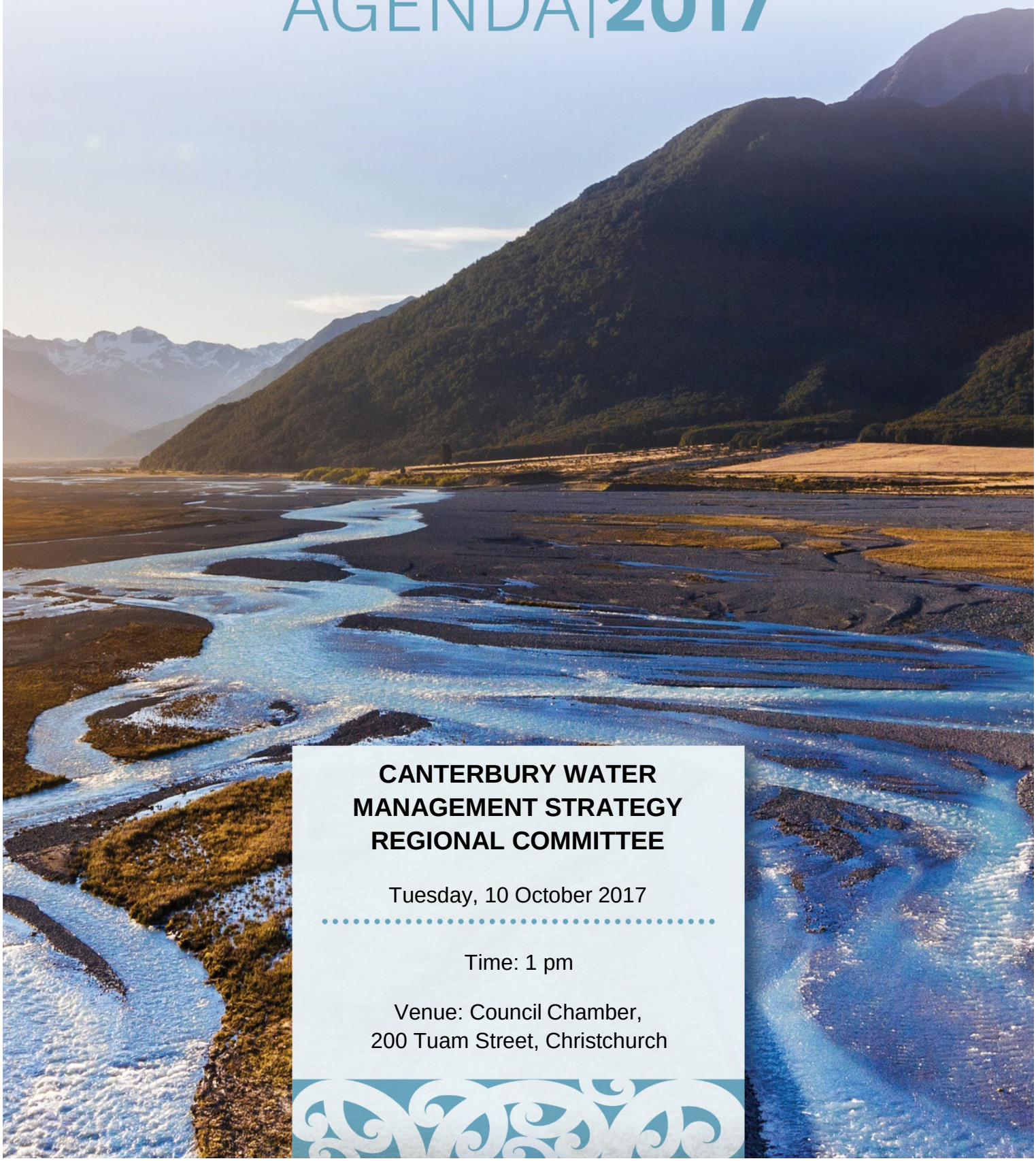
Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

CANTERBURY REGIONAL COUNCIL
Kaunihera Taiao ki Waitaha

AGENDA|2017



CANTERBURY WATER MANAGEMENT STRATEGY REGIONAL COMMITTEE

Tuesday, 10 October 2017

Time: 1 pm

Venue: Council Chamber,
200 Tuam Street, Christchurch

Canterbury Water Management Strategy
Regional Committee

Membership

Chair	Andy Pearce
Community Representatives	Hugh Canard, Jane Demeter, Cole Groves, Nicky Hyslop, Ross Millichamp and Vicky Southworth
Zone Representatives	Ben Curry (Ashburton), Michele Hawke (Hurunui-Waiau), Sandra Hampstead-Tipene (Upper Waitaki), Lance Kenyon (Christchurch West-Melton), Thomas Kulpe (Banks Peninsula), Carolyne Latham (Waimakariri), Karaitiana Taiuru (Selwyn-Waihora), John Talbot (Orari-Temuka-Opihi-Pareora)
Christchurch City Council	Councillor Sara Templeton
District Council Representatives	Mayor Winton Dalley (North Canterbury) Councillor Nicole Reid (Mid Canterbury) Councillor Peter McIlriath (South Canterbury)
Te Rūnanga o Ngāi Tahu	Rebecca Clements
Ngā Rūnanga	Nigel Harris, Riki Lewis, David Higgins
Environment Canterbury	Councillors Rod Cullinane and Claire McKay
Central Government Observer	Murray Doak (MPI), Jenny Ridgen (MPI)
Canterbury District Health Board Observer	Dr Alistair Humphrey

Members please note that lunch will be available at 12.30 pm

Canterbury Water Management Strategy
Regional Committee

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Minutes of the Canterbury Water Management Strategy Regional Committee held in the Council Chamber, Canterbury Regional Council, 200 Tuam Street, Christchurch on Tuesday 8 August 2017 starting at 1 pm

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8. CWMS Draft Targets Report
9. Plan Change 5 – Nutrient Management & Waitaki Planning Provisions
10. Working Group Updates
11. Meeting Chairs/Deputies (October 2017) on proposed Zone Committee Symposium in March 2018 – verbal update
12. General Business
    a) Facilitators Update

Present:

Chairperson	Andy Pearce
Community Representatives	
Hugh Canard	
Jane Demeter	Nicky Hyslop
Vicky Southworth	Ross Millichamp
Zone Representatives	
Ben Curry	Ashburton
Sandra Hampstead-Tipene	Upper Lower Waitaki

Michele Hawke	Hurunui-Waiau
Matt Hoggard	Kaikoura
Lance Kenyon	Christchurch-West Melton
Thomas Kulpe	Banks Peninsula
Carolyne Latham	Waimakariri
Karaitiana Taiuru	Selwyn-Waihora
John Talbot	Orari-Temuka-Opihi-Pareora
District Council Representatives	
Mayor Sam Broughton	Mid Canterbury
Mayor Winton Dalley	North Canterbury
Peter McIllraith	South Canterbury
Te Rūnanga o Ngāi Tahu	
Rebecca Clements	
Ngā Rūnanga	
Riki Lewis	
Environment Canterbury	
Cr Rod Cullinane	
Cr Claire McKay	
Central Government Observer	
Simon Wagner (MFE)	
Canterbury District Health Board Observer	
Dr Alister Humphrey	

In attendance

Stephen Bragg (Tangata Whenua Facilitator, Environment Canterbury), Nadeine Dommisse (Senior Manager Operational Support, Environment Canterbury), Anita Fulton (Senior Strategy Advisor – Water & Land, Environment Canterbury), Jason Holland (Team Leader Planning, Land & Water, Environment Canterbury), Dennis Jamieson (Project Leader Water Infrastructure, Environment Canterbury), Dann Olykan (Principal Strategy Advisor Water, Environment Canterbury), Peter Ramsden (Tangata Whenua Facilitator, CWMS Environment Canterbury), Ian Whitehouse (Zone Facilitator, Environment Canterbury), Lesley Woudberg (Team Leader Zone Facilitator, Environment Canterbury), Cindy Butt (Team Leader Governance Services, Environment Canterbury).

