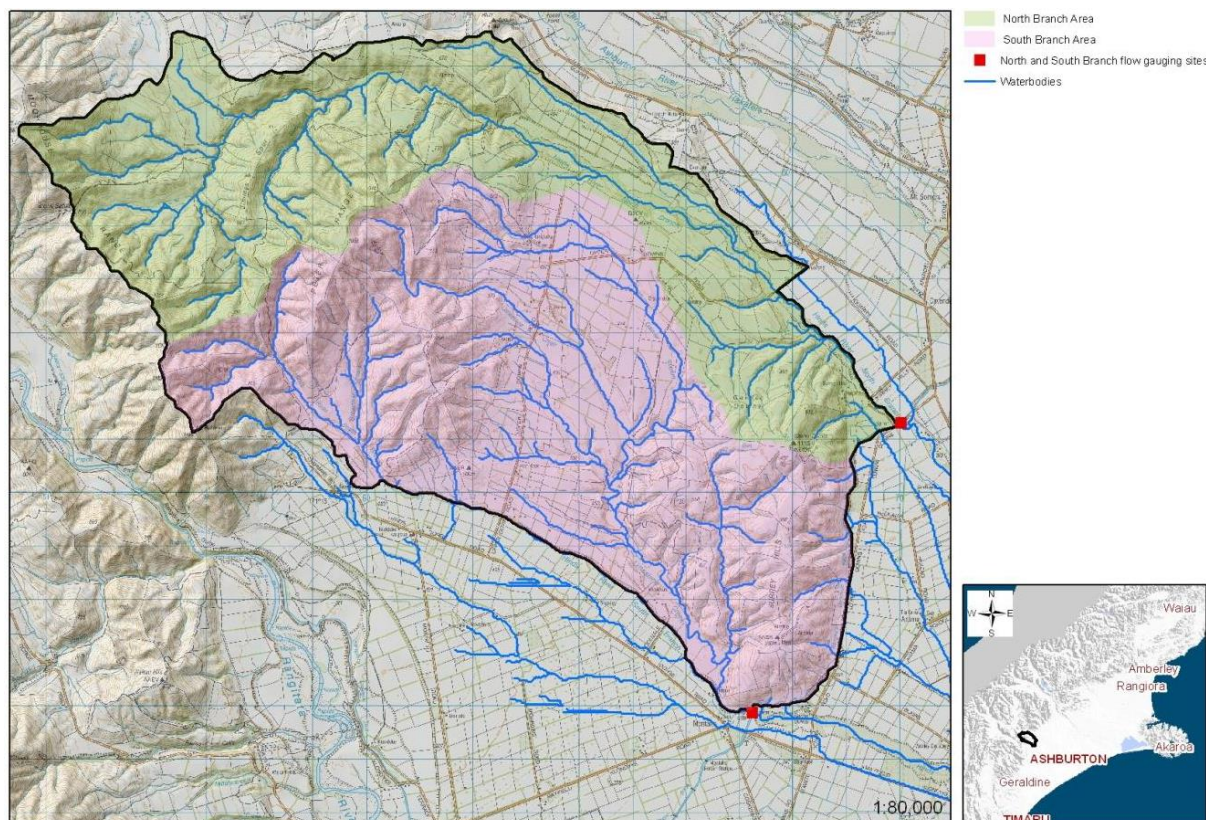


Figure 2: Map showing Upper Hinds/Hekeao Plains area.



Upper Hinds Catchment: Recommendations/actions

The ZIP addendum ‘solutions package’ includes recommendations which relate to the upper Hinds catchment. These include catchment scale actions, local scale actions, investigation, monitoring and review and community engagement. Below is a summary of some of the key recommendations.

Nitrogen and Phosphorous limits

The ZIP addendum recommended that the current catchment loads for Nitrogen and Phosphorus be maintained. Plan Change 2 gives effect to this recommendation by introducing policies and rules that relate to the Upper Hinds area. See summary below:

- **Permitted Activity:** Nitrogen loss is less than 15 kg/ha/yr.
- **Consent required:** If nitrogen loss exceeds 15 kg/ha/yr but does not exceed baseline. There is also a requirement to reduce below the baseline loss rate (percentage reductions overtime).
- **Prohibited:** To increase above 15 kg/ha/yr or baseline (whichever is the greater).

Good management practice

The ZIP addendum specified that all landowners should operate at good management practice. To give effect to this, there are provisions in Plan Change 2 that require landowners to implement good management practice and complete Farm Environment Plans or keep records as per Schedule 24a.

