



HURUNUI
District Council



Hurunui-Waiau Zone Committee

Agenda

3.00pm, Monday, 17 October 2016

Committee only workshop to commence at 12.30 – 1.45pm

Public workshop to commence at 1.45 -2.45pm

Community Hall, Cheviot Area School, 3 Caverhill Road, Cheviot

Committee Membership:

John Faulkner (Chairperson)
James McCone (Deputy Chairperson)
David Bedford (Canterbury Regional Council)
Mayor Winton Dalley (Hurunui District Council)
Vince Daly (Hurunui District Council)
James Costello
Michele Hawke
Ken Hughey
Makarini Rupene (Te Ngāi Tūāhuriri Rūnanga)
Representative to be advised (Te Rūnanga o Kaikōura)
Ben Ensor
Dan Shand
Olmec Sinclair

Quorum:

The quorum of the meeting consists of:

- half of the members if the number of members (including vacancies) is even; or
- a majority of members if the number of members (including vacancies) is odd.

The purpose of local government:

- (1) The purpose of local government is—
 - (a) to enable democratic local decision-making and action by, and on behalf of, communities; and
 - (b) to meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.
- (2) In this Act, **good-quality**, in relation to local infrastructure, local public services, and performance of regulatory functions, means infrastructure, services, and performance that are —
 - (a) efficient; and
 - (b) effective; and
 - (c) appropriate to present and anticipated future circumstances.

(Local Government Act 2002 – Amendment Act 2012)

HURUNUI – WAI AU ZONE COMMITTEE WORKSHOP & MEETING

Monday 17 October 2016

Cheviot Community Centre, 3 Caverhill Road, Cheviot

TIMETABLE & ORDER OF BUSINESS

12.30pm – 1.45pm **Committee-only workshop with senior Environment Canterbury staff
(lunch provided)**

1.45 – 2.45pm **Public workshop: *Complete the review Hurunui Waiau ZIP (2011)
recommendations – Agenda Pages 59-74***

	3.00pm	Zone Committee Meeting commences with karakia and formal order of business <ul style="list-style-type: none">• Apologies• Announced urgent business• Interests register (changes or updates)• Confirmation of minutes – 19 September 2016• Matters arising.	4 5 - 13
1	3.15pm	Update on Regional Committee <ul style="list-style-type: none">• Winton Dalley	
2	3.20pm	Update from Zone Committee members on activities and meetings attended that relate to the Committee's outcomes for the zone	
3	3.30pm	Public Contribution	
4	3.35pm	Update from Hurunui District Landcare Group and any other organisations wishing to speak	
5	3.45pm	Update from Zone Manager including moving ahead on stock access issues in upper Hurunui lakes.	14
6	3.55pm	Hurunui Waiau Zone Compliance Strategy Tammy McMahon, Kevin Heays and Ian Brown, Environment Canterbury	15-28
7	4.30pm	Integrated approach to major water storage: <ul style="list-style-type: none">i. Context for providing water to north and south sides of Hurunui River (AIC, NTFE and HWP);ii. Proposed scope for independent assessment of water storage options (Bryan Scott, AECOM);iii. Time constraints to an integrated option (Alex Adams, HWP).	29-31
	4.50pm	BREAK	
8	5.10pm	Freshwater Planning Road Map Jamie McFadden, Rural Advocacy Network	32-34
9	5.40pm	Zone Committee identify what they like and what they don't like about the HWRRP (continuation of September discussion)	35-40
10	6.00pm	Proposed Terms of Reference for Hurunui Science Stakeholder Group Ian Whitehouse, Environment Canterbury	41-50
11	6.20pm	Zone Facilitator's report Ian Whitehouse, Environment Canterbury	51-54
	6.30pm	Meeting concludes	

Register of Interests for the Hurunui-Waiau Zone Committee

Committee Member	Interests
James Costello	<ul style="list-style-type: none"> • Farm owner – sheep in the Hurunui Catchment • Water Resource Consent to take water from the Waitohi River • Shareholder in Hurunui Water Project • Possibly an affected landowner by infrastructure of Hurunui Water Project • Dryland Farmers Committee member
Ben Ensor	<ul style="list-style-type: none"> • Land owner in the coastal hills, Jed and lower Waiau catchments. • Managing director of Seaward Stock Company Ltd, comprising sheep, beef and cropping enterprises. • Consent holder to take water for irrigation from a stream hydraulically connected to the Waiau River. • Member of the Hurunui Waiau Landcare Group (Dryland Farmers Group).
John Faulkner	<ul style="list-style-type: none"> • Dairy farm owner in the Amuri Basin. • Irrigation water supplied by Amuri Irrigation Company Ltd (Shareholder). • Dairy Support block owner, consent to take water from a gallery. • Member of the independent irrigators Group.
Michele Hawke	Nil
Dan Shand	<ul style="list-style-type: none"> • Land owner Hurunui and Waiau catchments • Dry land farmer • Member of the Hurunui/Waiau Landcare Group
Mayor Winton Dalley	<ul style="list-style-type: none"> • Register of Interests lies with the CEO of the Hurunui District Council.
Ken Hughey	<ul style="list-style-type: none"> • Professor of Environmental Management, Lincoln University (2 days per week) • Chief Science Advisor, Department of Conservation, Wellington (3 days per week) • Board member Waihora Ellesmere Trust • Board member Hanmer Springs Conservation Trust • Member Royal Forest and Bird Protection Society. • Member Royal Society of NZ • Member NZ Geographical Society. • Occasional contract water-related research work including for Environment Canterbury.
Olmec Sinclair	Nil
Makarini Rupene	TBC
James McCone	<ul style="list-style-type: none"> • Dairy Farming businesses- Director and Shareholder • Dry Creek Dairy Ltd- AIC Balmoral scheme • Kinloch Dairy Ltd- AIC Waiau Scheme • Dairy Farm Director • LH Dairy Ltd- Independent irrigation consent, lease of dryland hill country • Water management • Amuri Irrigation Company Director • Committee Member Upper Waiau Independent Irrigators • Informal interest in potential emu plains irrigation
Councillor Vince Daly	<ul style="list-style-type: none"> • Farm owner - mixed cropping and livestock farm • Water resource consent to take water from unnamed lake in Jed catchment
Commissioner David Bedford	<ul style="list-style-type: none"> • Register of Interests is held by Environment Canterbury.

HURUNUI DISTRICT COUNCIL MINUTES



Meeting	Hurunui-Waiiau Zone Committee
Date and Time	19 September 2016, 3.00pm
Venue	Community Hall, Rotherham
Members Present	John Faulkner (Chair), Mayor Winton Dalley, James McCone, Councillor Vince Daly, Commissioner David Bedford, Ken Hughey, James Costello, Ben Ensor, Olmec Sinclair and Dan Shand.
In Attendance for all or part of the meeting	<p>Environment Canterbury (ECan) – Ian Whitehouse (Zone Facilitator), Michael Bennett, Kevin Heays, Renay Weir, Tammy McMahon, Lisa Jenkins, Saskia Ball, Virginia Loughnan, Stefanie Rixecker, Brodie Young and Leanne Lye.</p> <p>Hurunui Water Project – Alex Adams and Karen Renouf</p> <p>Amuri Irrigation – David Croft and Andrew Barton</p> <p>Rural Advocacy Network – Jamie McFadden</p> <p>Department of Conservation (DOC) – Daniel Kimber and John Benn</p> <p>Fonterra – Mike Hennessy, Shaun Lissington and Sue Ruston</p> <p>Fish and Game – Scott Pearson</p> <p>White Water Canoe Club – Ian Fox</p> <p>Landowners – Lesley Shand</p> <p>Committee Secretary – Michelle Stanley</p>
Recording Device	A recording device was in use for the accuracy of the minutes.
Karakia	The Karakia was not performed due to the absence of qualified persons.
Apologies	Apologies were received from Michele Hawke and Makarini Rupene.
Conflict of Interest Declarations	Nil.
Urgent Business	See Item 2 – Update from Zone Committee Members
Minutes	<p>THAT THE MINUTES OF THE COMMITTEE MEETING HELD ON 15 AUGUST 2016 ARE CONFIRMED, SUBJECT TO THE FOLLOWING AMENDMENTS:</p> <ul style="list-style-type: none"> Page 7, Item 2, paragraph 3 – change last line to read “... how much irrigation they want.” Page 14, Item 7, paragraph 5, change “a farmer” to “Sue Turnbull made the following comments:” <p>Faulkner/Costello</p> <p>CARRIED</p>

Matters Arising:**Page 8, Item 4 – Funding question regarding one to one communication**

A question was raised if funding for one on one communication with disengaged persons had been allowed for. Kevin Heays is still looking into this and noted that it is not a specific project as yet but is part of Michael Bennett's portfolio. Kevin will pursue an answer from ECan management to see if this could become a project.

It was reiterated that there are still a number of individuals in the community that are unaware of what will be required of them and are disinterested in attending meetings on the subject.

Currently one on one communication is on an as-needed basis but ECan's help is needed if this is to be a more common form of communication. It was felt that engaging these individuals would be a more proactive approach rather than waiting till they do not comply with the regulations.

While this would be a helpful initiative, financially it would be difficult. Landcare have sent a recent mail drop.

Other Matters

The biodiversity group met prior to this meeting and hope to provide a summary report to the Committee at the next meeting. They will also look at getting it on Google.Docs at least two weeks before the meeting.

Ian Whitehouse to include on the next agenda.

Correspondence

Nil

1. Update on Regional Committee

There was no update as there has not been a Regional Committee meeting since the last Zone meeting.

2. Update from Zone Committee members on other activities and meetings attended that relate to the Committee's outcomes for the Zone.

The Regional Pest Management Plan review update – Dan Shand

Dan spoke to the Committee on the proposed changes to the Regional Pest Management Plan and what the proposed draft plan will look like:

- It has been a long standing process. While it was publicised, it was uncertain as to what these meetings would look like.
- Broom and Gorse control is changing to a Good Neighbour rule. This would require less work for the farmer. There has been a national direction for change and a large part of that motivation is due to the fact that 60% of the budget is comprised of monitoring and compliance costs.
It is felt that this rule could have, potentially, quite a negative impact on the environment.
- There were 17 submissions for the new proposal and 4 against it. They then had a meeting in Amberley and the general feeling was that these numbers were not indicative of the general feeling in the community. It was not considered to be a fair or fully thought out process which in turn has prolonged the process. This has pushed them to extend the draft and submission stage of the review out but the full operative date of approximately June 2017 is to remain the same.

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- The risk that could have significance to the Zone Committee is that if the new rules are approved, there are entire river catchments' and braided rivers that currently have little or no Gorse or Broom which could potentially have future problems and infestations as seeds travel well via the waterways. Dan suggested that it is in the Zone Committee's best interests to ensure that the new framework for these reflects good environmental outcomes.
 - Dan has asked the planners to send the draft to the Committee as soon as it is out and present a report to the Zone Committee on cost savings, redistribution of saved funds and environmental impact of this new rule.

It was agreed that the Committee needs to be involved in this process as landowners/farmers have invested a large amount of time and money into Broom and Gorse control.

The draft plans argument is that there seems to be no improvement on the fight on noxious weeds so maybe pulling back resources is the way forward. The Committee agreed that maybe there has been no improvement but there also has been no slide backwards either and it feels that this would definitely cause a slide backwards.

A concern regarding the new fencing of waterways regulations was raised and how this could increase the instances of woody weeds.

Another concern is that there has been a fair amount of land brought by beekeepers recently and they would prefer to have the Broom and Gorse present. The cause and effect of this would be that they might not be so concerned about controlling said weeds and this could seriously affect neighbouring properties.

The Committee nominated Dan Shand to be the spokesperson of the Zone Committee for the Regional Pest Management Plan review meetings and Dan accepted.

3. General Public Contribution

Shaun Lissington advised the Committee that he attended a couple of Plan Change 5 hearings in Lincoln and Oamaru. He commented that Plan Change 5 will likely go ahead and suggested that the Committee bear this in mind for future discussions.

Alex Adams from the Hurunui Water Project (HWP) gave a quick brief on their recent activity:

- They are still awaiting results of the shareholder loan and early contractor involvement agreement. They are looking at Alliance Contracting as their way of working which has a very open and collaborative way of working.
- The Rooney Group has started work.
- There is a Project Control Group meeting on 28 September.
- They have future funding promises of \$868,000 from over 60 shareholders.
- The last step is to apply for the IAF fund.

John Faulkner on behalf of the Committee congratulated the HWP for getting to that stage.

REPORTS, SPEAKERS AND PRESENTATIONS

4. Update from North Canterbury Landcare Group and other organisations

Ben Ensor updated the Zone Committee on the recent activity of the Hurunui District Landcare group (HDLG):

- They have rebranded and are now officially the Hurunui District Landcare Group Incorporated. This better represents the area that the group represents.
- They have now become an official incorporated society. A lot of work was involved in this and they have worked hard to make sure the group is future proofed.
- The Board forms the governing body in support to those various catchment and irrigator groups around the district. All of the subgroups are represented on the Board. This is so that they do not have to form their own incorporated societies and therefore avoid extra costs.
- The HDLG Coordinator position will be advertised in the next two weeks with the aim to have someone join them by December.
- Invoices will also do out in the next two weeks.
- The Cheviot Irrigators Group training day is set for 2 November 2016.
- They have had a few more forms trickle in, but due to all the work setting the group up and meeting funding deadlines, pushing for membership has not been top priority.

John Faulkner asked Ben Ensor to email him a list of dates.

Dan Shand, on behalf of the Committee, thanked Ben Ensor for the huge amount of effort and time that he has invested into getting the HDLG going.

5. Impact of AIC piping on flows and reliability of supply

Peter Brown
(Aqualinc)

Andrew Barton spoke to the report in place of Peter Brown who sent his apologies.

Discussion was held on the technical data of water takes versus actual water takes and the following issues were raised:

- Concern was raised by committee members regarding how much consented water is not currently being used and if this would make a difference to the impact on flows in the tributaries in the Amuri Basin. It was felt that though the technical data says one thing – minimal impact on flows in the lower Hurunui River it does not represent what the real situation is.
- There will be an increase in the nutrient concentrations in the Amuri tributaries due to less bywash from AIC but with more efficient irrigation there should be a reduction in Nitrogen losses from irrigated paddocks.

Andrew felt that it was worth noting they have oversized some of the pipes for hydro-generating in the future. There is still work to be done on hydro-generation possibilities but it is future proofing the project. This would provide approximately 3 cumecs of water going back into the Hurunui River. It was noted that hydro-generation could only be done when the irrigators are not in use.

The Committee thanked Andrew Barton and Peter Brown for their feedback and work on this.

6. Zone Committee identify what they like and what they do not like about the HWRRP

Ian Whitehouse talked to the report and asked for feedback from the Committee on the information.

Water Quantity

Takes for community and /or stock drinking schemes - the Committee made no changes to this topic.

Minimum Flows – This topic was discussed in depth and the following points were made:

- The implications of minimum flows on native fish needs to be looked into. Ken Hughey suggested taking this to the science group to discuss.
- There is new science from the Cawthron Institute on the flow requirements to maintain trout fisheries. This science indicates that higher flows may be required than those indicated using the models used in developing the HWRRP. The Cawthron paper has only been released and ECan (and other councils) will have to consider its implications.
- There is concern that the nutrient gains from irrigation efficiency improvements which should be going back to the river are actually going back to the farm by way of increased irrigated area. While this issue is covered in the Nutrient Management topic the general consensus was that it is a topic which crosses over.
- There was some confusion around whether the letter sent to AIC in 2014 regarding minimum flows was an advisory note or recommendations. Ian Whitehouse will find the original letters and include them in the material for the next meeting. Scott Pearson, Fish and Game, expressed concern that the recommendations in the letter have not been completed.
- It was agreed that the Waiau River mouth closure should be a discussion point for the Committee.
- The Jed is not included in the Hurunui Waiau River Regional Plan in the table of minimum flows. There is a policy in the plan that relates to taking water from the Jed River - Policy 2.11. It is felt that some of the stipulations in this policy are impossible to prove. There was concern that when consents for water takes in the Jed are renewed each consent holder will be responsible for showing how they met the policy requirements.
- It was discussed that it is worth waiting and working collaboratively towards storage unless there is a change in minimum flow which could create urgency. The point was raised that if there is going to be a change in minimum flow which would result in an environmental impact, then those irrigating will need plenty of notice to make changes.

Allocation of water

- The C Block on the Waiau was discussed and the question was raised whether this C Block needed to be as big as it is especially with the concerns around the Waiau Mouth.

Groundwater takes – groundwater seems hard to find. No further issues.