Welcome

The Chairperson opened the meeting at 1 pm, followed with a karakia from Peter Ramsden.

1 Apologies

Apologies were received and accepted from Councillor Sara Templeton (Christchurch City Council), Murray Doak (MPI Representative) and Jenny Ridgen (MPI Representative).

For lateness, Karaitiana Taiuru and Dr Alistair Humphrey. For early departure, Lance Kenyon and Rod Cullinane at 4 pm.

2 Conflicts of interest

Chair Andy Pearce declared he had been appointed a Director to the Centre for Space, Science and Technology New Zealand and requested this be added to the interests register. Hugh Canard declared an interest as a member of the assessment panel for applications to the Ministry for the Environment Freshwater Improvement Fund.

3 Minutes of the previous meeting 13 June 2017

Refer pages 4-28 of agenda

Corrections:

(a) Page 8, item 6.5, Lower and Upper Waitaki, first paragraph, last sentence: replace the word Takatua with Takapo

(b) Page 9, item 7, CWMS Draft Target Update: include commentary that Target 156 is on the high risk list

(c) Page 10, item 7 CWMS Draft Target Update: delete “Jane Demeter” from resolution 2.

(d) Page 11, item 11 General business, Biogas facilities on farms, first paragraph, final sentence: include the words “obstructions in pivot irrigators”

The general consensus of the Canterbury Water Management Strategy Regional Committee:

Confirmed the minutes of the Regional Water Management Committee meeting held on 13 June 2017 as true and correct record with the foregoing corrections.

4 Matters arising

Nil.

5 Correspondence

Nil.

ITEMS FOR DISCUSSION

6 Waimakariri Groundwater

Refer pages 29-30 of the agenda

Dr Tim Davie presented the report that updated the Committee on the latest groundwater modelling and science from the Waimakariri zone. He advised the Waimakariri Sub-regional planning process had been delayed to allow more time to understand groundwater movements under the Waimakariri River.

Attendance
Dr Alister Humphrey attended the meeting at 1.17 pm, and Karaitiana Taiuru at 1.21 pm.

Dr Davie advised modelling work highlighted the current uncertainty of groundwater flow paths including the direction of flow path in deep groundwater, and the time taken for deep groundwater to travel. The modelling work would include vigorous testing of the hypothesis that there are deep flow paths under the Waimakariri.

Attendance
Dann Olykan attended the meeting at 1.32 pm.

Members asked questions of clarification regarding river flow direction, ground water and well depth, and other possible sources of acquifer water. It was noted the Christchurch West Melton ZC had collected some data that could be of interest, and it would be keen to be involved in developing a solutions package. Aging work was part of the project and indicative information showed some of the deep ground water is hundreds of years old and across the plains between 70 to 100 years old.

7 Zone Committee (ZC) Updates

Refer pages 31-34 of the agenda

Hurunui-Waiau Zone Committee

Refer page 31 of the agenda

Michelle Hawke gave an update that advised the zone committee had agreed nine issues to progress over the next eighteen months including consideration to defer a review of water take consents, and whether to pursue an all plan review or take a more targeted approach. The science stakeholders group were assessing technical information that would inform how to progress the key issues, and the group would come back to the zone committee with its findings later in the year. The biodiversity sub group were developing an approach to braided riverbed management and would bring its findings back to the committee in September.

Christchurch West Melton Zone Committee

Refer page 32 of the agenda

Lance Kenyon gave an update and noted the ‘Erosions and Sediment Control Tool Box’ was an excellent online tool. A new technique to use compost to stabilise hill erosion

was recently launched, and the committee facilitated a 'Zinc and Copper' workshop from which Environment Canterbury were trialling copper free brake pads on some of its vehicles. The 'Meet in the Middle' walk or ride event to Kerrs Reach was being held on 15 October 2017. It was a community fun day to promote the Avon Trail and included kids activities, food stalls and entertainment.

Selwyn Waihora Zone Committee

Refer page 33 of the agenda

The update was taken as read. The Zone Committee was thanked for hosting several water seminars at Lincoln University.

Upper-Lower Waitaki Zone Committee

Refer page 34 of the agenda

Sandra Hampstead-Tipene advised the committee hosted Environment Canterbury councillors at Waihou marae, and will host a joint combined zone hui at the Otematata Community Centre on 18 August 2017.

Ashburton Zone Committee

Ben Curry gave a verbal update and advised the appeals regarding Plan Change 5 and Plan Change 2 had been settled. The managed acquifer recharge trial report (first 5 years) was near completion and would be presented to the ZC at the end of the month, and be made available on Environment Canterbury's website.

The pending sale of Mount White station was noted, and that the Department of Conservation would participate in the tenure review process.

8 Canterbury Water Management Strategy Targets Report

Refer page 35 of the agenda

The Chairman introduced the report and advised the CWMS Regional Committee functions and responsibilities included oversight and monitoring of the CWMS implementation, and advice to Environment Canterbury about matters like the targets report. The committee needed to provide a consensus view on the content in the targets report and agree the scores represent a true and fair position across all of the targets. The Chair said this was the final opportunity for committee members to provide feedback. The targets report needed to be accurate, balanced, and complete for presentation to the Canterbury Mayoral Forum meeting on 25 August 2017, who would subsequently consider if the targets report is approved.

Dann Olykan addressed the meeting and advised members that a targets report was prepared every 2 years to assess progress against the CWMS targets. The 2017 review was focussed on progress towards the 2020 targets but would continue to update 2015 targets. Work would continue over the next 6-12 months on how the 2020 targets would be met. The Chair summarised the target scores as; 2 achieving, 9 good progress, 10 progress, 19 started, 1 not started, and 2 no score.

The committee deliberated and noted the targets were from 2015 to 2020 and there was a gap after that to 2040, and agreed additional targets be developed for 2020-2040. A member considered it was difficult to measure target performance and recommended a cost benefit analysis was needed for each target. The Chair said there may be opportunity to raise this at the Mayoral Forum as part of the discussion on the proposal to develop 2020-2040 targets, and reiterated it was not the role of the committee to prioritise targets, the role of the committee was to provide a view on the rate of progress of the targets, based on a set of scores. Members agreed the commentary on how targets were progressing was important, and should focus on the activity rather than on the ground activity. The report should include comment on the complexity and dynamics of the targets environment. The meeting broke into workshop mode and members were invited to provide their feedback on each target, the target scores and associated commentary.