The Ashburton zone work programme includes a milestone for developing a good management practice extension programme. As part of this programme, Ecan will work with industry and other organisations to provide landowners with the information and support they need to implement these practices on farm.

Water Quantity

The ZIP addendum recommended that the current water allocation in the South branch of the Hinds River be maintained and that no further water allocations be granted from South and North branches. Plan Change 2 provisions cap the existing allocation from the South branch.

Non- statutory actions

A summary of non-statutory actions will be discussed by Donna Lill, Zone Team Manager, at the upcoming committee meeting.

Ashburton Zone Committee Report

Date 31 May 2016
Report to Ashburton Water Zone Committee
From Olivia Smith
Subject 5 year implementation outcomes and milestones

8 Implementation Outcomes and Milestones

Purpose

Provide background on the development of the 5 year implementation outcomes and milestones.

Recommendation

The committee:

- **note** the updated 5 year outcomes and milestones (copy to be circulated with workshop agenda)
- **discuss** ways for reporting on implementation progress.

Background

Early this year the committee developed a package of draft 5 year implementation outcomes and milestones to deliver key implementation priorities in the Ashburton zone.

- The **outcomes** represent what the committee aim to achieve through implementation in the next 5 years. These outcomes are consistent with those included in the ZIP, ZIP addendum and Hinds Drains Working Party recommendations.
- The **milestones** represent the actions required to achieve the outcome. The milestones integrate many of the priority recommendations/actions that were developed collaboratively during the ZIP addendum and Hinds Drains working party processes.

The Ashburton zone delivery team (Biodiversity, Compliance and Land Management officers) will develop a suite of actions/tasks (work programme) that need to be completed to enable each milestones to be achieved. The team will then work with industry, landowners and various organisations to ensure that each action is effectively implemented.

Donna Lill, Zone Team Manager, will regularly report to the committee on progress with implementing the work programme. There will also be opportunities for the committee to provide feedback and review the appropriateness of milestones.

Ashburton Zone Committee Report

Date 31 May 2016
Report to Ashburton Water Zone Committee
From Brett Painter & Olivia Smith
Subject Managed Aquifer Recharge (MAR) Pilot Project: Operational and governance groups.

10 Managed Aquifer Recharge (MAR) Pilot Project

Purpose

To discuss the role of operational and governance groups in the MAR Pilot Project.

Recommendation

The committee:

- **consider** the report.
- **confirm** Ben Curry as the committee representative on the MAR Pilot Working Group.
- **support** the formation of the MAR Governance Group in Spring 2016.

Background

The MAR Pilot Project is an integral part of the solutions package for improving water quality and quantity in the Hinds / Hekeao Plains area. To effectively undertake the MAR Pilot Project a number of operational and governance decisions needed to be made. It is essential that these decisions are made in a collaborative nature given the significance of the project to the community.

MAR Pilot Working Group

The MAR Pilot Working Group was established to make a number of funding and operational decisions during the project trial. This group currently includes:

- Ashburton District Council
- Environment Canterbury
- Golders consultancy
- Affected landowners
- Hinds Drains Working Party (HDWP)/ local representative
- Irrigation schemes: Valleta, Mayfield-Hinds, Eiffleton, Rangitata Diversion Race
- Zone Committee Representative

The group meets on a frequent basis and is chaired by Peter Lowe (HDWP/local representative). To date, the group have undertaken actions and decisions to help get the pilot project up and running. It is envisaged that this will continue to occur until the end of the trial and reporting period.

MAR Governance Group

The HDWP also recommended that a MAR Governance Group be formed to provide strategic oversight during the MAR Pilot Project and consider how future MAR applications could be best utilised in other parts of the catchment to realise the community aspirations.

It is proposed the governance group would include wider stakeholder and community representation and would report on a regular basis back to the zone committee. At present, it is anticipated that the most appropriate time to form a governance group is when the initial technical findings from the trial become available (around Spring).

Ashburton Zone Committee Report

Date 31 May 2016
Report to Ashburton Water Zone Committee
From Olivia Smith
Subject Zone Committee representation on the Rakaia Enhancement Fund

11 Rakaia Enhancement Fund

Purpose

For the committee to consider Zone Committee representation on the Rakaia Enhancement Fund.

Recommendation.

The committee **appoint** a Zone Committee representative on the Rakaia Enhancement Fund Committee.

Background

The Rakaia Water Conservation Order was amended in February 2014 to allow TrustPower to release water from Lake Coleridge for irrigation when the river is low, increasing the reliability of the water supply. Included in the conditions of the amendment was the establishment of the Rakaia Enhancement Fund.