Transfer of water take consents

- Virginia Loughnan reiterated that the Plan only allows a Consent transfer within the same block (on same river). You can not transfer takes to a different block/river as this would require an application for a new consent. As the effects in that consent are on a particular river it cannot be changed to another river.
- Any water taken from a river has to pipe directly to the farm. The Plan does not allow water to be piped from one river into another and have a consent holder of the first river then taking water from the second river.
- Map zones need to be checked. Isolated hill between Rotherham and Waiau. Rotherham stream needs to be relooked at.
- It is now known that what is allocated is not often used. Water consent trading is going to be a major issue across Canterbury and this will need to be discussed. The Committee agreed that this issue should be added under the topic 'Water Use Efficiency'.

Water Use Efficiency

- It was hypothesised that if water use becomes too efficient then water could end up being of a worse quality.
- It is felt that efficiency will add more head room but the question was raised will this lead to more intensive farming.
- Further discussion is need around this topic and more data is needed before reviewing and discussing this topic.

The Committee ran out of time to look at the full document. Ian Whitehouse will include it in a future agenda.

7. Break

The meeting adjourned for a break at 4.42pm and reconvened at 5.04pm.

8. Proposed approach to collaborative science and technical briefings

Ian Whitehouse and Ned Norton (Environment Canterbury)

Ian Whitehouse spoke to his report and thanked Dan Shand and Olmec Sinclair for their work on getting Google.Docs up and running for the Committee. He reminded the Committee that in order for this process to work he needs all members to be involved in the on-line discussion. For help on how to use Google.Docs please contact Ian. Ian thanked all of those that have commented on the documents.

Ian asked the Committee to approve providing a collaborative science and strong engagement on technical matters in Hurunui Waiau Zone over the next three years. It was proposed to:

1. Establish a science stakeholder group and formally appoint members.
2. Appoint a small peer review group
3. Provide briefings on findings from water quality and land use related monitoring and investigations, catchment by catchment to the Science stakeholder group and the Zone Committee hosted community meetings.
4. Establish a Waipara Working Party comprising Ngāi Tūāhuriri, science stakeholders and local land users and interest groups.

Ian proposed that the Committee mimic the current process in the Waimakariri Zone. The Committee was interested to know what lessons the Waimakariri Zone Committee learnt from this process. Ian works closely with the Waimakariri Zone facilitator and has tried to closely follow his work.

While there is lot to learn from the Waimakariri there are also some differences in how the two Zones work. There is a larger amount of information in the Hurunui-Waiau Zone which is held by a large variety of parties. There is also an awareness of the need for robust validated property scale information due to the 10 percent rule.

Mayor Dalley said that in previous discussions with the Waimakariri Zone Committee Chair the reason given for them setting up their Science Stakeholder Group was because of their observation of the Hurunui-Waiau Zone and the issues experienced with the lack of science data.

The Science Stakeholder Group

Discussion was held around the Science Stakeholder Group dynamics and membership:

- There was a concern that the 28 suggested organisations could create too much information, get side tracked from the Zone Committees goals and become un-manageable. If this was to go ahead then it would need to be well focused and the group would need to have clear parameters set by the Zone Committee. The terms of reference would need to be well thought out and well adhered to. Information and reporting to the Zone Committee would also need to be timely.
 - There is a need for good robust information on land use, land information, environmental effects and what they mean, current farm practices, Good Management Practices, what would be the difference using real farms, what their current nutrient losses are and as well what would be the impact if they went down the intensification route. What is being practiced and what is being lost, farming technical information, is critical hence why there are other stakeholders on the list.
 - Ian suggested that there maybe some parties that may choose not to be involved but there are others that need a clear invitation to provide technical information.
 - The Waimakariri experience was that the first couple of meetings were well attended but only those that were interested seemed to stay and others dropped off.
 - There was a request for the term science to be defined so as to ensure that there is no misunderstanding on what information is actually needed by the Zone Committee.
 - Some agreed that all of those 28 parties needed to be involved so that there is a more complete knowledge base. There would also be the opportunity for gaps to be identified that might have otherwise been overlooked.
 - Members would like to ensure that all of the technical information collected is available and tested. And that the technical community tells the Committee what they think this information means. All of the work is done and narrowed to be usable and at a further point in the process.
 - Members liked the idea of having a group to consult when technical science information is needed on a topic.
 - While some members liked the idea of an issue by issue approach, others wondered if this would mean some unidentified issues might get overlooked.
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Ian will take on board all of the suggestions and concerns voiced by the Committee and will set up a Google.Doc document to help determine the issues and discuss what needs to go into the terms of reference.

The Zone Committee needs to decide how much involvement it would like to have in this Group.

The Zone Committee agreed to progress further with this approach as long as it is tightened up and terms of reference are established.

5. Progress on 5-year Delivery Outcomes

Kevin Heays
and Zone team
(Environment
Canterbury)

Kevin Heays was present for questions on the progress report that was taken as read. He summarised that they are looking at compliance and monitoring strategy and making it more meaningful and useful. He will bring more information on it for the October meeting.

Discussion was held on the report and the following notes were made:

- Outcome 9 –Maintain Natural Character of Braided Rivers falls into Michael Bennett’s portfolio. Dan Shand and Ken Hughey will contact Michael regarding this.
 - Outcome 2 – Bullet point 2 was discussed.
 - There are still discussions happening around how to approach the review of the land and water management package.
 - They would like time to consider all the relevant feedback and be well informed before begin the review process.
 - The general consensus was that the community did not want the process to be rushed without due consideration.
 - A comment was made that the key point from the community is that any changes are stress tested before being formally implemented.
 - Outcome 6 in regards to the swimming vales research.
 - It was noted that no schools in the Hurunui-Waiau zone were available to participate in the survey despite Ken Hughey and ECan’s attempts. There was however an online survey conducted which had a good level of response.
 - Outcome 3 – Integrated Water Infrastructure.
There has not been a lot of progress on this project. HWP, AIC and NTFE have been more focused on meeting funding deadlines. Their next plan of attack is to talk to Zone Committee members, ECan experts and all other involved persons to find out what those groups want from the Glenrae option. They feel this would give them a way forwards. Andrew Barton, Edwin Jansen and Alex Adams are having a meeting on Wednesday 21 September to discuss this topic.
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5. Mapping area of intensive winter grazing in the zone
Brodie Young
(Environment
Canterbury)

Stefanie Rixecker and Brodie Young were present to answer any questions on the Winter Forage Study report. The report was taken as read.

Stefanie introduced herself to the Committee. She has only recently stepped into her role as the Science Director at ECan. She is conscious of the work that needs to be done to ensure better communication between her department and the Zone Committee. She also offered her sincere apologies for previous issues.

Going forward ECan Science staff will be a part of the delivery team. A work program in the science section will be incorporated and updated regularly. While they will strive to provide the best information possible in a timely manner she asks that the Committee be aware that not all of the science is

undertaken by ECan scientists. They will often use independent scientists and therefore they do not fall under the same time parameters that are in place for ECan scientists.

There was general unease about the winter-forage ground-truthing undertaken by ECan. It was felt that the information gathered is not truly indicative of the actual effects.

It was brought to Stefanie and Brodie's attention that a lot of this information can be accessed via Statistics New Zealand and it might be worth checking to see if they can access the winter grazing data in order to compare.

Confusion around what the information that they collected is going to be used for was a common discussion. Brodie explained that it is a start to just get an idea of the area and the yield. All the information collected via ground-truthing was to get an idea. They are aware that it will not be accurate and is just an estimate.

Concern was raised over seasonal changes and the far ranging effects. There is potential a huge difference in yield.

Seven farmers, who have previously worked with Landcare Research, agreed to provide paddock information directly to the scientists which provided a higher level of information to use.

Stefanie reiterated that they are trying to rebuild the damaged relationship.

There has been a concern raised by the local farmers that the compliance section would use this data for compliance. While at a gross level it will be public information, Brodie assured that it will take a lot of work to make the information usable in the compliance sense. The other concern raised was that there was a distinct lack of communication between the farmers and those taking the photos of the land. This was a breach of privacy and a concern for those that did not know why people were taking these photos of their private property. Stefanie appreciated that better processes and protocols need to be put into place in the future.

The Landcare scientists are very interested in this and want to do the right thing and have offered to come along to future meetings to answer any questions.

**7. Zone
Facilitators
Report**
Ian
Whitehouse
(Environment
Canterbury)

Ian Whitehouse took his report as read. The following comments were made.

It was brought to Ken Hughey's attention that the Laings have left Waiau – Ken Hughey to look into this as the Laings had been the driving force for the Waiau Rivercare Group.

Commissioner David Bedford highlighted a lack of mention, in the preamble to the Zone Committee's Nutrient Management Principles, of the Canterbury Water Management Strategy and would like that added.

Urgent Business

Nil

**Meeting
concluded**

The meeting concluded at 6.35pm.

Next meeting

17 October 2016 – Cheviot Community Hall.

AGENDA ITEM NO: 5 (in part)	SUBJECT MATTER: Update on stock access issues in upper Hurunui lakes
AUTHOR: Michael Bennett, Environment Canterbury	DATE OF MEETING: 17 October 2016

Update on Lakes and Lake Taylor Stations

I have been asked to give an update on recent zone team activities relating to access by cattle to surface water on Lakes Station and Lake Taylor Station.

Lakes Station

Following an incident involving access by cattle to Lake Taylor earlier this year, the Zone Team has had ongoing involvement with the owners and manager of Lakes Station. The focus has been:

- The stock exclusion rules in the Land and Water Regional Plan (LWRP);
- An audited farm environment plan.

A combination of fencing programmes and stocking policies to only graze sheep where cattle cannot be excluded means that relevant LWRP rules are already complied with on most of Lakes Station.

The exception is the shore of Lake Sumner where it intersects the Upper Hurunui. This area is complex. The engineering required to effectively fence across the river mouth would probably cause more harm than good in environmental terms, and it is not practical to run other classes of stock because of the harshness of the climate.

In the circumstances the best option is to apply for a resource consent.

Zone Team staff will meet on site with the owners and DOC staff on October 12th to discuss progress. The priority is on outcomes; getting a Farm Environment Plan done and maintaining momentum on fencing and enhancement work programmes already underway.

Consents staff will be kept in the loop, and will be able to provide pre-application advice at the appropriate time.

Lake Taylor Station

In August we received a complaint about cattle in a braided riverbed on Lake Taylor Station

This was resolved by Robin Hubbard, who found stock exclusion rules had not been breached.

Shortly after this cattle from Lake Taylor Station were trespassed off a strip of LINZ pastoral lease land which runs along a riverbed on the farm, resulting in loss of access to parts of the Station. Local LINZ staff discussed this matter with me at the time.

Subsequently I was invited to an on-site meeting with staff from LINZ and DOC to formulate a plan of action to manage stock around waterways on Lake Taylor Station, particularly on crown lease or DOC land. This meeting will take place on the afternoon of the 12th.

There are implications for stock access on other high country farms with similar challenges, but also opportunities for better integration of agency approaches across Canterbury. As with Lakes Station, the issue will be maintaining a focus on sensible solutions and making progress to outcomes.

Michael Bennett
Senior Land Management Advisor
HWKK Zone Implementation Team
6th October 2016

AGENDA ITEM NO: 6	SUBJECT MATTER: Hurunui Waiau Compliance Strategy
COVER PAGE BY: Ian Whitehouse, Environment Canterbury ATTACHMENT: Tammy McMahon, Kevin Heays and Ian Brown, Environment Canterbury	DATE OF MEETING: 17 October 2016

Action required

The Zone Committee recommends Environment Canterbury use the attached Hurunui Waiau monitoring and compliance strategy as guidance for the zone team.

Background

A significant component of the work to be undertaken by the zone team is monitoring and compliance.

The zone committee agreed the 5-year Delivery Outcomes and Milestones for the zone in March 2016. These provide the basis for the zone team's work programme.

One of the Milestones is a Compliance strategy to support GMP. This strategy will identify where the zone team should focus monitoring and compliance resources and efforts to ensure the desired outcomes are achieved.

It will provide guidance to the zone team on the approach, targets and priorities for monitoring and compliance in the zone, which includes the zone committees preferred approach to implementing the permitted activity rules that require farms to provide overseer records, the 10% rule and join a scheme or collective.

This strategy has been drafted by Environment Canterbury staff members Ian Brown and Tammy McMahon and provided to the following people for review and input: David Bedford, Ben Ensor, John Faulkner, Ken Hughey, James McCone, Dan Shand, Winton Dalley and Scott Pearson. Overall, feedback was positive towards the strategy and all were in support of such a strategy, valuable input was provided and changes have been made to reflect the recommendations.

The attached strategy is a high level document from the zone committee to provide guidance to the zone team to co-ordinate their work plan. If agreed by the zone committee, Environment Canterbury will refine the information to quantify the number of properties and collate compliance information to scope a work plan that delivers this strategy.

Attachment

"Hurunui Waiau Zone Monitoring and Compliance Strategy". Tammy McMahon, Ian Brown and Kevin Heays, Environment Canterbury.

Hurunui-Waiiau Zone Committee - Hurunui Waiiau Zone Monitoring and Compliance Strategy

Introduction

This strategy has been prepared by the Hurunui-Waiiau Zone Committee with Environment Canterbury input to provide guidance for the Kaikoura Hurunui-Waiiau Zone Team to undertake monitoring and compliance within the zone. The zone committee and the zone team are committed to working with members of the Hurunui community in a pragmatic customer focused way to deliver on this strategy and achieve positive environmental outcomes within the Hurunui-Waiiau zone.

Purpose and scope

The purpose of this strategy is to help inform the zone teams work programme and actions to support attainment of the Hurunui-Waiiau Zone Committee's (HWZC) five year delivery outcomes, as set out in Appendix 1. Specifically, the document sets out a zone committee recommended approach to compliance monitoring within the zone, and the monitoring of the nutrient management provisions of the Hurunui-Waiiau Plan.

The strategy is consistent with Environment Canterbury's Compliance Monitoring and Enforcement Guidelines and protocols and supports existing legal and risk management processes for consent monitoring and enforcement within the zone.

The document does not exhaustively address all statutory limitations and considerations that may be relevant under the RMA 1991, and nor does it confine, restrain or limit the discretion of Environment Canterbury to take any action. Notwithstanding this, the strategy represents the consensus views of the Hurunui-Waiiau Zone Committee on how best to handle compliance monitoring matters within the Hurunui-Waiiau zone.

Principles

All compliance monitoring action within the zone will be guided by the following principles.

1. *Whole of farm advocacy approach*
Where possible, a whole of farm – 'one stop shop' – approach to compliance monitoring and/or discussions on regional plan requirements, will be taken. This will help ensure efficiencies, avoid duplication of effort and add value to farming businesses.
2. *Focus on the achievement of positive environmental outcomes*
A pragmatic approach will be taken to compliance monitoring with strong emphasis placed on ensuring that regulations are not a barrier to achieving positive outcomes.

3. *Work with industry and rural support personnel to improve practices*

The zone team will work closely with industry, collectives, and other rural support personnel to help resolve compliance issues where identified.

4. *Well informed community*

Every effort will be made to ensure that the Hurunui-Waiau community understands and supports the Zone Committees approach to compliance monitoring. Effort will also be made to ensure the community is well informed of progress against strategy targets while maintaining the privacy of individual's information.

5. *Emphasis on highest risk*

Given the number of consents requiring monitoring and the resources that this requires, the emphasis will be on monitoring first those activities which are deemed 'high' risk in term of zone outcomes.

6. *Enforcement bottom-line*

Where other avenues have failed enforcement actions commensurate with the severity of the issues involved will be taken. In situations where enforcement action is considered necessary the following matters will be considered; the nature and scale of the environmental impact, the past and present conduct of the resource user, and the significance of the issue to the community.

Approach, Targets & Priorities

Approach

Building on these principles the compliance strategy includes a number of key components including:

1. One-stop-shop compliance visits

Farmers will be advised that they can book in for a one-stop-shop visit or they may be chosen at random. Advance notice of these visits will be given. Properties that hold multiple resource consents will be the top priority of these visits and a two-pronged focus is proposed. The first area of focus will be on all matters relating to consents held on the property including the monitoring and management of existing consent requirements. While not the primary focus of these visits, where non-compliance is found, the zone team member will work with the landowner to ensure rapid resolution of any issues found. The zone team member will also identify where future consents may need to be sought. The second area of focus will be on discussing and answering questions relating to Council rules. This One-Stop-Stop approach will reduce the need for multiple visits to the same farm and provide clarity for farmers on Council's regulatory requirements and the impacts these requirements may have on their farming businesses.

2. Linking with farm environment plan audits

Members of an approved collective are not required to provide Environment Canterbury with a copy of their farm environment plan audit information. However, those farmers who receive an 'A' audit grade may choose to advise the zone team of this information. Where these grades are provided to the zone team, these properties will be considered low risk in any relevant consent related matters. A similar arrangement will also apply to those farms that receive a 'B' audit grade with a high level of confidence for any relevant consent areas of activity. Providing the audit information would be a purely voluntary action on the part of the landowner. This approach will help avoid duplication and give recognition to good results achieved through the FEP audit process.

