

**82<sup>ND</sup> ORDINARY MEETING OF THE  
SELWYN-WAIHORA ZONE COMMITTEE  
TO BE HELD AT THE  
LINCOLN EVENTS CENTRE  
ON TUESDAY 1 MAY 2018  
AT 2.00 PM**

"If there is magic on this planet, it is contained in water..."

**Loran Eisely, US Author**



82<sup>nd</sup> Meeting of the Selwyn Waihora Zone Committee - Outline of Agenda

DATE: TUESDAY 1 May 2018

TIME: 2.00pm

VENUE: Bayliss Lounge, Lincoln Event Centre, Meijer Drive, LINCOLN

Item	Time	Description	Pages	Presenter
	2.00pm	Meeting commences with karakia and formal order of business: <ul style="list-style-type: none"> <li>• Apologies</li> <li>• Identification of Urgent General Business</li> <li>• Confirmation of minutes 3 April 2018</li> <li>• Matters Arising &amp; actions from last meeting</li> <li>• Report to and from Regional Committee Meeting (Karaitiana Taiuru)</li> <li>• Update from Zone Committee members on activities and meetings attended that relate to the Committee's outcomes for the zone</li> </ul>		
	2.20pm	General Public Contribution		
1.	2.25pm	Terms of Reference for "Plan for Selwyn River" Working Group		<i>Paul Hodgson</i>
	<b>3.00pm</b>	<b>Break</b>		
2.	3.20pm	Progress report: Waikirikiri / Selwyn River Near River Recharge Project		<i>Brett Painter,</i> Environment Canterbury
3.	3.35pm	Progress report: Silverstream catchment		<i>Sylvia McAslan,</i> Environment Canterbury
4.	4.00pm	Quarterly progress report		<i>Chris House,</i> Environment Canterbury
5.	4.15pm	Department of Conservation activities in Selwyn Waihora Zone		<i>Andy Thompson,</i> Department of Conservation
6.	5.00pm	Update on Youth Zone Committee meeting		<i>Johannes Welsch and Hannah Dunlop,</i> Environment Canterbury
7.	5.10pm	Zone Facilitator's Report including: <ul style="list-style-type: none"> <li>• Proposed 2019 "Omnibus" plan change to Canterbury Land and Water Regional Plan;</li> <li>• Outline of 05 June SWZC workshop and meeting</li> </ul>		<i>Ian Whitehouse,</i> Environment Canterbury
	<b>5.20pm</b>	<b>Approximate finish time</b>		

**MINUTES OF THE 81st MEETING OF THE SELWYN WAIHORA ZONE COMMITTEE  
HELD IN THE BAYLISS LOUNGS, LINCOLN EVENT CENTRE, LINCOLN, ON TUESDAY  
3 APRIL 2018 COMMENCING AT 2:00 PM**

**AGENDA SUMMARY**

Item	Time	Description	Pages	Presenter
	2.00pm	Meeting commences with karakia and formal order of business: <ul style="list-style-type: none"> <li>• Apologies</li> <li>• Identification of Urgent General Business</li> <li>• Confirmation of minutes 6 March 2018</li> <li>• Matters Arising &amp; actions from last meeting</li> <li>• Report to and from Regional Committee Meeting (Karaitiana Taiuru)</li> <li>• Update from Zone Committee members on activities and meetings attended that relate to the Committee's outcomes for the zone</li> </ul>		
	2.20pm	General Public Contribution		
1.	2.25pm	Terms of Reference for "Plan for Selwyn River" Working Group		Paul Hodgson
	<b>3.10pm</b>	<b>Break</b>		
2.	3.30pm	"Building Trust" Sustainable Farming Fund project		<i>Andrew Curtis, Irrigation New Zealand</i>
3.	3.55pm	Environment Canterbury's monitoring industrial compliance		<i>Katie Nagy, Selwyn Waihora Zone Team</i>
4.	4.15pm	Sustainable Hill Farming Tool (SHIFT) project		<i>Anna Veltman, Environment Canterbury</i>
5.	4.25pm	Zone Facilitator's Report including: "submission" relating to future of SDC stock water races; Revised Zone Committee work programme		<i>Ian Whitehouse, Environment Canterbury</i>
	<b>5.15pm</b>	<b>Approximate finish time</b>		

The meeting was opened with a welcome and karakia by Councillor Iaeen Cranwell.

The Chair welcomed everyone to the meeting.

**PRESENT**

Allen Lim (Chair), Councillor Murray Lemon (Selwyn District Council), Councillor Iaeen Cranwell (Canterbury Regional Council), Karaitiana Taiuru (Te Rūnanga o Koukourāata), George Tikao (Te Rūnanga o Ōnuku), Riki Nicholas (Wairewa Rūnanga), Megan Hands (Community Member), Maree Goldring (Community Member), Paul Hodgson (Community Member), Ron Pellow (Community Member).

## IN ATTENDANCE

Johannes Welsch, Mananui Ramsden, Dr Stefanie Rixecker, Anna Veltman, Katie Nagy and Ian Whitehouse (Canterbury Regional Council); Andrew Curtis (Irrigation New Zealand) and Therese Davel (Selwyn District Council);

Jane Hodgson (Member of the public)

## APOLOGIES

Apologies received from Victor Mthamo, Councillor Anne Galloway, Les Wanhalla and Matiu Payne.

**Moved:** Cr Iaeen Cranwell/**Seconded:** Maree Goldring  
*That the Committee accept apologies for absence as noted.*

**CARRIED**

## IDENTIFICATION OF URGENT GENERAL BUSINESS

A late item was tabled related to Selwyn River / Waikirikiri Near River Recharge project. There was a brief discussion in which Ian Whitehouse explained the proposed schedule for future reports on this project to the Committee.

**Moved** (as amended): Councillor Murray Lemon / **Seconded:** Ron Pellow

*That the Zone Committee receive verbal project updates at their May 2018, July 2018, October 2018 and February 2019 meetings;*

*That the Zone Committee electronically receive written project reports by the end of the second week of the months of July 2018, October 2018 and January 2019 and the audit report by the end of the second week of October;*

*That the Zone Committee have one week to request changes back to the author, and delegate the Zone Committee Chair to sign off project reports within one week of receipt.*

A further urgent business item was addressed i.e. progress on the drop-in sessions related to wet pasture / wetlands. Johannes Welsch and Mananui Ramsden provided a brief update noting there was a good turn out. Around half of the landowners around the lake were represented.

The Committee will receive an in-depth update at its next meeting.

## CONFIRMATION OF MINUTES

### **Minutes of the 80<sup>th</sup> Meeting of the Selwyn Waihora Zone Committee (Water Management) held on Tuesday 6 March 2018.**

*(Refer pages 5 - 10)*

In relation to the discussion on Selwyn District Council Water Race Network, Councillor Lemon clarified that the public good contribution of \$20 is not the **current** situation, rather it is a **proposal** in the Long Term Plan. Also, the increase in future will not be **by** \$50 - \$60 per ratepayer, rather it may increase in future **to** an amount of between \$50 and \$60 per ratepayer.

**Moved:** Cr Murray Lemon / **Seconded:** Ron Pellow

*That the minutes of the 80<sup>th</sup> meeting of the Selwyn Waihora Zone Committee (Water Management) held on Tuesday 6 March 2018, as amended, be confirmed,*

**CARRIED**

## MATTERS ARISING FROM MINUTES

None.

