



Christchurch West Melton Water Management Zone Committee AGENDA

Notice of Meeting:

A meeting of the Christchurch West Melton Water Management Zone Committee will be held on:

Date:	Thursday 22 August 2019	
Time:	6.30pm	
Venue:	Environment Canterbury,	
	200 Tuam Street	

Membership

Chairperson Members Arapata Reuben - Tūāhuriri Rūnanga Kevin Brown - Community Representative Helen Caley - Community Representative Annabelle Hasselman - Community Representative Gareth Oddy - Community Representative Carly Sluys - Community Representative Abbie Wilson - Community Representative Councillor Pauline Cotter - Christchurch City Council Councillor Tom Lambie - Environment Canterbury Councillor Debra Hasson - Selwyn District Council Herewini Banks - Te Hapū o Ngāti Wheke/Rapaki Les Wanhalla - Te Taumutu Rūnanga

If you require access to the Environment Canterbury building after 6pm, please phone Tami Woods at the number below

15 August 2019

Zone Facilitator Tami Woods Tel: 027 529 7761 Environment Canterbury Principal Advisor Diane Shelander Senior Policy Analyst Tel: 941 8304 Christchurch City Council Committee Advisor Liz Ryley Tel: 941 8153 Christchurch City Council



Christchurch West Melton Water Management Zone Committee

Members' Register of Interests - at August 2019

Name/Organisation	Interests
Updated: 14.08.2019	
Helen Caley, Aurecon	 Works in environmental consulting, in planning and contaminated land, occasionally on consents for council stormwater projects
	 Aurecon contracted by Ravensdown for stormwater system upgrades at their Hornby site, to improve the quality of the discharge
Annabelle Hasselman	 Chair Ōpāwaho Heathcote River Network Shareholder Fulton Ross Team Architects





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The meeting will be opened with a Karakia/Timatanga and closed with a Karakia/Whakamutunga

1. Apologies

At the close of the agenda no apologies had been received.

2. Confirmation of Previous Minutes

That the minutes of the Christchurch West Melton Water Management Zone Committee meeting held on <u>Thursday, 25 July 2019</u> be confirmed (refer page 6).

3. Matters Arising from the Minutes

4. Deputations by Appointment

4.1 Drinkable Rivers.NZ Michael Mayell will speak on behalf of Drinkable Rivers.NZ

5. Identification of Urgent Items

6. Identification of General Public Contributions







Christchurch

City Council

Christchurch West Melton Water Management Zone Committee OPEN MINUTES

Tł	ursday 25 July 2019
6p	m
Er	vironment Canterbury,
20	0 Tuam Street

Present

Date: Time: Venue:

Chairperson Members Arapata Reuben - Tūāhuriri Rūnanga Kevin Brown - Community Representative Helen Caley - Community Representative Annabelle Hasselman - Community Representative Gareth Oddy - Community Representative Carly Sluys - Community Representative Abbie Wilson - Community Representative Councillor Pauline Cotter - Christchurch City Council Councillor Tom Lambie - Environment Canterbury Councillor Debra Hasson - Selwyn District Council Herewini Banks - Te Hapū o Ngāti Wheke/Rapaki Les Wanhalla - Te Taumutu Rūnanga

23 July 2019

Zone Facilitator Tami Woods Tel: 027 529 7761 Environment Canterbury Principal Advisor Diane Shelander Senior Policy Analyst Tel: 941 8304 Christchurch City Council Committee Advisor Liz Ryley Tel: 941 8153 Christchurch City Council

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Arapata Reuben opened the meeting with a Karakia/Timatanga.

The agenda was dealt with in the following order.

1. Apologies

Committee Resolved CWZC/2019/00014

That the apology for lateness from Helen Caley be accepted.

Arapata Reuben/Kevin Brown

2. Confirmation of Previous Minutes

Committee Resolved CWZC/2019/00015

That the minutes of the Christchurch West Melton Water Management Zone Committee meeting held on Thursday, 20 June 2019 be confirmed, subject to the following amendment:

• Page 8, Item 7 – add to seek support from the Otago University School of Medicine about the investigation of any correlation between nitrate levels in drinking water and the incidence of colorectal cancer.

Kevin Brown/Herewini Banks

Carried

Carried

3. Matters Arising from the Minutes

Les Wanhalla queried whether the Heathcote River Sediment Assessment work had included fish recovery.