3. Spot checks

Spot checks of both resource consents and permitted activities will continue to be an important component of the compliance strategy. Priority will be given to:

- monitoring consents with 'high' risk ratings,
- local officer knowledge of issues and high risk activities, such as intensive winter grazing of cattle on crop,
- responding to complaints such as those relating to stock in waterways.

Where issues of non-compliance are found, the Compliance Officer will, where possible, work closely with the landowner to help ensure quick resolution of the issue.

4. HWRRP Provisions

There are three key nutrient management provisions in the HWRRP which directly impact all farmers within the area covered by this plan. These are:

1. Collectives
2. Overseer requirements
3. 10% rule

This strategy provides for a pragmatic approach to the monitoring and implementation of these provisions.

Collectives

Under the HWRRP, farms must be part of an industry based farm environment plan audit scheme, commonly referred to as a 'Collective', to continue as a permitted activity from 1 January 2017. If this criteria is not met, an application for resource consent must be made as a restricted discretionary activity. There are currently two ECan-approved Collectives; Amuri Irrigation Scheme, and Cheviot Irrigators Group.

The Hurunui District Landcare Group administers farm environment plans on behalf of farmers, but does not have an environmental management strategy approved in accordance with the HWRRP. Despite this, the HWZC recognises the significant value that the Landcare Group adds, and as a result strongly encourages farmer participation in this group.

The HWZC recognises the anomalies in requiring low impact farming operations within the Hurunui-Waiau zone, (particularly dryland operations with limited or no winter forage grazing), to be part of an approved collective. The HWZC has set as one of its 5 year outcomes, for all farmers to be farming at 'good management practice' (GMP) or better. Landholder membership of an approved collective, or the Landcare group, is seen as an important part of achieving this outcome.

Accordingly, this strategy proposes that:

- All those farming operations with >50ha of irrigation will be required to be part of an approved collective or seek a resource consent.
- In the situation where there is a waiting list on collective membership, then the farmer should notify the zone team and as a minimum prepare a farm environment plan.
- The Hurunui District Landcare Group will be encouraged in its efforts to mitigate the effects of non-irrigated farming and help its members make progress towards improved environmental outcomes.
- Those farmers that choose not to join a collective will be expected, as a minimum, to prepare a farm environment plan. The zone team will work with these farmers, where required, to assist them with FEP preparation.
- The zone team will work closely with the sectors, collectives, HDLCG and local farmers, to ensure that forage crops intended for the winter grazing of cattle are appropriately managed so as the environmental impacts of this activity are minimised.

2016 Overseer requirements

The HWRRP requires that all Hurunui-Waiau farmers submit four years of Overseer data for their property to Environment Canterbury by the 31st October 2016. It is understood that this provision was included in the plan to help ensure that there was better data available for the 2018 HWRRP plan review. The HWZC is of the view that there is limited value of actively enforcing this provision, particularly given that the time period includes an extended period of low rainfall when non-irrigated farms have been de-stocked and real losses of N and P will not be representative of a normal situation. The zone committee is also of the view, that better valued would be gained through working constructively with landowners in the zone to collect the required data. Accordingly this strategy proposes that:

- The HWZC will strongly encourage dryland and irrigated farmers in the zone, to work together to develop and implement a data collection programme in preparation for the 2018 plan review.
- The zone team in conjunction with science providers will work with the landholder groups to develop and implement a coordinated data collection programme.
- Any Overseer information submitted by landowners will be considered as part of the overall data collection package.

10% Rule

The HW Zone Committee supports Environment Canterbury's approach to the implementation of the 10% rule as set out in the advice note; July 2015

5. Liaison with industry and sectors

It is recognised that industry and the sectors have a vital part to play in ensuring compliance with consent conditions and Hurunui-Waiau Plan provisions. Three monthly meetings will be held with industry and sector partners to update them on compliance matters and, develop and review joint work programmes to address key issues arising. Industry and the sectors will be advised of non-compliance incidents when they occur and assistance sought to resolve issues as quickly as possible.

6. Cross organisational and other organisation support

The zone team will work closely with other teams within Environment Canterbury and the Hurunui District Council to ensure coordination of effort and avoid duplication. The approach outlined in this document will be clearly communicated throughout both these organisations and regular updates on progress will be provided.

The zone team is also committed to working closely with local environmental groups including North Canterbury Fish & Game and Forest & Bird. The team will provide these groups with regular three monthly updates on matters arising as a result of implementation of this strategy.

7. Community awareness

The strategy recognises that members of the wider Hurunui-Waiau community have an interest in the outcomes of the strategy and the approach taken to compliance and monitoring within the zone. The strategy proposes that at least twice per year significant achievements will be celebrated with information released through industry channels and the local media. Areas of concern and issues arising will also be noted. The focus all along will be on working towards effective solutions that ultimately contribute to the achievement of the Zone committees five year outcomes.

Targets

Based on the Zone Committee's 5-year Outcomes and Milestones and discussions between Environment Canterbury staff and the Zone Committee the following targets have been set for 2016/2017 and 2017/2018

Compliance category	2016/2017 Targets	2017/2018 Targets
One-stop-shop visits	At least 100 visits held	At least 100 visits held
Dairy effluent	< 5% significant ¹ non compliance	Zero significant non-compliance
Water abstraction	95% full compliance	100% full compliance and carry out water meter testing on 5% of water meters tested
Water metering requirements	100% compliance	100% compliance
Stock in waterways	Time frames are met as set out on Environment Canterbury's Stock in Waterways response protocol	Time frames are met as set out on Environment Canterbury's Stock in Waterways response protocol
Collectives	98% irrigated farmers are part of an approved collective. Remaining irrigated farmers have applied for consent. 75% of non-irrigated commercial farms are members of the Hurunui District Landcare Group	100% irrigated farmers are part of an approved collective. 100% of non-irrigated commercial farms are members of the Hurunui District Landcare Group
HWRRP Overseer requirements	Comprehensive data collection programme agreed by Collectives, industry and organisations.	Data collection programme contributing significantly to knowledge pool for 2018 plan review.
Community wastewater treatment plants	100% compliance	100% compliance

¹ As defined in Environment Canterbury's Dairy Effluent Monitoring Guidelines (Internal Document)

Priorities

In establishing priorities for individual property visits, the zone team will be guided by resource consent risk ratings, known areas of high risk activities, and where appropriate, by the following criteria.

1. Identified streams/Rivers/Catchment at risk
2. Properties 1km upstream of identified bathing sites
3. Properties within a drinking water protection zone
4. Intensively farming in close proximity to water ways
5. Farms that have īnanga/salmon spawning habitat
6. Properties with waahi tapu sites identified on them
7. Properties with braided river beds frontage
8. Properties with outstanding water bodies, landscapes and features.
9. High Priority ecosystem health/recreational values and biodiversity

The zone committee is committed to ensuring that any criteria used for the prioritisation of activities are appropriately field validated. For example, the zone committee understands that current data relating to īnanga spawning sites is at best 'patchy.' Where required, the zone team will act in a coordinating role to help ensure community confidence in any information used for prioritisation purposes.

Reporting

Measuring and reporting on progress is an important component of this strategy. The approach to monitoring and reporting includes:

- The Zone Manager will include compliance and monitoring stats in the quarterly report to the zone committee.
- Press releases will be issued based on the information supplied to the zone committee as part of the quarterly report.
- Three monthly meetings will be held with industry and sector partners to update them on progress against the compliance targets.
- Three monthly meetings with environmental organisations, including Fish and Game, and Forest and Bird, to update them on progress against the compliance targets.
- At least twice per year significant achievements will be celebrated with information released through industry channels and the local media.

Review

This strategy will be reviewed at a minimum annually. However the zone committee shall review or amend the strategy where it sees fit.

Appendix 1: Zone Committee Vision and 5 Year Delivery Outcomes

Vision

The committee envisages:

1. *A thriving natural environment, safeguarded by protecting important ecosystems and biodiversity and by implementing appropriate environmental flow regimes.*
2. *Healthy water ways that provide abundant mahinga kai and recreational opportunities, with the health of hapua on the rivers reflecting effective and responsible economic and natural resource management of the land and rivers that flow into them so that the mauri of the rivers is maintained and enhanced.*
3. *A prospering zone, economically and socially, built on the basis of environmentally sustainable land-based production and tourism, with irrigation water supplied through an innovative combination of run-of-river takes and off-mainstem-river storage, and managed by sustainable best practice audited self-management programmes.*

Five year Delivery Outcomes and Milestones

The five-year delivery outcomes for the zone are:

Outcome 1: Operate at GMP

Hurunui Waiau Zone farmers are operating at Good Management Practice (GMP) levels or better.

Milestones:

1. GMP “Game plan” for the zone agreed between ECan and sectors and endorsed by zone committee by December 2016. This Game Plan to include prioritisation (e.g. by sector, location), roles of different organisations, compliance strategy, approach to extension and recognition of local conditions (dairy payout and impact of drought).
 - Lead: Ian Brown
2. Communications strategy reviewed annually and updated, if necessary, by zone committee in April and November each year.
 - Lead: Michael Bennett
3. All irrigated farms have audited farm environment plans, whether as part of a collective or not, by March 2017.
 - Lead: Michael Bennett (Milestone done by AIC in large part)
4. At least 50% of dry land farms in the Hurunui and Waiau catchments of greater than 50ha have a farm plan by June 2017.
 - Lead: Michael Bennett (Milestone done by Landcare Group in large part)
5. Complete first round of FEP auditing on AIC Collective farms involving 30% of farms by August 2016. Farms which receive C and D audit grades are actively supported with 90% achieving a better grade subsequently.
 - Lead: Michael Bennett (Milestone done by AIC)
6. Complete all first audits on AIC Collective farms by August 2018.

- Lead: Michael Bennett (Milestone done by AIC)
- 7. Compliance strategy to support GMP uptake in the zone endorsed by the zone committee by December 2016.
 - Lead: Richard Purdon (tbc)
- 8. Zone Manager reports to zone committee, in a timely manner, on response taken to significant one-off matters.
 - Lead: Kevin Heays

How will this outcome be measured?

- % farms that require an audit that receive an A or B grade (in the longterm – not over next few years)
- % uptake of benchmark GMP practices (e.g. irrigation efficiency, wintering practices etc)
- % of farms with irrigation that have audited farm plans and the progress in audit grades achieved over time;
- Number of dryland farms with a FEP

Management oversight

Zone Committee Sponsors – Ben Ensor and James McCone (dryland & irrigated)

Zone team responsibility – Mike Bennett

Outcome 2: HWRRP review & sub-regional

Widely supported HW sub-regional plan which supports economic development while maintaining and/or enhancing cultural and environmental values, is in place.

Milestones:

1. Comprehensive community engagement strategy for the sub-regional plan development process agreed and endorsed by the zone committee by March 2017.
 - Lead: Whit (with yet to be appointed community engagement person)
2. Sub-regional plan science (biophysical, economic and farm system) programme agreed and endorsed by zone committee by December 2016.
 - Lead: Whit (with Technical Lead)
3. Zone Committee agrees by October 2016 the preferred method, for managing N and P at property scale (including N “allocation”) to achieve water quality outcomes for the waterways in the zone.
 - Lead: Whit (with Technical Lead)
4. The Zone Committee’s recommended water management solutions package for the whole zone (ZIP Addendum) is widely supported by stakeholders and finalised by XX 2017.

How will this outcome be measured?

- Survey to determine the degree of acceptance of the revised HWRRP.

Management oversight

Zone Committee Sponsor – All of committee

Zone team responsibility – Ian Whitehouse

Outcome 3: Integrated water infrastructure

Widely-supported integrated water infrastructure solution for Hurunui, Waiau and Waipara Rivers and agreed and in process of implementation

Milestones:

1. Integrated water infrastructure solution for Hurunui, Waiau and Waipara catchments agreed by HWP, NTP and AIC and endorsed by zone committee by December 2016.
 - Lead: Brett Painter
2. Twice-yearly report to zone committee from HWP, NTP & AIC re progress on integrated solution.
 - Lead: Ian Whitehouse
3. Zone Committee works with Environment Canterbury and developers to identify alternative water infrastructure options by December 2016 that should be considered in the sub-regional process.
 - Lead: Brett Painter

How will this outcome be measured?

- *Area of land receiving new water and/or definitive plan for the delivery of water to new areas.*

Management oversight

Zone Committee Sponsor – John Faulkner

Zone team responsibility – Brett Painter

Outcome 4: Ecosystem health and biodiversity

Maintaining and, where possible enhancing, ecosystem health including maintaining Indigenous biodiversity values in priority areas – braided river ecosystems, North Pegasus Bay Coastal wetlands, coastal hills from Conway Flat to Waiau River mouth, and significant wetlands.

Milestones:

1. Annual reporting on state of ecosystem health in the zone.
 - Lead: Tim Davie
2. Review current state monitoring to ensure it is fit-for-purpose for determining present environmental conditions using a range of indicators to show positive or negative trends.

Lead: Tim Davie
3. Identify the water bodies that currently have high ecosystem health values by December 2016 and the water bodies that the community wish to improve by October 2017 and include recommendations to maintain those with high values and improve the other water bodies in the ZIP Addendum (prepared as part of the sub-regional process).
 - Lead: Technical Lead (done as part of sub-regional)
4. Zone Committee review and agree freshwater biodiversity priorities for the zone by September 2016 and agree, by March 2017, strategies to increase the level of biodiversity enhancement and protection within the identified priority areas.
 - Lead: Jess Hill

5. Comprehensive programme for increasing the awareness and understanding of biodiversity, and for growing trust between land owners and councils, agreed and endorsed by the zone committee by December 2016.
 - Lead: Jess Hill
6. Arrangement agreed between Environment Canterbury and Hurunui District Council by December 2016, for the promotion and delivery of biodiversity protection and enhancement within the zone.
 - Lead: Jess Hill
7. Annual Immediate Steps funding allowance for zone is all allocated.
 - Lead: Kevin Heays

How will this outcome be measured?

- *Before and after surveys of state of biodiversity values in priority areas*
- *Immediate Steps and other biodiversity funds are oversubscribed in the zone*

Management oversight

Zone Committee Sponsor – Ken Hughey and Michele Hawke

Zone team responsibility – Jess Hill

Outcome 5: Community ownership and understanding

Hurunui – Waiau zone community feels well informed and widely engaged in zone activities.

Milestones:

1. Regular communication by zone committee in local media.
 - Lead: ??
2. Possibilities for involving schools and youth in zone committee activities investigated and report to zone committee with recommendations by March 2017.
 - Lead: Kevin Heays

How will this outcome be measured?

- *Attitude and understanding surveys*

Management oversight

Zone Committee Sponsor – Michelle Hawke

Zone team responsibility – Kevin Heays

Outcome 6: Recreation, tourism and amenity opportunities

Aquatic recreation, tourist and amenity values in priority locations are maintained and, where possible, improved.

Milestones:

1. Report to zone committee on freshwater recreation in the zone (swimming, jet boating, white-water recreation and fishing) by August 2016.
 - Lead: ?

2. Zone Committee agree, by December 2016, the priority locations for aquatic recreation in the zone (swimming, jet boating, white-water recreation and fishing) and strategies to improve aquatic recreation opportunities at the identified priority locations by July 2017.
 - Lead: ?
3. Zone Committee review and recommend appropriate monitoring and reporting of contact recreation suitability at key sites by December 2016.
 - Lead: ? (Tim needs to be involved but not lead)

How will this outcome be measured?

- *Before and after surveys of recreational values in priority areas*
- *Number of complaints about the state of water bodies for recreation (such as in relation to suitability for swimming)*
- *Number of initiatives to improve recreation opportunities at priority sites*
- *Contact recreation monitoring*

Management oversight

Zone Committee Sponsor – Dan Shand and James Costello

Zone team responsibility – to be confirmed

Outcome 7: Reliable drinking water

A sustainable supply of water that meets the needs of present and future domestic and agricultural users, and complies with New Zealand Drinking Water Standards in an affordable and responsible manner.

Milestones:

- 1 All Hurunui District community water supplies will be protozoa compliant as below:
 - End of 2017/18: 33.3% protozoa compliant (deep well security status)
 - End of 2024/25: 52.4% protozoa compliant (all minor schemes)
 - End of 2025/26: 85.7% protozoa compliant (all small and rural agricultural supply schemes)
 - End of 2026/27: 100% protozoa compliant (all neighbourhood supply schemes)
- 2 Hurunui District Council progressively implements the prioritised water management improvement areas as outlined in the Water Asset Management Plan (wAMP approved in November 2014).
- 3 Hurunui District Council progressively implements the agreed improvement areas identified in each of the Water Safety Plans (previously referred to as Public Health Risk Management Plans) for the community supply schemes across the district.
- 4 All on-demand community drinking water supplies will be fully metered by the end of June 2017.