## REPORT TO AND FROM REGIONAL WATER MANAGEMENT COMMITTEE MEETING

A summary will be forwarded to the Committee for the next meeting.

## UPDATE FROM ZONE COMMITTEE MEMBERS ON ACTIVITIES AND MEETINGS ATTENDED THAT RELATE TO THE COMMITTEE'S OUTCOMES FOR THE ZONE

Zone committee members reported on meetings attended that relate to the work of the zone committee including:

Cr Murray Lemon – Field trip with Fish and Game; Biodiversity workshop; visit to several high country stations to observe how biodiversity is managed on farm.

Paul Hodgson – Fish and Game field trip

Ron Pellow – Ballance Farm Awards presentation; Kim Hill debate on soil.

Allen Lim – Field trip Fish and Game

## GENERAL PUBLIC CONTRIBUTION

None.

## **1. TERMS OF REFERENCE FOR “PLAN FOR SELWYN RIVER” WORKING GROUP**

(Paul Hodgson)

(Refer pages 11 – 22)

The Committee agreed by consensus, after a lengthy discussion, to defer the item to the next meeting in order that the Terms of Reference be redrafted.

To assist in this, Paul Hodgen, Les Wanhalla, laean Cranwell, Ron Pellow and Ian Whitehouse will meet to discuss the comments made by members around the table.

During the discussion the following comments were made for consideration of the Working Group:

- It was important that Paul asked Taumutu Rūnanga for a representative;
- Some proposed members of the working group will not be full members, rather points of contact;
- Selwyn District Council as the TA for the area should be involved;
- Refer to upper and lower catchment community members or it will be too open and attract too many people;
- Be aware to keep the group small to avoid fragmentation;
- Due to the work proposed it suggests a significant budget – will it be part of a future Annual Plan because ratepayers will pay for it;
- Ongoing science work may mean the science team will have to drop an existing project to provide for this work;
- Should there be a historical timeframe of the 50's – 60's or should there rather be an objective target;
- Consider narrowing the scope of what the Working Group is covering;
- Consider whether the state of the river will also include the state of the district economy and community wellbeing;
- Consider the status of the plan – it will have to form part of the funding stream to go forward.

*Tea break 3.10pm – 3.30pm*

## **2. “BUILDING TRUST” SUSTAINABLE FARMING FUND PROJECT**

(Andrew Curtis, Irrigation New Zealand)

Andrew Curtis, CEO Irrigation New Zealand provided a brief update to the Committee on a project using students to do bucket tests on irrigation systems in Selwyn District over the 2017/18 summer. He noted 120 were tested of which around 70% were performing well. He said those systems that were not working well were probably older, e.g. between 10 – 20 years.

Regarding the Sustainable Farming Fund Project Andrew said the focus of the project was open and honest information providing an opportunity for communities and others, to learn about the state of their environment. Some of the issues and opportunities of the project include the growing amount of data being collected but which was not easily visible; the fact it will take some time for improvements to become visible in the environment; the need for a 'source of truth' due to mis-information; identifying who should own or be responsible for the information – in particular because many farmers still lack trust in the regulator; and targeting support and resources where it's needed e.g. how best to use funds such as levies, fees, memberships and rates.

In response to a question, Andrew noted that in most cases where irrigators were not working properly it was because the machines were not set up correctly. There were ongoing issues with companies selling 'steel' rather than service. Megan Hands agreed that audits show that some companies deliver and others do not. This was getting out and will ensure companies start delivering improved service.

Andrew also informed the Committee of training IrrigationNZ provides with more than 800 people undergoing training of which more than 90% were farmers. He expects an e-learning platform to go live from September 2018.

### **3. ENVIRONMENT CANTERBURY'S INDUSTRIAL COMPLIANCE MONITORING**

*(Katie Nagy, Selwyn Waihora Zone Team)*

*(Page 23)*

Katie Nagy shared with the Zone Committee around the role of a Resource Management Officer, in particular the Selwyn Waihora Monitoring Team. Referring to the Act she provided background as to why compliance monitoring was necessary e.g. monitoring efficiency and effectiveness of policies, rules and other methods as well as the exercise of resource consents that have effect in the district.

Katie showed the Committee the Consent Process and explained that monitoring compliance involved doing thorough background research. Each site is rated according to a risk matrix which informs what monitoring officers will look for when doing a site visit. Katie cited examples of a new subdivision, gravel takes and a site where trade waste is processed. Each site is investigated according to a Source-Pathway-Receptor Model, meaning that it starts with a source (substance) with the potential to cause harm; follows a route or means by which a receptor is exposed to the contaminant; and ends up in a receptor such as a waterway or other area of the environment which could be harmed by the source.

The available enforcement options to monitoring officers include formal warning, abatement notice, infringement notice, enforcement orders and in severe cases, prosecution.

The idea was to get anyone in a non-compliant situation to fully compliant. Staff encourage businesses and individuals to move beyond full compliance to best practice and eventually to a place of innovation where possible.



#### 4. SUSTAINABLE HILL FARMING TOOL (SHIFT) PROJECT

*(Anna Veltman, Environment Canterbury)*

*(Refer pages 27 – 30)*

Anna Veltman briefly informed the Committee about the Sustainable Hill Farming Tool Project (SHiFT). The tool was created to aid farmers where they consider development of hill country blocks.

As background context Anna noted an issue was sediment loss off hills which contributed to reduced water quality in waterways. This was particularly in relation to certain types of winter feed crops such as fodder beet and kale. There were a number of possible solutions available which is what the project aimed to make known. Anna noted there was a steering group made up of Environment Canterbury, Federated Farmers and Beef and Lamb New Zealand. Ministry for the Environment have provided funds for the project for 18 months.

Environment Canterbury is leading the project and soon farmer surveys will be underway. Around 150 farmers will be chosen randomly to participate. The idea is to integrate the tool into the GMP basket.

#### 5. ZONE FACILITATOR'S REPORT

*(Ian Whitehouse, Environment Canterbury)*

*(Refer page 31)*

Taken as read with the following additions:

Zone Committee submission to the Selwyn District Council Long Term Plan:

Megan Hands noted the Selwyn District Council presentation of the issue in the Selwyn District Long Term Plan is disappointing as it does not clearly indicate the plan to close water races. She also noted where the threshold is set, was inappropriate and inconsistent with zone committee views in protecting the values within the zone with regionally-significant biodiversity values needing protection as well as nationally-significant values.

Regarding a submission from the Zone Committee on water race closures, as part of the Canterbury Regional Council's formal submission to Selwyn District Council, the Committee agreed by consensus on the following proposal:

*The Zone Committee supports that water races with significant ecological importance should be maintained and the funding should be provided from general rates.*

*As an additional note it should be acknowledged that Council's message may be misinterpreted as it intends closing significant water races.*

Watershed Workshop 9 April 2018

Ian Whitehouse provided a brief update on the upcoming workshop.

**GENERAL BUSINESS**

Councillor Iaeen Cranwell ended the meeting with karakia.

The meeting closed at 5.10 pm.

