



ORDINARY MEETING OF THE SELWYN-WAIHORA ZONE COMMITTEE TO BE HELD IN THE LARGE EXECUTIVE MEETING ROOM ON TUESDAY 7 FEBRUARY 2017 AT 1.00 PM

Assemble for 12.30pm start for Lunch

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

Loran Eisely, US Author

SELWYN WAIHORA ZONE COMMITTEE – **Outline** of **Agenda**

TUESDAY 07 February 2017, **Selwyn District Council, Rolleston** TIMETABLE & ORDER OF BUSINESS

12.30pm Lunch at Selwyn District Council, Rolleston

Item	Time	Description	Page #	Presenter
	1.00pm	Welcome to new members and introductions		
	1.15pm	Meeting commences with karakia and formal order of business: • Apologies • Identification of Urgent General Business • Confirmation of minutes: • 01 November 2016 • 06 December 2016 • Matters Arising • Report to and from Regional Committee Meeting (Ron Pellow) • Update from Zone Committee members on activities and meetings attended that relate to the Committee's outcomes for the zone	2-12	
	1.35pm	General Public Contribution		
1	1.40pm	Update on augmenting flows in lowland streams (TSA project) and Selwyn River	13 - 16	Brett Painter, Environment Canterbury
2	2.20pm	Next steps Swimmable Selwyn@Coes Ford	17 - 18	Ian Whitehouse, Environment Canterbury
	2.45pm	Break		
3	3.10pm	Election of officers: Chair, Deputy Chair & Representative on Regional Committee	19 - 20	
4	3.25pm	Progress report: 5-year Delivery Outcomes & Milestones	21 - 25	Michaela Rees, Environment Canterbury
5	3.55pm	Zone Committee Annual Report for the Community	26 - 30	Ian Whitehouse, Environment Canterbury
6	4.15pm	Zone Committee's 2017 work programme	31 - 32	Ian Whitehouse, Environment Canterbury
	5.00pm	Approximate finish time		

MINUTES OF THE 66th MEETING OF THE SELWYN-WAIHORA ZONE COMMITTEE HELD AT THE LARGE EXECUTIVE MEETING ROOM, SELWYN DISTRICT COUNCIL ON TUESDAY 1 NOVEMBER 2016 COMMENCING AT 3 PM

PRESENT

Allen Lim (Chair), Bill Lambie, John Sunckell, Cr Pat McEvedy (Selwyn District Council), Murray Lemon (Selwyn District Council), Maree Goldring, Victor Mthamo, Karaitiana Taiuru (Te Rūnanga o Koukourarata) and Commissioner Tom Lambie (Canterbury Regional Council)

IN ATTENDANCE (for part or all of meeting)

Ian Whitehouse (Zone Facilitator - ECan), Steve Bragg (ECan), Michaela Rees (ECan), Susan Goodfellow (CPW), Janet MacDonald (Changehub), Treena Davidson (TRONT), Gerald Raymond (ECan), Angus McLeod (ECan), Stefanie Rixecker (ECan), Maki Norman (ECan), Murray Doak (MPI), John Benn (DOC), Danny Kimber (DOC), Nicole Reid (Selwyn District Council),

The meeting was opened with a karakia by Stephen Bragg.

APOLOGIES

Apologies from Councillor Tim Scandrett, Christina Henderson, Ron Pellow, George Tikao, Riki Nicholas, Clare Williams and Hayley Moynihan were accepted by the meeting.

Moved: Mr Lambie/Seconded: Mrs Goldring

'That the Committee accept apologies for absence from Councillor Tim Scandrett, Christina Henderson, Ron Pellow, George Tikao, Riki Nicholas, Clare Williams and Hayley Moynihan.'

CARRIED

Commissioner Lambie noted that he would be leaving at 4pm.

IDENTIFICATION OF URGENT GENERAL BUSINESSNil.

CONFIRMATION OF MINUTES

1. Minutes of the 65th Meeting of the Selwyn Waihora Zone Committee (Water Management) held on Tuesday 4 October 2016.

Moved: Mrs Goldring /Seconded: Mr Mthamo

'That the minutes of the 65th meeting of the Selwyn Waihora Zone Committee (Water Management) held on Tuesday 4 October 2016 be confirmed as circulated.'

CARRIED

MATTERS ARISING FROM MINUTES

Nil.

REPORT FROM REGIONAL COMMITTEE MEETING.

Mr Pellow's reports were taken as read. The Chair noted that Mr Lambie attended as an observer and if members have questions please direct them to Mr Lambie.

Rakaia Catchment Environmental Enhancement Fund

Mrs Goldring summarised her report to the meeting.

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

- 1. Maree Goldring attended the Rakaia Catchment Enhancement Trust meeting. She also attended a WELRA meeting.
- Mr Pellow reported via email of meetings attended. It was noted that he attended a LUDF focus day and a SWZC Plan Implementation Subcommittee meeting. He attended a discussion with the Living Water team on Selwyn Waihora water quality and farming implications.
- Mr Lim advised of his attendance at the Plan Implementation Sub-group meeting.
 He noted that he presented at the West Melton Christchurch Zone Committee meeting.

GENERAL PUBLIC CONTRIBUTION

Nil.

2. UPDATE FROM CENTRAL PLAINS WATER

Ms Goodfellow (Central Plains Water -CPWL) provided an update on Stage 1 results to the meeting.

Project update and overview of Stage 1

- Projects stages timeline updates for one season of operating
- Overview of 2015/2016 results water quality and water quantity and water usage statistics

She referred to a map of the Selwyn Waihora zone noting the area of the CPWL scheme.

Ms Goodfellow provided background regarding the consented proposal advising what has changed since its inception. She noted that the run of river has 60% reliability and will be supplemented with stored water released by TrustPower from Lake Coleridge. A further change included an open headrace from Rakaia intake to Leeches Road (17km). Mention was made that Stage 2 will be fully piped with no headrace and water being distributed via gravity through 400km of an underground pipe network.

Ms Goodfellow advised the meeting that Stage 2 is to build the balance of the canal underground through a distribution of pipe networks thus removing ecological challenges.

The target irrigation supply dates were summarised to the meeting noting that Sheffield is 4,300ha with a date of 30 September 2017 and Stage 2 being 20,000ha with a date of 1 September 2017.

Ms Goodfellow noted that the Stage 2 construction contracts are being signed in the next few weeks with start date of the New Year. She summarised the initial assessment of dry v irrigated land being at 50/50.

Water monitoring programme:

Mrs Goodfellow summarised CPWL's use consent requirements. She noted the development of a baseline report prior to commencing monitoring in 2012 identifying quality and quantity status and pollution in the zone.

Part two of the use consent included a development of a Trigger Levels report specifying an investigation process if any specified trigger level is breached to determine the cause.

Reference was made to the Stage 1 Management Plan noting that that there are 20 installed fully screened bores with groundwater quality and level monitoring 2 years prior to commencing Stage 1 irrigation.

She noted the surface monitoring area and the bores are located via a distribution of an existing Environment Canterbury bore for history and monitoring. She outlined the parameters that they test for in terms of water quality and results of their testing covering Stage 1 and Stage 2 nitrate levels and various other elements. The meeting discussed the matter in further depth.

Management of Nutrients – Tools:

Mrs Goodfellow summarised their management of nutrients and tools they have available such as FEP's, water use agreements and accessing farmers' data.

Biodiversity and Ecosystems Enhancements

- Levy via water use agreement
- Te Waihora Management Fund Contribution to annual cost of Lake openings for Lake Ellesmere/Te Waihora

Stage 1 2015/16 water usage

She referred to her presentation noting that the Selwyn Waihora catchment is over allocated – groundwater abstraction and nitrogen discharge 75% or 60Mm3 of groundwater was not abstracted as farmers switched to CPWL river scheme.

She summarised the water usage, irrigator type and land use.

Commissioner Lambie left the meeting at 4pm.

Environmental, Cultural, Economic & Social

Mrs Goodfellow summarised the four factors.