How will this outcome be measured?

- Number of drinking water complaints
- State of community supplies in relation to NZ drinking Water standards

Management oversight

Zone Committee Sponsor – Winton Dalley and Vince Daly

Zone team responsibility – Kevin Heays [milestones done by HDC]

Outcome 8: Enhance Mahinga Kai

Work with Rūnanga to develop outcome statement and milestones

Zone Committee Sponsor – Raewyn Solomon and Makarini Rupene

Zone team responsibility – Kevin Heays and Stephen Bragg

Outcome 9: Maintain natural character of braided rivers

Natural character is maintained on active braided river beds in the zone.

Milestones:

1. Work with LINZ to start to deliver, from December 2016, CWMS targets, where relevant, on LINZ riverbed land in the zone.
 - Lead: ??
2. Communicate to affected landowners the meaning of the “river-bed” lines on Hurunui and Waiau Rivers by August 2016.
 - Lead: Mike Bennett
3. Work with the community to gain a better understanding and appreciation of Braided Rivers and their ecological significance, while ensuring access is welcomed but with care.
 - Lead: ??

Management oversight

Zone Committee Sponsor – Ken Hughey

Zone team responsibility – to be confirmed

AGENDA ITEM NO: 7	SUBJECT MATTER: Integrated approach to major storage
COVER PAGE BY: Ian Whitehouse, Environment Canterbury BRIEFING BY: Alex Adams (HWP), Andrew Barton (AIC), Edwin Jansen (NTP), Bryan Scott (AECOM) ATTACHMENTS: Brett Painter, Environment Canterbury and Bryan Scott, AECOM	DATE OF MEETING: 17 October 2016

Action required

Note the briefings, following up on the presentation by AIC, NTFE and HWP at the August meeting, on the challenges of integrated water storage.

Background

AIC, HWP and NTFE briefed the Zone Committee at the 15 August meeting on progress towards an integrated approach. The developers told the committee that an integrated approach was very challenging under the HWRRP with a small part of the large Glenrae storage option being in Zone A (where storage is prohibited) and the objectives and policies in the HWRRP creating a very high hurdle for getting a consent for water storage in Zone B (and this is likely to be seen as too high risk by a developer). The developers asked the Zone Committee to consider a plan change and that this be notified within 12 months.

A workshop was held on 23 September to identify what was needed to progress this issue. The workshop was attended by Andrew Barton (AIC), Alex Adams (HWP), Edwin Jansen (NTP), John Faulkner, James Costello and David Bedford (Zone Committee), Bryan Scott (AECOM), Lisa Jenkins, Brett Painter and Ian Whitehouse (Environment Canterbury).

The workshop agreed the following would be provided to the October zone meeting:

- The developers will provide a summary of the “reality” of providing water to the north and south of the Hurunui River (HWP, NTFE, AIC)
- An initial proposal for the scope of a strategic assessment is attached for discussion and guidance from the committee (Mr Scott).
- Mr Adams will brief the Committee on the time Constraints HWP are facing.

Attachment

“Proposed scope of strategic assessment against CWMS targets (and other factors) of storage concepts for Hurunui-Waiau catchments”, Brett Painter and Bryan Scott

ATTACHMENT TO AGENDA ITEM NO: 7	SUBJECT MATTER: Proposed scope of strategic assessment against CWMS targets (and other factors) of storage concepts for Hurunui-Waiau catchments
BY: Brett Painter, Environment Canterbury and Bryan Scott, AECOM	DATE OF MEETING: 17 October 2016

Action required

Consider and provide guidance on the following draft strategic assessment scope with reference to its intended purpose of assisting the zone committee in understanding the current challenges and opportunities of Hurunui-Waiau Zone integrated water storage.

Background

The objective of a Strategic Assessment is to compare the expected outcomes of potential water management concepts against the Principles and Targets of the CWMS. This assessment proposes to use categories relevant to the sub-regional process outcomes agreed at the 18 July 2016 zone committee meeting as well as additional commercial/development categories.

A key outcome of the assessment is an improved understanding regarding the potential for storage concepts to contribute to an integrated infrastructure solution for the Hurunui-Waiau Zone. In this context “integrated” refers to a concept or combination of storage concepts (that can potentially be staged if required) to meet current understanding (time, place and supply reliability) of future water demand.

Proposed assessment process

The strategic assessment of water storage concepts is proposed to follow a similar process to that carried out in 2012/13 for Lees Valley and Selwyn-Waihora concepts using the following methodology:

- Option description;
- Information collection;
- Development of assessment categories and scales;
- Key assumption confirmation;
- Category assessment evaluation.

As with the Lees Valley and Selwyn-Waihora assessments, the Hurunui-Waiau storage concepts are expected to be at different stages of investigation and development. The proposed focus of this assessment is therefore **identifying significant challenges regarding inclusion of the storage concept in an integrated infrastructure solution.**

It is proposed to use the following categories from the sub-regional process outcomes agreed at the 18 July 2016 zone committee meeting:

1. Ecosystem health and biodiversity
2. Safe for contact recreation or swimming
3. Drinking water
4. Mana whenua values
5. Natural character

6. Land-based economy
7. Rural communities
8. Recreation and amenity
9. Hydro-electricity
10. Irrigation

The Good Management Practice (GMP) outcome agreed by the zone committee is proposed to be included as a key assumption of proceeding with any infrastructure development. Strategic assessments of storage concepts in the Lees Valley (2012) and Selwyn-Waihora Zone (2013) included additional assessment categories specific to infrastructure development. The additional categories proposed for this assessment are:

- 7b. Direct impacts (to be included in the Rural Communities category)
11. Consentability and other legal issues
12. Commercial opportunities and risks

Mana whenua values will be assessed in a process to be confirmed with mana whenua. All other assessments are proposed to be led by Environment Canterbury staff, with the exception of the 'Commercial opportunities and risks' category which is proposed to be led by Bryan Scott (AECOM).

As with the Lees Valley and Selwyn-Waihora assessments, it is proposed to focus on available documented information/evidence, though some of this information may be in commercially confidential documents and cannot therefore be directly referenced. Available information is proposed to be rated separately for quality/quantity of information and the degree of potential negative or positive effect on each assessment category. Proposed assessment templates follow, with actual assessment wording tailored to the relevant category.

Table 1: Assessment scale for quality and quantity of available information

Scale	5	4	3	2	1
Meaning	Excellent information	Very good information	Good information	Limited information	Very limited information

Table 2: Assessment scale for each category

Scale	Assessment Scale				
	-2	-1	0	1	2
Meaning	Significant potential negative effect	Potential negative effect	Neutral	Potential positive effect	Significant potential positive effect

Storage concepts to be assessed

Specific concepts are currently being considered by Hurunui-Waiiau infrastructure entities and will be shared once directly affected landowners have been consulted. Concept categories are expected to cover:

- No major storage (i.e., no larger than on-farm storage)
- On-plains scheme size storage concepts
- Hurunui River tributary storage concepts (at multiple sizes if relevant)
- Waiiau River tributary storage concepts (at multiple sizes if relevant)

Agenda Item 8

Freshwater Planning Road Map

Stage 1: Preparing for the journey

1. Understand the legislation & what it requires;
2. consider who to engage with & when;
3. declare conflicts of interest & avoid issues of predetermination & bias and
4. determine what resources, technical support & information is required to complete the journey.

Stage 2: Decide on the destination

- Agree on the desired outcomes.

Stage 3: Establish a baseline of the current state of freshwater.

The NPS Freshwater guidelines state that before Councils set freshwater objectives, limits & methods they will first need to establish a baseline of the current freshwater state. This includes the following steps:

1. Freshwater Management Units [FMUs]:

- Regional councils must ensure that all freshwater bodies in a region are included within FMUs.
- An FMU can be a water body, a group of water bodies that are similar or one water body can be broken into a number of FMUs. Scale & surrounding land use are 2 key elements to take into account. A FMU too large in scale may lead to ineffective freshwater objectives. Conversely too small or too many FMUs can result in undue complexity & cost.
- Prioritize FMUs under greatest threat.

2. Values:

- Identify the values that are relevant to an FMU but you must include the 2 compulsory values; ecosystem health & human health for recreation.
- Values are the things that people think are important about water.
- The locally held values associated with each FMU, identified through engagement with the wider community, will be important in setting objectives.

3. Attributes

- Attributes are the characteristics of each FMU that need to be managed in order to provide for each value. Attributes listed in Appendix 2 of the NPS-FM include Total N, Total P, Periphyton & there are National Bottom lines for these attributes.
- Councils have the flexibility to consider other attributes not listed in Appendix 2 which are relevant to their own regional & local circumstances.

4. **Freshwater use & contaminants accounting system**

- Accurate information is required on:
 - [1] the quantity of water being taken from freshwater bodies and
 - [2] the type and amount of contaminants going into freshwater bodies.
- This information must be available when setting freshwater objectives & limits.
- Not all contaminants are to be accounted for; it is only those that the Regional Council & community consider are relevant to achieving freshwater objectives. It is important to identify the sources of contaminants that need to be managed through freshwater objectives & limits.

Before moving onto the next stage there are 2 more things that the NPS-FM requires:

[i] Significant values of outstanding freshwater bodies are protected &

[ii] Significant values of wetlands are protected.

Stage 4: Freshwater objectives

Freshwater objectives are established for each of the attributes being managed for the chosen values in each FMU. The objectives express an environmental outcome keeping in mind the national bottom lines for the specified attributes such as total N, total P & periphyton.

Freshwater objectives can be aspirational but it is important to assess the cost, achievability & the social, cultural & economic implications for resource users.

Stage 5: Limits & Methods

Limits

Limits are the maximum amount of water use & contaminants that enable the freshwater objectives to be met. Councils have flexibility to determine how these limits can be applied i.e. they can be water body specific [e.g. maximum loads] or land use specific [stock access rules].

It is important to identify all the contributing sources of a given contaminant. However the NPS-FM guidelines note that the background contaminants [i.e. those from natural processes & historic activities] are not part of the limit itself.

One limit may address a number of freshwater objectives or a range of limits maybe needed to address a single objective.

As for objectives it is important to carry out a thorough analysis of how the limits will affect resource users.

Methods.

Councils are required to implement those methods that are likely to be the most appropriate, efficient & effective in ensuring the limits & freshwater objectives are met. There is no presumption in favour of regulation & councils have flexibility to choose whatever methods they believe are appropriate. Under section 32 of the RMA councils are required to assess the costs and benefits of each method. This provides a mechanism to identify those methods that will achieve improvements with the highest benefit compared to the cost.

Not all methods need to be set out in a regional plan; some, such as council funding for riparian fencing, may be set out in an annual plan or long-term plan.

The NPS FM guidelines highlight:

- 1) The need to evaluate the social, economic, cultural & environmental impacts of the chosen approaches/methods &
- 2) the importance of working collaboratively with the water resource users in setting limits, targets, methods & timeframes.

Stage 6: Over-allocation.

Having established freshwater objectives & limits, councils will have effectively identified any FMUs that are over-allocated in terms of amount of water extracted or amount of contaminant. For an over-allocated FMU the NPS-FM expects more stringent requirements & methods should be designed to avoid, not just mitigate or remedy over-allocation.

Councils are required to set targets, methods & the appropriate timeframes required to return water quality back to a state where it meets the freshwater objective[s]. The methods will be primarily directed at the sources of contaminants & the presumption is that those that contribute most to the contaminant issue will carry most of the burden of fixing the issue. However the NPS-FM allows flexibility for the wider community to share the burden where this is deemed appropriate through consultation & a section 32 process.

Stage 7: Section 32 analysis – will the plan work

The NPS-FM guidelines reinforce the need to carry out a thorough assessment of the impacts, workability & achievability of the objectives, limits & methods. This could include testing the provisions across the range of different landuse types.

Stage 8: Public notification & submission process

Stage 9: Monitoring

The final step is monitoring to

- ✓ [a] ensure the plan provisions are working &
- ✓ [b] identify & address any unintended consequences and
- ✓ [c] measure progress against the freshwater objectives.

AGENDA ITEM 9: Zone Committee's evaluation of Hurunui Waiau Rivers Regional Plan (HWRRP)

*Updated from discussion on 19 September, 2016 – **work in progress** and not fully agreed by Committee*

Topic	What do you like?	What don't you like or wish to improve	Comments
WATER QUANTITY			
Takes for community and/or stock drinking schemes	Support this - community drinking schemes should have priority over irrigation		<i>HWRRP gives priority to community schemes</i>
Minimum flows: <ul style="list-style-type: none"> • Hurunui River; • Waiau River; • Jed River; • Tributaries. 	Minimum flows were pretty well thrashed out in the planning process particularly for the mainstem rivers so leave as is unless compelling reason to change.	<p>The link between storage and new minimum flows was severed in the Hearing process. Thought needs to be given to this matter.</p> <p>Min flows on some of the tributaries of low ecological value may need looked at where there is the opportunity to remove water with high nutrient loads for a net benefit to the environment.</p> <p>Some rivers are dry for part of the year yet still have minimum flow requirements.</p>	<p><i>As consents have not been reviewed the HWRRP minimum flows are not yet "in effect" except for a few new consents.</i></p> <p><i>The Waiau River mouth closed and this could suggest the minimum flows are inadequate or the way the river is managed is not working. Need more information on why river mouth closed.</i></p> <p><i>A paper from John Hayes, Cawthron Institute, questions the adequacy of the tools used to assess the river flow required for trout fisheries, concluding that current approach (as used to</i></p>

Topic	What do you like?	What don't you like or wish to improve	Comments
			<i>inform decisions on HWRRP minimum flows) under-estimates flow requirements.</i>
Allocation of water <ul style="list-style-type: none"> • Waiau River • Hurunui River • Tributaries 	Support approach in HWRRP	Consider B Block allocation for some tributaries to enable takes to storage (e.g. Leader River). Review the irrigation demand from Waiau below Stanton confluence to assess need for policy that makes it easier to get B block in lower Waiau than in Waiau upstream of Stanton. There is a very large C Block allocation in Waiau River. Does this need to be reviewed?	
Groundwater takes		Check the “accuracy” of the mapped stream-depletions zones.	
Transfer of water take consents			<i>Can only transfer between same allocation block (which will relate to a specific river or part of a river)</i>
WATER STORAGE			
Development zones: <ul style="list-style-type: none"> • Zone A (upper Hurunui & Waiau) – storage prohibited; 	General support for the zoning approach though “tweaks” may be needed.	Focus has been on large water storage and on integration across AIC, HWP, NTP. Need to ensure that independent irrigators and	<i>Zone Committee agreed at August meeting that Lake Sumner and South Branch are “off the table”.</i>

Topic	What do you like?	What don't you like or wish to improve	Comments
<ul style="list-style-type: none"> Zone B – non-complying; Zone C – restricted discretionary (for storage >20,000m³); Zone D (Jed) - storage <20,000m³ permitted; 		<p>irrigators in the lower catchments are also considered and part of the conversation.</p> <p>Consider how well HWRRP supports approaches other than “mega” storage, for example, numerous small scale projects.</p> <p>Consider “tweaks” as identified in comments.</p>	<p><i>Developers have told zone committee that a large Glenrae storage would require adjustment to Zone A/B boundary.</i></p> <p><i>Developers have told committee that requirements for Zone B are “too hard” for an integrated solution.</i></p>
Water use efficiency			
<ul style="list-style-type: none"> 80% application efficiency Annual volume to provide reasonable use of water, for the intended land use, for 9 out of 10 years. 	General support.	<p>Application efficiency is only part of the equation. Need to consider how to encourage water to be used for the highest value land use.</p> <p>Does there need to be a timeframe to get uptake of technologies such as soil-moisture monitoring, variable rate irrigation?</p>	<p>Concern about people who have consent to take a lot of water but hardly ever use it.</p> <p>More understanding needed on the impact of some irrigation practices – for example should irrigation only be done at night time to reduce evaporation?</p> <p>Need to take into consideration the interplay between actions to improve water-use efficiency and impacts on river flows and nutrient concentrations.</p>