DATED this            day of            2018

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**CHAIR**

**ACTIONS FROM MEETING**

<b>Name</b>	<b>Action</b>
Living Water	Update at a future meeting regarding their work
ECan / Fish and Game	List of potential Fish and Game sites to visit and staff to present to the Committee
ECan	Marae visit and potential overnight stay for the Committee
ECan	Provide progress report against ZIP Addendum (and Selwyn Te Waihora Plan) outcomes / targets
ECan	Lake margin wetlands and wet pasture – update at next meeting related to drop in sessions
Working Group Selwyn / Waikirikiri River Plan	Amended Terms of Reference presented to the next meeting.

AGENDA ITEM NO: 1	SUBJECT MATTER: Terms of Reference and membership for “Plan for Selwyn River” Working Group
COVER PAGE BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 01 May 2018

**Action required:**

- Agree the membership and Terms of Reference for the Zone Committee’s Working Group to develop a Plan for the Waikirikiri/Selwyn River.

**Background**

At the February meeting, Paul Hodgen made a presentation to the zone committee – see attached – outlining his thoughts on the need to develop a Plan for the Selwyn River.

The committee agreed to establish a Working Group to develop such a plan.

Four committee members indicated they would be on the Working Group: Paul, Iaeen Cranwell, Les Wanhalla and Ron Pellow. At the April meeting, Murray Lemon also indicated he wished to be on the Working Group.

A draft Terms of Reference (TOR) for the Working Group was discussed by the committee at its April meeting. Committee members had a range of questions and asked that the committee members who are going to be on the Working Group meet and revise the TOR. The zone facilitator met with Paul Hodgen and following this discussion, revised the draft TOR. This draft was discussed at a meeting with Paul Hodgen, Iaeen Cranwell and Ron Pellow. The draft TOR attached was agreed at this meeting.

Paul Hodgen has talked with some other people who he believes should be on the Working Group. Some of these people have confirmed their interest, others are waiting until the Terms of Reference are agreed by the committee.

**Attachments:**

1. Proposed Terms of Reference

## **Selwyn River/Waikirikiriri Plan Working Group**

**Terms of Reference** (revised draft following discussions by laean, Paul, Ron and Whit on 17 April 2018)

### **Introduction**

Improvement is needed in the state of Selwyn River/Waikirikiriri River. The Selwyn Te Waihora Plan sets out rules and limits for the river and catchment. The Selwyn Waihora ZIP and ZIP Addendum identify other actions to improve the waterways in the catchment

The Waikirikiriri/Selwyn River Near River Recharge project will provide water from CPW during winter to augment flows in the lower Selwyn River during dry periods. The Snake Creek Restoration project will restore waterways in one of the lowland tributaries of the river. The ECan Zone Team is working with farmers in Silverstream to reduce runoff of sediment, phosphorus and microbial contaminants to the river. In the upper catchment, Immediate Steps Biodiversity funding has supported wetland and riparian protection. There are many other local restoration projects planting natives around wetlands and waterways.

Notwithstanding all these projects, there is no specific “plan” that relates just to improving the Waikirikiriri/Selwyn River. Some people are frustrated that not enough is being done fast enough to get a “healthy” Selwyn River and that there is no one place where they can find what this means in terms of the state of the river (water quality and quantity, and ecology) and the “roadmap” for getting there.

### **Establishment**

The Working Group as established by the Selwyn Waihora Zone Committee at its meeting on 01 May 2018.

### **Membership**

The Working Group comprises the following:

Zone Committee members: Paul Hodgson (Group Lead), Les Wanhalla, Ron Pellow, laean Cranwell

Other people: UC Waterways Centre for Freshwater Management - Katie Nimmo, Fish and Game - Scott Pearson, Forest and Bird, SWWIM, Farmer(s), Rūnanga, DOC, Community members

### **Purpose**

The purpose of the “plan” is to pick up issues from the Selwyn Water seminars hosted in 2017 by the Zone Committee and to propose a roadmap to achieve a healthy Waikirikiriri/Selwyn River with healthy people. The community needs a better understanding of the tough realities to make informed decisions on behalf of our grandchildren’s children.

### **Outline of proposed work programme**

The work will be in two stages.

Stage 1 will have a technical focus, describing the state of the river including:

- Historical records from the Ngai Tahu archives (1840s recordings of food gathering places)
- Determining what types of data are available and if the data can be used to describe what the river was like in the past, particularly the 1950’s – 60’s

- What a healthy contemporary Waikirikiri/Selwyn River might look like in terms of measures such as mahinga kai, cultural, nutrient concentrations, sediment, microbial contamination, people and ecological health.
- How these compare with the current state.

The technical information for this stage will be presented by the Working Group members, aggregated and given to the Waterways Centre, University of Canterbury, for a technical assessment. Therefore, the timetable for this stage will be largely determined by the Waterways Centre.

On completion of Stage 1 the Working Group will report and discuss the findings with the Zone Committee. The Working Group will bring to the Zone Committee a work programme for Stage 2 for the committee's approval. The second stage of the Working Group's activities will not start without the agreement of the Zone Committee.

Stage 2 will involve the Working Group in deliberations, informed by engagement with community and stakeholders, to develop recommendations on:

- Identifying the factors that influence the state of the river, such as climate, population, land use, water takes.
- A state of the river that is acceptable to a wide range of interests
- A roadmap and timeframe for the pathways for getting to this state.

In carrying out the above, the Working Group will engage with a wide range of interests thereby increasing the knowledge and understanding in the community and amongst stakeholders of the state of the river, the ways to improve the river and the challenges in terms of the scale and timing of the changes required.

### **Role and responsibilities**

The working group will:

- Build on work done to date including the development of the ZIP Addendum and Selwyn Te Waihora Plan;
- Recognise and document all projects and other work underway to improve Waikirikiri/Selwyn River;
- Not request a change to the rules and limits in the Selwyn Te Waihora Plan, but rather to work with these rules and limits to help achieve a healthy river recognising that the Plan may need changing when it is reviewed;
- Respect and listen to all points of view;
- Consider and balance the interests of all water interests in the zone in debate and decision-making encompassing cultural, environmental, health, social and economic values;
- Work in a collaborative and co-operative manner using best endeavours to reach solutions that take account of the interests of all sectors of the community;
- Make decisions by consensus;
- Provide minutes of meetings to the Working Group and to the Selwyn Waihora Zone Committee. Regular updates will be provided at Zone Committee meetings.

### **Timetable**

Stage 1 to be completed in 2019

Stage 2 to be started in 2020

### **Support for the Working Group**

The Waterways Centre, University of Canterbury, will provide support, where it has resources and information, for the analysis, synthesis and briefings for Stage 1 and Stage 2.

Environment Canterbury will provide support, where it has available resources and information, in relation to:

- Assistance with meetings;
- Access to reports and monitoring information.

The Working Group will, within three months of establishment, develop an initial list of Environment Canterbury reports, information and monitoring data that it wishes to have and use this list to discuss with Environment Canterbury what can be provided and when.

Environment Canterbury can supply existing information but if there is science work that is needed to be done (e.g. analysis of data or modelling) then it would have to go through a prioritisation exercise in the Environment Canterbury Science Group and may not be able to be provided.