- Environmental Mention was made of their focus on education and prevention
- Cultural Engagement with local iwi
- Social Good stories coming out of stage 1 on the positive impact of water and effect on local businesses
- Economic farmers have certainty now regarding a supply of water

The meeting sought further clarification from Ms Goodfellow regarding various matters.

1. SWIMMABLE SELWYN@COES FORD

Mr Whitehouse (ECan) provided some context around the Zone Committee's work focus and where he believes the committee is currently at.

He summarised the zone committee's journey from 2010 noting various elements such as the ZIP, Selwyn Te Waihora Plan Change becoming operative in February 2016, and the lake interventions being led by the Te Waihora Co-governors. He said the committee needed a focus, beyond the ongoing biodiversity work, for the next year or so.

What is next in terms of focus and target?

Mr Whitehouse said a Swimmable Selwyn@Coes Ford programme could be the focus for the committee's work.

Mr Whitehouse noted that while the committee would like to undertake everything in the Selwyn Te Waihora catchment (from the foothills to the sea), he directed

members to focus so they could make a real difference. Mention was made of being able to have capacity to undertake work which would be a problem if efforts were not focused.

Members discussed the matter in further depth. There was support forfocusing on Coes Ford while considering some research in other areas such as Whitecliffs where the causes (and hence solutions) were less clear.

The Chair summarised the key points of the discussion.

- Coes Ford is a problem
- Silverstream catchment is a problem with E.coli which is nearby to Coes Ford

 it was suggested that information of sampling could be provided to the
 meeting.

Mr Whitehouse referred members to point 13 on page 11 of the agenda requesting that members explore this point in a discussion. The meeting questioned if it is possible to make Coes Ford swimmable. Staff advised that in terms of science it is possible, in time, to make Coes Ford swimmable. It was noted that a big challenge is drought conditions and how this made this objective harder to achieve.

Members continued to discuss this matter in further detail.

Mr Whitehouse asked if the committee would take a leadership role regarding this matter. Members agreed, he suggested that a workshop be held regarding this topic.

Mr Whitehouse (ECan) advised members that while Mrs Moynihan was absent from today's meeting she wished to show her support for the Swimmable Selwyn at Coes Ford initiative be recorded.

3. LOOKING BACK, LOOKING FORWARD

John Sunckell and Pat McEvedy provided their thoughts to the meeting. John Sunckell noted that this has been a journey. He suggested to the meeting to think widely and outside the box as well as challenging when necessary to in order to obtain information.

Cr Pat McEvedy summarised growth of farmers over the years, noting that many agree that there are issues with water.

The meeting acknowledged the work of Mr Sunckell and Councillor Pat McEvedy. Cards and gifts were presented.

4.	ZONE	EACII	ITATOD	REPORT
4.	ZUNE	FACIL	HAIUKa	REFURI

Mr Whitehouse (ECan) provided a letter that is being sent to Selwyn households and noted there will be drop in evenings regarding this matter.

The meeting was closed with a karakia by Stephen Bragg.

The Chair thanked all in attendance and the meeting closed at 5:06pm.

DATED this	day of	2016	
		/	
		/	
CHAIR			

NOTES OF THE 67TH MEETING OF THE SELWYN-WAIHORA ZONE COMMITTEE HELD IN THE LARGE EXECUTIVE MEETING ROOM, SELWYN DISTRICT COUNCIL, ON TUESDAY 6 DECEMBER 2016 COMMENCING AT 1PM

PRESENT

Allen Lim (Chair), Bill Lambie, Les Wanhalla (Te Taumutu Rūnanga), Karaitiana Taiuru (Te Rūnanga o Koukourarata), Christina Henderson (Te Hapu o Ngāti Wheke), Cr Anne Galloway (CCC), Hayley Moynihan

IN ATTENDANCE

John Benn (DOC), Ian Whitehouse (Zone Facilitator ECan), Stephen Bragg (ECan), Sylvia McAslan (ECan), Stefanie Rixecker (ECan), David Murphy (ECan), Murray Doak (MPI), Michaela Rees (ECan), Johannes Welsch (ECan), Michele Stevenson (ECan)

The meeting was opened with a karakia.

APOLOGIES

Apologies were tabled from Cr Murray Lemon, Cr Iaean Cranwell, Riki Nicholas. Victor Mthamo, Maree Goldring, Ron Pellow, George Tikao, Clare Williams

Mr Lim welcomed everyone to the meeting and especially the two new members Cr Anne Galloway and Les Wanhalla.

Introductions around the table then took place.

As many of the Committee Members were absent, a quorum could not be formed, therefore notes only were taken.

IDENTIFICATION OF URGENT BUSINESS

Nil

At this point the meeting was informed that George Tikao's wife had passed away – the committee members expressed their condolences.

CONFIRMATION OF MINUTES

The minutes of the 66th meeting of the Selwyn Waihora Zone Committee were not confirmed due to the lack of a quorum, however no changes to the minutes were considered necessary.

REPORT FROM REGIONAL COMMITTEE MEETING

In Ron Pellow's absence, and at his request, Ian Whitehouse spoke to the Report from the Regional Committee Meeting.

Mr Whitehouse said the Regional Committee now has new members as a result of changes arising from the Council elections, and changes of community members and Zone representatives.

He noted each Zone representative on the Regional Committee had been asked to provide briefing papers as to where their Zone Committee is at, what challenges it is facing, and how the Regional Committee could help.

CORRESPONDENCE OUT

A letter to Bill Bayfield (CEO of Environment Canterbury) from the Selwyn Waihora Plan Change Implementation Working Group was tabled. The letter encouraged Environment Canterbury to approve the use of 'NCheck' as an alternative to OVERSEER®, and provided the thinking around this. The letter was spoken to by Stefanie Rixecker.

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

Allen Lim and Hayley Moynihan had attended the Plan Implementation Working Group meeting.

GENERAL PUBLIC CONTRIBUTION

Nil

VERBAL UPDATE ON ZONE DELIVERY

Michaela Rees handed out her paper and gave an update:

- Committee members are needed for the Biodiversity Working Group anyone interested should let Johannes Welsch or Michaela Rees know.
- In reply to Christina Henderson's question as to whether this involves meetings, Ms Rees explained there is usually a 30 minute meeting before the Zone meeting to go through Immediate Steps projects. A one hour meeting before Christmas is also envisaged.
- She then spoke to her report which contained results for Selwyn from 1 July 2015 to 30 June 2016.

VERBAL UPDATE ON PROGRESSING LAKE INTERVENTIONS

Stefanie Rixecker gave a verbal update:

- It is planned to have a facilitated workshop in February next year maybe 21 February.
- Dr Hamilton will address points that came up at the recent Hui that Allen Lim attended.
- Allen Lim said as there is not much money available he would encourage thinking about how to research a project with zero cost. He saw no reason why we should not collaborate with research institutions, and suggested Michaela Rees could pull all the academics together and brainstorm.
- Christina Henderson asked if we should use 'Give a Little' and places like that, to which Mr Lim replied we should talk to them, however it may be hard to get as much as we need.

DRAFT ZONE COMMITTEE ANNUAL REPORT FOR THE COMMUNITY

Ian Whitehouse spoke to the draft Annual Report and said the Zone Committee will not sign off on this until its meeting on 7 February 2017. He asked the committee to identify any gaps, see if the emphasis is correct, and to suggest any changes. He asked that any comments be sent to him by early January, if not sooner.

Suggestions were:

- Key events for 2016 bring forward to the front page.
- Key achievements for 2016 the first bullet, reword it to say "...within the Selwyn Te Waihora Catchment".
- Selwyn 'Waihora' plan change should be 'Te Waihora'.
- Zone Committee membership Bill Lambie was Deputy Chair.
- Christine should be Christina with an 'a'.

Further suggestions going forward:

- Key events:
 - perhaps include some of the things Stefanie has talked about.
 - make them for the community.
 - get DOC, joint agencies and the community at large involved (schools are already involved).