The purpose of the fund is to fund projects within the Rakaia and Selwyn River catchments that are designed to enhance the cultural, ecological, and biological health and recreational opportunities within these catchments. The fund includes:

- Initial payment = \$50,000
- Annual payments = \$100,000 CPI adjusted (ends Dec 2031)
- Administration Funds = \$2,500 per annum

Rakaia Enhancement Fund Committee Membership

TrustPower has developed a deed to establish a committee to disperse the Rakaia Enhancement funds. Committee members include representatives from:

- Te Taumutu Runanga
- Te Ngai Tuahuriri Runanga
- Te Runanga Arowhenua
- Selwyn - Waihora Zone Committee
- Ashburton Zone Committee
- Department of Conservation
- Environment Canterbury
- TrustPower Ltd

Trustpower envisages that the funds will be contestable and initially proposed that the committee would meet at least twice a year to assess applications in accordance with guidelines developed by the committee. To date, the committee has not met as frequently as intended and there have been no funds have been allocated.

Zone Committee Representation

Donna Field has represented the Ashburton Zone Committee on the Rakaia Enhancement Fund committee. Donna recently attended a meeting on the 20th May as an interim Zone Committee representative. It was acknowledged that Donna Field was simply 'holding the space for the Ashburton Zone Committee' until a new representative was confirmed (Please note that Donna Field will update the zone committee on the outcome of this meeting). It is now appropriate that a new zone committee member is appointed to this position. It is anticipated that this position will require attending a minimum of two meetings a year.

Ashburton Zone Committee Report

Date 31 May 2016
Report to Ashburton Water Zone Committee
From Kimberley Dynes
Subject Recreational Water Quality monitoring and guidelines

12 Recreational Water Quality Monitoring and Guidelines

Purpose

To update the zone committee of methods and protocols followed for the monitoring and analysis of recreational water quality.

Recommendation

The Zone Committee consider this report.

Background

Environment Canterbury carry out recreational water quality monitoring at 51 freshwater sites throughout the Canterbury Region during the summer months. Recreational water quality monitoring cover two individual aspects: the microbiological state of the water, where the presence of faecal indicator bacteria indicates the presence of pathogens that may cause an individual to become sick, and the presence of potentially toxic cyanobacteria (blue-green algae) that have the potential to produce toxins that may be harmful to humans and animals.

Microbiological concentrations vary rapidly in space and time, and robust “real-time” monitoring is not available. Therefore a risk based assessment is made for recreational water quality (microbiological) which follows national guidelines set by the Ministry for the Environment and the Ministry of Health in 2003. Additionally, potentially toxic cyanobacteria do not always produce toxins, therefore a risk analysis is carried out for the relative cover of a river or stream bed, with the assumption that the greater the cover, the greater the risk of coming into contact with toxins produced by the cyanobacteria.

The national microbiological guidelines for recreational water quality

The recreational water quality monitoring programme follows the *Microbiological water quality guidelines for marine and freshwater recreational areas* (MfE & MoH, 2003). The 2003 guidelines use a qualitative risk grading of the catchment, supported by the direct measurement of faecal indicator bacteria to assess the suitability of a site for contact recreation which is provided as the Suitability for Recreation Grade.

These two components combine to give a site an overall *Suitability for Recreation Grade* (SFRG) (Table 1). The two components to grading an individual site are:

- the *Sanitary Inspection Category* (SIC), which generates a qualitative risk assessment of the susceptibility of a water body to faecal contamination; and

- historical microbiological results (based on the 95th percentile of 5 years data). This generates a *Microbiological Assessment Category* (MAC), which provides a measurement of the actual water quality over time.

Table 1 Suitability for recreation grade (SFRG) matrix for freshwater sites (MfE & MoH, 2003)

Susceptibility to faecal influence		Microbiological Assessment Category (MAC) (95 percentile of 5 years data)			
		A	B	C	D
Freshwater		≤ 130 <i>E. coli</i> /100 mL	131-260 <i>E. coli</i> /100 mL	261-550 <i>E. coli</i> /100 mL	>550 <i>E. coli</i> /100 mL
Sanitary Inspection Category (SIC)	Very low	Very good	Very good	Follow-up*	Follow-up*
	Low	Very good	Good	Fair	Follow-up*
	Moderate	Follow-up*	Good	Fair	Poor
	High	Follow-up*	Follow-up*	Poor	Very poor
	Very high	Follow-up*	Follow-up*	Follow-up*	Very poor

* Indicates unexpected results requiring investigation (reassess SIC and MAC)

The Suitability for Recreation Grade describes the **general condition** of a site at any given time. The risk of becoming sick from swimming increases from sites graded 'very good' to 'very poor'. Sites graded 'very good', 'good' and 'fair' are considered suitable for contact recreation, although 'good' and 'fair' sites may at times not be suitable. Sites graded 'poor' and 'very poor' are generally considered unsuitable for contact recreation, and there is public notification of this, via permanent signage at the site and/or through the media.