The Working Group will, within three months of establishment develop an outline of its meeting schedule for Stage 1. In developing its work programme for stage 2, the Working Group will develop an outline of its meeting schedule (including meetings with communities and key interests). These meeting schedules will form the basis of a discussion with Environment Canterbury on the assistance that could be provided for these meetings.

AGENDA ITEM NO: 2	SUBJECT MATTER: Update on augmenting flows in lowland streams (TSA project) and Selwyn River
REPORT BY: Brett Painter, Environment Canterbury	
DATE OF MEETING: 1 May 2018	

### Action required

- Committee members note the following updates on the Targeted Stream Augmentation (TSA) and Selwyn/Waikirikiriri Near River Recharge (NRR) Projects.

### Context

The Selwyn Waihora Targeted Stream Augmentation and Selwyn/Waikirikiriri Near River Recharge Projects respond to Selwyn-Waihora ZIP Addendum Recommendation 1.8 and Canterbury Land and Water Regional Plan Policy 11.4.22.

### Targeted Stream Augmentation (TSA) Project



**Figure 1. TSA Project site: Broadacres/Raywell Farm tributary of the Selwyn River/Waikirikiriri**

Following the Boggy Creek TSA pilot experiment the Broadacres/Raywell farm tributary of the Selwyn/Waikirikiriri River was chosen as the site for the next stage of the TSA Project (Figure 1). This site was chosen due to its historical importance for native aquatic species, supported by a DOC Management Plan, and the willingness of landowners to assist with the project. The lack of reliable spring flow has led to the loss of all species in the last few years. The aim for this stage of the TSA project is to future-proof the habitat for native species by installing a groundwater bore and a solar powered pump, constructing in-stream habitat, and planting riparian margins.





**Figure 2. TSA Project site infrastructure components**



**Figure 3. TSA Project site: Stage 1 planting**

The infrastructure components are now complete, comprising a 42 m bore, 13 kW pump for up to 37 l/s flow and 100 m<sup>2</sup> Photovoltaic (solar) panels for 23 kW energy. Security fencing is complete, with additional fencing underway. The first stage of planting (500 wet area plants) is complete with further stages to follow in the spring. Habitat works to create more low flow areas for mudfish are on hold until natural spring flows cease. Mudfish repopulation will not occur until all habitat works are complete.

**Near River Recharge Project for the Selwyn River/Waikirikiri**



Conversations involving many parties on the potential for use of Central Plains Water (CPW) scheme infrastructure to augment the Selwyn River system can be traced back prior to initial CPW consenting processes in 2006. Confirmation of CPW Stage 2+ infrastructure in late 2016 has provided the necessary technical information to design and cost specific augmentation options. An extended period of low natural recharge and an active discussion about swimming values at Coes Ford have provided additional incentives to proceed. A funding agreement between MfE Freshwater Improvement Fund and Environment Canterbury was signed in late November 2017, with additional support agreed via MoU with Central Plains Water.

The concept is described as “near river recharge”. This involves directing water from the off-take to where it will be filtered by bed material and/or filtering vegetation before entering the groundwater system naturally fed by the Selwyn and Hororata Rivers (Figure 4). The key use of the off-take will be when CPW are not at capacity delivering irrigation water, i.e. from late autumn through until early spring. Augmentation rate would be maximised when groundwater levels are low and forecast rainfall is below average. The water source would be Rakaia River water (currently consented SDC stockwater and/or CPW irrigation water). A consent to authorise the discharge of augmentation water will also be required.

Key progress to date comprises infrastructure design, off take construction (Figure 7), baseline monitoring, key landowner discussions, assessment of environmental effects, land purchase and sub-division processes. A parallel project to design and install an electric fish barrier at Haldon Springs (Hororata River tributary) is also underway. The primary purpose of this barrier is to keep trout from accessing key mudfish habitat in the Haldon tributary. This tributary will receive flow benefits from the near river recharge project.



**Figure 4. Selwyn/Waikirikiriri Near River Recharge (NRR) Project**



Figure 6. Selwyn/Waikirikiriri Near River Recharge (NRR) Project: infrastructure components



Figure 7. Selwyn/Waikirikiriri Near River Recharge (NRR) Project offtake

<b>Agenda Item No:</b> 3	<b>Subject Matter:</b>  Silverstream catchment, part of Swimmable Selwyn@Coes Ford project
<b>Report to:</b>  Selwyn Waihora Zone Committee	<b>Date of meeting:</b>  1st May 2018
<b>Prepared by:</b>  Sylvia McAslan  Land Management Advisor SW Zone, Environment Canterbury	<b>Action:</b>  Update on progress on Silverstream catchment, part of Swimmable Selwyn@ Coes Ford project

**Action required:**

Note progress in Silverstream catchment, part of the Swimmable Selwyn @Coes Ford project.

**Background:**

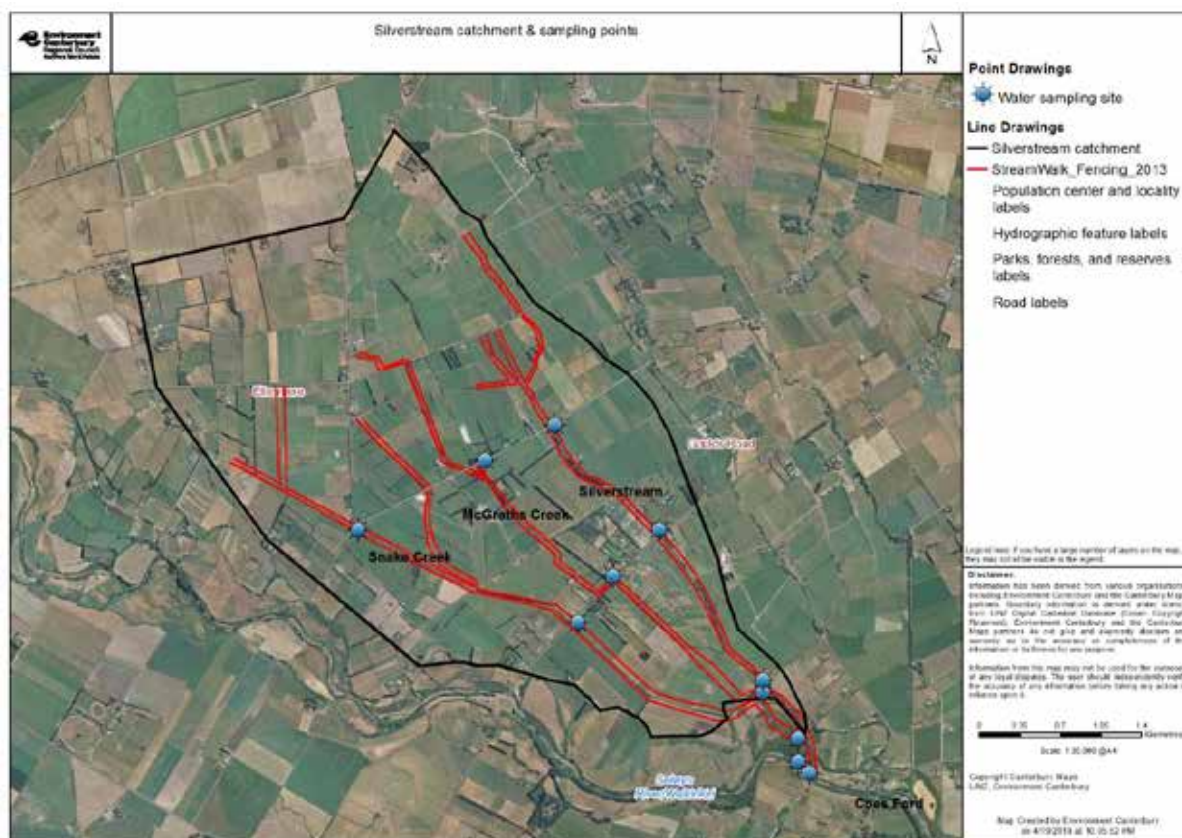
The Selwyn Waihora zone committee endorsed this current project after reviewing the concerns and suggestions expressed at a community workshop, hosted by the zone committee in February 2017.