The following feedback was noted:

- Convey the complexity of the targets environment
- Drinking water was going backwards. Disconnect between the target and the real world. Progress activity, no change in desired outcome. Reflect the change. Include narrative to say it will take longer to achieve
- Nutrient areas – progress made on activities, not made in the real world and some were not met
- Encourage a thorough gap analysis to look how far we have got to, where we need to go, and how to get to where we want
- Develop targets from 2020 to 2050
- Provide a view across all Zones - the report is pan-regional, and some Zones were doing great things
- Acknowledge the report is qualitative rather than quantitative.

The Chairman concluded the discussion and noted; members were unhappy with 2 of the target areas, overall target progress was satisfactory and there was necessity for change on some targets. The report was reasonable, balanced, fair, and accurate on target progress made.

The general consensus of the committee agreed the targets report and the scores represented a true and fair position across all of the targets, and agreed additional targets be developed to fill the gap from 2020 to 2040, and noted its willingness to be involved in developing additional targets.

The general consensus of the Canterbury Water Management Strategy Regional Committee:

1. Agreed the Targets Report was reasonable, balanced, fair and an accurate reflection on target progress.

Attendance

Riki Lewis and Mayor Dalley left the meeting at 3.43 pm.

9 Plan Change 5 – Nutrient Management & Waitaki Planning Provisions

Refer page 36 of the agenda

Olivia Cook updated the Committee on Plan Change 5 (PC5) and advised PC5 created rules that affected farming activities to comply with nutrient limits that also aligned with Good Management Practice (GMP). How PC5 affects a farm was dependent on individual circumstances and farms requiring a consent will have their nitrogen loss capped at GMP.

Attendance
Cr Rod Cullinane left the meeting at 3.53 pm.

Members sought and received clarification and it was noted that zone committee determinations had been incorporated into PC5. The audit process included assessments and monitoring of farm environment plan (FEP) processes. A member considered advances in technology in the next 10 years would create solutions that will take farms beyond their GMP.

Attendance
Nicky Hyslop left the meeting at 4.15 pm.

10 Working Group Updates

Refer pages 49-53 of the agenda

Regional Infrastructure Working Group

Ross Millichamp advised the Group were waiting for a briefing on compliance and monitoring and how to undertake fish screen monitoring and evaluation.

Education and Communication

Vicky Southworth advised an app was being developed that will advise the public on suitable swimming sites. The app will be connected to the Land Air Water Aotearoa (LAWA) site, and would be available to use this summer. A campaign to raise awareness on 4x4 drivers operating in riverbeds (namely the Ashley River) was underway and was an opportunity for other zones to tie into the campaign.

11. Meeting with Chairs/Deputies for October 2017

The Chair gave a verbal update and noted a workshop for Zone Committee Chairs and Deputies was being convened on 4 October 2017.

12 General Business

(a) Facilitators Update

Refer page 54 of the agenda

The facilitators update report was noted.

(b) Ministry for the Environment Freshwater Improvement Fund Update

Hugh Canard updated the Committee on some of the successful applications received from the Canterbury region. He said 79 applications were assessed from across New Zealand and ranged from $7m to $250k. Mr Canard noted the high quality of the Canterbury applications that had secured about $2.7m in funding.

Attendance
Lance Kenyon and Mayor Sam Broughton left the meeting at 4.30 pm.

It was noted a funding application from the Kaikoura Zone Committee (Ted Howard (Chair)) had been successful and had secured $600k from the fund.

(c) Resignation

The committee was informed that Matt Hoggard (CWMS Committee member from Kaikoura) had resigned.

The meeting closed at 4.35 pm, with a karakia from Karaitiana Taiuru.

Confirmed

Date _____ **Chairperson** _____

Agenda Item No: 7	**Subject Matter:** Zone Committee Updates
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Zone Committee Representatives	

Purpose

Provide the Regional Committee with an update on the issues and priorities of each zone committee and to discuss regional themes and options where the regional committee could add value.

Reports

Kaikoura – Ted Howard

To be tabled

Waimakariri – Carolyne Latham

Report attached

Banks Peninsula – Thomas Kulpe

To be tabled

Ashburton – Ben Curry

To be tabled

OTOP – John Talbot

To be tabled

Waimakariri Water Zone Committee

Briefing to Regional Committee 10th October 2017

1. Cam River Enhancement Fund Sub-committee

This unique fund originated from Waimakariri District Council by way of an environment court decision relating to a sewage discharge breach. It is administered by a sub-committee of WDC with accumulated funds in excess of $200,000. Funds are to be used "for habitat restoration in the Cam River system to be used as agreed between North Canterbury Fish & Game and WDC in consultation with DOC".

Dr Henry Hudson of Environmental Management Associates was commissioned to produce a Scoping Strategy for the Cam to give a scientific base to where funding for habitat restoration could be best focussed. The fund sub-committee provided a copy of the report to the Zone Committee in May, and it effectively provides a catchment blue print with potential solutions including estimated costs, for managing issues which are primarily related to excessive sediment deposition on and within the bed. It identifies an integrated catchment management approach starting from the top of the catchment so that downstream rehabilitation isn't overwhelmed by upstream sediment and contaminant sources. It also notes a major threat to stream rehabilitation is "paralysis by analysis", and that some of the solutions recommended should be regarded as experiments with appropriate reporting on successes and failures.

The Cam River Enhancement Fund Subcommittee is now in a position to work with the relevant parties and start to fund the implementation of the recommendations in the report.

2. Cam River Irrigation Users Group

Cam River irrigators have formed a group to participate in the sub-regional process, to get a better understanding of the Cam River issues, iwi aspirations, and how the irrigators can help to achieve better outcomes for the river. They are also working with Ecan to prepare information that will assist the Zone Committee to better understand how increasing minimum flows might impact on irrigators' businesses.

3. Immediate Steps Projects Approved

- $12-13,000 for island and weed clearing in strategic parts of Ashley River. Application request reduced from an initial estimate of $70,000 due to good autumn/winter rainfalls doing some of the work.
- Approved ongoing funding for weed control in Tutaepatu Lagoon.

4. Extension to Sub-Regional Timelines

The timeline for developing a ZIPA has been extended from December 2017 to around September 2018 so that Ecan have time to carry out scientific work including drilling additional wells and water quality sampling, to gain a better understanding of the movement of deep groundwater in the area of the Waimakariri River. Modelling has indicated the possibility of deep groundwater from the Waimakariri zone finding its way under the Waimakariri River, whereas previously it was thought that this didn't occur.

5. Silverstream Salmon Hatchery

The Zone Committee received a briefing from the commercial salmon fishery operating on the spring-fed Silverstream near Ohoka. It is a commercial operation but recreational fish are also released through Fish & Game. While generally salmon spawning was improving through the Kaiapoi river and

stream systems, there was considerable concern about increasing nitrate levels in the Silverstream and the on-going effects of this on salmon at various growth stages. After three years of drought, low flow had also been an issue with warming of the water potentially having a negative impact on salmon. The hatchery supplements the stream from a bore, however the bore water is also showing elevated nitrate levels, and modelling indicates these may increase in the future. Blue Sky and potential solutions are being considered, and trials are being carried out including a woodchip filter wall, and re-charge via a trench to test possibilities for augmentation.

6. Workshops

While the Waimakariri deep groundwater investigations and results are being worked through, the Zone Committee is continuing to have workshops and discussions on catchment management areas in the zone that are not influenced by the new investigative work. A programme of targeted engagement is also being worked out for the next few months.