4. Deputations by Appointment

A deputation was given by Nichola Wilkie about her concerns for the state of the Ōpāwaho/Heathcote Awa (River). Eels are prehistoric, a Tipuna, and the modern long-fin eels are a barometer and indicator of water quality. Issues of concern noted by Nichola included that there is asbestos in the Awa entering from contaminated properties, eels are being fed bread and cat food, the herbicide Roundup is being used near wai ways (watercress), fluke worms have been found in wai ways, as well as unswimmable waterways. Nichola suggested signage applicable to the awa could be carried out through artistry and images as a learning tool.

Arapata thanked Nichola for her presentation. He explained that education and highlighting actions for mitigation were key areas of focus for the Zone Committee.

5. Identification of Urgent Items

Nil.





6. Identification of General Public Contributions

Nil.

Helen Caley arrived at 6.25pm.

7. Correspondence - Minister of Health

Committee Comment

1. Tami advised that to date no response had been received to the Zone Committee's letters sent to the Ministry of Health and University of Otago Christchurch, on research on nitrate in drinking water and colorectal cancer risk.

Committee Resolved CWZC/2019/00016

That the Christchurch West Melton Water Management Zone Committee:

1. Note the correspondence from the Committee to the Deputy Director, Population Health and Prevention, Ministry of Health, and to Professor Gillian Abel, Head of Department of Population Health, University of Otago, on research on nitrate in drinking water and colorectal cancer risk.

Arapata Reuben/Kevin Brown

Carried

8. Facilitator's Update - 25 July 2019

Committee Comment

- 1. Tami spoke to her report.
- 2. Discussion was held about the Christchurch City Council Stormwater Consent and further detail was sought on steps and actions relating to Pūharakekenui/Styx River and sediment.
- 3. In relation to the remit from the City Council on nitrate in drinking water research, that was presented at the Local Government AGM on 7 July, the Committee sought further information about the journey of the remit following that meeting, and the process of advocacy.
- 4. Tami referred to the invitation that members had been sent from the Selwyn Waihora Zone Committee to attend its meeting on 6 August 2019 at West Melton, where discussion will be held about urban issues. Suggestions for highlighting at that meeting included; the danger of using zinc and copper on roofs, and how to distribute information about this matter to the relevant businesses, such as architects; as well as the inability for long fin eels to travel up piped waterways.

Committee Resolved CWZC/2019/00017

That the Christchurch West Melton Water Management Zone Committee:

1. Note the upcoming events and updates.

Arapata Reuben/Helen Caley

Carried





Arapata Reuben closed the meeting with a Karakia/Whakamutunga.

Meeting concluded at 6.40pm.

CONFIRMED THIS 22ND DAY OF AUGUST 2019

ARAPATA REUBEN CHAIRPERSON



7. Correspondence - Frank Hill

Reference: 19/931235

Presenter(s): Tami Woods, Zone Facilitator

1. Purpose of Report

1.1 The purpose of this report is for the Christchurch West Melton Water Management Zone Committee to note the correspondence received from Frank Hill.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Note the correspondence received from Frank Hill.

Attachments

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А <u>Л</u>	Attachment - Email from Frank Hill	12



From: Frank Hill <<u>frank.hill151066@gmail.com</u>>
Sent: Friday, 9 August 2019 7:30 a.m.
To: Arapata Reuben <<u>Arapata.Reuben@ngaitahu.iwi.nz</u>>
Subject: Addington Brook

Mr Reuben

You should be ashamed of yourself for putting your name to this item of what is essentially no better than propaganda:

https://www.ecan.govt.nz/get-involved/news-and-events/zone-news/christchurch-westmelton/improving-the-health-of-addington-brook/

The facts here are that you are not going to achieve the CWMZC goal set many years ago of making Addington Brook "Wadable" and have instead resorted to dreaming up meanless targets that will not make any difference in the water quality in that stream.

The public has come to expect this of your Zone Committee which has significantly failed to protect and improve water quality in this city.

This could have been avoided if you and your committee had taken time to listen to the public who attended Zone Committee meetings and showed they were generally interested in protecting our water. Instead you resorted to belittling and arrogant behavior in a vain attempt to cover up this committees many failures.

In the upcoming elections the public in this city will be demanding significant change in water management due to the incompetence of the people who were tasked with making sure the water in this city remained protected.

Frank Hill ST Albans

This email has been scanned by the Symantec Email Security.cloud service. For more information please visit <u>http://www.symanteccloud.com</u>



8. Community Waterways Partnership Charter

Reference: 19/931775

Presenter(s): Clive Appleton, CCC and Evan Smith, Avon-Otākaro Network

1. Purpose of Report

1.1 The purpose of the report is to seek Christchurch West Melton Water Management Zone Committee support for the Community Waterways Partnership Charter (Attachment 1).