Chamberlains Ford and Coes Ford are both popular summer recreational sites that are monitored on the lower Selwyn River/Waikirikiri by Environment Canterbury. Past water quality monitoring has shown that (upstream) Chamberlains Ford is generally suitable for swimming (as measured by *E.coli* levels), but nearby (3.3-4km downstream) Coes Ford at times is not.

Silverstream, a tributary that flows into the Selwyn River approximately 500m above Coes Ford, has historically been identified as a significant contributor to the poor microbial water quality of the Selwyn River at Coes Ford.

Snake Creek, McGraths Creek and Silverstream merge into one stream (Silverstream) and meet the Selwyn River upstream of Coes Ford, as illustrated in Figure 1 below.





**Figure 1:** Map shows Snake Creek, McGraths Creek and Silverstream which merge into one stream (Silverstream) and meet the Selwyn River upstream of Coes Ford. Also shows 2017-2018 water sampling sites.

June 2013 a stream walk assessment was undertaken along the 3 tributaries (following an earlier 2006 stream walk), recording fencing, riparian management, etc., this showed 9% of these streams fenced were unfenced, compared with 20% in the earlier survey.

The current part of the project is visiting the properties in the catchment to build a picture of current good practices and discuss potential areas for improvement. Specifically looking at side drains which until now have not been recorded. Along with monthly water sampling Oct 2017-April 2018.

#### Progress:

- Visits completed to over 50% of the catchment area
- Working collaboratively with local rūnanga, CAREX, ESR, Fish and Game, Dairy NZ, Silverstream Farmers Group, the local drainage committee and SDC.
- Monthly sampling for key water quality parameters and Faecal Source Tracking almost completed. The full water quality scientific report should be completed in August.

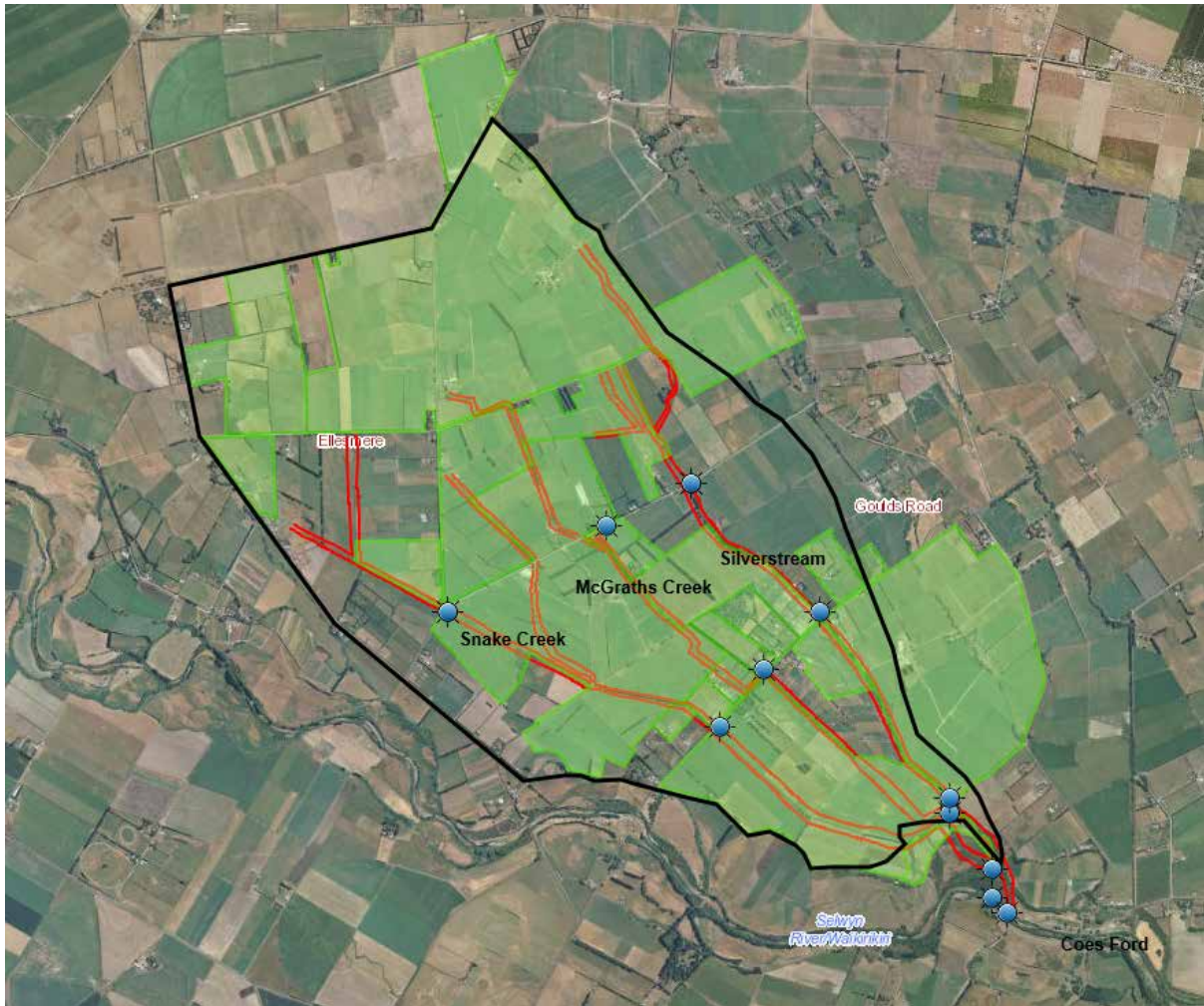


Figure 2: Catchment area visited to date, and 2017-2018 water sampling sites.

### Scoping visit observations

- Waterways sedimentation appears less than previously (probably due to the better flows and regular rainfall / flushes this season as well as mitigations).
- Positive response / good engagement with all landowners
- Most waterways and flowing drains are now fenced. Landowners are being encouraged to fence dry drains or create effective buffers above where these enter waterways.
- Some properties have completed significant dry / ephemeral and small drain fencing
- Most septic tanks are 20+ years old; unclear where most discharge to; generally servicing is infrequent. The significance of this is unknown.
- Potential contaminant entry points and side drains are being mapped; mitigation options are discussed with landowners.
- It is very encouraging to see the establishment of significant stream enhancement demonstration areas facilitated by Carex, and Fish and Game.
- Some potential opportunities / options for stream contaminant mitigations are becoming clearer.