ZONE FACILITATORS REPORT

lan Whitehouse spoke to this report which covered meeting dates for 2017, first actions for next year including election of officers, working group sub committees.

CONTACT RECREATION AND RELATED MONITORING AT CHAMBERLAINS AND COES FORDS, SELWYN RIVER/WAIKIRIKIRI

Michele Stevenson spoke to her handout and gave some background comparison between the two sites. She pointed out:

- While Chamberlains Ford does not have issues, Coes Ford is graded 'poor'. The "poor" gradings go back well before 2007/8.
- There is less than 5 kilometres between the two sites (Chamberlains and Coes Fords) which are monitored weekly between November and early March.

Tom Lambie joined the meeting at 2.10pm in order to take part in the Field Trip.

- Silverstream is the key source of E. coli and there has been significant work done to try and find out what has been causing that contamination.
- Coes Ford last summer was the first time a health warning had been issued for cyanobacteria which went out in August and was taken off in January.
- At Coes Ford there is a warning meter for potentially toxic cyanobacteria.

The meeting closed	at 2.25pm and	zone committee	: members	departed for	Chamberlains
and Coes Ford.					

DATED this	day of	2016
CHAIR		

SELWYN-WAIHORA ZONE COMMITTEE MEETING 7th February 2017

Report back from	SWZC representative on CWMS Regional Committee
То	Selwyn-Waihora Zone Committee
Ву	Ron Pellow [S-W ZC representative on the Regional Committee]
Actions sought	Note

The CWMS Regional Committee met on 13th December 2016; the discussion included the following topics / items that may be of interest to the SW Zone committee.

- 1. Zone updates were provided to enable the Regional Committee to consider its 2017 work programme, particularly with regard to key messages and opportunities across zones.
- 2. The Regional Committees Recreation and Amenity Working Group has recommended the subregional processes continues to progress recreational opportunities, while the Regional Committee can champion recreational and amenity values.
- 3. ECAN informed the Regional Committee of the Canterbury Drinking Water Reference Group, a group formed to primarily review compliance, risks and mitigation plans for drinking water in Canterbury. Further updates will occur through 2017.
- 4. Priorities and Working groups for 2017 were discussed, further consideration of this will occur at the next Regional Committee meeting (Tuesday 14th February)

Ron Pellow

30 January 2017

AGENDA ITEM NO: 1	SUBJECT MATTER: Update on augmenting flows in lowland streams (TSA project) and Selwyn River
REPORT BY: Brett Painter, Environment Canterbury	
DATE OF MEETING: 7 February 2017	

Action required

- Committee members note the following update on the Targeted Stream Augmentation (TSA) project.
- Committee members note the following update on the Selwyn/Waikirikiri Near River Recharge Project and prioritise the 1, 2 and 5 m³/s options in terms of their ability to assist delivery of Zone Committee objectives.

Context

The Selwyn Waihora Targeted Stream Augmentation and Selwyn/Waikirikiri 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

SH1

Brookside

Chamberlains
Ford

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

Following the Boggy Creek TSA experiment the Broadacres/Raywell farm tributary of the Selwyn/Waikirikiri 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.

The springs sited around the red star in Figure 1 currently flow when the Selwyn River/Waikirikiri is flowing in the reach at the top left corner of Figure 1. At this time, the groundwater supplying the river also feeds underground channels that supply the springs. Low catchment groundwater levels over the last few years have resulted in extended periods of no flow through these springs. The proposed solar powered pump will provide flow according to sunshine strength with battery backup a potential future addition. The proposed in-stream habitat enhancements involve digging into sections of the stream bed and installing a clay liner before re-filling the bed material. If the intermittent supply of water is not sufficient to keep flowing water in the tributary during future dry periods, these areas of enhanced habitat will allow for freshwater mussels and mudfish to burrow into as well as keeping water plants alive.

Groundwater bore construction was completed late 2016, with up to 37 l/s recorded in the flow test. The solar pump and panel contract was also tendered late 2016. Current activities include final design and consenting processes, with construction hopefully in early autumn.

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.

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 mixing with the natural river flow (that is, no direct mixing of waters). Figure 2 shows the Selwyn River currently travelling down the centre of the flood channel where the proposed CPW pipe crosses. Initial investigations suggest that inside the true right bank near the forest would be the preferred off-take location due to its elevation, natural flood protection and filtering capacity. Further investigations are required.

The key use of the off-take would 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, via amendments (if required) to current SDC stockwater take consents and/or CPW irrigation take consents. A consent to authorise the discharge of augmentation water will be required and any flood protection works for the off-take will also require a consent.

A 2007 NIWA study (Figure 4) concluded that the Selwyn River loses approximately 500 l/s to groundwater in the target reach for every kilometre of river bed, though a significant portion of this water feeds the Haldon Springs which flow into the Hororata River and then back into the Selwyn River system. The native and recreational fish values of the Haldon/Hororata reaches will benefit as will the values of the connected groundwater system which supports the Irwell River and lower Selwyn River systems.

Costings for 1, 2 and 5 m³/s off-takes have been requested in advance of the Selwyn Waihora Zone Committee on 7 February. These sizes will enhance natural system functioning rather than provide unnaturally high river flows (which will increase lower catchment flooding risks). The average daily flow at Whitecliffs since 1964 is approximately 3 m³/s with the median flow approximately 2.1 m³/s. Figure 3 shows that the relationship between median flows at Whitecliffs and Coes Ford varies significantly between seasons. The question of how much effect the Near River recharge will have on Coes Ford flows is not easy to answer, even with a computer model, due to the role of the underground channels that link the Selwyn/Hororata systems and the Selwyn/Irwell systems.

Some potential funding sources have been identified, and this conversation will need to be prioritised once costs are available and guidance on ideal size has been provided.

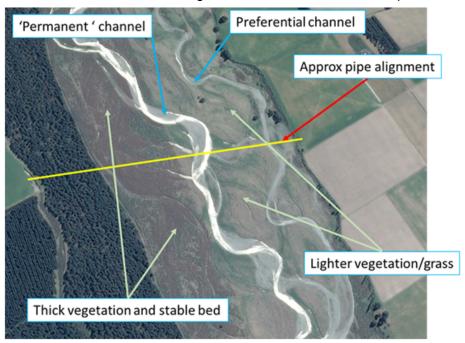


Figure 2. Potential Selwyn Near River Recharge site.

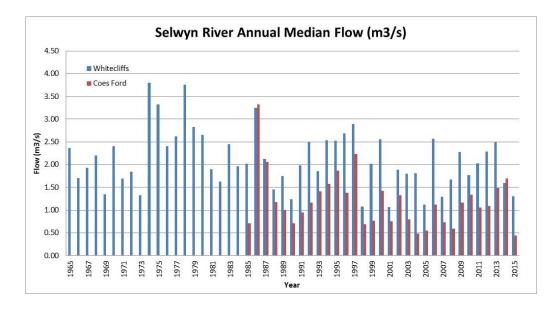


Figure 3.

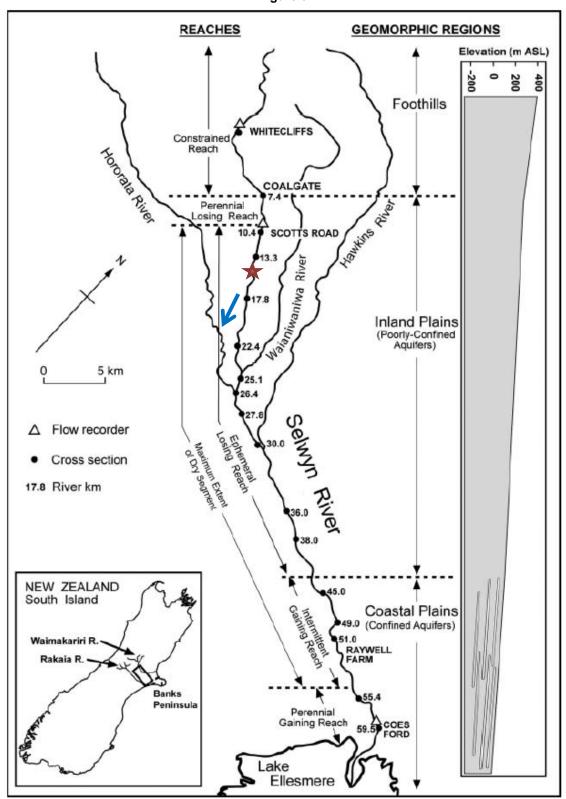


Figure 4. Selwyn River system (from Larned et al. 2007). Star shows potential recharge site. Arrow shows Haldon spring flow direction.