Topic	What do you like?	What don't you like or wish to improve	Comments
Water quality and land use ZONE COMMITTEE HAS NOT YET DISCUSSED ANYTHING PAST THIS POINT			
Periphyton limits for: <ul style="list-style-type: none"> • Hurunui River; • Pahau and Waitohi Rivers; • Waiau River 		Need to review limits and be clear how these relate to the freshwater objectives for each river	<i>Limits will be reviewed. NPS for FM includes national bottomline and attribute states. The HWRRP does not define freshwater management units (FMUs) so these will also be identified as part of HWRRP review/sub-regional.</i>
Nitrate toxicity limits for: <ul style="list-style-type: none"> • Hurunui River & tributaries: <ul style="list-style-type: none"> • above Mandamus; • below Mandamus; • Waiau River & tributaries <ul style="list-style-type: none"> • above Marble Point; • below Marble Point. 		Need to review limits and be clear how these relate to the freshwater objectives for each river	<i>Limits will be reviewed. NPS for FM includes national bottomline and attribute states.</i>
Phosphorus concentration limit for Hurunui River		Need to review limits and be clear how these relate to the freshwater objectives for each river	<i>Limits will be reviewed and the relationship between P concentration and periphyton scrutinised.</i>
Nitrogen and Phosphorus load limits for Hurunui River at <ul style="list-style-type: none"> • Mandamus; • State Highway 1. 		Need to review limits and be clear how these relate to the freshwater objectives for each river	<i>Limits will be reviewed as well as the role of in-river and/or catchment loads in helping achieve freshwater objectives</i>

Topic	What do you like?	What don't you like or wish to improve	Comments
Support for Collective approach			<i>Two "collectives" approved to date – AIC and Cheviot Irrigators Group.</i>
Land use consent required if not part of Collective		Need better approach for properties with low environmental impact.	<i>HWRRP review will consider regulatory approach for properties with low environmental impact.</i>
"Change in land use" definition and related matters (the "10%-rule" issue)		Need to remove this rule.	<i>Advice Note addressed the unfairness of the "10%-rule" for dry land farmers.</i> <i>HWRRP review will consider regulatory approach for properties with low environmental impact.</i> <i>PC5 approach will be starting point.</i>
Report annual average N and P losses for 2012 - 2016			<i>HWRRP requires this to be reported by 1 October 2016. Unlikely to receive this information from many farmers.</i> <i>The intent of this policy was to ensure good information for review of the HWRRP. Other ways will be needed to get property-scale N and P losses to inform revised approach to property-scale nutrient management rules and limits.</i>
FEP and environment			<i>Note that PC5 proposes revisions to</i>

Topic	What do you like?	What don't you like or wish to improve	Comments
management system requirements (Schedule 2)			<i>the region-wide schedule for audited FEPs and this will be the starting point for HWRRP revision.</i>

AGENDA ITEM NO: 10	SUBJECT MATTER: Proposed Terms of Reference for Hurunui Science Stakeholders Group
COVER PAGE BY: Ian Whitehouse, Environment Canterbury ATTACHMENT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 17 October 2016

Action required

1. **Agree the Terms of Reference (TOR)**, as attached, for the Hurunui Science Stakeholders Group noting that the Science Stakeholders Group will discuss the TOR at its first meeting and may recommend changes to the committee.
2. **Appoint two zone committee members** to the Hurunui Science Stakeholders Group.
3. **Note the dates proposed for the Science Stakeholder Group meetings.**
4. **Discuss the date and venue for the public meeting** on water quality in **Waiau catchment**.

Background

At the September meeting the zone committee agreed the approach to collaborative science and engagement on technical matters in the Hurunui Waiau plan revision and sub-regional process. This approach includes the establishment of a Hurunui Science Stakeholders Group.

Proposed Terms of Reference (TOR) for this Science Stakeholder Group are attached for the committee's consideration. The TOR will be discussed by the Science Stakeholder Group at its first meeting. Some organisations may have concerns about disclosure of some of the information they hold and about the separation of technical expert and advocacy roles. The Science Stakeholder Group may recommend changes be made to the TOR. Any changes to the TOR must be agreed by the zone committee.

It is recommended the Zone Committee approve the TOR.

Appointment of zone committee members to Science Stakeholder Group

The TOR includes appointment of two zone committee members to the Science Stakeholder Group. Other committee members will be able attend meetings of the Science Stakeholder Group. I strongly encourage them to do so.

The committee is asked to appoint two members to the Hurunui Science Stakeholder Group.

Initial meetings of Science Stakeholder Group

Invitations have been sent to all the organisations listed in the TOR. People have been asked to indicate their availability for the following meeting dates:

The **initial meeting** will be on either **Wednesday 19 October OR Thursday 20th** – this will talk about the purpose, Terms of Reference and timeline.

The **second meeting** will be **Wednesday 02 November OR Thursday 3rd** – this will continue discussion from first meeting, if required, on purpose and TOR, and recommend membership of Peer Review Group and identify non-ECan water quality information relating to Waiau catchment.

The **third meeting** will be **Wednesday 16 November OR Thursday 17th** – this will discuss water quality in Waiau catchment including estimates of agricultural N losses from sub-catchments.

By the zone committee meeting the dates and venue for the meetings will be finalised.

Scheduling community meeting on water quality in Waiau catchment

Community engagement on technical matters will start with a series of meetings describing the findings from water quality- and land use-related monitoring and investigations. This will include assessment of trends and comparison with bottom lines and benchmarks – that is, what does the information mean. These briefings will be provided on a catchment basis starting with water quality in Waiau catchment.

The Zone Committee would introduce these meetings and listen to the issues raised. Solutions to the issues will be explored in “what-if” scenarios scheduled for mid 2017, or sooner if possible.

I am seeking zone committee feedback on the date and venue for this meeting on water quality in the Waiau catchment.

The meeting could be scheduled the evening of the zone committee – Monday 21 November. This would make for a long day but would be efficient.

The meeting could be scheduled for another evening in that week, that is:

Tuesday 22nd, Wednesday 23rd or Thursday 24th.

The 21 November zone committee meeting will be at Waiau. This is “central” in the catchment. Other venues in the “catchment” would be Cheviot or Rotherham.

Zone Committee members are asked to identify the best date and location for the community meeting on water quality in the Waiau catchment.

The community briefing will cover what the results mean from the following:

- Water quality monitoring (N, P, periphyton) in mainstem and tributaries;
- Water quality monitoring (N) in groundwater;
- Ecosystem health monitoring in mainstem and tributaries;
- Monitoring of the source water for HDC community drinking water supplies;
- Monitoring of pathogens and toxic algae at contact recreation monitoring sites;
- Estimates of catchment and tributary agricultural N loads and comparison of these with estimates of in-river N loads;
- Catchment-specific investigations relating to water quality.

Hurunui Science Stakeholder Group

Proposed Terms of Reference (10 October 2016)

1 Background

The Hurunui Waiau Zone Committee, with Environment Canterbury, is starting the development of a long-term water management solutions package for the zone – “Healthy rivers – productive land”. This includes review of the Hurunui Waiau Rivers Regional Plan (HWRRP) – acknowledging the difficulties with the “10% rule” in the plan. As part of the solutions package, a plan change to the Canterbury Land and Water Regional Plan (LWRP) will be notified in mid-2019 with zone-specific limits and rules for the Hurunui Waiau zone where required. The plan change will eventually replace the HWRRP.

It is important that all information from all sources, not just Environment Canterbury, is used over the next two to three years to revise the HWRRP and develop the water management solutions package (ZIP Addendum) for the whole zone. There is a substantial body of information, particularly for the Hurunui catchment, from monitoring and investigations carried out by AIC, HWP, Ngāi Tahu Property and others. There is need as well for data from actual farms across the zone to underpin the development of a widely-accepted approach to property-scale nutrient management. Robust estimates will be needed of current and good management practice (GMP) nutrient losses for different land uses and farm practices under a range of soils and climates.

The Zone Committee wants widespread buy-in on the technical information, models and assessment results, thereby improving the focus on the value judgements needed and lessening the contest over technical matters in the RMA Hearing on the plan change.

The Hurunui Waiau Zone Committee strongly supports the establishment of a Hurunui Science Stakeholder Group.

2 Purpose and function of Hurunui Science Stakeholder Group

The Science Stakeholder Group will:

1. Build involvement and confidence in the science being carried out;
2. Ensure that information is used from all sources, not just from Environment Canterbury;
3. Ensure there are “no surprises” in terms of the information held, or planned to be collected, by an organisation. This includes information collected to fulfil statutory requirements.
4. Recommend membership of the Hurunui Peer Review Group (see below);
5. Help to identify the key issues of contention that require technical input;
6. Review and validate the results from analysis and modelling;
7. Focus on informing, not making, the value judgements that will be needed;

8. Identify scientific limitations, clarify assumptions and describe uncertainties;
9. Seek consensus and if necessary describe any outstanding areas of contention.
10. Provide the Zone Committee with a collective expert-view on the answers to specific questions and topics. The questions will emerge as the process progresses. The zone committee is anticipating the Science Stakeholder Group will provide a collective view on matters such as (indicative only):
 - a. Is the Hurunui over-allocated with respect to water quality? If so, why?
 - b. Are flushing flows from off-mainstem water storage a possible solution to periphyton issues (including didymo) in Hurunui River?
 - c. What land uses and farming practices contribute most to water quality?
 - d. What farming practices, if adopted widely, would improve water quality and by how much?
 - e. How long does it take to get widespread adoption of (specified) farm practices?
 - f. How much will it cost to reduce N losses in different farming systems and how would this impact farm financial viability?
 - g. What are the contributions from different land uses and water-related tourism to the District economy and employment?

The Science Stakeholder Group will **not**, as a group:

11. Advise or advocate for particular water management policies, rules or limits;
12. Re-litigate the Zone Committee's water management outcomes.

Organisations involved in the Science Stakeholder Group are, however, expected to be involved in the zone-committee led process, involving community and all interests in water in the zone, developing the water management solutions package for the entire zone. This process will include evaluation of "what-if" options (scenarios) and is likely to take place in mid to late 2017. A timeline is provided in a later section with an indication of the role of the Science Stakeholder Group over the next two years.

3 Expectations of members of the Hurunui Science Stakeholders Group

Organisations on the Science Stakeholder Group are expected to:

13. Contribute relevant information, including results from monitoring and investigations, except where such information is confidential or privileged;
14. If required, brief the Science Stakeholder Group, zone committee or community on the results of monitoring, investigations or other studies that contribute important information on water management and related matters in the zone;
15. Respect confidential and privileged information and how this should be used, such as using farm information in a manner that precludes results being identified with a specific property unless this is with the agreement of the owner;

16. Constructively work together to ensure all relevant information is used;
17. Constructively work together to ensure the technical information and science underpinning the development of the water management solutions package for the zone is of high quality and has wide support;
18. Endeavour to attend all meetings or where this is not possible ensure they are up to speed with the work of the Group;
19. Act in a manner that is consistent with the role of technical expert or advisor, not as an advocate;
20. Accept the timetable for developing the water management solutions package for the zone and the deadlines this imposes unless there is consensus amongst all of the Science Stakeholder Group and endorsed by the Zone Committee that deadlines are unreasonable and must be revised.
21. **Not** receive a meeting fee for attending meetings.

4 Geographic scope of Hurunui Science Stakeholder Group

The Hurunui Science Stakeholder Group will deal with technical information and science relating to the entire Hurunui Waiau zone **except** the Waipara catchment.

The Waipara catchment has different issues, land uses and science stakeholders than the rest of the zone. A Waipara Working Group will be established comprising science stakeholders, Ngāi Tūāhuriri, local landowners and interests.

5 Membership of Hurunui Science Stakeholder Group

The following organisations will be invited to participate in the Hurunui Science Stakeholder Group:

- Te Rūnanga o Ngāi Tahu (TRoNT);
- Kaikōura Rūnanga;
- Ngāi Tūāhuriri;
- Amuri Irrigation Company;
- Ngai Tahu Farms;
- Hurunui Water Project;
- Cheviot Irrigators Group;
- Fish and Game;
- Forest and Bird;
- Department of Conservation;
- North Canterbury Landcare Group;
- Federated Farmers;
- Rural Advocacy Group;
- Beef and Lamb;

- Deer NZ;
- Dairy NZ;
- Fonterra;
- Foundation for Arable Research;
- Horticulture NZ;
- Balance;
- Ravensdown;
- Whitewater NZ;
- Whitewater Canoe Club;
- Jet Boating NZ;
- Canterbury Tourism;
- Hurunui District Council;
- Canterbury District Health Board;
- Environment Canterbury.

Two zone committee members will be members of the Hurunui Science Stakeholder Group. Other Zone Committee members may attend meetings of the Science Stakeholders Group.

6 Record of meetings of Science Stakeholder Group

A record will be made of the key points and actions of the meetings of the Science Stakeholder Group. These records will be public.

7 Changes to these Terms of Reference

The Hurunui Science Stakeholder Group will review these draft Terms of Reference and recommend changes, if required, to the Zone Committee who will finalise the Terms of Reference at the zone meeting in November or December 2016.

8 Outline of timeline and roles of Science Stakeholders Group (dates are indicative)

	Task	Role of Science Stakeholders Group
October 2016	Establish Hurunui Science Stakeholder Group	Join the group. Agree/revise Terms of Reference.
November 2016 – March 2017	<p>Briefings on what we know about water quality and land mgmt in the zone, what it means and what are likely causes of poor water quality.</p> <p>Briefings will present results by catchment in the following order:</p> <ul style="list-style-type: none"> • Waiau catchment (mid Nov); • Conway/Tutaepuaputa (early Dec); • Hurunui catchment(Feb); • other areas of zone (Feb). <p>The briefings will be made to the Science Stakeholder Group then to a community meeting in the catchment.</p>	<p>Make available results of monitoring or investigations.</p> <p>Present information, if needed, at briefing(s).</p> <p>Constructively review each briefing and identify improvements for when it is presented to the community.</p> <p>Reach a collective view (as far as possible) on what the results mean and the likely causes of poor water quality for each catchment.</p> <p>Identify information gaps and areas of contention that require further technical input.</p> <p>Attend community meetings, if interested, (as advocate for organisation's interest, not as member of Science Stakeholders Group).</p>
October 2016 – July 2017	<p>Address information gaps and develop models.</p> <p>Address specific questions or topics.</p>	<p>Help identify information gaps.</p> <p>Collect and provide information.</p> <p>Provide collective expert view on specific questions or topics.</p>
July – September 2017	<p>Assess current state and “what-if” scenarios in relation to outcomes:</p> <ul style="list-style-type: none"> • technical assessment; • community assessment. <p>Identify possible solutions.</p> <p>Address specific questions and topics as they come up in community meetings.</p>	<p>Review technical assessments of whether outcomes are achieved currently and in “what-if” scenarios.</p> <p>Provide collective expert view on specific questions or topics.</p> <p>Attend community meetings, if interested, (as advocate for organisation's interest, not as member of Science Stakeholders Group).</p>
October-December 2017	<p>Summarise “Issues and options”.</p> <p>Develop and model initial Solutions Package.</p>	<p>Provide collective expert view on specific questions or topics.</p>

	Task	Role of Science Stakeholders Group
February 2018	<p>Assess initial Solutions Package in relation to outcomes:</p> <ul style="list-style-type: none"> • technical assessment; • community assessment. <p>Identify how to achieve more outcomes, outcomes more fully and more quickly.</p> <p>Address specific topics.</p> <p>Assess effectiveness and cost of non-statutory actions.</p>	<p>Review technical assessments of whether outcomes are achieved in the initial Solutions Package.</p> <p>Provide collective expert view on specific questions or topics.</p> <p>Attend community meetings, if interested, (as advocate for organisation's interest, not as member of Science Stakeholders Group).</p>
February – June 2018	<p>Refine and improve Solutions Package.</p> <p>Agree final Solutions Package</p>	<p>Provide collective expert view on specific questions or topics.</p>
July – August 2018	<p>Agree ZIP Addendum (recommendations on the package of non-statutory actions and regulation).</p> <p>Communicate Zone Committee's recommended Solutions Package.</p>	
September 2018 – May 2019	<p>Draft polices, rules and limits</p> <p>Consultation</p>	
June 2019	<p>Notify plan change</p>	

9 Peer Review Group

It is proposed to establish a small Peer Review Group.

Purpose and function

The Peer Review Group will provide:

- a) Independent review of conceptual models, assumptions and methodological approach;
- b) Independent review of technical reports prepared by Environment Canterbury and their contractors. Where the members of the Peer Review Group do not have the specific expertise to review particular reports it will work with the Technical Lead to identify suitable independent reviewers;
- c) External expert advice to Environment Canterbury's technical team.

The Peer Review Group's key function is ensuring the technical information and modelling is fit for purpose and of a high standard. The Peer Review Group will not synthesise information or seek consensus on the science and what it means. This will be the role of the facilitated process involving the Science Stakeholder Group.

Membership

The Science Stakeholder Group will recommend the membership of the Peer Review Group. The Science Director, Environment Canterbury, will appoint the Peer Review Group following the Zone Committee endorsing the Science Stakeholder Group's recommendation.

It is anticipated that the Peer Review Group will have three members.