Carolyne Latham
Waimakariri Zone Committee Representative

Agenda Item No: 8	**Subject Matter:** Managed Aquifer Recharge and other CWMS Environmental Infrastructure Projects
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Dr Brett Painter – Project Leader CWMS Assessments and Evaluations Denise Tully - Technical Manager/Drinking Water Assessor, Community & Public Health	

Purpose

To provide the Regional Water Management Committee with an update on three CWMS Environmental Infrastructure Projects: the Broadacres Targeted Stream Augmentation project, The Selwyn/Waikirikiri Near River Recharge project, and the Hinds/Hekeao Managed Aquifer Recharge project.

Staff Recommendations

1. **That the report be received and noted.**

2. **That requests for further information and points of discussion be noted.**

Report

1. **CWMS Environmental Infrastructure concepts**

CWMS Environmental Infrastructure investigations seek benefits across multiple CWMS Target areas, but particularly those delivering improvements to ecosystem health, biodiversity, kaitiakitanga, mahinga kai, drinking water, water use efficiency, recreation and amenity values. Natural character of braided rivers is another important target area due to their potential roles as source or receiving water bodies.

The Targeted Stream Augmentation, Near River Recharge and Managed Aquifer Recharge concepts have been developed and investigated in response to recommendations from the Regional Water Management Committee, Selwyn-Waihora Zone Committee and Ashburton Zone Committee. Initial investigations have focused on understanding how the potential source and receiving water body systems function as well as their current state and pressures (natural and human influenced). These investigations have informed potential environmental infrastructure responses.

2. **Broadacres Targeted Stream Augmentation project**

Targeted Stream Augmentation (TSA) is a term coined by the Selwyn-Waihora Zone Committee. It refers to augmentation of spring-fed waterways by groundwater that would naturally supply the waterway if groundwater levels were sufficient. The Broadacres TSA project augments a Selwyn River tributary upstream from Chamberlains Ford. Construction of the dedicated groundwater bore, solar panels, pump, pump shed and connections are complete. Security fencing and riparian planting preparation is underway. The discharge piping will be installed once the spring stops flowing naturally. A paper titled "*Protection of groundwater dependent ecosystems in Canterbury, New Zealand: the Targeted Stream Augmentation Project*" has been published online by the Sustainable Water Resources Management journal. This paper can be accessed at: http://link.springer.com/article/10.1007/s40899-017-0188-2

3. **Selwyn/Waikirikiri Near River Recharge project**

Our Near River Recharge concept involves recharging alpine water near (but not directly mixed with) the target river system. For this project the source water is from the Rakaia River via CPW infrastructure to a recharge area beside a very 'leaky' section of the Selwyn/Waikirikiri. These waters naturally mix in the southern Selwyn-Waihora groundwater system. The recharged water will support the lower Hororata, Selwyn and Irwell Rivers plus their connecting groundwater. Progress to date includes initial design creation, land purchase assessments/discussions, baseline information collection and the signing of a Stage 1 construction MoU (CPW and ECan).

4. **Hinds/Hekeao Managed Aquifer Recharge project**

Managed Aquifer Recharge (MAR) has been described as the purposeful recharge of water to aquifers/groundwater for subsequent recovery or environmental benefit. In mid-2016 a leaky pond was constructed approximately 8 km inland from Tinwald to test the potential for MAR to contribute to groundwater (quantity and quality) and Hinds Drains ecosystem health improvements.

A key reason for the placement of the initial leaky pond was to direct clean water toward domestic water wells in an area of poor groundwater quality beneath Tinwald. Sampling of 50 domestic bores in late 2015 by CDHB/ADC identified:

- 27 bores over half the NZ Drinking Water Standard for nitrate;
- 14 bores over the NZ Drinking Water Standard for nitrate;
- 2 bores testing positive for *E. coli*.

Some of these bores are included in the on-going MAR project ground and surface water monitoring network to track the clean recharge water.

Year 1 of the Hinds MAR Project concluded in June 2017. The key findings to date are:

- A MAR basin recharge system has been successfully designed, constructed and operated for its first year. The project has achieved significant support from the local community as well as interest nationally and internationally.

- The influence on groundwater levels and groundwater quality can be measured and distinguished from natural effects.
- Groundwater levels have risen significantly via pressure response downgradient for approximately 7 km in the shallow aquifer and over an approximate area of 12 km2 in the regional aquifer.
- Groundwater nitrate-nitrogen concentrations have reduced significantly and remained at low levels (below the catchment target) over a distance of at least 3 km.
- Over time, the zone of influence will extend to the Tinwald area and the springs feeding the Hinds Drains. This will occur sooner if the pilot site can be enhanced to recharge more water than currently.

Year 2 of the Hinds/Hekeao MAR project is now underway with oversight provided by a new Hinds MAR Governance Group. The three key objectives for Year 2 are:

- Enhancing the physical performance of the initial site.
- Using lessons learnt to inform development of further sites, including a Near River Recharge site up-gradient from the Mayfield community drinking water bore.
- Developing a business case for implementing an integrated Hinds/Hekeao catchment MAR scheme.

Further information is available at www.ecan.govt.nz/hinds-MAR.

Agenda Item No: 9	**Subject Matter:** Update on CWMS Targets Reporting - 2017
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Dann Olykan – Environment Canterbury	

CWMS Targets Progress Report 2017

Purpose

1. To provide the Regional Water Management Committee with an update on CWMS Targets Progress Report 2017

Recommendations

1 Receives the report.

CWMS Targets Progress Report

2. Every two years Environment Canterbury completes a report to assess progress against the Canterbury Water Management Strategy (CWMS) Targets. The 2017 report is complete; a printed copy has been provided.

3. Information has been drawn from across the CWMS partners, agencies and organisations to report progress.

4. The report focuses on progress towards the 2020 targets but continues to update related 2015 targets.

Role of the Regional Committee

5. It is a key role of the Regional Committee to review and provide assurance to Environment Canterbury and the Mayoral Forum on matters like the targets report.

6. The Regional Committee has been engaged with Environment Canterbury staff on the report during meetings in April, June and August – to discuss scope, format and

assessment of progress. The various Working Groups have also discussed the reported progress against relevant targets.

7. On 8 August 2017 the Regional Committee discussed the final draft in detail. This allowed committee members to propose any adjustments on the reported progress for each individual target.

8. Subsequently, the committee was able to agree that the report was, overall, 'true and fair' or 'accurate, balanced and complete'.

The Canterbury Mayoral Forum

9. The Regional Committee agreed that, in aggregate, the assessment of progress to 2020 in the CWMS Targets Progress Report 2017 was fairly and accurately described.

10. The Mayoral Forum received the report on 25 August and approved the CWMS Targets Progress Report 2017 for publication.

Next steps

11. The report is now being used to inform zone and industry work programmes with a view to ensuring action is underway to achieve the 2020 targets.

12. The report is also being used to inform decision making in the *Long Term Planning* process for councils.

13. The CWMS is seven years into a 30-year programme from 2010 to 2040 there is an upcoming need to set some interim milestones or targets for 2025 and 2030

14. At the last meeting, the Regional Committee recommended that:
    - additional targets for 2025, 2030, and 2035 should be developed, based on the progress reported in the 2017 report
    - these additional targets be focused (and increasingly so with time) on the desired outcomes of the CWMS, especially in water quality, nutrient loads, biodiversity and ecosystem health, and recreation.