**Plans for the next 4 months**

- Complete catchment visits
- Raise awareness of mahinga kai requirements – shed talk on 1st May at Five Springs
- Review water quality information and field visit data; revise priority actions
- Revisit priority properties; follow up on progress with mitigations
- Develop catchment scale mitigation options with catchment groups / partners and landowners
- Convene a community meeting to report on project findings and discuss options.

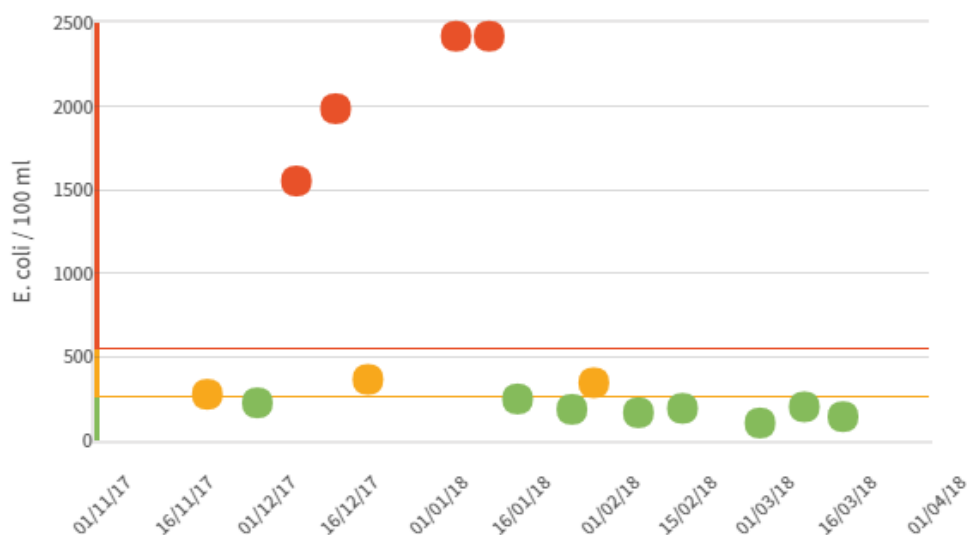
Brief update from our Science team prior to full analysis:

## Swimmable Coes Ford and the influence of the Silverstream catchment

### The contact recreation season

- 4 out of 15 samples exceeded the national public health guideline of 550 MPN/100mL. 3 samples exceeded the alert level guideline of 260 MPN/100mL. This indicates that nearly half of the samples taken exceeded alert and action guideline values. These elevated *E.coli* concentrations indicate that on any given day, the recreational water quality at Coes Ford cannot be guaranteed to meet public health standards.
- No potentially toxic cyanobacteria (algal) warnings were issued at Coes Ford. Cyanobacteria cover was considered low at this site, with approximately 10% of the bed showing cyanobacteria mats
- See [www.lawa.org.nz](http://www.lawa.org.nz) for weekly results

#### *E. coli* sampling graph



### Potential sources of contamination from the Silverstream catchment that influence swimmability at Coes Ford

An investigation of potential faecal sources of contamination, and potential contaminants that support cyanobacteria blooms for Coes Ford was carried out from September to April in the nearby Silverstream catchment. Silverstream and its tributaries are a known source of faecal contamination to the Selwyn River, from where it flows in approximately 500m upstream of Coes Ford.



### What did the investigation involve?

- Monitoring of *E.coli*, nutrients in both sediment and water, sediment cover and volume, potentially toxic cyanobacteria and faecal source tracking throughout the Silverstream catchment (including McGraths and Snake Creeks).
- Concurrent flow measurements were taken to assess the load volume of these potential contamination sources
- Observations of potential contamination pathways and sources from surrounding land use.

### Next steps and monitoring update

- Final round of the Silverstream monitoring in April
- *E.coli* data will be analysed to assess which sites and samples are the best candidates for further analysis of faecal source tracking (FST). FST costs about \$400 per sample.
- Full data analysis will be carried out once the FST results become available. This analysis will assess where faecal contamination appears to be the greatest and what those faecal sources might be, and what influence they may have on swimmability at Coes Ford. Nutrient concentrations and loads will be assessed for nutrients that are known to play a role in cyanobacteria blooms. Sediment nutrients and volume will be assessed to determine what nutrients are being retained in deposited sediment in the catchment. Sediment acts as a reservoir for contaminants and can release these contaminants back into the water column i.e phosphorus binds to sediment, and can be released under low oxygen or high pH conditions and become available to cyanobacteria.
- Observations made during monitoring to date include:
  - the sampling has been highly affected by the weather. Most months have had a fresh that has restricted cyanobacteria growth, at least somewhat.
  - anecdotally sedimentation looked like it was increasing in the middle sites. However, this was only immediately downstream of bridge outlets, where gauging occurred and not ecological sampling.
  - the Lower Snake Creek (upstream of Silverstream) has a few tracks, stock crossings that will allow run off to enter the ck.
  - All of the streams have fencing, generally double wire, on the properties we visited, however at some points this is minimal (i.e., < ~ 2m)
  - the small side and lateral drains that feed the sampled streams could be a major source of contamination. Especially upstream of Leeston-Lincoln rd. This may require further investigation and/or walkovers to determine the actual effect that these could play.



Selwyn Waihora Zone - 5 Year Outcomes			Milestones this Quarter	Progress Update - Zone Committee Jan-April 2018
1	Lake interventions	Have commenced on-the-ground lake interventions relating to reconstructing wetlands, addressing legacy phosphorus and restoring Macrophyte beds	Start a reconstructed wetland, funding dependent, by Jan 2018; being delivered by Te Waihora Co-Governors. See update. This milestone is now achieved. New milestone will be created to report progress. Te Waihora stock access guidelines ZC member meeting held 15 March to further define wetland stock access rules.	April 18- Te Waihora Wetland Project; Guidance document for wet pasture still being developed with site visits now underway helping improve the document. A paper is currently being drafted which will outline how fencing Ecan land can be established. Update to ZC will be given at June meeting.
2	Good Management Practices	Farming at GMP or better, focusing on priority areas; CPW, Phosphorus sediment Risk Area (PSRA), and Cultural Landscape Values Management Area (CLVMA), on all dairy farms, in the Kaituna and Silverstream catchments, and on farms in high country sensitive lake catchments	Community drop in session held 19 April in Lincoln where 10 property owners attended. Following this a further 4 property visits by the Environment Canterbury Land Management Advisor were undertaken.	March 18- Of the 356 priority farms (>50ha of irrigated land), 7 follows ups were identified. Since all completed. As at 31 March 146 land use consents issued. Further 45 have been lodged. Letters sent 3 April to landowners (60 properties), in the Cultural Land Values Management Area (CLVMA) of Lake Ellesmere Te Waihora of properties >10 ha not part of the first campaign (>50 ha irrigation), within the river zone of the CLVMA (62 properties), and the lower phosphorous / sediment risk area (162 properties) outlining requirements and drop in session information. Phone inquiries positive with site visits being arranged by LMA Selwyn.
4	Using alpine water	Water from Rakaia River and Lake Coleridge is used for new irrigation, replacing groundwater takes and for augmenting lowland stream flows		Infrastructure design aspects of project progressing well within plan and budget. Weather delays to other aspects of CPW stage 2+ have caused some delays. Land procurement and subdivision processes have taken longer than planned but still on track to conclude as expected in year 1.
5	Ngai Tahu values	The catchment is managed in a way that integrates Ngai Tahu values across all outcomes and how these will be achieved		Mahinga Kai model farm shed talk to be presented by CLVMA Mananui Ramsden 1 May, 5 Springs QEII covenant (Silverstream Catchment, Springston). Supported by industry partners. Intention is to explain meaning of Mahinga Kai and what actions on farm look like particularly to assist with land use consent and auditing process. Invites sent to farmers and industry groups.