Given the issues in the Hurunui Waiau Zone it is expected the Peer Review Group would have experience in collaborative multidisciplinary science processes generally, and include particular expertise on:

- i. The relationship between outcomes, relating to ecosystem health (e.g. periphyton cover) and human health for recreation (e.g. pathogens and toxins), and in-river or resource-use limits;
- ii. The relationship between nutrient losses and land use, soils, farming systems and farm practices including the impact of intensification scenarios and of all farms being at good management practice;
- iii. The interaction of the groundwater and surface water systems and what this means for transport pathways and attenuation of nutrient losses between farms and waterways.

Glossary

“10%-rule”	The provisions in the Hurunui Waiau Rivers Regional Plan (HWRRP) that constrain any increases to nutrient losses (nitrogen and phosphorus) on a farm to 10% when the nitrogen or phosphorus limits in Hurunui River are breached. The intent of the “10% rule” was to prevent land-use change from low to high nitrogen loss farming. The unintended consequence was to restrict existing farming practices on farms with low nitrogen losses. An Environment Canterbury Advice Note of July 2015 addressed this issue by stating that normal dryland farming is not “land use change” and so not subject to the “10%-rule”.
Canterbury Land and Water Regional Plan (LWRP)	The LWRP provides the planning framework for land and water management in Canterbury including water quality and quantity limits. It includes region-wide and sub-regional (zone) rules. In Hurunui Waiau Zone the LWRP applies to the Waipara and Conway catchments but not to the area covered by the Hurunui Waiau River Regional Plan.
Good Management Practice (GMP)	The practices described in the industry-agreed Good Management Practices relating to water quality (April 2015).
Hurunui Peer Review Group	The small independent group providing expert technical advice and peer review to ensure science quality in the process reviewing the HWRRP.
Hurunui Science Stakeholder Group	Technical people from organisations involved in collecting or using the technical information that will underpin the review of HWRRP and development of ZIP Addendum. The Science Stakeholder Group will ensure all relevant information is used (not just that collected by Environment Canterbury) and provide a collective expert view.
Hurunui Waiau Rivers Regional Plan (HWRRP)	The HWRRP provides the planning framework for land and water management in Hurunui, Waiau and Jed catchments.
Property-scale nutrient management	The statutory and non-statutory actions needed to manage on-farm nutrient losses and other environmental impacts to deliver the community freshwater outcomes for the waterways in the zone.
ZIP Addendum	The Zone Committee’s recommended water management solutions package including required planning provisions and limits.

AGENDA ITEM NO: 11	SUBJECT MATTER: Zone Facilitator's Report
REPORT BY: Ian Whitehouse, Environment Canterbury	DATE OF MEETING: 17 October 2016

Action required

1. Note the letters relating to the Zone Committee's recommendation on review of consents in relation to minimum flows in Hurunui and Waiau River catchment.

1 Zone Committee's 2014 recommendations on reviewing consents in relation to HWRRP minimum flows

In recent zone meetings people have referred to the zone committee's recommendation relating to reviewing water-take consents in Hurunui and Waiau to align them with the minimum flow provisions in the Hurunui Waiau Rivers Regional Plan (HWRRP). Some of the current committee were not on the committee when this recommendation was agreed by the zone committee in December 2013.

Copies of the zone committee's recommendation to Environment Canterbury (February 2014) and the reply are attached.

Hurunui Waiau Zone Committee recommendation on review of consents in relation to minimum flows in Hurunui and Waiau Rivers catchment

RECOMMENDATIONS

1. The Hurunui Waiau Zone Committee recommends Environment Canterbury does not review existing water consents in Hurunui and Waiau Rivers until at least the end of 2017 so as not to divert resources from activities to improve nutrient management.
2. The Committee recommends Environment Canterbury consider the timing and scope of a post-2017 review of water consents as part of the “sub-regional” planning process for the Hurunui Waiau Zone, currently scheduled for about 2018, and this take into account:
 - a. Changes to river flows and reliability of supply for existing users from new irrigation development (e.g. HWP), water-use efficiency (e.g. by AIC), or other initiatives;
 - b. Progress with nutrient management activities including completion of audited farm environment plans and the actions identified in these farm plans across the catchment;
 - c. Improvements in water quality in rivers and streams in the catchment.

This recommendation reflects the consensus of the Hurunui Waiau Zone Committee at its 17 December, 2013, meeting.

COMMENTARY

1. The Hurunui and Waiau Rivers Regional Plan (HWRRP) raised minimum flows for the Hurunui and Waiau Rivers. These minimum flows apply immediately to all new consents and at time of renewal or review for current consents.
2. Existing water users have concerns about the impact of higher minimum flows on reliability of supply.
3. The Hurunui Waiau Zone Implementation Programme (ZIP) and the proposed HWRRP linked the increase in minimum flows to the provision of major water storage. The HWRRP Hearing Commissioners decoupled minimum flow provisions from major water storage and recommended raising the minimum flows immediately.
4. The Hurunui Water Project (HWP) has been consented to take and store water from Hurunui River. The HWP consent conditions include the (higher) minimum flows of the HWRRP. It is probably at least three years, and possibly five years, before water would be being taken from the Hurunui River to supply HWP Stage 1.
5. The Environment Canterbury Commissioners indicated to the Zone Committee in April 2013 that they are looking to the committee for a recommendation on reviewing consents in relation to minimum flows.
6. The Committee is concerned that an immediate review of water consents would divert resources

away from nutrient management initiatives.

7. The Committee believes a delay in reviewing consents would provide certainty for water users and therefore be an incentive for improving nutrient management.

8. With a delay until at least 2017 the Committee believes that by the end of 2017 the following should be achieved:

- a) Completion and on-going implementation of audited farm environmental plans by all AIC shareholders;
- b) Completion and on-going implementation of audited farm environmental plans by all farmers in tributary catchments in the AIC command area;
- c) Completion and on-going implementation of audited farm environmental plans for at least three other tributary catchments or “sub-catchment” groups.

It is expected the following targets will be achieved:

- Approval by Environment Canterbury of the Amuri Irrigation Company’s scheme management programme by the middle of 2014;
- Completion of audited farm environment plans by all AIC shareholders by the end of 2014;
- Completion of audited farm environment plans by all farmers in tributary catchments in the AIC command area by the end of 2015;
- Completion of audited environmental farm plans for at least five other tributary catchments by the end of 2016;

9. The Committee acknowledges that these targets are indicative and should not be used in a punitive manner.

10. The Committee expects the nutrient management activities by individual farmers and AIC will lead to improved water quality outcomes, some of which may be measurable by the end of 2017.

11. A “sub-regional” planning process will commence in the Hurunui Waiau Zone in about 2017-18. This will bring the HWRRP, Conway River Plan and Waipara River Plan into the Canterbury Land and Water Regional Plan. It will set a load limit for Waiau River and include nutrient provisions for all of the Zone. It is anticipated that water quality outcomes and progress with nutrient management initiatives will be reviewed at part of the “sub-regional” process.

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26 March 2014

David Eder
Chair
Hurunui Waiau Zone Committee

Dear David

Thank you for your letter of 17 March 2014 concerning the review of consents in relation to minimum flows on the Hurunui and Waiau Rivers. Environment Canterbury Commissioners have noted your recommendation that existing water consents are not reviewed until at least the end of 2017.

Reviewing resource consents in the light of new plan provisions such as we have here requires an allocation in our budgets through the Annual Plan process. We have not yet scheduled a review of consents on the Hurunui and Waiau Rivers, as part of that process.

In the meantime we would welcome being kept informed about progress towards the outcomes set out in paragraph 8 of your letter.

Yours sincerely



Peter Skelton
Commissioner

Hurunui Waiau Zone Water Management Committee

Terms of Reference

The area of the Hurunui Waiau Water Management Zone is shown on the attached map.

Establishment

The Committee is established under the auspices of the Local Government Act 2002 in accordance with the Canterbury Water Management Strategy 2009.

The Committee is a joint Committee of Environment Canterbury (the Regional Council) and Hurunui District Council (the Territorial Authority).

Purpose and Functions

The purpose and function of the Committee is to:

- Facilitate community involvement in the development, implementation, review and updating of a Zone Implementation Programme that gives effect to the Canterbury Water Management Strategy in the Hurunui Waiau area; and
- Monitor progress of the implementation of the Zone Implementation Programme.

Objectives

- 1) Develop a Zone Implementation Programme that seeks to advance the CWMS vision, principles, and targets in the Hurunui Waiau Zone.
- 2) Oversee the delivery of the Zone Implementation Programme.
- 3) Support other Zone Implementation Programmes and the Regional Implementation Programme to the extent they have common areas of interest or interface.
- 4) Ensure that the community of the Zone are informed, have opportunity for input, and are involved in the development and delivery of the Hurunui Waiau Implementation Programme.
- 5) Consult with other Zone Water Management Committees throughout the development and implementation of the Hurunui Waiau Implementation Programme on matters impacting on other zone areas.
- 6) Engage with relevant stakeholders throughout the development of the Hurunui Waiau Implementation Programme.
- 7) Recommend the Hurunui Waiau Implementation Programme to their respective Councils.
- 8) Review the Implementation Programme on a three yearly cycle and recommend any changes to the respective Councils.
- 9) Monitor the performance of Environment Canterbury, Hurunui District Council, and other agencies in relation to the implementation of the Hurunui Waiau Implementation Programme.
- 10) Provide Environment Canterbury and Hurunui District Council with updates on progress against the Zone Implementation Programme.

Limitation of Powers

The Committee does not have the authority to commit any Council to any path or expenditure and its recommendations do not compromise the Councils' freedom to deliberate and make decisions.

The Committee does not have the authority to submit on proposed Resource Management or Local Government Plans.

The Committee does not have the authority to submit on resource consent matters.

Committee Membership

The Zone Committee will comprise:

- 1) One elected member or Commissioner appointed by Environment Canterbury;
- 2) One elected member appointed by each Territorial Authority operating within the Zone Boundary;
- 3) One member from each of Tūāhuriri and Kaikōura Rūnanga;
- 4) Between 4-7 members appointed from the community and who come from a range of backgrounds and interests within the community;
- 5) Environment Canterbury and Hurunui District Council will appoint their own representatives on the Committee. Tūāhuriri and Kaikōura Rūnanga will nominate their representatives and the appointments will be confirmed by Environment Canterbury and Hurunui District Council.

Selection of Community Members

To be eligible for appointment to a Zone Committee the candidate must either live in or have a significant relationship with the zone. Recommendations on Community Members for the Hurunui Waiau Zone Committee will be made to Environment Canterbury and Hurunui District Council by a working group of representatives from Environment Canterbury, Hurunui District Council, Tūāhuriri and Kaikōura Rūnanga. The recommendations will take into account the balance of interests required for Hurunui Waiau, geographic spread of members and the ability of the applicants to work in a collaborative, consensus-seeking manner. Environment Canterbury and Hurunui District Council will receive the recommendations and make the appointments.

Quorum

The quorum at a meeting consists of:

- (i) Half of the members if the number of members (including vacancies) is even; or
- (ii) A majority of members if the number of members (including vacancies) is odd.

Chair and Deputy Chair

Each year, the Committee shall appoint the Chair and Deputy Chair from the membership by simple majority. There is no limit on how long a person can be in either of these positions.

Term of Appointment

Members of Committees are appointed for a term of three years. To coincide with Local Government Election processes terms shall commence from January each year, with each Committee requiring confirmation of membership by the incoming Council. The term for community members will be staggered so that one third of the community members is appointed (or reappointed) each year. There is no limit on the number of consecutive terms.

Financial Delegations

None

Operating Philosophy

The Committees will at all times operate in accordance with the requirements of the Local Government Official Information and Meetings Act 1987, and will observe the following principles:

- 1) Give effect to the Fundamental Principles, Targets and goals of the CWMS;
- 2) Be culturally sensitive observing tikanga Maori;
- 3) Apply a Ki uta ki tai (from the mountains to the sea) approach;
- 4) Work with the CWMS Regional Committee to support the implementation of the CWMS across the region as a whole;
- 5) Give consideration to and balance the interests of all water interests in the region in debate and decision-making;
- 6) 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;
- 7) Contribute their knowledge and perspective but not promote the views or positions of any particular interest or stakeholder group;
- 8) Promote a philosophy of integrated water management to achieve the multiple objectives of the range of interests in water;
- 9) Seek consensus in decision-making where at all possible. In the event that neither unanimous agreement is able to be reached nor a significant majority view formed, in the first instance seek assistance from an external facilitator to further Committee discussions and deliberations. Where the Committee encounters fundamental disagreements, despite having sought assistance and exhausted all avenues to resolve matters, recommend that the respective Councils disband them and appoint a new Committee.

Meeting and Remuneration Guidelines

- 1) The Committee will meet at least eight times per annum and with workshops and additional meetings as required. At times, the workload will be substantially higher. Proxies or alternates are not permitted.
- 2) Any Committee may co-opt such other expert or advisory members as it deems necessary to ensure it is able to achieve its purpose. Any such co-option will be on a non-voting basis.
- 3) Remuneration for members will be paid in the form of an honorarium currently set at the following levels:
 - a. Appointed members - \$4,000 pa
 - b. Deputy Chair - \$5,000 pa
 - c. Chair - \$6,000 pa.

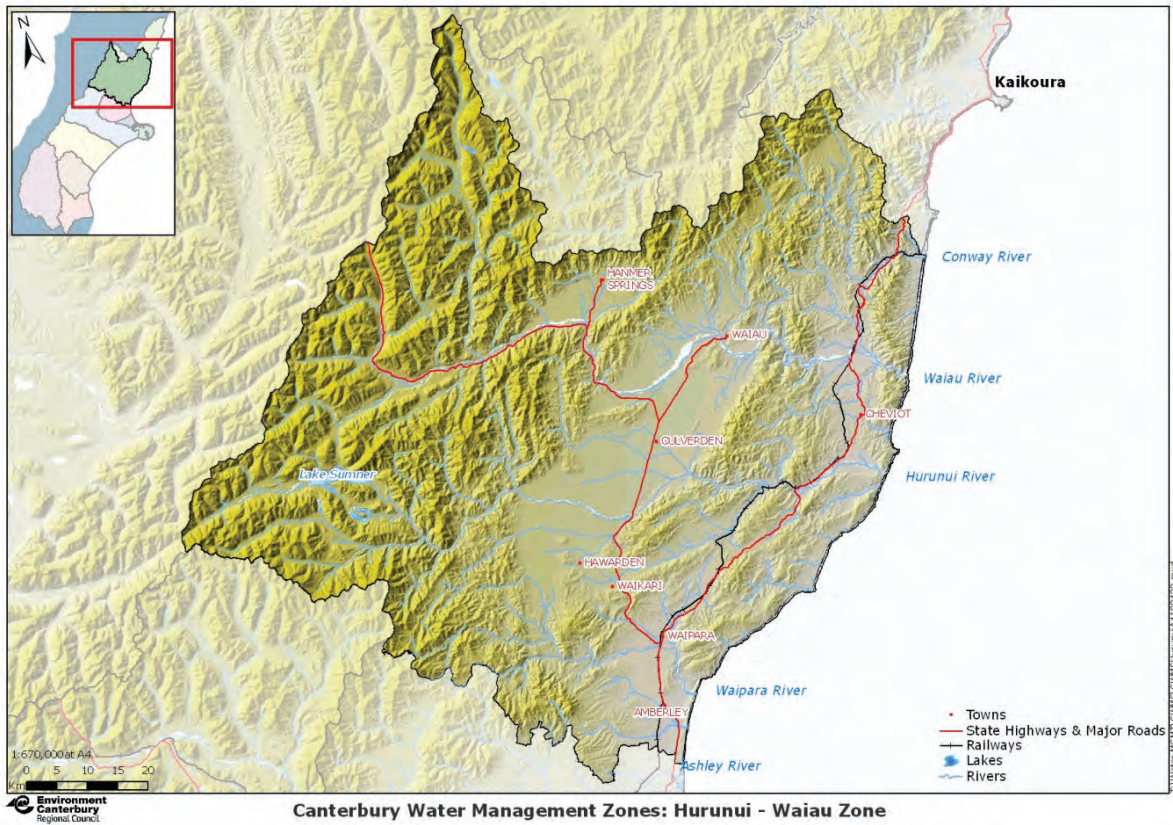
Staff or elected members of Territorial Authorities or the Environment Canterbury shall not be eligible for remuneration.

Mileage will be reimbursed.

Committee Support




The Committee shall be supported staff from the Territorial Councils and Environment Canterbury, primarily through the Committee Secretary and the Zone Facilitator.