15. These recommendations are being progressed by Environment Canterbury. A process for refreshing of the CWMS is being scoped and will be on the Regional Committee agenda for early to mid 2018.

Agenda Item No: 10	**Subject Matter:** Update on Farming at Good Management Practice Campaigns
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Tami Woods, Regional Implementation	

Purpose

To provide the Committee with an update on:

a) Progress of farms sent direct mails packs as part of the Farming at GMP Stage 1 Regional Campaign and next steps.
b) The upcoming Campaign for South Coastal Canterbury Streams.

Recommendations

1. **The progress of farms sent direct mails packs as part of the Farming at GMP Stage 1 Campaign and next steps.**

2. **The upcoming Campaign for South Coastal Canterbury Streams.**

Report

Farming at Good Management Practice Stage 1 Campaign

The Farming at Good Management Practice Stage 1 Campaign targeted farms who were likely to require consent under operative Land and Water Regional Plan and subsequent Plan Changes. The Campaign's customised zone direct mail pack went to 1000 farms with more than 50 hectares of irrigation across Waimakariri, Christchurch-West Melton, Selwyn-Waihora, Ashburton and Orari Temuka Opihi and Pareora Zones.

The direct mail packs were also supported by tools, processes, information sharing (e.g. drop in sessions run by zone teams and rural professional networking events) and a region-wide rural and urban advertising campaign.

See www.canterburywater.farm and www.canterburywater.org for more information.

Progress

In July follow up phone calls were made by Environment Canterbury to target farms. The purpose of the phone calls was to confirm how farms were progressing with establishing whether they needed a consent and if so preparing a farm environment plan, nitrogen budgets and completing applications.

Contact was made with 56% of the target farms.

Of the farms contacted more than 80% had taken the action needed, whether it was determining they were permitted, applying for consent, completing a Farm Environment Plan and preparing a nitrogen baseline – or joining a waitlist.

Almost 70% of farms contacted, who required consent, identified they were on a waitlist for a nitrogen budget to be prepared.

From this data a follow up list was created for each Zone Team. The list included, those not able to be contacted and those who were not considered on track (excluding farms that are permitted, on a waitlist, who have lodged a consent, or who were about to apply). Notably the most significant follow up list was in Ashburton.

Zone Teams are now contacting those on their follow up list. Zones with a higher number of follow-up have given priority to those who have been contacted and needed follow up support.

Next steps

Further letter and targeted communication was sent on 29 September to farms in Ashburton, Selwyn-Waihora and Orari Temuka Opihi and Pareora zones who were unable to be contacted. Landowners have been given until late October to respond. Staff are also working with Fonterra who will contact their farmers that receive letters.

In November further analysis will be undertaken to identify farms still 'not on track', or who have not provided information to Environment Canterbury about their progress. Final warning letters will be sent late November (after show weekend), before compliance visits occur over the summer period. Targeted abatement notices will follow if no response occurs to the warning letter.

Farming at Good Management Practice South Coastal Canterbury Streams Campaign

The South Coastal Canterbury Streams (SCCS) area was not included in the Stage 1 Regional Campaign due to the uncertainty around changes to the nutrient management rules through the appeals process for Plan Change 3 (PC3).

On the 1 September 2017, PC3 was notified as operative.

Earlier this year, there was a study undertaken in the SCCS area researching how engaged farmers are with getting a land use consent to farm. One of the main points highlighted in this research was that farmers are still uncertain about what is required of them and how these new regulations will impact on their business. The need for a further Campaign for SCCS was therefore identified.

The SCCS Campaign essentially follows the same campaign format as the Farming at GMP Stage 1 Regional Campaign.

A direct mail package will be received by farms from 24 October and will be followed by specific community drop in sessions.

The direct mail package will be sent to all farms in the SCCS area outside of Irrigation Schemes. This is based on the Zones desire to communicate requirements to all farmers. Compliance follow up will however continue to prioritise farms with over 50ha of irrigation.

The deadline for land use consents is 1 March 2018, which is 6 months after PC3 became operative.

This Campaign like the Regional Stage 1 Campaign will also include an end to end process of follow up phone calls, zone team follow up and then further action utilising escalating compliance tools and reports on progress.

Agenda Item No: 11	**Subject Matter:** Working Group Updates
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Dennis Jamison, Brett Painter, Maree Willets, Anita Fulton – Environment Canterbury	

Purpose

To provide an update on the Working Groups discussions and actions.

Recommendation

1. **Receive the report and note the next steps each Working Group is undertaking.**

Report

Braided Rivers and Biodiversity/Ecosystem Health WG

Key Points

The Long Term Planning (LTP) process is currently underway. Staff are providing Councillors with information for their consideration.

The key points discussed with the Biodiversity & Ecosystem Health and Braided River working groups were:

<u>Braided Rivers</u>

Braided river environments are being raised as an area of specific interest by zone committees. They are also an area of interest for agencies with ownership and/or administrative responsibilities in and around braided rivers, for example the Department of Conservation and Land Information New Zealand. These partnerships are essential to the success of the CWMS in braided rivers.

It is proposed that a Braided Rivers programme is included in the Biodiversity and Biosecurity Portfolio to continue to focus on the current range of planning, property management and biodiversity related projects.

Biodiversity & Biosecurity

The Long Term Planning process is proposing a step change in biodiversity. Staff are currently working on what this means, in terms of the vision, targets and work plans.

The working group discussion / feedback included support for:

a) Data / information about what's out there now
b) Some targets are aspirational and there are conflicts - how we can make the best gains
c) There may be a need for additional target time frames
d) The wide range of engagement and activity required for a step change
e) Technology – because it can add huge value in short timeframes
f) Immediate Steps needs to be prioritised strategically
g) Working efficiently and effectively with others who have an interest, for example landowners, Department of Conservation, Land Information New Zealand

Next Steps

a) The LTP process is continuing through the Council.
b) There will be further opportunities for discussing content as it evolves.

Infrastructure

1. Meeting held 12 September 2017. Meeting notes attached.

2. Update: Access to understandable information on river flow

   Small group meeting held 29 September 2017. Approach emerging to focus on:
   - Making use of existing information/data
   - Focus on presenting information in a form that a wide range of users can easily understand – potentially using "Storyboard" approach.
   - Identifying information gaps

3. Update: Fish exclusion

   Initial meeting held 18 September. Wide range of parties represented (including DoC, Ngai Tahu (TRONT), NCF&G). Wide agreement on much of 2007 guidelines with work expected to focus on:
   - Development and experience over last 10 years
   - Information gaps
   - Common information for operators and compliance.

   ECan/CWMS team approach: Adrian Meredith (Science), Richard Purdon (Compliance) and Dennis Jamieson (CWMS Infrastructure).

RIWG working group meeting notes: 12 September 2017

1. CWMS infrastructure staff update on activities.

   Discussion based around Infrastructure update dated 12 September 2017
   a) RIWG members asked for access to Hurunui-Waiau Infrastructure Integration Assessment and full Phase 1 report of the Hinds/Hekeao Managed Aquifer Recharge Pilot. Report/link circulated post meeting.
   b) Discussion around Regional Committee/Working Group role in conjunction with Targets report (next item).