AGENDA ITEM NO: 2	SUBJECT MATTER: Swimmable Selwyn@Coes Ford – next steps
REPORT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 07 February 2017

Action required

- 1. Zone Committee host a workshop on 22 February of key stakeholders/interested parties to identify what is being done and what could be done to improve the river and who is leading each initiative.
- 2. Zone Committee members attend this workshop and champion a "solutions approach".
- 3. Zone Committee identifies organisations and/or individuals who should be invited to attend the workshop.

1 Background

Selwyn River/Waikirikiri flows at Coes Ford are 40-50l/s, the lowest recorded since March 2006 (20 l/s). The site has a "poor" contact recreation grade in contrast to the "good" grade at Chamberlains Ford. Silverstream is the main contributor of microbial contaminants. The river currently looks "bad" with extensive aquatic weeds and periphyton (slimes) in the waterway. Upstream of the ford the river bed has deep ruts from 4WD vehicles that have accessed the river following the removal of bollards and fencing.

The Selwyn River has featured prominently in the media and in wider discussion about the health of waterways in Canterbury. Much of the discussion has focused on who or what is to blame.

At its November 2016 meeting the zone committee adopted the goal of working towards making "Swimmable Selwyn@Coes Ford" happen.

There is a need to improve river flows, water quality, river health and visitor experience at Coes Ford. There is a lot action occurring already and many other initiatives being suggested to improve the river at Coes Ford. These include:

- Possible ways to improve flows
 - o Restrictions on water takes from the river (in place);
 - o Prohibit new takes & restrict transfers (in place);
 - Replace groundwater takes with CPW ("alpine") leaving more in the groundwater "bathtub" (in progress – CPW Stage 2+)
 - Near-river recharge using CPW water (early discussions);
 - o Restrictions on all groundwater takes in catchment/zone (longer term).
- Possible ways to improve water quality:
 - Work with and support farmers in Silverstream catchment including:
 - Walk waterways (including drains) with experts (e.g. CAREX) to identify effective riparian management and then provide funding;
 - Protect springheads (two already funded by Immediate Steps);

- Protect wetlands (Immediate Steps funding);
- Stock exclusion (stock already excluded from 90% of main tributaries in Silverstream catchment);
- Signage about the work improving the river;
- Possible ways to improve river health:
 - Restore trout spawning in Snake Creek (Fish and Game project);
 - Create a low-flow channel to increase water velocity and reduce weed growth;
 - o Mechanical disturbance (4WDs?) of river bed when Phormidium blooms;
 - Riparian planting (some already done);
- Possible ways to improve the in-river experience:
 - Willow management, restrict 4WD access, native plantings (in place);
 - Create a low-flow channel to increase water velocity and reduce weed growth;
 - Excavate a swimming hole;
 - Change "Toxic Algae" signage;
 - o Signage about the work improving the river.

2 Next steps - workshop on 22 February

The zone committee agreed to host a workshop of people interested in improving the Selwyn River at Coes Ford.

This has been scheduled for Wednesday 22 February, 4.00 - 7.00pm at Lincoln Events Centre.

The purpose of this workshop is to identify what is already being done to improve the river at Coes Ford, what more could be done and the key people leading and involved with each initiative. A further meeting would be held with the key people to map out a work programme.

Strong zone committee participation at the 22 February workshop is needed to show leadership and, most importantly, to keep the discussion focused on solutions not on who/what is to blame.

Workshop participants

Invitations will be sent to people who are already involved in projects to improve the river at Coes Ford or who are known to be interested in identifying and progressing ways to improve the river.

The zone committee is asked to identify people who should be invited to the workshop.

3 Delegation from Debra Hasson

Debra has asked to speak to the zone committee about the Selwyn River. Debra lives in the Silverstream catchment. She is a Selwyn District Councillor and the District Council representative on the Christchurch West Melton water zone committee.

AGENDA ITEM NO: 3	SUBJECT MATTER: Election of officers
REPORT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 07 February 2017

Action required

- 1. Zone Committee members elect the following officers for 2017:
 - o Chair
 - o Deputy Chair
 - o Selwyn Waihora Zone representative on Regional Committee.
- 2. Confirm Maree Goldring as the zone committee representative and Bill Lambie as her alternate on the Rakaia Catchment Environmental Enhancement Society.
- 3. Agree to the dissolution of the Selwyn Te Waihora Plan Implementation Working Group.
- 4. Confirm membership of the Biodiversity Working Group.
- 5. Establish a Working Group for "Swimmable Selwyn@Coes Ford".

Appointment of officers

Officers of the zone committee are elected by the committee for a 12-month term. It is time to appoint officers for the next 12 months.

The positions are:

- Chair (currently Allen Lim)
- Deputy Chair (currently Bill Lambie)
- Representative on the Regional Water Management Committee (currently Ron Pellow).

At the meeting the committee will elect members to these three positions.

Confirm Representative on the Rakaia Environmental Enhancement Society

The Rakaia Environmental Enhancement Society allocates the TrustPower environmental enhancement fund established as part of TrustPower's operation of Lake Coleridge under changes to the Rakaia Water Conservation Order.

Maree Goldring is the zone committee's representative on this Society with Bill Lambie as the alternate.

Plan Implementation Working Group

This working group has been advising Environment Canterbury staff on implementation of the Selwyn Te Waihora plan change. The plan change became operative in February 2016 and 12 months on almost all of the decisions on how to implement the plan have been made. Therefore the working group has completed its job.

This working group has also advised the Zone Manager on aspects of the Environment Canterbury work programme for the zone including advising on the development of the compliance strategy and communication matters. The Zone Manager has valued the advice from zone committee members and wishes to continue to seek advice from zone committee members. She believes this can be done informally rather than requiring a committee Working Group.

Confirm membership of Zone Committee Biodiversity working group/subcommittee The Biodiversity Working Group is currently Maree Goldring, Allen Lim, Christina Henderson and Iaean Cranwell).

At the meeting the committee will confirm membership of this Working Group, appointing additional members if there is interest.

Swimmable Selwyn@Coes Ford Working Group

"Swimmable Selwyn" is a key focus for the zone committee in 2017. It is suggested that the committee establish a working group to discuss and help progress initiatives to improve the river.

At the meeting the committee form a Swimmable Selwyn@Coes Ford Working Group

AGENDA ITEM: 4	SUBJECT MATTER: 5-year Delivery Outcomes & Milestones: Zone Team Quarterly Report October - December 2016
REPORT BY: Michaela Rees, Environment Canterbury	DATE OF MEETING: 7 February 2017

Item 1

Action required

 Committee members review the Environment Canterbury Work Programme Quarterly Report for October - December 2016

Background

The Zone Committee agreed 5-year delivery Outcomes and Milestones at the April 2016 Zone Committee meeting and a Work Programme was agreed at the June 2016 meeting.

The Selwyn Waihora Zone Team is leading on the implementation of the work programme within Environment Canterbury and with partners and stakeholders throughout the zone. A quarterly update report to the Zone Committee is required to inform progress against milestones.

A refresh of the 5-year delivery Outcomes and Milestones will take place in the second quarter of 2017 to ensure milestones are in keeping with achieving the outcomes.