Ongoing monitoring is an important component of the assessment of monitoring sites. This is particularly important for sites graded 'good' to 'poor', which tend to have variable water quality and contaminant risks. While the site grades will not change during the bathing season as a result of the monitoring during that season, the data collected during the season is important for monitoring unpredictable changes in water quality and for determining if management intervention is necessary (e.g. temporary warning signs, notification via Environment Canterbury website and Facebook page). The ongoing seasonal monitoring provides data for re-assessment of grades at the end of each summer.

During the summer monitoring season, individual sample results are used to determine surveillance modes (Table 2). When a sample result exceeds the Alert or Action guideline values the site is re-sampled as soon as possible. Some sites that have 'poor' or 'very poor' grades and have permanent warning signage are not re-sampled after exceedance of the Alert or Action modes.

Table 2 Response modes for sampling results during the summer monitoring period (MfE & MoH, 2003)

Surveillance modes	Single sample result	Action
Acceptable-Green mode	≤ 140 Enterococci /100 mL ≤ 260 <i>E.coli</i> /100 mL	Continue routine monitoring
Alert- Amber mode	>140 and ≤ 280 Enterococci/100 mL >260 and ≤ 550 <i>E.coli</i> /100 mL	Increase sampling Identify and report on possible sources
Action – Red mode	> 280 Enterococci/100 mL > 550 <i>E.coli</i> /100 mL	Increase sampling Identify and report on possible sources Erect warning signs Inform public

Microbiological assessment Categories (MAC)

A Microbiological Assessment Category (MAC) is calculated based on the 95th percentile value for all sites with at least three years of microbiological data. Site grades are provisional until they are based on five years of data.

Rainfall affected data

Rivers

For those river sites with ‘poor’ grades where rainfall is known to influence results, the MAC was also calculated on a subset of data that had all rainfall-affected results removed.

The criteria for removing rainfall-affected data aims to only remove data that match climatic/flow conditions that would deter people from swimming at the site.

Criteria are:

- moderate to heavy rain on or prior to the day of sampling
- river in flood, i.e. high flows (max. 2 days following peak flood)
- water turbid, i.e. still in flood

Sanitary Inspection Categories (SIC)

Environment Canterbury staff review the Sanitary Inspection Category (SIC) for each site with the categories ratified by the TAs and Public Health agencies.

River cyanobacteria guidelines and warnings

Environment Canterbury carries out surveillance monitoring for potentially toxic benthic cyanobacteria growth at all of the non-tidal river sites that are sampled weekly in the recreational water quality monitoring programme. A few additional sites, which are known to be popular for dog walking and exercise, are also visited weekly for surveillance monitoring. If the surveillance monitoring indicates that

specified conditions in the growth and/or mats are detaching, accumulating or becoming exposed then more detailed monitoring is undertaken to confirm the alert level and appropriate response (Table 3). If Action mode is triggered by either the surveillance or alert level monitoring then response actions in the form of warning signage and media releases are initiated. Information is also placed on the Environment Canterbury website and Facebook page when warnings are issued.

Table 3 Alert-level framework adopted for monitoring and response to benthic cyanobacteria in Canterbury rivers

Alert Level	Actions
<p>Surveillance Level (Green Mode) Up to 20% coverage of potentially toxigenic cyanobacteria attached to substrate.</p>	<ul style="list-style-type: none"> • Undertake weekly bank-side observations between spring and autumn at representative locations in the water body where known mat proliferations occur and where there is recreational use.
<p>Alert level (Amber Mode) 20-50% coverage of potentially toxigenic cyanobacteria attached to substrate.</p>	<ul style="list-style-type: none"> • Notify the public health unit. • Conduct quantitative transect surveys at least fortnightly. • Recommend erecting an information sign that provides the public with information on the appearance of mats and the potential risks. • Consider increasing the number of survey sites to enable risks to recreational users to be more accurately assessed. • If toxigenic cyanobacteria dominate the samples, testing for cyanotoxins is advised. If cyanotoxins are detected in mats or water samples, consult the testing laboratory to determine if levels are hazardous.
<p>Action Level (Red mode) <i>Situation 1:</i> Greater than 50% coverage of potentially toxigenic cyanobacteria attached to substrate, <i>or</i> <i>Situation 2:</i> Up to 50% where potentially toxigenic cyanobacteria are visibly detaching from substrate, accumulating as scums along river's edge or becoming exposed on the river's edge as the river levels drop.</p>	<ul style="list-style-type: none"> • Immediately notify the public health unit. • If potentially toxic taxa are present then consider testing samples for cyanotoxins. • Notify the public of the potential risk to health – this should include temporary warning signage and a media release.