2. Targets report

   Infrastructure approach seen as:
   a) Combination of "soft" and "hard" components – e.g. efficiency and "hardware"
   b) If needed, individual items are generally "small scale"
   c) Many "connector" elements
   d) Addressing "all targets"
   e) Approach should address all targets "as a whole"
      - Need to consider aspects such as "nitrate mobilisation". (Infrastructure linked options to better managed/reduced?)
      - Complex systems
        - "Pilots" needed to determine actual performance of concepts under "real world" conditions.
      - Need to look at objective assessment of "environmental benefits" of infrastructure in multi-target context.

3. Access to understandable information on river flow

   Process has commenced using Rakaia/Coleridge as a case study
   a) Initial meeting (11 July) involving NCF&G, NZ Salmon Anglers, Trustpower) and CWMS/ECan identified list of topics of concern (Water quality etc. as well as flow)
   b) Follow up small group meeting planned to identify next steps.

4. Fish exclusion

   Initial meeting of "Fish Screen Working Party" planned for 18 September
   a) Sits alongside two related but independent regulatory processes – fish screen compliance (ECan) and major consent processes.
   b) Organisation and acting Chair Andrew Curtis INZ

Infrastructure WG Briefing paper

(attached)

Recreation/Amenity and Communication/Education

Purpose

To update the Regional Committee on the recent combined meeting of the Recreation and Amenity Working Group (RAWG) and Education and Communications Working Groups (EDWG).

Background

1 **Priority recreation or amenity restoration sites**

The Working Groups reviewed the list of recreation or amenity restoration sites submitted by zone committees. There are common themes throughout the data that, if implemented, would enhance popular sites, e.g. providing toilet facilities, improving signage and access, weed control and plantings, and rubbish removal. Through the Regional Committee, RAWG will work closely with Environment Canterbury and zone committees to partner with local district or city councils to find ways to improve these priority sites. There may be opportunities to access central government's tourism fund.

2 **River and Lake Swimming in the Canterbury Region**

The report identified popular freshwater rivers and lakes for swimming throughout Canterbury. These swimming sites will be reviewed against ECan's current 'swimmability' monitoring programme.

3 **'Can I Swim Here?'**

Communications is piloting a project to build awareness of 10 swimmable recreation sites closest to Christchurch this summer by developing signage, an app and promotion through an advertising and social media campaign. ECan's weekly summer water quality monitoring of river and lake sites is posted on LAWA and ECan's website and could be linked to local district or city council websites. Connections are starting to be made with zone committees, district and city councils, communities and community groups.

Recommendation

That the Regional Committee note the combined report of RAWG and ECWG.

Notes from the combined Recreation & Amenity and Education & Communications working groups meeting 13 Sept 2017

Present: Hugh Canard, Grant Edge, Thomas Kulpe, Riki Lewis, Ted Howard, Peter McIlraith, guest Nick Vincent from MfE

Staff: Lesley Woudberg, Dann Olykan, Anita Fulton, Gerald Raymond

Apologies: Mark Webb, Ben Curry, Andy Pearce

1 **CWMS Targets Progress Report 2017**

Dann advised that the report had been presented to the Mayoral Forum and would soon be publicly available. More needs to be done to progress targets for Recreation and Amenity Opportunities.

Peter queried the linkage of TAs, and central government, to the CWMS and how do we leverage these groups to do more in this area. We can offer leadership and support to the zone committees through the Regional Committee. Is there a mechanism to link together groups that do similar recreation and amenity projects?

2 **Recreation or amenity restoration sites**

A list of priority recreation or amenity restoration sites from zone committees was provided to RAWG at their request. The purpose of gathering this information was to formulate a more integrated and better resourced work programme with the aim of providing effective leadership on delivering CWMS targets.

Grant felt that selecting up to five sites was very narrow, he would have liked to engage with the community; we needed to identify opportunities and leverage funding across the region looking at the bigger picture; needed to identify the values and experience we are trying to achieve.

Ted wanted to see scale dependent impact; how can we minimise the impact on riverbeds by 4WDs.

Thomas believed strong planning provision was needed to protect existing sites from pollution, flooding, and changes from subdivision development; building on things already in place, TAs will more likely fund if it's included in their long term vision and strategic plan.

Hugh saw water quality as having a huge impact on recreation, e.g. Glentunnel camp ground had fewer bookings last summer believed to be because of river pollution signs; this also relates to jobs and incomes so has economic implications that impact on local communities.

TA are able to influence regional policy development, use this as a template to plan for improvement; work with zone committees to include more recreation and amenity initiatives in their work programmes; and zone committees to get alongside TAs to work together to improve recreation sites.

3 **Swimming sites report**

Attribute data for the additional swimming sites is still being collated. More discussion is needed on how an action strategy could be developed.

4 **'Can I swim here?'**

Communications is piloting a project to build awareness of 10 swimmable recreation sites closest to Christchurch this summer by developing signage, an app and promotion through an advertising and social media campaign. ECan's weekly summer freshwater quality monitoring of river and lake sites is posted on LAWA and ECan's website and could be linked to local TA websites. Connections are starting to be made with zone committees, TAs, communities and community groups.

5 **NPS-FM swimmability targets**

Information item on a swimmability project by LGNZ working with TAs to collate advice for MfE on councils proposed regional and finalised targets.

6 **Work programme**

Further discussion needed on developing a work programme of action.

Infrastructure Working Group briefing paper – 12 September 2017

Portfolio **Portfolio Director** **Programme**	Canterbury Water Management Strategy Stefanie Rixecker CWMS Infrastructure
Authors	Brett Painter (Project Leader CWMS Assessments), Dennis Jamieson (Project Leader CWMS Infrastructure)
Endorsed by	Dann Olykan (Principal Strategy Advisor Water, CWMS)
Peer-reviewed by	Dennis Jamieson

Purpose

To provide updates regarding CWMS infrastructure activities and opportunities.

1. Hurunui-Waiau/Kaikoura

- Amuri Irrigation Corporation (AIC) expects to complete their pipe network construction by late September.
- Emu Plain scheme are contracted with the Irrigation Acceleration Fund (CIIL) for pre-resource consent application investigations. October 2017 completion expected.
- The CWMS Infrastructure Integration assessment for the Hurunui-Waiau Zone Committee is complete and was presented to the HWZC on 21 August.
- Hurunui Water Project are applying for consents for large on-plains storage rather than continuing with Waitohi or Glenrae investigations (at this stage).

2. Waimakariri

- The appellant is expected to report back to the Environment Court in mid-September on the Waimakariri Irrigation Limited (WIL) 8.2 M m^3 storage resource consent appeal. Responses are then due by 29 September.
- An infiltration test up-gradient from Silverstream is being progressed to understand MAR potential. Next steps are an ECan / WIL MoU and consent application.

3. Selwyn-Waihora

- Central Plains Water (CPW) Sheffield Scheme (4,000 ha and 2 M m^3 storage) completion expected September 2017 and Stage 2+ (20,000 ha) completion expected by September 2018. Construction challenges with recent wet weather.
- The Broadacres Targeted Stream Augmentation (TSA) project (Selwyn River tributary upstream from Chamberlains Ford): Construction of the groundwater bore, solar panels, pump, pump shed and connections are complete. Security fencing and planting preparation is underway. The discharge piping will be installed once the spring stops flowing naturally. A paper titled "*Protection of groundwater dependent ecosystems in Canterbury, New Zealand: the Targeted Stream Augmentation Project*" has been formally accepted for publication in the Sustainable Water Resources Management journal
- Selwyn/Waikirikiri Near River Recharge project: concept design has been discussed with landowner. Stage 1 MoU (CPW and ECan) has been signed. Freshwater Fund contracting underway with MfE. Baseline information is being gathered.