Attachments

- 1. Selwyn Waihora Work Programme Quarterly Report October December 2016
- 2. Selwyn Waihora Zone Committee 5-year outcomes and milestones for land and water management, including monitoring and compliance priorities

Selv	wyn Waihora Zo	one - 5 Year Outcomes	Milestones this Quarter	Progress Update - Zone Committee - Jan 17
1	Lake interventions	Have commenced on-the-ground lake interventions relating to reconstructing wetlands, addressing legacy phosphorus and restoring Macrophyte beds		Stefanie Rixecker Environment Canterbury Director held a discussion at the November Te Waihora Agencies Group to work on a collaborative work programme regarding work around Te Waihora. Zone Committee Chair Allen Lim attended. Next step is a workshop being held 21 February to progress discussions Next phase of wave barrier planting being scoped by Whakaroa te Waihora programme. The WTW Work Plan 2016/2017 , which has been approved by the Te Waihora Co-Governance Group, is being implemented with the majority of works for the programme on track for implementation. The Ahuriri Restoration Plan, has also been approved by the Te Waihora Co-Governance Group and is being implemented. Due date pushed out Other milestones on hold until after Te Waihora Agencies Group workshop (21 Feb 2017) to enable discussions on any potential joint projects to take place
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	2.3 Develop and agree how beyond GMP be implemented by October 2016 - COMPLETE	Farming for generations / consent to farm: Direct mail out moved from November to February 2017 (7-8th). Community drop-in sessions to be held week 13 Feb in Templeton, Lincoln, Darfield, Coalgate, Leeston. Several FAR and Dairy consent application workshops held, supported by Environment Canterbury staff NCheck: has been approved by Environment Canterbury as an equivalent model to OVERSEER® in the following limited circumstances: 1. In the consent process and during on-farm audits for: a. Low leaching/lifestyle farming activities where nitrogen losses do not exceed 15 kgN/ha/year. b. In the short term, until 2022, for horticultural and arable farms while further improvements are made to OVERSEER®. 2. To determine whether consent is required and a farm is below a fixed nitrogen loss rate threshold. Beyond GMP: Application form has been prepared to outline how reductions will apply. Process to handle conversations about lesser reductions if already operating beyond GMP has been confirmed. Further analysis about how final portal numbers can help with this discussion will be carried when LWRP Plan Change 5 decision is released. Workshop to occur around mitigations outside OVERSEER® so advice as to how to consider to occur. Date yet to be set. Kaituna Valley sediment and erosion programme: Electrofishing community engagement activity held 27 November. Sediment and erosion report received. Engagement/discussion with rūnanga a priority for early 2017 and wider community meeting to be held. Zone Manager currently exploring options to contract this project
3	Using alpine water	Water from Rakaia River and Lake Coleridge is used for new irrigation, replacing groundwater takes and for augmenting lowland stream flows		CPW: stage 2 planning continues. Storage pond construction about to commence Targeted Stream Augmentation: Dr Brett Painter currently exploring the option of TSA from CPW stage 2 into the Selwyn River. Zone Committee update/paper to be presented by Brett at 7 Feb meeting. Meeting requested with Taumutu Runanga.
4	Ngai Tahu values	The catchment is managed in a way that integrates Ngai Tahu values across all outcomes and how these will be achieved		Funding secured for 12 month contract for Cultural Land Management Advisor within the Zone Team. Recruitment underway. Selwyn Te Waihora catchment stock access factsheet almost complete. Mahinga kai factsheet: content finalised with rūnanga. Session held with primary sector consultants to adapt into farmer friendly format Zone Manager wishes to hold rūnanga workshop in quarter one 2017 to identify further cultural values projects , including mahinga kai, for the zone Ongoing discussions with dairy sector regarding cultural values within their environmental schemes . Environment Canterbury audit programme continues to develop mahinga kai content River Engineering have engaged with Taumutu runanga regarding draft Drainage Management Plan
5	Biodiversity	Enhanced indigenous biodiversity and ecosystem health in priority areas or ecosystems; Hororata catchment, high country, wetlands, springheads, braided rivers and Te Waihora		Zone Biodiversity Priorities and Action Plan: to be discussed with Biodiversity Sub-committee early 2017. Hororata Restoration Plan: Stage 1 plan signed off Oct 2016, project identification taking place. Stage 2 signed off Dec 2016 - awaiting final report expected 31.03.2017. Wetlands/springheads: two large Immediate Steps projects in High country with wetlands, riparian areas and native plantings and similarly the same in focus area in Hororata catchment in development. Wilding Pines: Recent wildling pine aerial spraying in the Canterbury High Country results will be visible later in the year CPW collaboration: Once the Biodiversity implementation and action plan is endorsed by the zone committee, this will be an action, CPW has indicated they are interested in working closer with the Zone Team and NGOs Braided rivers: six month update received from project lead with some positive news in the Rangitata river island project as well as weed control Networks: Zone Team has started working closely with Selwyn District Council biodiversity officer.
6	Water supply	All community water supplies meet New Zealand Drinking Water Standards and provide sufficient water to meet community demand		Next annual update on this outcome by Selwyn District Council will be in August 2017

30/01/2017 3:59 p.m. Prepared by Michaela Rees

Selv	wyn Waihora Zo	one - 5 Year Outcomes	Milestones this Quarter	Progress Update - Zone Committee - Jan 17
7	Recreation	Enhance, where possible, contact recreation opportunities at key sites on Selwyn River/Waikiriri and for sports fishing in the high country		Coes Ford: Selwyn Waihora Zone Committee has taken this on-board as a flagship project for the zone - Swimmable Selwyn at Coes Ford. Zone Committee field trip held on 6 Dec to visit Chamberlains Ford and Coes Ford. Contributions from Environment Canterbury Rivers Team and Emily Moore from Fish and Game regarding their Snake Creek project. Next step is workshop to be held either 22 or 23 February with stakeholders. High country salmon/trout spawning: Cave stream fencing Immediate Steps project maintains and improves freshwater quality in the high-country and there are salmon spawning grounds just outside the project area and salmon fishing above project sites. Zone Team also exploring opportunities on Snake stream with Fish and Game to enhance both spawning and freshwater environment - this project would be connected to the Coes Ford/Silverstream milestone
8	Awareness	Raise community awareness of freshwater management goals in the Selwyn Waihora zone and how these will be achieved	8.2: Current community awareness level is measured by July 2016 - delayed to Oct 2016 - COMPLETE	A number of articles in the local papers regarding the Selwyn River Nov-Jan. New Environment Canterbury website launched, Zone Committee and Zone on the ground action showcased under 'Selwyn Waihora water zone'. About to engage contract comms support for quarter 1 and 2 of 2017. Research: Current community awareness research complete. Findings shared/discussed within Environment Canterbury and with stakeholders. Zone Committee workshop with stakeholders held November. Key actions for immediate follow up identified and underway. Relationship building and networks: new portfolios developed for Monitoring and Compliance Officers - stakeholder relationships to commence or be further developed within these areas. Several industry engagement opportunities held throughout the quarter. Zone Team has now moved to a more open and accessible zone office in Templeton
9	Monitoring and Compliance	Monitoring to be undertaken as per priorities		Compliance Water Project: Zone team RMOs continued their follow ups from the water metering and verification project. Several actions from the Monitoring & Compliance Plan have been completed. Dairy effluent monitoring commenced, focusing on priorities areas; CLVMA (11 in Nov with whole farm approached used), high risks, history of non-compliance. Quarterly review and inspections of all zone high risk and significant non-compliant consents has taken place. Land development: Lincoln and Rolleston subdivisions are being actively monitored for sediment and dust control issues. Halswell subdivisions will be prioritised in Quarter 1 2017.
10	One-off Projects			Staff recruitment and induction: Roles currently being recruited: Zone Delivery Lead (covers two Zones), Cultural Land Management Advisor, Resource Management Officer - Monitoring and Compliance. Induction and training will be undertaken once appointments are made. An Integrated Zone Delivery Pilot was held in Nov/Dec within the SW zone. The pilot was initiated to develop a zone based integrated delivery approach to monitoring high risk consents, responding to incidents and achieving zone priorities. The pilot was tasked with building work prioritisation tools, developing a more integrated work programme and delivering the work over a set period of time. Recommendations have been taken to leadership with an aim for these to be rolled out across all zones.
11	River Engineering	Outside of the 5-year delivery outcomes - general work programme update		Halswell/Hurutini: Overgrown willow removal from Knights Creek, Halswell River/Hurutini and a number of smaller drains across the scheme and sites prepared for native planting by adjacent landowner. Significant focus on willow removal so far for 2016-2017 financial year and there will be a continued focus on overgrown willow removal throughout the scheme for 2017. Te Waihora: Lake closed naturally on 31st October 2016 after being open for 34 days. Last average lake level on 13 January 2017 was 0.63m. Rakaia: Progressing River Mouth re-setting/opening Code of Practice and associated planning provisions in the Coastal Plan. This will ultimately give guidance to opening for a wide range of values including fish passage, water quality, recreational use and also for hazard management. Assisting Northern hut residents resolve issues with erosion at their boat ramp. Willow planting along northern side of Rakaia River for erosion protection and flood control. Erosion protection works as required. River Engineering staff are surveying for damage after flood event on 19 January where the Rakaia peaked over 3000 cumecs. Selwyn/Waikirikiri: Major floodgate maintenance completed to provide better functionality to the flood management and drainage for scheme. At Coes Ford, 250-300m u/s and d/s of ford cleared to facilitate native planting. Fairway also cleared to improve accessibility to the waterway.