6	Biodiversity	Enhanced indigenous biodiversity and ecosystem health in priority areas or ecosystems; Hororata catchment, high country, wetlands, springheads, braided rivers and Te Waihora	Full IMS money allocated for this FY 17/18, all projects have signed grant agreements and some have already started. <b>Tai tapu wetland</b> commenced – will have full public access once completed to showcase wetland importance and biodiversity. Currently investigating biodiversity project to promote Mahinga Kai values around Tārerakautuku / Yarrs lagoon. Scoping opportunities for large scale mudfish protection in Haldon Pastures in collaboration with agencies, industry and land owners. working with CPW to progress biodiversity opportunities within the Hororata catchment. Scoping FY18/19 IMS projects already and drafting up project proposals.	<b>Snake Creek</b> stage 1 completed. 1 Million meters stream campaign up and running to enhance 1 km along Silverstream. Additional \$15,000 found outside of Zone and IMS budget to deliver a \$70,000 project in collaboration with UC, DoC and Kiwi rail – willow and broome free Grasmere stream and connected lakes – ki uta ki tai. <b>Youth Zone committee</b> project has started with over 40 kids from the EnviroSchool programme.
7	Water supply	All community water supplies meet New Zealand Drinking Water Standards and provide sufficient water to meet community demand		Selwyn District Council is currently seeking comment from the community on options for introducing chlorination to community water supplies. These options include: 1. Introduce chlorination for water supplies which would receive the greatest benefit, based on a risk assessment 2. Introduce chlorination for all Council water supplies 3. No additional chlorination Over the last quarter, Council has completed the UV upgrade on all of its Rolleston bores which now provides a second barrier of protection from contamination.

8	Recreation	Enhance, where possible, contact recreation opportunities at key sites on Selwyn River/Waikirkiri and for sports fishing in the high country	Monthly water sampling (Sep 2017-April 2018) in Silverstream catchment completed. E.coli data will be analysed to assess which sites and samples are the best candidates for further analysis of faecal source tracking.	<b>Swimmable Selwyn at Coes Ford;</b> Following letters sent to landowners, 16 property visits (over 50% of catchment), completed by Land Management Advisor as of April. Data from these visits will be presented to ZC alongside that of monthly water sampling. Intention to further promote visits at coming 5 Springs Shed Talk.
10	Awareness	Raise community awareness of freshwater management goals in the Selwyn Waihora zone and how these will be achieved		Brett Painter (Environment Canterbury), to provide verbal update at May Zone Committee Meeting.
11	Monitoring and Compliance	Monitoring to be undertaken as per priorities	95% of all very high or high risk dairy consent monitoring has been achieved by Selwyn Waihora Resource Management Officers	Focus on subdivision meetings and staff training, joint approach to subdivision monitoring with focus on the Halswell and Lincoln areas, Te Whariki ongoing with commencement of stage 3 development. Regular visits made to Bathurst site, overall compliance situation is improving following proactive work from Resource Management Officer. <b>Water consent monitoring;</b> water restriction & low flow monitoring has been completed. Annual water monitoring programme commences later in the year. <b>Dairy Monitoring;</b> Very high risk monitored 20/20, high risk 74/79, medium risk 46/47, low risk 24/82. A lot of good work has been achieved here.



<b>Agenda Item No: 6</b>	<b>Subject Matter:</b> Youth Zone Committee
<b>Report to:</b> Selwyn Waihora Zone Committee	<b>Date of meeting:</b> 1st May 2018
<b>Prepared by:</b> Johannes Welsch, Hannah Dunlop Environment Canterbury	<b>Action:</b> Update on recent Youth Zone Committee workshop and discussion around the Zone committees' role in October's Youth Zone Committee

**Action required:**

1. Note the update on progress on October's Youth Zone Committee;
2. Discuss the Zone Committee's role in the Youth Zone meeting.

**Background:**

The idea came about during a conversation between the Zone team, Zone Committee members, the Youth Engagement team, and the EnviroSchools team who saw an opportunity to engage with rangatahi/young people on the work that they're doing throughout the zone

**Workshop 1**

Mid-April, the inaugural Youth Zone Committee workshop was held. The session took place at Lincoln Events Centre and brought together 40 young people from seven EnviroSchools across the zone, and three representatives from the Selwyn Youth Council.

The day started with a karakia and a mihi whakatau for the Selwyn/Waihora Zone. The rangatahi were then split up in to six groups; farmers, local iwi, environmentalists, local government representatives, scientists, and anglers, and were instructed to discuss what they wanted to see for the future of the zone. Groups explored what goes into making a quality decision, and noted that, "*Decision-making is complex when there are so many groups to please!*"

Before discussing the 'Swimmable Selwyn @ Coes Ford' project from the group's perspectives, Selwyn/Waihora Zone Committee Chair, Allen Lim, declared the group 'honorary Zone Committee Members'– much to their delight!

*"It was an amazing exercise seeing the students realise the complexity of finding solutions with the greatest community benefit and general consensus in mind. Though, it didn't stop them blaming most of the issues at Coes Ford on the freedom campers - a group not represented at the hui!"*

Some of the proposed solutions the groups came up with included; importing a fish to eat toxic algae, developing a coded gate with an app so freedom campers have to pay to stay at Coes Ford with the money going to improving the area, tighter controls on irrigation, fencing and planting manuka along waterways to diversify farm income streams while protecting water quality, and using science to provide data on the current state of the water quality.

The rangatahi remarked, *"We need to think about our land and wai and how we treat it. It's awesome that the important people in the Council are listening to kids!"*

### **Next steps**

It is proposed to have a workshop of the young people and the Zone committee prior to a Zone Committee meeting (June or July).

In preparation for this workshop the zone committee should discuss its role at the October Youth Zone Committee meeting.



AGENDA ITEM NO: 7	SUBJECT MATTER: <b>Zone Facilitator's Report</b>
REPORT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 03 April 2018

### Action required

1. Provide feedback on any new urgent regionally-significant topics that should be considered for inclusion in the Omnibus Plan change to the Canterbury Land and Water Regional Plan;
2. Note the 05 June zone meeting is likely to include a two-hour committee only workshop from 1 – 3.00pm. The June meeting will include an update from Fonterra.

### 1 Input to Omnibus Plan Change (2019) to Canterbury Land and Water Plan

The attached report provides background and seeks feedback from the zone committee in relation to the proposed Omnibus Plan change to be notified in mid-2019.

The proposed regionally-significant topics for the Omnibus Plan Change include "Horticultural operations", a matter raised with Environment Canterbury by Allen Lim.