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Decides whether to be a signatory partner to the Community Waterways Partnership Charter (Attachment 1).

3. Report

- 3.1 The idea of a partnership came out of a Zone Committee workshop in October 2018, where the community waterways partnership Charter was discussed with representatives for central and local government agencies, Ngai Tahu, Universities, and Community Groups. The outcome from that workshop was for a select number of representatives to draft, circulate and finalise the Charter. This has now been completed, with full support from all representatives at the workshop.
- 3.2 The Charter vision is for a collaborative partnership that supports the development of community-based initiatives to improve the ecological health, indigenous biodiversity and the amenity value of our urban waterways.
- 3.3 The purpose of the Charter is a shared statement of intent among community groups, iwi, researchers, businesses, and local, regional and central government. Seeking to work in partnership under a Charter to achieve outcomes that cannot be attained independently. It will do this by sharing expertise, networks and resources to promote and achieve solutions needed to improve the ecological health, indigenous biodiversity and amenity value of our urban waterways. To uphold Te Mana o Te Wai to actively protect and enhance the mauri of Christchurch urban waterways.
- 3.4 The Charter will directly support the Comprehensive Stormwater Network Discharge Consent Schedule 4 non-regulatory action (m), to establish a community water engagement programme involving Council, Canterbury Regional Council, Ngāi Tahu, Department of Conservation, Ministry for the Environment, universities, industry representatives and community groups with the objective of encouraging awareness and community actions to reduce stormwater contaminant discharges and improve waterways through source control and behaviour change.
- 3.5 This Charter fits with a number of the Committee's Zone Implementation Plan outcomes and priority actions and Mayoral Forum endorsement of the Canterbury Water Management Strategy through Fit for Future process.



4. Next Steps

- 4.1 Present the Charter to Christchurch City Council for their adoption to become a signatory partner.
- 4.2 Christchurch City Council staff develop a work program after the Charter has been signed which will focus on the delivery of the Comprehensive Stormwater Network Discharge Consent Schedule 4 (m) non-regulatory actions around communication, education and awareness using partner organisations.

Attachments

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A <u>.</u>	Community Waterways Partnership Charter	15





Our Vision

A collaborative partnership that supports the development of community-based initiatives to improve the ecological health, indigenous biodiversity and the amenity value of our urban waterways.

Purpose of this Charter

This charter is a shared statement of intent among community groups, iwi, researchers, businesses, and local, regional and central government. We are seeking to work in partnership under a Charter to achieve outcomes that cannot be attained independently. We will do this by sharing expertise, networks and resources to promote and achieve solutions needed to improve the ecological health, indigenous biodiversity and amenity value of our urban waterways. We uphold Te Mana o Te Wai to actively protect and enhance the mauri of Christchurch urban waterways.

This Charter is a statement of intent to work in partnership. It imposes no binding authority, decision or obligation on partners. Each signatory partner remains autonomous, and none is bound by the Charter in undertaking its everyday activities. The partnership is not a new formal structure or organisation.

Background

Christchurch has many passionate community groups who are already working to, and desire to further protect and improve their local waterways. Activities involving local communities and schools, with support through the partnership, will bring about behaviour changes, at individual, household and community level, to stop contaminants entering stormwater and waterways, and degrading water quality.

The Canterbury Water Management Strategy (CWMS) was established in 2009 and sets a framework for a collaborative approach to managing freshwater in Canterbury. The Christchurch West Melton Zone Committee and Banks Peninsula Zone Committee were established to help implement the CWMS in the Christchurch area. The role of these committees is to work collaboratively with the community to make recommendations to Environment Canterbury and Christchurch City Council.

The Christchurch West Melton Zone Committee has identified stormwater as a priority issue. Untreated, contaminated urban stormwater is a major environmental problem for waterways. Routine water quality monitoring of Christchurch's urban waterways reveals regular exceedances for contaminants above guideline levels. Water quality varies considerably across and within catchments. Monitoring identifies areas that need to be improved, and it will take time and everyone working together to make a positive difference.

Municipal stormwater treatment infrastructure alone will not address this water quality problem, it also needs communities to actively prevent pollution in the first place. To achieve community



action requires communities to be aware of the issues and the actions that they can undertake. Given that in 2017, only 55% of Christchurch residents surveyed were aware that stormwater from roads and properties mostly leads to waterways, there is a need for community awareness-raising and engagement initiatives.