30/01/2017 3:59 p.m. Prepared by Michaela Rees

Selwyn Waihora Zone Committee

Five year outcomes and milestones for land and water management



"Working with the community to deliver their aspirations for freshwater"

The five year outcomes show the Zone Committee's priorities, set in April 2016, for improving water quality and ecosystems in the Selwyn Waihora Zone under the Canterbury Water Management Strategy. The milestones are set based on current work programmes, planning framework implementation and new projects to start over the next one to three years. Milestones will be reviewed on an annual basis and adjusted as necessary.



On-the-ground lake interventions relating to reconstructing wetlands, addressing legacy phosphorus and restoring macrophyte beds

MILESTONES

- 1. Work programme identified to progress lake interventions
- 2. Start a reconstructed wetland, funding
- 3. Investigate impact of managed retreat of lake opening with sea level rise and identify priority
- 4. Complete further investigations on options for addressing legacy phosphorus by June 2017
- Point by June 2018



- dependent, by July 2017
- sites for wetland construction and land retirement
- Complete pilot macrophyte trial near Timberyard





OUT 2 COME

Farming at Good Management Practice (GMP) or better, focusing on priority areas - Central Plains Water (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

MILESTONES

- 1. Strategy to get all farmers operating at GMP or better endorsed by Zone Committee by
- 2. Start two-year work plan to deliver strategy to get all farmers operating at GMP or better, with stakeholders by August 2016 and report sixmonthly to Zone Committee on progress
- 3. Develop and agree how beyond GMP is to be implemented by October 2016
- 4. CPW Stage 1 farmers operating at GMP with 75% of Farm Environment Plan (FEP) audits achieving A or B grade by January 2018
- 5. All properties in PSRA/CLVMA have completed FEPs and lodged land use consent applications by June 2017 in accordance with set priorities
- 100% of audited dairy farms have FEP audit grade of A or B by June 2018
- 7. All farmers within Sensitive Lake Zone achieve GMP by June 2017 as demonstrated by FEP audit
- 8. Sediment and erosion work programme for Kaituna catchment agreed by the community and started by July 2017 (subject to external funding)
- 9. Compliance strategy to support GMP uptake in the zone endorsed by the Zone Committee by
- 10. Reduce dairy effluent discharge significant noncompliance by September 2018 with a target of zero
- 11. Reduce water extraction significant noncompliance by September 2018 with a target of zero



Water from Rakaia River and Lake Coleridge is used for new irrigation, replacing groundwater takes and for augmenting lowland stream flows

MILESTONES

- 1. Stage 2 of CPW operating by September 2018, subject to development timeframes
- 2. Targeted Stream Augmentation investigates opportunities for improving flows in lowland streams. Findings reported regularly and recommendations made by January 2018
- Integrated CPW and Environment Canterbury water quality and quantity monitoring programme in place by August 2016



The catchment is managed in a way that integrates Ngāi Tahu values across all outcomes and how these will be achieved

MILESTONES

- 1. Enhance mahinga kai
- 2. Cultural outcomes are understood
- 3. Support the regional biodiversity outcome of managing longfin eels/ tuna in a sustainable way
- 4. Implement a package of actions that builds capacity and quality actions to implement the **CLVMA Plan provisions**
- 5. Work with the farming sector to improve understanding of cultural values
- 6. Farmers understand their responsibilities regarding stock exclusion
- 7. Progresses discussions on the plan for the Selwyn Huts and Leeston wastewater emergency discharge
- 8. Integrated drain management programme developed and agreed by 30 June 2017
- Identifying mahinga kai food gathering standard
- 10. Integrate Cultural, Opportunities Mapping and Responses (COMAR) and State of the Takiwā approach with Environment Canterbury's water monitoring approach



Enhanced indigenous biodiversity and ecosystem health in priority areas or ecosystems - Hororata catchment, high country, wetlands, springheads, braided rivers and Te Waihora

MILESTONES

- 1. Prepare strategy and agree initial two-year work programme
- 2. Restoration plans for biodiversity corridors (Hororata and Waimakariri) confirmed by June 2016 and implement identified priority actions by December 2017
- 3. Deliver a minimum of two wetlands/ springhead projects per year
- 4. Collaborate with the Braided Rivers Regional Flagship on projects regarding the Upper Rakaia River that falls in the Selwyn Waihora Zone
- 5. Aligned work programme in place for agencies/groups working in the Te Waihora surroundings
- 6. Reduce the extent of spread of wilding trees in the upper Waimakariri catchment
- 7. Collaborate with CPW on biodiversity opportunities through development of shareholder FEPs and the Environmental Management Fund
- 8. Biodiversity protection and enhancement opportunities identified through the FEP process
- 9. Develop a large-scale and multi-year programme to support active management and enhancement of effective riparian margins by September 2017
- 10. Start work on improved management of riparian margins in priority streams, rivers and drains from October 2017



All community water supplies meet New Zealand Drinking Water Standards and provide sufficient water to meet community demand

MILESTONES

- 1. Bacterial and protozoal compliance is within the Selwyn District Council Long Term Plan community outcomes performance levels
- 2. Selwyn District Council drinking water demand management plan approved by Council in June 2016
- 3. Selwyn District Council progressively implements water demand management as outlined in the district plan
- 4. All on-demand community water supplies metered by June 2019



Enhance, where possible, contact recreation opportunities at key sites on the Selwyn River/Waikiriri and for sports fishing in the high country

MILESTONES

- 1. Suitability for contact recreation improves at Coes Ford by 2019
- 2. Persistence of toxic algae reduced at Whitecliffs Domain on Selwyn
- 3. Support one salmon/trout spawning project per year in the high country



Raise community awareness of freshwater management goals and how these will be achieved

MILESTONES

- 1. Communications and awareness strategy developed by August 2016 and initial 18-month tactical plan agreed by September 2016
- 2. Current community awareness level measured by July 2016
- 3. Selwyn Waihora Zone Team continues to develop strong relationships with sector, industry and community groups - demonstrating an increase in connections by January 2017

Selwyn Waihora Zone Committee Monitoring and compliance priorities to December 2018



Selwyn Waihora is one of the largest zones in the Canterbury region. Literally running from the mountains to the sea. It has over 5,500 consents, the majority of which are for wastewater discharge and groundwater abstraction.

Below are the priorities for compliance and monitoring. They will require a collaborative approach across both advocacy and compliance.