Map showing Hurunui Waiau Water Management












Review of Hurunui Waiau ZIP recommendations (for HWZC workshop 17 October)







Updated following Zone Committee workshop 19 September 2016





	Topic	ZIP Recommendation	Status	Comment/Recommendation
3.1.1	Immediate Steps Biodiversity Fund	<p>Target Immediate Steps Biodiversity Funding for 2011/12 through 2014/15 to some or all of the following priority areas:</p> <ol style="list-style-type: none"> 1. North Pegasus Bay coastal wetlands 2. Lower Waitohi wetlands 3. Conway Flat to Waiau River mouth; 4. Braided River Ecosystems 5. Sumner Lakes complex. <p>Seek Immediate Steps funding proposals from biodiversity "experts" and interested individuals/communities.</p>		<p>\$435,323 allocated to July 2016 of \$500,000 Immediate Steps funding. 22 projects.</p> <p>Environment Canterbury will continue Immediate Steps funding for further five years.</p> <p>RECOMMENDATION: Zone Committee reviews priority areas and considers a strategic/multi-year approach for some areas. Move from small scale to larger "projects" that can be leveraged to access funding from corporate bodies - projects that are visible to the greater public.</p>
3.1.2	River flows to protect aquatic ecosystems and braided-river processes	See sections 6 - 9		
3.1.3 (a)	Wetland protection & land use development	Work with landowners (and potential developers) to identify significant wetlands throughout the Zone, obtain independent ecological assessment to identify and protect, maintain and enhance these wetlands. Where wetlands are impacted by land-use development ensure appropriate offsets are developed to ensure no 'net loss' of wetlands.		<p>No systematic identification of significant wetlands.</p> <p>HWP has identified wetlands in their command area.</p> <p>RECOMMENDATION: Work with HWP and other developments with goal of protecting wetlands as part of development.</p> <p>Committee champion the importance of protecting wetlands. Accept that zone-wide identification and independent assessment of significant wetlands is in "too hard" basket. Strategy is to work with those who are willing.</p>
3.1.3 (b)	Wetland protection target	Set a target for wetland protection in the Zone (taking into account the CWMS target/goals) and identify how this target would be achieved (including through 3.1.3(a)).		See above.



	Topic	ZIP Recommendation	Status	Comment/Recommendation
3.1.4	Ecosystem protection & irrigation development	Work with landowners to identify and prioritise for protection significant native ecosystems throughout the Zone and obtain independent ecological assessment to identify the most significant native ecosystems. Developers will ensure, as part of irrigation development, that the most significant ecosystems adjacent to the proposed development (including dam, reservoir, canals and irrigation command area) are protected and have a restoration plan as a first order priority or where affected, ensure appropriate offsets are developed.		<p>No systematic identification of significant native ecosystems.</p> <p>HWP has identified native ecosystems in their command area and wants to protect these.</p> <p>RECOMMENDATION: Work with HWP and other developments with goal of protecting native ecosystems as part of development.</p> <p>Committee champion the importance of protecting native ecosystems.</p> <p>Accept that zone-wide identification and independent assessment of significant native ecosystems is in “too hard” basket.</p> <p>Strategy is to work with those who are willing. May be an opportunity to engage with “Collectives”.</p>
3.1.5	Protection of high-value conservation lands in upper catchments	<p>See Section 12.</p> <p>The Zone Committee does not support major water storage reservoirs in the any of the following locations:</p> <ul style="list-style-type: none"> • mainstems of Waiau River including Boyle and Hope Rivers; • all tributaries of Waiau, Boyle and Hope Rivers, above Hope-Waiau Confluence • mainstem of Hurunui River below the South Branch confluence. <p>The Zone Committee supports deferring South Branch and Lake Sumner water storages until Waitohi options are demonstrated not to be viable or for two years, whichever is shorter.</p> <p>The Zone Committee will work with developers and other parties to progress other more preferable water reservoir options.</p>		<p>Achieved in HWRRP.</p> <p>HWP has consent for off-mainstem storage in Waitohi. Other irrigators looking at other off-mainstem storage.</p> <p>RECOMMENDATION: Continue to work with developers.</p> <p>Zone Committee’s position is that major storage should continue to be prohibited at Lake Sumner and South Branch of Hurunui river.</p> <p>Consider minor adjustments to the Zone A (prohibited area) boundary to accommodate large Glenrae storage option.</p>




	Topic	ZIP Recommendation	Status	Comment/Recommendation
3.1.6 (a)	Hapua improvement	Identify what is required, beyond river flow regime, for thriving culturally and recreationally attractive river mouths and hapua on the four rivers in the zone, including cost of activities and how these might be implemented.		<p>Actions agreed and being progressed for Waipara hapua.</p> <p>No list of activities available for other hapua. Richard Measures (NIWA) currently doing Ph.D. study on Hurunui hapua that may provide information.</p> <p>RECOMMENDATION: Zone Team get parties together, including land owners, rūnanga and District Council, for each hapua to identify issues and what could be done to fix the issues – as was done for Waipara hapua.</p> <p>As part of HWRRP review seek to understand then recommend further actions to protect hapua.</p>
3.1.6 (b)	Hapua as 'ultimate' health measure	Identify and prioritise the use of hapua to monitor the “ultimate” health of the contributing catchment, including advantages/limitations, current monitoring and cost of additional monitoring and how these might be implemented. This monitoring should start as soon as possible.		<p>Some monitoring/investigations will be done for HWRRP review.</p> <p>RECOMMENDATION: Review investigations/monitoring done as part of informing HWRRP review and then make recommendation about on-going monitoring programme.</p> <p>Zone Committee champion the importance of hapua as an indicator of the ultimate “health” of the zone’s rivers.</p>
3.1.7 (a)	Baseline assessment of aquatic ecosystem health	Provide baseline assessment (from currently available information including from cultural assessments) of aquatic ecosystem health of rivers/streams and lakes in the Zone and identify significant information gaps and how these will be addressed.		<p>Routine state of environment ecosystem health and water quality monitoring.</p> <p>RECOMMENDATION: Zone committee to be briefed on health and water quality of rivers and lakes, catchment by catchment to understand current state and trends and any issues of concern.</p>
3.1.7 (b)(i)	Baseline assessment of aquatic ecosystem health	Provide identification (from current information) of intermontane basin & plains aquatic and dryland (native) ecosystems, lowland stream ecosystems, high-country spring-fed foothill rivers and lakes ecosystems, and wetlands in the Zone (including relative significance of each site).		<p>No systematic identification of significant native ecosystems.</p> <p>RECOMMENDATION: Accept that zone-wide identification and independent assessment of native ecosystems is in “too hard” category.</p>
3.1.7 (b)(ii)	Baseline assessment of aquatic ecosystem health	Define ecosystems targets for valued ecosystems and the threats to achieving these targets.		<p>No targets set.</p> <p>RECOMMENDATION: Accept that this is not going to happen.</p>






	Topic	ZIP Recommendation	Status	Comment/Recommendation
3.1.8 (a)	Freshwater fisheries: eel	Zone Committee be informed of North Canterbury Eel Management Plan and extract key policies for inclusion in the 2012 ZIP. Ministry of Fisheries provide Zone Committee with status of longfin eel in Zone.		Regional Committee has pursued increased protection of longfin eel. Longfin removed from commercial catch quota. RECOMMENDATION: Keep informed of Regional Committee's work to protect longfin eel particularly habitat requirements (which are seen as being critical to sustaining longfin in the zone).
3.1.8 (b)	Freshwater fisheries: inanga	The Zone Committee encourage University of Canterbury (with links to Department of Conservation) to identify current (and historic) inanga spawning sites in the Zone and with DOC, Rūnanga and interested parties establish spawning area targets and management actions.		Plan Change 4 to LWRP provides map of potential inanga spawning habitat and provisions to protect these habitats. RECOMMENDATION: Ensure inanga habitat considered when developing work programmes for hapua.
3.1.8 (c)	Other native fisheries	Zone Committee be informed about and develop recommendations for other native fisheries.		.No specific recommendations for zone. Regional committee project on fish barriers RECOMMENDATION: Committee is comfortable that HWRRP and Waipara Plan flow provisions provide for requirements of other native fish.
3.1.9 (a)	Braided riverbed weeds	Identify the reaches of all (major) rivers in the Zone where the active riverbed is being invaded by standing trees (e.g. willow), woody and herbaceous weeds and to develop a control strategy.		Not done. The challenge is how to empower landowners, including government agencies, to undertake extensive weed control and to not put onerous regulation or other hurdles in the way of this happening yet still providing some sort of regulatory backstop to ensure action by all who need to be involved. RECOMMENDATION: Ensure revised Regional Pest Management Strategy does not adversely impact on control of braided river weeds (such as gorse and broom). Consider supporting collective approaches to weed control (e.g. "rating" groups). Resolve land ownership for particular river-bed parcels and enforce weed control







	Topic	ZIP Recommendation	Status	Comment/Recommendation
3.1.9 (b)	Braided riverbed weeds	Develop policies and rules that facilitate river-bed weed control without compromising flood protection		Not done. RECOMMENDATION: See above.
3.1.10	Increasing funding for biodiversity	The Zone Committee supports a feasibility study and investigation of the development of an ongoing biodiversity fund (in addition to any funding from the CWMS) by way of public and landowner contribution as part of an integrated more water option.		HWP has a mechanism in place to fund biodiversity enhancement once irrigation development has happened. Ngai Tahu Farming also has plans for major riparian restoration. RECOMMENDATION: Committee to continue to support and encourage HWP and NTFE to fund biodiversity. Committee to encourage AIC and other irrigators to fund biodiversity enhancement.
4.1.1	Ensuring drinking water supply	The Hurunui Waiau Regional Plan must include provision of water availability to meet future demand for community water supplies in volume, quality and location to align with existing schemes as identified by Hurunui District Council.		Provisions in HWRRP. RECOMMENDATION: No further action required.
4.1.2	Cost of providing drinking water source	A whole-of-life cost assessment will be carried out of the provision of secure community drinking water (and stockwater) from a Waitohi water storage reservoir.		Not done as Waitohi water storage not started. RECOMMENDATION: Zone Committee encourages HDC to explore options for changing the supply of stock and community drinking water as new (irrigation) developments are proposed and progressed.
4.1.3	Drinking water provided from major water storage	Provision of secure community drinking water (and stockwater) of a quality capable of being treated to New Zealand Drinking Water Standard should be part of an integrated “more water” project and developers will partner with Hurunui District Council to deliver this outcome in their proposals and plans		No “more water” developments have progressed beyond early design so too early to say if they could provide secure water supply. RECOMMENDATION: see above (4.1.2)
4.1.4	Partial funding for community supplies from regional and national government	In a first world country all citizens should be prepared to contribute to making clean drinking water available to communities that are not able to financially afford to meet the costs on their own. Support, as appropriate, Hurunui District Council initiatives to improve community water supplies to meet New Zealand Drinking Water Standard.		RECOMMENDATION: No further action required..





	Topic	ZIP Recommendation	Status	Comment/Recommendation
5.1	Mixing of waters	The Hurunui Waiau Regional Plan will require all developers who seek to mix waters to engage with Tangata Whenua so that appropriate solutions can be identified on a case-by-case basis.		Mixing of water provisions in HWRRP
5.2	Te Runanga o Ngai Tahu Freshwater Policy & other relevant iwi Environmental Management Plans	The Hurunui Waiau Regional Plan will take into account the Ngāi Tahu Freshwater Policy and other relevant Iwi Environmental Management Plans including Te Pōhā o Tohu Raumati – Te Rūnanga o Kaikōura Environmental Management Plan (2005); Te Whakatau Kaupapa – Ngāi Tahu Resource Management Strategy for the Canterbury Region (1990), and the North Canterbury South Marlborough Eel Management Plan (1999).		Considered in developing HWRRP and by Hearing Commissioners. RECOMMENDATION: No further action required
5.3	Cultural Monitoring	The Hurunui Waiau Regional Plan will recognize and provide for cultural monitoring on all rivers in the zone.		HWRRP does not include a requirement to provide cultural monitoring of all rivers. State of Takiwa monitoring of Hurunui River done in 2011 and needs to be written up. RECOMMENDATION: Cultural monitoring (or COMAR) to be done to inform HWRRP review. This may include cultural monitoring at hapua.
5.4	Wāhi Tapu & Wāhi Taonga	The Hurunui Waiau Regional Plan will recognize and provide for all wāhi tapu and wāhi taonga within the Hurunui and Waiau catchments (e.g. spawning grounds and key habitats for native fish species are protected and maintained or enhanced to ensure the ongoing health and vitality of those species).		No HWRRP provisions specifically relate to wāhi tapu and wāhi taonga although provisions seek to protect mauri and native fish and take into consideration Ngai Tahu values. RECOMMENDATION: As part of HWRRP review consider whether specific provisions are needed relating to wāhi tapu and wāhi taonga. Ensure strong mana whenua participation in Zone Committee and HWRRP review.






	Topic	ZIP Recommendation	Status	Comment/Recommendation
6.1.1	Environmental flows (minimum flows and flow variability)	<p>The Hurunui Waiau Regional Plan must include minimum flows and flow variability for Waiau River that provide for:</p> <ul style="list-style-type: none"> • in-stream river ecology (including native fish and invertebrates); • maintain mauri of river; • maintenance of river mouth and hapua; • mahinga kai; • protection of river-nesting birds during breeding season; • the needs for salmon and trout fisheries (including fishability); • maintenance of in-stream recreation opportunities (particularly whitewater kayaking and jet-boating (including commercial jetboating)); • maintain existing out-of-stream uses and allow for future growth in out-of-stream uses: <ul style="list-style-type: none"> o primarily, irrigation supply o secondarily, hydro-power generation. 		<p>HWRRP revised minimum flows and allocation. As there has been no review of existing consents these have not been implemented except for new consents.</p> <p>RECOMMENDATION: In the revision of HWRRP only change minimum flows and allocation regime if there are very compelling reasons to do so.</p> <p>reviewed down to this point at 19 September 2016 workshop</p>
6.1.2	Tributary minimum flows	<p>The Hurunui Waiau Regional Plan must include minimum flows for key tributaries of Waiau River to protect in-stream values of these tributaries while allowing for out-of-stream use.</p>		<p>HWRRP includes minimum flows for key tributaries though consents have not been reviewed to give effect to these on current consents.</p> <p>RECOMMENDATION: In the revision of HWRRP only change minimum flows if there are very compelling reasons to do so, such as there being no minimum flow set on a tributary where there is current water takes.</p> <p>As part of HWRRP review consider impact of piping of irrigation schemes on flows and how ecosystem health objectives can be achieved in tributaries (and not just by setting minimum flows).</p>





	Topic	ZIP Recommendation	Status	Comment/Recommendation
7.1.1	Environmental flows (minimum flows and flow variability)	<p>The Hurunui Waiau Regional Plan must include minimum flows and flow variability for Hurunui River that provide for:</p> <ul style="list-style-type: none"> • in-stream river ecology (including native fish and invertebrates); • maintain mauri of the river; • maintenance of river mouth and hapua; • mahinga kai; • protection of river-nesting birds during breeding season; • the needs for salmon and trout fisheries (including fishability); • maintenance of in-stream recreation opportunities (particularly whitewater kayaking and jet-boating (including commercial jetboating)) • out-of-stream uses: <ul style="list-style-type: none"> o primarily, irrigation supply o secondarily, hydro-power generation. 		<p>HWRRP revised minimum flows and allocation. As there has been no review of existing consents these have not been implemented except for new consents.</p> <p>RECOMMENDATION: In the revision of HWRRP only change minimum flows and allocation regime if there are very compelling reasons to do so.</p>
7.1.2	Tributary minimum flows	<p>The Hurunui Waiau Regional Plan must include minimum flows for key tributaries of Hurunui River to protect in-stream values of these tributaries while allowing for out-of-stream use.</p>		<p>HWRRP includes minimum flows for key tributaries though consents have not been reviewed to give effect to these on current consents.</p> <p>RECOMMENDATION: In the revision of HWRRP only change minimum flows if there are very compelling reasons to do so, such as there being no minimum flow set on a tributary where there are current water takes.</p> <p>As part of HWRRP review consider impact of piping of irrigation schemes on flows and how ecosystem health objectives can be achieved in tributaries (and not just by setting minimum flows).</p>
8.1.1	Increasing Waipara River Flows	<p>The Committee supports an increase in Waipara River flows. The Committee, supported by Environment Canterbury and Hurunui District Council, will work with water users, Ngāi Tūāhuriri Rūnanga and interest groups to establish and then support a Waipara River Care Group that includes all interested parties from source to sea that will:</p> <ul style="list-style-type: none"> • identify options for increasing river flows (including willow control and flow augmentation from outside of catchment); • identify other actions required to improve Waipara River. 		<p>Waipara Working Group identified that willow control would improve low flows but not result in flushing flows to remove periphyton.</p> <p>Augmentation depends on HWP's irrigation plans. HWP's current plans will not be able to provide flushing flows for Waipara River.</p> <p>RECOMMENDATION: Consider ways of improving Waipara River as part of HWRRP review/sub-regional process.</p>





	Topic	ZIP Recommendation	Status	Comment/Recommendation
9.1.1	Variation to Conway River/Tutae Putaputa Flow and Allocation Plan	The variation to the Conway River/ Tutae Putaputa Plan be further developed through discussion with submitters to ensure that concerns on the following are addressed: <ul style="list-style-type: none"> • value of the hapua; • river-mouth opening; • value as a bird habitat; • reliability of supply. 		Decisions of Hearing on Conway flows was included in LWRP and now operative.
10.1.1	Priority to drinking water & stockwater schemes	The Hurunui Waiau Regional Plan must give priority to takes for community drinking water and stock water schemes.		Provisions in HWRRP give priority to drinking water and stock water takes.
10.1.2	Environmental flows	The Hurunui Waiau Regional Plan must provide environmental flows for Hurunui and Waiau rivers and their tributaries (see sections 6 and 7).		See above
10.1.3	Takes for water storage	The Hurunui Waiau Regional Plan must include provision for takes to major storage.		C Block included in HWRRP for Waiau and Hurunui Rivers (but not for tributaries) providing high flows to be taken to storage. RECOMMENDATION: Consider whether C Block takes should be allowed on some tributaries (such as Leader River) as part of HWRRP review/sub-regional process.
10.1.4	Irrigation vs hydro	The Hurunui Waiau Regional Plan should give priority to allocation for irrigation development (particularly for integrated irrigation and hydro-generation projects) rather than allocation just for hydro-generation.		This provision removed from notified HWRRP by Hearing Commissioners after considering submission from Meridian arguing that this provision was counter to the requirements of the NPS for Renewable Energy. All proposed developments to date are primarily irrigation developments with complementary generation. RECOMMENDATION: Committee continue to work with developers to encourage them to consider hydro-generation as a complement to irrigation. As part of the HWRRP review, the Committee consider whether it wishes to recommend that Environment Canterbury planners include a provision giving priority to allocation for irrigation rather than hydro-generation, and whether such a provision is likely to survive the RMA Hearing process.