Please note that a presentation will also be provided at the zone committee meeting.

Ashburton Zone Committee Report

Date 31 May 2016
Report to Ashburton Water Zone Committee
From Ellie McNae, Senior Strategy Advisor
Subject Swimming Values in Canterbury and Recreation and Amenity Flagships

13 Swimming Values in Canterbury and Recreation and Amenity Flagships

Purpose

To inform the Zone Committee of work underway to address recreation and amenity information gaps, and to request their support for an initiative to identify potential recreation and amenity flagship projects in their zone.

Recommendations:

That the Ashburton Zone Committee;

1. **Note** the scope of the swimming research and intention to further involve them in the project,
2. **Receive** the background reports on recreation and amenity topics,
3. **Agree** to discuss and identify potential flagship recreation and amenity locations in August.

Background

Since the inception of the CWMS a range of work has been underway to deliver the recreation and amenity targets. This includes a number of recommendations in Zone Implementation Plans, publication of research reports into kayaking and jet-boating values, and the establishment of joint work programmes and projects with partner organisations. Despite this work, there is a general acknowledgement that insufficient progress has been made in delivering on the recreational and amenity targets. This includes the presence of significant information gaps, with a key one being around swimming in freshwater. To address this the CWMS Regional Committee has commissioned a piece of research into swimming values in Canterbury.

The Regional Committee has also reconvened the Recreation and Amenity Working Group (RAWG), who have now begun work towards developing a set of 5 year outcomes and a work programme. This includes a proposal to work with the Zone Committees to identify and establish Recreation and Amenity Flagship projects.

Scope of the Swimming Research

Ken Hughey (Lincoln University) has been contracted to deliver a research report that assesses the full range of values associated with freshwater swimming in the Canterbury region. This will include assessment of the following factors:

1. Locations where people swim, and the relative popularity/value of these sites at both a local and regional scale
2. Values that are key to a 'good' swimming spot, e.g. presence of amenities, flow rates/water depths, water quality, presence of a pool, scenic values
3. Barriers to people swimming in freshwater, e.g., accessibility, perceived water quality, knowledge of sites
4. Appropriateness of current locations for recreational water quality monitoring
5. Value of current indicators used for recreational water quality monitoring
6. Value of the current methods for reporting recreational water quality

The 'broad' approach to be used is to work with Environment Canterbury and other relevant organisations to establish an Expert Panel to guide and then moderate the data collection and analysis process. Environment Canterbury's Youth Engagement Team (and others as appropriate) will engage with schools and youth groups, electronically and face-to-face as appropriate, to gather raw data. Staff also plan to work with the various CWMS Zone Committees and their Rūnanga representatives.

Data will be collected and compiled from June – August, with an expert panel workshop to examine the results scheduled for September. The draft report will be delivered in early October, in time to inform the selection of monitoring sites at the pre-season recreation meeting. The final report is due in November.

Identifying Recreation and Amenity Flagship projects

The CWMS Recreation and Amenity Targets state the requirement that there be a positive trend in the availability or quality of recreational opportunities in each zone by 2020. By 2040 the targets state that at least one major recreational opportunity in each zone be restored that did not exist in 2010. To drive work towards this goal, the Regional Committee recommended in 2014 the establishment of at least one multi-party flagship project for recreation and amenity. In the spirit of the CWMS, the flagship projects could look to achieve outcomes for multiple targets, not just recreation and amenity.

The Recreation and Amenity Working Group (RAWG) discussed this proposal at their May 2016 meeting and determined that, rather than the Regional Committee selecting flagship projects, each Zone Committee should nominate their own potential flagship projects.