Zone Priority Areas

- High-risk consents Monitor all high-risk consents at least every six months
- Non-compliance Consents with significant non-compliance become a priority for monitoring. A targeted monitoring action response and plan to be carried out by the Zone Team
- The priority for monitoring of water abstraction consents will be in this general order: no record of meter installed, no record of verification certificate, no data supplied, take while on restriction, take above authorised rate, take above annual volume. Priority for compliance monitoring, investigation of non-compliance and enforcement will be with the most significant non-compliance or effect first.
- Silverstream catchment Pilot the whole farm/site approach to monitoring for the Silverstream catchment and work with consent holders for 100% compliance
- Cultural Landscape Values Management Area Take a whole farm/ site approach to monitoring consents in the Cultural Landscape Values Management Area, with a priority on dairy effluent
- Monitoring land development sites is a priority, particularly in the Halswell and Lincoln areas. The Halswell catchment is under capacity pressure, so keeping sediment out from land development is important for preventing flooding and protecting water quality in streams and Te Waihora/Lake Ellesmere. Land development around Lincoln contributes phosphorus-laden sediment to the LII and Te Waihora, so monitoring is high priority. Good land management practices will minimise dust discharges from development

- Respond to Pollution Hotline All pollution events regarding discharge to water, including stock in waterways, are responded to as a priority and the appropriate action is taken in accordance with guidance and protocols. Pollution events with a pattern of dust or odour complaints are responded to with consideration of the likely adverse environmental impact and prioritised accordingly
- Wastewater Monitor all community / territory authority wastewater treatment plants
- Farming land use consents Contribute to the programme and ensure those who require land use consents are working towards them in a timely manner
- Good Management Practice Support Good Management Practice advocacy work
- Stock in waterways support the education and awareness programme
- Relationship building Selwyn Waihora Zone Team members continue to build relationships with key stakeholders
- Other monitoring Medium and low level risk rated consents are monitored on a 2 to 5 year rotation
- Support other priorities and issues that arise within the zone as directed by Environment Canterbury leadership or the Selwyn Waihora Zone Committee.







AGENDA ITEM NO: 5	SUBJECT MATTER: Zone Committee Annual Report for the Community 2016
REPORT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 07 February 2017

Action required

Approve the Selwyn Waihora Zone Committee Annual Report for the Community 2016.

Background

The primary audiences for the Annual Report are Selwyn District Council, Christchurch City Council and Canterbury Regional Council. The Annual Report is presented by the Chair at meetings of these Councils in March or April 2017. The Annual Report is also available on the Environment Canterbury web site.

A draft of the 2016 Annual Report was discussed at the December meeting. Changes have been made in response to this. A copy of the Annual Report was provided to Ron Pellow, who was not at the December meeting, and he made further suggestions to improve the report. Ron's changes have been included in the revised report as attached.

Recommendation

The Zone Committee approve, subject to any changes made at the meeting, the 2016 Annual Report.

Attachment

Selwyn Waihora Zone Committee Annual Report for the Community 2016.

Annual Report for the Community 2016

Delivering water management priorities through key work programmes

The zone committee's vision is to restore the mauri of Te Waihora/Lake Ellesmere while maintaining the prosperous land-based economy and thriving communities around it. It also aims to protect the natural values of the alpine rivers and of the high country.

The committee has supported work programmes by Environment Canterbury and a wide range of other organisations to deliver this vision, including:

Lake rehabilitation

Whakaora Te Waihora, a joint restoration programme funded by the Ministry for the Environment, Environment Canterbury and Te Rūnanga o Ngāi Tahu, has initiated restoration actions and implemented an inlake trial to restore macrophyte (Ruppia) beds.

Good Management Practice (GMP)

As farmers work towards industry approved GMP standards, primary sector organisations (DairyNZ, Foundation for Arable Research, and Beef & Lamb) have held more than 20 workshops to help farmers with Farm Environment Plans (FEPs) and applying for land use consents required by the Selwyn Te Waihora Plan.

CPW have commenced audits on the FEPs for the 105 farms supplied with water from Stage 1.

Maintaining or improving the natural environment

Four projects in the high country, one in the Hororata catchment and one in Silverstream were supported with Immediate Steps funding by the Zone Committee. Wetland protection featured in five of these.

Biodiversity efforts in the Hororata catchment, including through Immediate Steps, were reviewed and a restoration plan developed to target future work.



Key achievements 2016

The CWMS and the zone committee supports, drives, and celebrates on-the-ground actions to deliver sustainable benefits from water.

- The Selwyn Te Waihora Plan Change came into force in February 2016. This imposes new limits and rules to manage water quality and quantity in the Selwyn Waihora catchment. This includes the requirement for dairy farms to reduce nitrogen losses by 30%, arable by 7% and dryland sheep and beef by 2% by 2022.
- Over \$70,000 of Immediate Steps funding was allocated in the year to local initiatives to protect and enhance biodiversity. The projects included support for the protection and enhancement of the margin of Lake Lyndon and of springheads in Silverstream catchment and at One Tree Swamp adjacent to the upper Waimakariri River.
- The 2015/16 irrigation season was the first operational year of CPW stage 1.During the year, there was a reduction of about 60,000,000 m³ of water taken from groundwater. Central Plains Water stage 1 irrigates about 23,500 ha with water from Rakaia River and Lake Coleridge. This includes about 17,000 ha previously irrigated from groundwater. Replacing groundwater takes with alpine water will leave more in the groundwater system improving flows in lowland streams and the lower Waikirikiri/Selwyn River.



Key events for 2017

Ensuring farmers are aware of their requirement to apply for land use consents will be the priority in the first half of 2017. The committee will support the communication campaign, primary sector workshops, and Environment Canterbury drop-in days to help farmers through the process.

The committee will also host meetings to get actions-on-the-ground to improve the Selwyn River/Waikiriri particularly at Coes Ford.

Protecting the margins of Lake Lyndon

Lake Lyndon is a popular boating and stop-off point on State Highway 73 just over Porters Pass. In recent years, however, the increasing volumes of visitors have had an adverse impact on the lake. The Waimakariri Environment and Recreation Trust are working with Environment Canterbury, Selwyn District Council, DOC, LINZ and the landowner to protect and rehabilitate the area.

Areas beside the lake that include nationally endangered turfland plants have been significantly affected by 4WD vehicle use. With Immediate Steps and Canterbury Biodiversity Strategy funding, areas of ecological significance have been fenced off to allow the vehicle damage to heal while still allowing for the continued access to the lake for recreational purposes including boating.

A floating nesting platform has been erected on the lake to encourage endangered crested grebe to nest there, and the grebe will also benefit from greater protection thanks to the improved fencing.

Selwyn District Council has installed a toilet at picnic area close to the highway, which is expected to help improve water quality.







Fence to exclude vehicles at Lake Lyndon



Water from a groundwater bore is used to restore water to a dry reach of Boggy Creek.

Restoration of lowland streams

Flows in lowland streams have decreased as a result of changing weather patterns and the combined impact of the 1,700 groundwater takes in the zone. The Targeted Stream Augmentation (TSA) project looks at the feasibility of supplying these streams with either groundwater, currently consented but unused stockwater, or from the Central Plains Water Irrigation scheme.

A pilot experiment used an irrigation bore to augment two dry tributaries of Boggy Creek. Monitoring of this experiment showed benefits from increased flow and reduced nutrient concentration. No significant risks, such as changes in the temperature or dissolved oxygen content of the mixed water, were observed.

A new groundwater bore was installed beside the springs of a lower Selwyn River tributary, just north of Brookside. This tributary has been of high value to native freshwater species including the endangered Canterbury Mudfish. Habitat enhancements and installation of a solar powered pump are expected to be completed over the 2016/17 summer. A local EnviroSchools project on native fish in 2017 is planned, which includes participation in re-stocking this tributary once we understand what population the augmentation setup will support.

Other TSA opportunities are also being explored by the Zone Committee for future implementation.