4. Ashburton Zone

- Barrhill Chertsey Irrigation's resource consent application for a 1.6 M m^3 Akarana storage pond near Methven has been considered by an independent commissioner, with consent conditions currently under discussion. BCI have successfully completed a capital raise to buy out Electricity Ashburton's shares in BCI.

- Ashburton-Hinds Managed Aquifer Recharge (MAR) project: Year 1 reports have been presented to MAR Governance Group and AZC / ADC. IAF (MPI) have confirmed Year 2 catchment scoping project funding.
- Stage 1 south Hinds Near River Recharge infrastructure is complete. Consenting and stage 2 construction are currently awaiting a LIDAR survey.
- Rangitata Diversion Race Klondyke storage hearing has been deferred to early 2018 so that fish screen matters can be considered further.
- New 18.5 km Ruapuna Pipeline (Mayfield Hinds Valetta) to open on 19 September.
- Ashburton Lyndhurst Irrigation (ALIL) expect to complete commissioning of the last 12 property section of their ~30,000 ha scheme piping project by early October.

5. South Canterbury

- The first mediation between RSIS owners and shareholders has concluded.
- The OTOP Conceptual Infrastructure Design and Costing study (with CIIL - IAF) is underway. The new project will provide initial design and costs for providing high reliability 'top-up' water to replace current groundwater abstraction in the Orari / Temuka catchments. It will also provide initial cost estimates of an extension of this scheme to Pleasant Point. Initial demand study deadline of 30 August.
- Hunter Downs Water are still considering scheme viability / size.
- Kurow-Duntroon Irrigation (including horticulture and viticulture land uses) are also considering pipe upgrade scheme viability / size.

6. Regional

- Water use efficiency: Summer student testing programme in OTOP and SW.
- Coordination with MBIE research programmes to focus on relevant matters.
- Future crops: Co-ordinating with an initiative related to water use efficiency work.
- Open and transparent information on rivers: Major theme emerging from stakeholder engagement. Consent monitoring data needs to be deployed in conjunction with flow/level sites.
- 3 Waters: Wastewater "watching brief" checking On Site Effluent Treatment risks. Stormwater consenting with TA's and update of NZ flood design methods.
- Climate Change and Infrastructure: Increased confidence in sub-regional predictions (NIWA). Increased Zone Committee and community (e.g., U3A) interest in climate futureproofing. Key points:
    - increased high intensity winter rainfall and rising sea levels require adaptation (managed retreat) and mitigation (improved infrastructure design);
    - future reductions in natural groundwater recharge will require further groundwater to stored surface water swaps and additional Environmental Infrastructure (e.g., MAR, TSA);
    - parts of Canterbury are still short of storage to provide resilience to increasing drought length and severity, and reducing snow pack;
    - further improvements in nutrient management will require continuing progress in supply reliability, water and nutrient application management, crop / cultivar choice, stocking rates, soil-moisture monitoring and weather forecasting.

File reference	https://punakorero/groups/CWMS/WaterInfra/RIWG_InfrastructureUpdate12Sept2017.docx

Agenda Item No: 12	**Subject Matter:** Telling Our Story
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Lesley Woudberg CWMS Facilitator/Team Leader	

Purpose

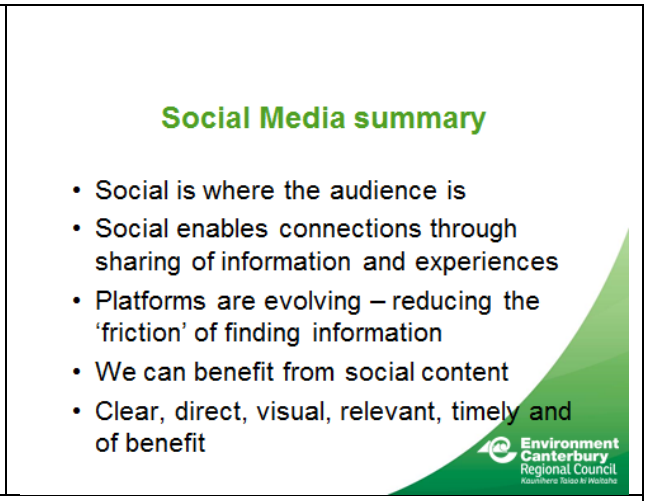
The purpose of zone committees is to "*facilitate community involvement in the development, implementation, review and updating of ZIPs that give effect to the CWMS*" So what are committees doing?

Staff Recommendation

That the Regional Committee

1. **Notes the communication initiatives being undertaken by zone committees.**

Report



Time spent each day

- Print 0:15
- TV 1:58
- Desktop 2:10
- Social 2:44

Change from 5 years ago

- Print - down 38%
- TV - down 18%
- Desktop – down 6%
- Social – **up 250%**

Kaikōura

Kaikōura Water

https://ecan.maps.arcgis.com/apps/MapSeries/index.html?appid=bdb4deaf2ad040d4a6276998c32c6af2

Hurunui Waiau

News

https://preview.ecan.govt.nz/get-involved/news-and-events/?zone=6&sortOrder=desc

Waimakariri

Waimakariri Land and Water Solutions Programme

https://apps.canterburymaps.govt.nz/WaimakStoryMap/Waimak.html

Word from the Chair

https://preview.ecan.govt.nz/get-involved/news-and-events/?subject=30&sortOrder=desc&zone=11

Christchurch - West Melton

Word from your Chair

https://www.ecan.govt.nz/get-involved/news-and-events/?subject=30&sortOrder=desc&zone=5

Banks Peninsula

Whakaraupō story map

http://healthyharbour.org.nz/

Selwyn Waihora

Selwyn Seminar Series

Booklet https://issuu.com/environment-canterbury/docs/6066_cwms_selwyn_book_a5_june_2017
Videos of seminars https://www.ecan.govt.nz/get-involved/news-and-events/events-2017/whats-going-on-selwyn-waihora-seminars/

Selwyn Film Awards
Winner Springston School – Save the Eels

https://www.youtube.com/watch?v=4XW1k226a6Y&index=2&list=PLoF6CeY4jnZU_JhPUixwPqHU62WD5-k_9

Ashburton

Ashburton College students Hannah Mae Jerao (left) and Bobbie Rushton are organising a group of students from the college to help Ashburton Water Zone Committee member Angela Cushnie and members of the public at a community planting day on the banks of the Ashburton River. PHOTO COLIN WILLISCROFT 290917-CW-023

Joining forces for the environment

By Colin Williscroft
Colin.w@theguardian.co.nz

Town and country will join forces in a couple of weeks to improve the recreation and amenity values of the Ashburton district.

Members of rural groups and students from Ashburton College will be among those taking part in a planting project on the banks of the Ashburton River organised by the Ashburton Water Zone Committee.

The Canterbury Water Management Strategy has 10 targets, one of which concerns recreation and amenity. Unfortunately, it has not received the same amount of attention as some of the other targets, like environmental limits or irrigation, water zone committee member Angela Cushnie said.