Benefits of a Community Waterways Partnership

- Reducing barriers to positive action;
- Increasing coordination, sharing and communication;
- Increasing ability to source funding and resources;
- Increasing consistency of key messages to share with the wider community;
- Having a collective voice to be more influential;
- Having a coordinated response across catchments, sectors and stakeholders;
- Increasing support for community groups and organisations;
- Increasing efficiencies by facilitating the sharing of resources;
- Providing potential for collective advocacy;
- Advocating as one voice for appropriate action from local, regional and central government and businesses;
- Identifying gaps and initiating projects to address these;
- Increasing the ability to resource a behaviour change, education and awareness-raising programme;
- Improving capacity and capability;
- Sharing risk.

Outcomes

We will work together to:

- 1. Establish a strong collaborative partnership between community groups, iwi, businesses, researchers, and local, regional and central government;
- 2. Achieve consensus on messaging interwoven with appropriate cultural narrative, and market these with an innovative package of shared and consistent material suitable for a variety of audiences;
- 3. Develop a network of trained people to deliver the key messages professionally and consistently;
- 4. Design and implement stormwater, habitat and water conservation educational resources to supplement existing resources for use in schools and community events;
- 5. Advocate for incentives that enable community implementation of positive stormwater, habitat and water conservation actions and solutions.
- 6. Establish and facilitate a network of water care champions and kaitiaki;
- 7. Advocate for national legislative change to better address stormwater contaminants;
- 8. Develop research to evaluate outcomes and improvements in our knowledge of best practice community interventions;
- 9. Establish, facilitate or support projects to deliver these outcomes.
- 10. Advocate for resources to sustain the partnership and deliver these outcomes.





We will employ the following to deliver the outcomes we seek:

- An inclusive and collaborative working environment;
- Time for listening but being prepared to make the big decisions;
- To work with the process; but reaching beyond the ordinary with a culture of enablement;
- Clarity on scope and not trying to solve everything in one go;
- Clear communication to avoid surprises and ensure all voices are heard;
- Constructive, challenging and respectful debate;
- To be brave, ambitious and bold for our city's waterways;
- To have fun and celebrate success.

We will achieve this with the following behaviours by:

- Being open to new ideas and ways of doing things;
- Being prepared to say when we are confused or unclear;
- Seeking to understand what others need to succeed;
- Leaving our badges at the door being the best for our urban waterways;
- Being accountable for our areas of responsibility and maintaining our integrity;
- Respecting differences and embracing diversity.



9. Nature Agents - 22 August 2019

Reference:19/932637Presenter(s):Kirsty Brennan, EOS Ecology

1. Purpose of Report

1.1 The purpose of this report is to provide information to the Christchurch West Melton Water Management Zone Committee on the Nature Agents programme, the learnings from Ilam School students and their goals for future guardianship of their river.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

- 1. Notes the Nature Agents programme;
- 2. Receives the learnings from Ilam School around the river and their goals for future guardianship of their river; and
- 3. Considers the student information and goals alongside other water quality monitoring information to be presented at the next zone committee meeting.

3. Report

- 3.1 EOS Ecology's Nature Agents programme is all about engaging young people and community with their local stream and with real science. With funding from the Ministry of Education, EOS Ecology have implemented Nature Agents across 13 schools in Christchurch and Banks Peninsula to date, with another 13 to become Nature Agents by the end of 2020 (see our website for details www.natureagents.co.nz). Nature Agents is a fully supported programme for schools (years 3-8) and includes:
 - 3.1.1 A comprehensive set of learning resources, and teacher planning support
 - 3.1.2 A 3 hr field session with our scientists to teach students and teachers how to monitor their stream
 - 3.1.3 A complete stream survey field kit (funding from Environment Canterbury)
 - 3.1.4 Data entry capability into a geospatial database
 - 3.1.5 Follow-up classroom/field support, and further teacher training sessions
- 3.2 Nature Agents teaches people to monitor water quality, stream habitat and invertebrates in their local waterway, so that they can continue to gather long-term data on their local stream. The programme was developed in such a way that the monitoring methods are comparable to scientific methods of measuring stream condition. This means that not only do participants gain a better understanding of their environment, but they also get to experience what it is like to collect information in a scientific way, and their data can be used more widely. Nature Agents is also suitable for any community group wanting to collect long-term data and improve awareness for their local waterway.
- 3.3 Year 5/6 at Ilam School had their Nature Agents training in March 2019 and since then have expanded their learning and experiences wherever they could to build a strong connection with their river and raise awareness within their community. Students from Ilam School will





present the story of their learning around the river and their goals for future guardianship of their river.