They acknowledged that current information gaps around the location and nature of some recreation opportunities may limit the Zone Committees ability to identify potential flagship projects. To remedy this, Environment Canterbury staff will be convening an information-gathering workshop with a wide range of recreational interest groups in the coming months. We then propose coming to each of the Zone Committees with that additional information in August/September, and working with the Zone Facilitators to identify some potential flagship projects in each of the zones.

In advance of that workshop, we wanted to present the proposal to Zone Committees, while also bringing their attention to the currently available information on recreation and amenity values. This includes the report into kayaking values, jetboating values and a range of maps showing access points and some recreational sites along Canterbury rivers. Copies of these will be provided at the meeting.

14 Reports for Committee Information

14.2 Consents Update

CONSENTS UPDATE – May 2016 – ASHBURTON ZONE	
CRC#/Applicant/Description	Status
CRC166240-3 – Z Energy Limited – Consent to replace underground storage tanks in Z Energy Station Ashburton.	Granted 06/05/2016
CRC166953 – Mt Arrowsmith Limited and PW & WF Wareing – Consent to use land for farming within the sensitive lake nutrient allocation zone (Ashburton Lakes – Lake Heron).	Granted 05/05/2016
CRC166941 – Fallgate Farm Limited – Consent to take and use water – replacement of previous consent combined with an increase in annual volume – Mayfield Hinds Groundwater Allocation Zone.	Granted 10/05/2016
CRC167422-4 – Align Hinterlands Ltd – Wetland Development – near Mount Somers. Undertake land drainage using surface and sub-surface drains and development of wetland to treat drainage water prior to discharge into Hakatere / Ashburton River. Draft conditions have been sent to applicant.	In Process
CRC151154 , CRC151179 – LW & DI Molloy ; CRC151176 – Yollom Farm Limited ; CRC154901 – Longbeach Estate Ltd & Raynham Dairies Ltd ; CRC154902 , CRC154906 – KB & RA Townshend ; CRC154904 – Bellwin Farms Limited ; CRC160364 , CRC160365 – GR & RC Wilson . Valetta Groundwater Allocation Zone applications to swap surface water or hydraulically connected groundwater to deep groundwater – currently waiting for LWRP PC2 becoming operative before proceeding (unchanged from previous update).	In Process
CRC163693 – E G Perkins Limited – Surface water take replacement on Dobsons Drain – minimum flow proposed that is equivalent to that recommended in Hinds Drain Working Party recommendations for Boundary Drain. Currently seeking ecological comment.	In Process
CRC165228 , CRC165316-23 – Ashburton District Council – Transfer use of 347 l/s from stockwater to irrigation purposes – further information requested regarding volume of surrender proposed and LWRP policy for Ashburton River on meeting reduction to 2.900 m ³ /s stockwater allocation, and draft conditions being considered by applicant.	In Process
CRC166783 – Ashburton Lyndhurst Irrigation Limited – dam water within the scheme –replacement application to increase storage capacity and dam footprint – applicant still seeking written approval from ADC (unchanged from previous update).	In Process
CRC165909 – Mr Gingerbread Limited – Use land for farming (as a farming enterprise) – a small part of the property is in an Orange Nutrient Zone with the bulk of the property in a Red Zone. Activity is in the PC2 area. Draft conditions have been sent, discussing GMP requirements with applicant (unchanged from previous update).	In Process

CRC167500 – P B J Investments Limited – Undertake earthwork activities within a contaminated site (East St and Princes St) – Further information requested from applicant.	In Process
CRC167731-2 – Erralyn Farm Limited – Renew consent for flood protection works and to divert water within Rakaia River bed	In Process
Greenstreet Irrigation Limited – Scoping options for farming land use/discharge consent under Nutrient Management Rules.	Pre-application
Mayfield Hinds Irrigation Limited – Proposal to augment Harris Drain with water taken from MHIS and take water out downstream – scoping assessment requirements (unchanged from previous update).	Pre-application
Mayfield Hinds Groundwater Allocation Zone pre-application requests – lapsing of a recent consent has made 958,464m ³ available within groundwater allocation block.	Pre-application

Ashburton Zone Committee Meeting

Tuesday 31 May 2016

Timetable

Time	Item
1:00 pm	Meeting Commences
2:30 pm	Afternoon Tea

Order of Business

1	Welcome, Karakia and Introductions	
2	Apologies	
3	Extraordinary Business	
4	Register of Interests	1
5	Confirmation of Minutes	3
6	Correspondence	
7	Hinds Drains Working Party Recommendations	9
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9	Zone Delivery Update	
10	Managed Aquifer Recharge (MAR) Pilot Project.....	13
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