Progress towards achieving CWMS Targets

Ecosystem Health and Biodiversity	Rehabilitating Te Waihora/Lake Ellesmere and its margins and waterways is a key focus for the committee. Whakaora Te Waihora (MfE, Environment Canterbury and Ngai Tahu), Living Water (DOC and Fonterra) and Immediate Steps Biodiversity Fund (Environment Canterbury) delivered on-the-ground action protecting biodiversity and improving ecosystem health.
Natural Character of Braided Rivers	Funding from the Regional Committee has helped control gorse, broom and wilding pines in the upper Rakaia catchment including wetland restoration, riparian planting and weed control. Immediate Steps funding has protected One Tree Swamp, a spring-fed wetland adjacent to the upper Waimakariri River.
Kaitiakitanga	The Selwyn Te Waihora Plan Change establishes a Cultural Landscape Values Management Area recognising the significance of Te Waihora/Lake Ellesmere. Guidelines have been prepared on farming practices and mahinga kai to help farmers and Farm Environment Plan (FEP) auditors.
Drinking Water	Selwyn District Council continues to manage risks to community drinking water supplies. Bacterial and protazoal levels in the community supplies meet the performance levels in the Council's Long Term Plan.
Recreational and Amenity Opportunities	Selwyn River/Waikirikiri meets swimmable standards at Chamberlains Ford but not at other popular swimming sites. The zone committee also wants Coes Ford swimmable.
Water Use Efficiency	The SMART Watering and SMART Irrigation awareness campaigns are teaching residents and farmers how use water efficiently and responsibly.
Irrigated Land Area	Central Plains Water (CPW) Stage 1 was completed in September 2015 supplying alpine water for 23,500 ha of irrigation.
Energy Security and Efficiency	CPW Stage 1 provides gravity fed water at pressure to most of its farms resulting in about 15% reduction in power load (about 5 MW) from reduced pumping with irrigation water being provided from Rakaia River rather than from groundwater.
Regional and National Economies	The construction of CPW Stage 1 created about 500 jobs over an 18 month period.
Environmental Limits	The Selwyn Te Waihora Plan Change sets minimum flows and water abstraction and nutrient discharge limits (including nitrogen discharge load limit for CPW). The Plan Change, introduced in February 2016, seeks to reduce nutrient inputs in the catchment, while as much as possible maintaining productivity and regional communities.







Challenges and opportunities

Whakaora Te Waihora

The Whakaora Te Waihora programme is an ecological and cultural restoration programme for Te Waihora / Lake Ellesmere. The programme started in 2012, and Phase One (2012-2017) has initiated actions to restore Te Waihora and its sub-catchments. Current funding from the Ministry for the Environment finishes in mid 2017. Although the other partners will continue to commit resources, in order to achieve the long term objectives of the programme the Te Waihora Co-Governance Group, which includes Selwyn District Council and Christchurch City Council, is actively seeking further funding.

Implementing the Selwyn Te Waihora Plan

About 900 farms will require land use consents under the plan change. These consents include audited farm environment plans (FEPs). In parts of the catchment the FEPs need to show farming practices to minimise phosphorus and sediment losses. Near Lake Ellesmere/Te Waihora the FEPs need to show how farming practices manage for Ngai Tahu values including mahinga kai.

Swimmable Selwyn at Coes Ford

The Selwyn River/Waikirikiri meets swimming standards at Chamberlains Ford but not at Coes Ford, a short way downstream. The zone committee will increase its focus on improving the river, particularly at Coes Ford.



Future water management engagement

The zone committee will continue its work with Environment Canterbury and many other organisations to deliver the community's aspirations for water management.

In particular, the committee will continue working with primary sector organisations, rūnanga and Environment Canterbury on the implementation of the Selwyn Waihora Plan Change, and take a leadership role in improving the Selwyn River/Te Waikirikiri.



CANTERBURY WATER MANAGEMENT STRATEGY VISION:

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

Delivering community freshwater aspirations

The Selwyn Waihora Zone stretches from the upper Waimakariri basin and the high country around Lake Coleridge down to Te Waihora/Lake Ellesmere. Te Waihora/Lake Ellesmere and its margins are a taonga (treasure) to Ngāi Tahu, reflecting the area's cultural significance and the concentration of mahinga kai, wāhi tapu and wāhi taonga.

Formed in 2010, the Selwyn Waihora Zone Committee works with the community, rūnanga and councils to develop and implement water management recommendations which deliver the vision of the CWMS.

The Selwyn Waihora Zone covers the Selwyn District and a small piece of Christchurch City. It includes Te Waihora/Lake Ellesmere and its catchment (including Selwyn River/Waikiriri, spring-fed lowland streams, and some of the Port Hills streams), Lake Coleridge, the Rakaia River and the upper Waimakariri basin. It is a joint committee of Selwyn District Council, Christchurch City Council and Environment Canterbury, and in the rohe of Wairewa, Rapaki, Taumutu, Tuahuriri, Koukourarata and Onuku rūnanga.







2016 Zone Committee membership

Each of the Canterbury region's ten zone committees include between four and ten community members. Committee membership is regularly refreshed to ensure a wide-range of perspectives are reflected.

Allen Lim

(Chair, community member)

Bill Lambie

(Deputy chair, Koukourārata)

Hayley Moynihan (community member)

John Sunckell (community member)

Maree Goldring (community member)

Ron Pellow

(community member)

Victor Mthamo

(community member)

Charlie Crofts

(community member)

Clare Williams (Tūāhuriri)

George Tikao (Ōnuku) Riki Nicholas (Wairewa) Terrianna Smith (Taumutu)

Christine Henderson (Rāpaki)

Tom Lambie

(Environment Canterbury Councillor)

Cr Pat McEvedy (Selwyn District Council)

Cr Tim Scandrett (Christchurch City Council) Towards the end of the year there were changes to some of the representatives on the committee with the appointment of Karaitiana Taiuru (Koukourarata), Les Wanhalla (Taumutu), Cr Anne Galloway (Christchurch City Council), Cr Murray Lemon (Selwyn District Council), and Cr Iaean Cranwell (Environment Canterbury).

Brought to you by the Selwyn Waihora Zone Committee working with







AGENDA ITEM NO: 6	SUBJECT MATTER: Zone Committee's 2017 work programme
REPORT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 07 February 2017

Action required

- 1. Zone Committee members identify:
 - o the key issues they wish to focus on at their 2017 meetings;
 - o field trip locations or topics.
- 2. Zone Committee members note that regular updates will be provided to the committee on:
 - Progress on 5-year Delivery Outcomes and Milestones;
 - Whakaora Te Waihora;
 - o Central Plains Water irrigation.
- 3. Zone Committee members note that the following occur annually:
 - Election of officers;
 - o Review and revision of 5-year Delivery Outcomes and Milestones;
 - Zone Committee's Annual Report for the Community.

Key issues for the Zone Committee in 2017

"Swimmable Selwyn River" is one of the key issues the zone committee will be involved in during 2017.

It is expected that biodiversity will continue to be a focus for the committee including funding Immediate Steps projects and progressing an updated restoration strategy for Hororata catchment.

In 2016 implementing the Selwyn Te Waihora Plan Change was a key focus for the committee. Much of this work has now been done. There may be some plan change implementation issues that need to be discussed by the committee in 2017.

The committee continues to champion the importance of lake interventions as part of the solutions package for the catchment. The Waihora Co-governors are leading the work on lake interventions as part of the future funding of the Whakaora Te Waihora programme. The zone committee's may have a supporting role.

At the meeting committee members identify the issues the committee should focus on in 2017.

Field trips

In 2016 the committee had field trips to Flock Hill station (upper Waimakariri Basin) in March and to Coes and Chamberlains Fords on Selwyn River in December.

At the meeting committee members identify the field trip locations or topics for 2017.

Standing items in Zone Committee's work programme

The Zone Committee's work programme includes regular updates and other recurring activities. These include:

- o Regular updates on:
 - o Progress on 5-year Delivery Outcomes and Milestones;
 - o Whakaora Te Waihora;
 - o Central Plains Water irrigation
- o Annual activities:
 - Election of officers (February each year);
 - o Review and revision of 5-year Delivery Outcomes and Milestones;
 - Zone Committee's Annual Report for the Community (draft in December, finalised in February).