### 2 Outline of 07 Zone Committee meeting

Fonterra will provide a briefing on their progress with implementing the Selwyn Te Waihora Plan and the Selwyn Waihora ZIP Addendum.

I am hoping to organise a 2-hour committee-only workshop (1.00 – 3.00pm) in relation to Te Waihora but cannot confirm this at the time of writing.

### 3 Briefings to Councils on the SWZC Annual Report 2017

Chair, Allen Lim, will present the SWZC Annual Report 2017 to Councils as follows:

- Selwyn District Council: Wednesday 09 May (afternoon);
- Environment Canterbury: Thursday 10 May (morning);
- Christchurch City Council: Thursday 07 June (morning).

<b>AGENDA ITEM NO:</b>	<b>SUBJECT MATTER: OMNIBUS PLAN CHANGE 2019</b>
REPORT: <b>xx Water Management Committee</b>	DATE OF MEETING:
REPORT BY: Andrea Richardson, Senior Planner – Environment Canterbury	

## PURPOSE

1. To seek feedback from the Zone Committee on any new urgent regionally significant topics to be considered for inclusion in the Omnibus Plan Change to the Canterbury Land and Water Regional Plan (*Omnibus Plan Change*), with a notification date of mid-2019.

## STAFF RECOMMENDATION

2. That the Zone Committee:
  - a. Reviews the list of urgent regionally significant topics proposed for the Omnibus Plan Change (Attachment 1); and
  - b. Advises if there is any other urgent regionally significant topic that should be addressed in the Omnibus Plan Change, along with the following information:
    - i. Why is the issue significant for the Canterbury region;
    - ii. Who and/or what is affected because of the issue;
    - iii. What your Zone Committee considers should be done to address the issue; and
    - iv. How urgent is the issue (e.g. how would the effects of the issue change if it was addressed in 4-5 years' time rather than now?).

## REPORT

3. The Omnibus Plan Change ensures the regional planning provisions in the Canterbury Land and Water Regional Plan (LWRP) are responsive to new directives from central government, emerging environmental issues, and changes in matters that are strategic priorities for Environment Canterbury. The Omnibus Plan Change will only make changes to the LWRP, and will not change any other Canterbury regional plan that control specific aspects of land and water separately. Key milestones for this project include engagement with Zone Committees on potential changes to the LWRP to address the regionally significant issues in the last quarter of 2018, public notification of the proposed plan change in mid-2019, a public hearing on submissions on the plan change in early 2020 and a decision to be notified by mid-2021.
4. We welcome your feedback as to whether there are any other regionally significant topics that your Zone Committee considers should be included in the Omnibus Plan Change. Please note that for each new topic added to the list, it is likely that a regionally significant topic listed in Attachment 1 would need to be removed in order to meet the mid-2019 notification timeframe.

5. Each new topic for Omnibus Plan Change needs to meet the following criteria:
  - a. It is an issue that is likely to apply to the whole Canterbury region (i.e. it is not only applicable to one sub-region); and
  - b. It is urgent and important for the sustainable management of natural and physical resources in Canterbury.
6. If your Zone Committee identifies a new topic that meets the above criteria, we would appreciate you providing the following information on the issue:
  - a. What is the issue and why is it significant for the Canterbury region;
  - b. Who and/or what is affected because of the issue;
  - c. What your Zone Committee considers should be done to address the issue; and
  - d. How urgent is the issue (e.g. how would the effects of the issue change if it was addressed in 4-5 years' time rather than now?).
7. Once all Zone Committees have provided feedback, Environment Canterbury's Councillors will evaluate which regionally significant topics should be included in the Omnibus Plan Change 2019. One of the considerations that Councillors will take into account when evaluating which significant topics should be included is the technical analysis and reporting workload required to support the plan change. The workload and timeframes are such that for each new topic added to the list, it is likely that a regionally significant topic in Attachment 1 would need to be removed to meet the mid-2019 notification timeframe. A final decision on any changes to the regionally significant topics listed in Attachment 1 will be made by Councillors in the middle of this year after consideration of your feedback. We will advise of the outcome of that decision as soon as possible after this time.
8. Environment Canterbury staff would be happy to attend one of your Zone Committee meetings in the last quarter of 2018 to seek your feedback on potential plan change amendments to address the regionally significant Omnibus Plan Change topics.

## Attachment 1: Proposed Regionally Significant Topics for Omnibus Plan Change 2019

Topics	Rationale and Implementation impacts
<b>Braided Rivers</b>	<p>There is an urgent need to define the edge of the 'bed' of Canterbury's braided rivers to ensure riverbed values are appropriately protected. Braided rivers have beds that are dynamic, with multiple channels creating a time series of recent and very old current and former channels across a 'braid plain' that extends well beyond that area that might now be described as the 'active bed' or even 'recently active bed'. Therefore, the features of braided rivers are not easily aligned with the definition of 'bed' in the LWRP.</p> <p>Priority for this amendment is high as there will be high implementation benefits.</p>
<b>Tangata Whenua values</b>	<p>There is an urgent need to amend provisions to ensure Tangata Whenua values are appropriately considered and provided for when making decisions on some controlled and restricted discretionary consent applications. For some activities (for example excavation of land) the ability of a decision maker to consider effects on tāngata whenua values is inappropriately constrained.</p> <p>Priority for this amendment is high as it will increase protection of Tangata Whenua values.</p>
<b>Increased protection of indigenous freshwater species and habitats, and habitats of other species with significant fishery values.</b>	<p>There is an urgent need to increase protection of habitat of indigenous species and other species with significant fishery values. Increased protection is sought for Canterbury Mudfish habitat and other critically endangered species and/or valuable but declining mahinga kai. Amendments to provisions are required to address incremental loss of stream habitat occurs through diversion, re-alignment, piping and reclamation. The Salmon Spawning Sites listed in the LWRP may not cover all identified spawning sites.</p>
<b>Implementing requirements of National Policy Statement for Freshwater Management</b>	<p>Region-wide provisions need to give effect (as far as practicable) to the 2014 and 2017 amendments to the National Policy Statement for Freshwater Management (NPS FM), which requires Councils to establish freshwater management units and limits to achieve freshwater outcomes.</p> <p>Implementation impacts are moderate-high in terms of benefits to water quality and recreational outcomes.</p>
<b>Horticultural operations</b>	<p>There is an urgent need to amend LWRP provisions to ensure the particular constraints that apply to horticultural operations are recognised and provided for. To avoid soil-borne diseases horticultural operations must rotate the land they lease and the type of crop grown on the land. Compliance with the LWRP farming rules is challenging for</p>

Topics	Rationale and Implementation impacts
	<p>these operations as the nitrogen loss limit that applies to the farm is restricted by the crop type grown during the nitrogen baseline period.</p> <p>Priority for this amendment is high as it will have high implementation impacts. No successful LWRP implementation pathway has been found to address the issue.</p>
<p><b>Implementing requirements of National Environmental Standards for Plantation Forestry</b></p>	<p>Review and (if necessary) amend LWRP provisions to ensure they are consistent with the National Environmental Standards for Plantation Forestry (NES-PF). The NES-PF prevails over LWRP rules except where the NES-PF specifically allows more stringent regional plan rules.</p> <p>Priority for these amendments (if any provision changes are identified) is high given the NES-PF takes effect on 1 May 2018.</p>