Recreation and amenity values in the district are not the responsibility of one group, Cushnie said, so it was important to try and get a wide range of community groups involved.

"It's as much about getting people together as it is the planting involved."

It's hoped the community planting session, which will involve planting several hundred native plants near a bike track that runs along the riverbank, will encourage people to think about the water amenities they value most in the district.

There will be a sausage sizzle and free food for those take part, in exchange for their work and feedback on community and recreation spots in the Ashburton Water Zone patch they value most.

The planting day is on Sunday, October 15, from 1pm to 3pm.

Meet at the carpark at the end of Boundary Road.

OTOP

Healthy Catchment Project

https://preview.ecan.govt.nz/get-involved/news-and-events/?zone=8&sortOrder=desc

Upper Waitaki

News stories

https://preview.ecan.govt.nz/get-involved/news-and-events/zone-news/upper-waitaki/joint-hui-allows-for-collaboration/

https://preview.ecan.govt.nz/get-involved/news-and-events/zone-news/upper-waitaki/new-funding-for-wetland-walkway/

Lower Waitaki

News stories

https://preview.ecan.govt.nz/get-involved/news-and-events/?zone=8&sortOrder=desc

Agenda Item No: 13	**Subject Matter:** Facilitators Update
Report to: Regional Water Management Committee	**Date of Meeting:** 10 October 2017
Report by: Lesley Woudberg, Team Leader CWMS Facilitators, Environment Canterbury	

Purpose

Provide the Regional Committee with information on

- Upcoming events
- CWMS timeline (attached)

Report

Upcoming Events

Event	Audience	Comment
6 October Proposed Chairs/Deputies meeting	ZC Chairs Deputies	
ZC Refresh	Kaikoura Hurunui-Waiau Christchurch-West Melton Banks Peninsula Selwyn Waihora Ashburton OTOP Upper Waitaki Lower Waitaki	
? October New government formed		
18 October "*Pathways to Swimability*" Southern Environmental Trust Forum Time/place (TBC)	Public	Speakers from * NIWA * Landcare * Whitewater NZ * ECan

14 November Regional Cmtt WG mtgs • Infrastructure • Braided Rivers • Biodiversity/Ecosystem Health	Regional Cmtt	
15 November Regional Cmtt WG mtgs • Recreation and Amenity • Communication and Education •	Regional Cmtt	
17 November A&P Show ECan Tent "*Farming to Limits*"	Public	
1 December *"Can I swim here Campaign"*	Public	Starts – 10 sites around Canterbury highlighting monitoring data on LAWA site – ECan and other regional councils
? March/April 2018 Proposed ZC Symposium (TBC)	All ZC Members	

30 August 2017

CANTERBURY WATER MANAGEMENT STRATEGY
LOCAL LEADERSHIP/LOCAL GOVERNANCE

Ka mura, ka muri
Look to the past to inform the way we move into the future

1989 Local Government Reforms
1991 Resource Management Act
1996 Ngāi Tahu Settlement
1997-98 NIWA begins Climate Outlooks

Timeline

TECHNICAL INVESTIGATIONS WATER QUANTITY	1998	***.. in the beginning ….. DROUGHT***
	1999 2006	***Canterbury Strategic Water Study*** 1999 Stage 1 Initial study of water availability issues in Canterbury (MFE funded) 2005 Stage 2 Identification of potential water storage sites (MPI funded) 2006 Stage 3 Multi-stakeholder review of water storage options (MPI funded) - New Beginnings https://www.youtube.com/watch?v=LTcrSW-W_MQ
DEVELOPMENT OF THE CANTERBURY WATER MANAGEMENT STRATEGY WATER QUANTITY,QUALITY LAND USE AND BIODIVERSITY	2008	***Canterbury Water Management Strategy*** **Canterbury Mayoral Forum took ownership** • Broadened scope - include water quality/land use + biodiversity • Request extensive consultation process • Endorsed an ECan targeted rate to fund the process • Steering Group – Chaired by Bede O`Malley – Mayor Ashburton
	July-Aug 2008	**Stakeholder Meetings** • Use and benefits of water, lead to draft principles
	April 2009	**Brochure** to all households in the region • 10x public meetings (2x sessions each) • 1100 submissions heard by the steering group
	Aug 2009	**Draft Strategy** released based on the Stage 4 Canterbury Strategic Water Study • Vision and Principles, Targets, Zone Committee concept Written submissions sought
	Nov 2009	**Final Strategy** released Empowering Communities https://www.youtube.com/watch?v=_EQxKkwz7bo&list=PLN9O2KsU5YyutdxrcWfHF42CyVWWXItjz&index=2 Working with Manawhenua https://www.youtube.com/watch?v=byU1xY3jqno&list=PLN9O2KsU5YyutdxrcWfHF42CyVWWXItjz&index=3
	Nov 2009 Feb 2010	**Strategy endorsed** by all councils TA/ECan Share responsibility/costs 2010/11 ECan Targeted Rate $5.5 million

Situation in 2008
Contested science
Litigious – adversarial planning framework
Demand increasing – first in first served
Groundwater and stream flows decreasing
Nutrients increasing

THERE HAS TO BE A BETTER WAY!

Canterbury Water Management Strategy
Vision, Principles, Approach and Targets

- *Collaboration/consensus decision making*
- *Community and rūnanga involvement – zone and regional committees*
- *Parallel development*
- *Environment restoration*
- *More reliable water supply through storage*
- *Improved land management – nutrient and water efficiency*

Land and Water Forum (LAWF) est Aug 2009

May 2010 Commissioners appointed to ECan
Govt. requires commissioners to build on collaborative work of the CWMS

CWMS	July 2010	**Final Targets endorsed by the Mayoral Forum** • After further consultation/negotiation with stakeholder groups and agencies – Targets agreed

CANTERBURY EARTHQUAKE
4 SEPT 2010
22 FEB 2011

ESTABLISH STRUCTURE AGENDA SETTING	2010 2011	**10 zone committees and the regional committee established** • Established under the Local Government Act • Joint committees of TAs and ECan • All committees developed Zone Implementation Programmes (ZIPs)	
LEADERSHIP - COMMUNITY ENGAGEMENT GOVERNANCE – ZONE DELIVERY	2011 2017	**Zone Committees** Community leadership/governance **Zone Implementation Programme Addendums (ZIPAs)** Collaborative Planning https://www.youtube.com/watch?v=-BXuTSJnz1k&list=PLN9O2KsU5YyutdxrcWfHF42CyVWWXItjz&index=4 • 2013 Selwyn-Waihora • Mar 2014 Hinds • Nov 2014 Wairewa • Sept 2014 South Coastal Streams • Dec 2016 Upper and Lower Waitaki **ZIPAs under development** • Waimakariri • Orari-Temuka-Opihi-Pareora	**Delivery** 2014 ECan: Zone Delivery Pilot Hurunui-Waiau 2016/17 ECan Restructure Operations Group into zone delivery teams 2016 All Zone committee agreed 5 Year Outcomes, milestones and work programmes 2017 Quarterly reporting begins

"If you reach a consensus then we will base our draft RMA plan and Long Terms Plans on it." ECan Commissioners

National Policy Statement for Freshwater Management 2014

Canterbury Land and Water Regional Plan
Operative Dec 2016

Resource Legislation Amendment Act 2017