	Topic	ZIP Recommendation	Status	Comment/Recommendation
10.1.5	Inter-catchment transfers	The Hurunui Waiau Regional Plan must provide for transfer of water from Waiau River to Hurunui Basin and from Hurunui River to Waipara catchment. The River Plan should ensure local Runanga determine how the waters are mixed.		Included in HWRRP
10.1.6	Parnassus – Cheviot irrigation	The Hurunui Waiau Regional Plan will ensure water will be available to meet reasonable demand for new irrigation in Parnassus – Spotswood – Cheviot area.		Policy and rules provide for this
10.1.7	Irrigable land target	The Hurunui Waiau Regional Plan should ensure water would be available (including through storage) to irrigate the approximately 100,000ha (net) irrigable area in the Zone.		C Block allocation on Waiau and Hurunui Rivers provides sufficient water for all irrigable land in zone.
10.1.8 (a)	Water use efficiency	The Hurunui Waiau Regional Plan will ensure new irrigation includes efficient distribution and irrigation systems and that water-use efficiency continues to improve in current irrigation.		Policies in HWRRP relating to water use efficiency.
10.1.8 (b)	Water use efficiency	The Zone Committee will work with Amuri Irrigation Company and Irrigation New Zealand to identify and then support activities to improve water-use efficiency amongst current irrigators in the Zone.		AIC's Irrigation Management System includes focus on water-use efficiency. Piping will improve water-use efficiency.
11.1.1	Water Quality Outcomes for Zone	<p>Water quality outcomes for mainstem of Hurunui and Waiau Rivers:</p> <ul style="list-style-type: none"> • Achieve in most years periphyton limits as identified in NRRP (that is, four years in every five); • Safe for contact recreation; • Maintain or enhance the mauri of the river; • Toxin producing cyanobacteria shall not render the river unsuitable for recreation or animal drinking water; • Nutrients (particularly nitrate and phosphorous) will decrease over time at sufficient rate and to a level such that additional irrigation development can occur without compromising water quality outcomes for the river (i.e. reduce current loads to create "headroom" for new irrigation development). <p>Water quality outcomes for tributaries of major rivers:</p> <ul style="list-style-type: none"> • As above for mainstems, and; • Achieve ecosystem health outcomes agreed for the particular tributary through a collaborative community-based process. 		<p>Water quality outcomes are reflected in HWRRP.</p> <p>N and P have not decreased over time – no headroom created.</p> <p>Toxic algae (Phormidium) have been present on occasions in Hurunui River.</p> <p>RECOMMENDATION: Review the water quality outcomes as part of review of HWRRP. Revise if required.</p>


	Topic	ZIP Recommendation	Status	Comment/Recommendation
11.1.2	Nutrient load limits for Hurunui River	<p>The goal for water quality in the Hurunui River at the SH1 bridge will be at or about the same or better standard as present, in terms of nitrate and phosphorus loads.</p> <p>The Hurunui and Waiau River Plan will include targets for nitrate (N) and phosphorous (P) limits for the Hurunui River (mainstem) at Mandamus, State Highway 1 and the river mouth.</p> <p>These limits must be implemented and applied in a way that results in the wide uptake of best practices without diminishing the viability of current land users.</p> <p>This will require flexibility in the timing of their implementation where consequences arise that unreasonably impact on the wellbeing of the Hurunui community. This is not a get out of jail card for farmers but recognition of the need to provide reasonable time for change to occur in a manner that does not destroy existing economic value.</p> <p>The load limits will be reviewed in five years.</p>		<p>Limits included in HWRRP with supporting rules to manage to the limits.</p> <p>The “10%-rule” has unintended consequences for dry land farmers. This has been addressed through the Environment Canterbury Advice Note.</p> <p>RECOMMENDATION: Review the water quality limit framework for Hurunui River and the approach to managing to these at the property-scale as part of review of HWRRP. Revise as required.</p>
11.1.3	Implementation Plan	<p>Urgently develop a plan for implementing improved nutrient management in Hurunui Basin. This plan must identify roles, responsibilities and timetable, including incentives for uptake and resourcing to facilitate and support the tributary- and farmer-based approach. The direct involvement and leadership by community based land user groups will be critical to this approach being successful.</p> <p>Develop plan(s) for implementing improved nutrient management in other parts of the Zone.</p>		<p>Improved nutrient management is being led by AIC and North Canterbury Landcare Group. A “GMP game plan” has been developed, with priorities, as part of the 5-year Delivery Outcomes and Milestones.</p> <p>RECOMMENDATION: Continue to support the “collectives”.</p>
11.1.4	Tributary- and community-based approach	<p>Implementation of improved nutrient management to achieve the load limits should take a tributary- and land/water user-based approach.</p> <p>The Hurunui and Waiau River Plan should support a tributary- and land/water user-based approach to nutrient management.</p>		<p>HWRRP strongly encourages a “collective” approach.</p> <p>RECOMMENDATION: Continue to support the “collectives”.</p>
11.1.5	Zone Committee leadership	<p>The Zone Committee will take a lead role in communicating the need for and supporting improved nutrient management in the Zone based on a tributary and farmer-based approach. The nitrate (N) and phosphorous (P) guidelines for the tributaries of Hurunui River (Pahau, St Leonards, Dry and Waitohi) should be consistent with the water quality standards set in the Hurunui Waiau plan for the Hurunui river at State Highway 1.</p>		<p>Zone Committee has taken leadership in supporting the need for good nutrient management.</p> <p>RECOMMENDATION: Continue to take a leadership role in supporting good nutrient management practices.</p>

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11.1.6	Farm-scale guidelines	Implementation of improved nutrient management will include guidelines to land/water users on “good management” N and P loads for their land.		Industry-agreed GMPs produced and being implemented through audited FEPs. RECOMMENDATION: As part of review of HWRRP, review property-scale approach to nutrient management to achieve water quality outcomes.
11.1.7	Regulatory backstop	The Hurunui and Waiau River Plan should require land/water users in Hurunui Basin to adopt good nutrient management practices within a reasonable time if voluntary farmer-based approach has not achieved required uptake of good nutrient management practice. The Committee will engage with land users and others to determine what is a “reasonable” time.		HWRRP encourages “collective” approach with land use farming activity consent required in 2017 as a backstop where not part of collective. RECOMMENDATION: As part of review of HWRRP, review property-scale approach to nutrient management to achieve water quality outcomes.
11.1.8	New irrigation development	The Hurunui and Waiau River Plan will include a requirement for new irrigation development to adopt good nutrient management practice and achieve their own load limits for Hurunui River and other catchment load limits as these are set.		AIC, HWP and NTP have land use consents that include nutrient discharge allowances and committed to GMP. RECOMMENDATION: As part of review of HWRRP, review water quality limits and nutrient management requirements needed to achieve water quality outcomes.
11.1.9	Waiau River & Hurunui below SH1	Set load limits based on NRRP targets, for N and P for Waiau River and for Domett area and then for other areas in the Zone including Conway and Waipara Rivers.		Water quality limits still to be set for other rivers. Will be part of revision of HWRRP/sub-regional process.
11.1.10	Monitoring	Prepare and then implement a monitoring programme to provide the knowledge required to underpin improved nutrient management that achieves load limits for Hurunui and Waiau Rivers and main tributaries. This must include monitoring of water quality in hapua.		Monitoring programme in place for rivers; not for water quality in hapua. See 3.1.6 (b)

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12.1.1	Integrated approach	<p>The Zone Committee will work with developers to bring forward an integrated “more water” proposal or proposals for the Zone that:</p> <ul style="list-style-type: none"> • uses water from Waiau and Hurunui Rivers in an integrated manner; • utilizes off-mainstem storage reservoir(s); • provides more water for Waipara River and environmental flows for Waitohi River; • includes hydro-power generation as part of an integrated approach with irrigation development; • protects and develops wetlands and significant native ecosystems within the irrigation command area; • will be capable of irrigating (with existing irrigation) most of the approximately 100,000ha (net) of irrigable land in the Zone; • will adopt good nutrient management practices to meet their share of nutrient load limits for Hurunui River (and other areas as limits developed for all of the Zone); • meets significant in-stream, cultural, environmental and recreational needs • uses highly efficient distribution and irrigation systems; • takes a community irrigation scheme approach; • provides recreation opportunities, where possible. 		<p>Committee has worked hard, with limited success to date, to get NTP, AIC and HWP to work together on an integrated water infrastructure approach. Signs are encouraging that the developers are now working collaboratively and could bring an integrated approach to the committee in the near future.</p> <p>RECOMMENDATION: Zone Committee continue to encourage and support a collaborative, integrated approach to water infrastructure.</p>
12.1.2	Economic viability	Zone Committee will work with developers and others to progress investigations, funding discussions and economic assessments of major water storage in Waitohi River.		HWP has consent for storage in Waitohi River.
12.1.3	Waitohi/Waiau option	The Committee supports an integrated option utilizing a major water storage in Waitohi River combined with or in conjunction with transfer of Waiau River water and storage of Waiau River water. The Committee regards this is an environmentally & recreationally attractive option but acknowledges that it is uncertain at this stage if Waitohi River storage is affordable.		HWP has consent for Waitohi storage but construction has not started.
12.1.4	Lake Sumner	The proposal to manage Lake Sumner as a water storage be deferred until a Waitohi storage option is shown not to be economically viable or for two years (from October 2011), whichever is sooner.		<p>HWRRP prohibits the use of Lake Sumner as a water storage.</p> <p>RECOMMENDATION: Zone Committee endorses the HWRRP provisions that prohibit the use of Lake Sumner as a water storage.</p>

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12.1.5	South Branch	The proposal to dam South Branch for a water storage be deferred until a Waitohi storage option is shown not to be economically viable or for two years (from October 2011), whichever is sooner.		HWRRP prohibits damming of South Branch Hurunui River. RECOMMENDATION: Zone Committee endorses the HWRRP provisions that prohibit damming of South Branch.
12.1.6	Excluded areas for major water storage reservoirs	<p>The Zone Committee does not support major water storage reservoirs in the any of the following locations:</p> <ul style="list-style-type: none"> • mainstems of Waiau River including Boyle and Hope Rivers; • all tributaries of Waiau, Boyle and Hope Rivers, above Hope-Waiau Confluence; • mainstem of Hurunui River below the South Branch confluence. <p>The Zone Committee will work with developers and other parties to progress other water reservoir options.</p>		<p>HWRRP prohibits damming and water storage in these areas.</p> <p>RECOMMENDATION: Zone Committee endorses the HWRRP provisions that prohibit water storage in these areas.</p> <p>As part of HWRRP review, consider:</p> <ul style="list-style-type: none"> • minor adjustment to the Zone A (prohibited) boundary to enable a large Glenrae option; • whether the consenting requirements for Zone B are reasonable given the values in this area or are unreasonable in imposing such a high consenting hurdle that developers will consider water storage in Zone B as being too “risky”. • a “what-if” scenario where a “reasonable” storage option in Zone B or C is found to not be technically feasible (e.g. because of seismic risk) and whether this would be sufficient reason for significantly adjusting the Zone A boundary.
12.1.7	On-farm and small-scale storage	The Zone Committee supports on-farm storage and small-scale storage as part of an integrated approach. The Hurunui Waiau Regional Plan should make the consent process for on-farm and small-scale storage less onerous than at present.		<p>HWRRP supports on-farm and small-scale storage, however, the HWRRP does not provide C Block allocations for tributaries that would allow high flows to be taken to storage.</p> <p>See 10.1.3</p>
12.1.8	Regional Plan give effect to Zone Committee position	<p>The Hurunui Waiau Regional Plan will give effect to the Zone Committee position as above on:</p> <ul style="list-style-type: none"> • The scope and requirements in an integrated approach (12.1.1); • The “preferred option” (12.1.3); • Lake Sumner (12.1.4); • South Branch (12.1.5); • Excluded areas (12.1.6) • On-farm storage (12.1.7). 		See above

	Topic	ZIP Recommendation	Status	Comment/Recommendation
13.1.1	Protect significant recreation locations	<p>The Hurunui and Waiau Regional Plan must safeguard:</p> <ul style="list-style-type: none"> • Significant salmon spawning sites; • Significant trout fishing river reaches; • The Hurunui River from Sisters Stream to Surveyors Stream as a nationally-significant whitewater kayaking river-reach. <p>Upper Waiau and Hope catchments as a highly valued whitewater kayaking resource.</p>		HWRRP includes schedule of significant salmon spawning sites, protects significant trout fishing reaches in upper Waiau and upper Hurunui Rivers, and protects the nationally-significant whitewater Maori Gully reach of Hurunui River.
13.1.2	River flows for recreation	<p>The Hurunui and Waiau Regional plan will ensure that the flow regime will:</p> <ul style="list-style-type: none"> • Ensure salmon passage; • Prevent mouth closures. <p>The Hurunui and Waiau Regional plan will recognise:</p> <ul style="list-style-type: none"> • Flows needed for salmon angling; • Flows needed for jet boating. <p>The Zone Committee will work with developers to increase flows in the Waipara and provide flows in the Waitohi in a manner that will benefit recreation (swimming/fishing).</p>		<p>HWRRP set minimum flows and allocation taking into account the requirements for salmon passage and for preventing mouth closures and recognising flows needed for angling and jet boating. These minimum flows are not yet operative as consents have not been reviewed. Waiau River mouth has closed at least once in last few years.</p> <p>HWP development required to increase flows in Waipara or Waitohi Rivers.</p>
13.1.3	Quality of bathing sites	<p>The Hurunui and Waiau Regional Plan will include gradings to be achieved in bathing sites for the Hurunui and Waiau Rivers.</p> <p>The Zone Committee with support from Environment Canterbury will work with developers and interested parties to deliver enhancement opportunities for the bathing sites identified in the Waipara and Waitohi Rivers.</p>		<p>HWRRP does not include gradings to be achieved at specified bathing sites.</p> <p>RECOMMENDATION: As part of HWRRP review consider water quality outcomes in relation to contact recreation.</p>
13.1.4	Toxic Algae	<p>The Hurunui and Waiau Regional Plan will ensure there are no toxic algae outbreaks in the Hurunui and Waiau Rivers.</p> <p>The Zone Committee with support from Environment Canterbury will work with developers and interested parties to ensure that toxic algae blooms do not occur in the Waipara and Waitohi Rivers</p>		<p>Toxic algae (Phormidium) outbreaks have occurred, for example at Balmoral camping ground (SH7 bridge) on Hurunui River.</p> <p>RECOMMENDATION: Zone Committee accept that a target of no toxic algae outbreaks is probably unrealistic and as part of review of HWRRP set target(s) and recommend actions to minimise toxic algae outbreaks.</p>

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13.1.5	Increased trout spawning	Require monitoring in the Waipara and Waitohi Rivers to ensure increased flow is increasing trout spawning habitat.		<p>Augmentation of flows has not occurred as HWP not yet underway.</p> <p>RECOMMENDATION: As part of HWRRP review/sub-regional identify a package of actions to improve Waipara and Waitohi Rivers. This will take into account HWP's plans.</p>