3.4 Find out more about our Nature Agents programme and who is already involved by going to our Nature Agents website or by contacting Kirsty Brennan kirsty@eosecology.co.nz.

Attachments

There are no attachments to this report.



10. Christchurch City Council Comprehensive Stormwater Consent

Reference:19/932764Presenter(s):Tami Woods, Zone Facilitator

1. Purpose of Report

1.1 The purpose of this report is to provide the Christchurch West Melton Water Management Zone Committee with a summary of conditions in the Christchurch City Council Comprehensive Stormwater Consent.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

- 1. Notes the key element to the Christchurch City Council Comprehensive Stormwater consent and that the consent is currently under Appeal; and
- 2. Identifies any questions for Christchurch City Council staff around implementation, to be asked once the appeal has been resolved.

3. Report

- 3.1 Independent commissioners recently granted Christchurch City Council a comprehensive consent to discharge stormwater from the existing and future reticulated stormwater network within Christchurch City and the settlements of Banks Peninsula.
- 3.2 The resource consent aims to future-proof Christchurch's stormwater network while also improving water quality in the receiving rivers as well as protecting the city's groundwater resources. The resource consent will be the first time that all stormwater discharges from the reticulated stormwater networks in Christchurch City and Banks Peninsula will be managed under one resource consent.
- 3.3 The consent takes an adaptive management where mitigation options to address environmental effects can be modified based on monitoring and modelling data.
- 3.4 A total of 39 submissions were received and 30 were heard by a panel of independent commissioners appointed by Environment Canterbury. The consent was granted on 4 June 2019 with a duration of 25 years.
- 3.5 Christchurch City Council made an appeal against two parts of the conditions. The first on the targets to be achieved through the Sediment Discharge Management Plan. The second is on Schedule 10 Flooding Receiving Environment Objectives and Attribute Targets specific to the Pūharakekenui/Styx River.
- 3.6 Due to the appeal being underway Christchurch City Council's position is to not present at this stage.
- 3.7 This paper therefore, provides the Committee with a summary of key elements in the consent conditions which are likely to be of interest to the Committee. It provides an opportunity for the Committee to identify any implementation questions that can be asked of Christchurch City Council staff, once the appeal has been resolved.



Summary of Key Element in the Consent Conditions

<u>Scope</u>

- 3.8 The consent authorises the discharge of stormwater onto or into land or surface water within the boundary of the City Council, or where stormwater enters the network from outside the boundary.
- 3.9 There are some exclusions from the consent covering private stormwater networks. Sites on the Regional Council Listed Land Use Register, development sites disturbing more than 5ha of flat land or 1 ha hill land, and a list of sites in an attachment are also excluded until 2025. From 2025, the vast majority of the excluded sites will be covered by the consent, unless agreement had been reached with Environment Canterbury that sites pose too high a risk.

Stormwater Management Plans

3.10 The consent requires that Stormwater Management Plans (SMP's) be prepared in accordance with Table 1 below.

SMP Area	Date SMP Operative	Date Submitted to Canterbury Regional Council
Ōtākaro/ Avon River Area Christchurch		Within 36 months of the commencement of this consent
Pūharakekenui/ Styx River Area Christchurch	30 June 2014	
Huritīni / Halswell River Area Christchurch	30 June 2016	
Ōpāwaho/ Heathcote River Area Christchurch		Within 18 months of the commencement of this consent
Estuary and Coastal Area Christchurch		Within 24 months of the commencement of this consent
Outer Area Christchurch		Within 30 months of the commencement of this consent
Te Pātaka o Rākaihautū / Banks Peninsula Settlements		Within 36 months of the commencement of this consent

Table 1: SMP Programme

- 3.11 The role of the SMP is to contribute to achieving the 'Overall Contaminant Load Reductions' (see Table 2 below), set the specific contaminant load reduction targets for that area; demonstrate how the quality of stormwater will be progressively improved to meet the 'Receiving Environmental Objectives and Attribute Targets' for waterways, coastal water, groundwater and springs and quantity; demonstrate how stormwater infiltration facilities will avoid, remedy or mitigate the effects of groundwater mounding; plan works required and implement other requirements of the consent that apply to the catchment (e.g. weed management in the Pūharakekenui/Styx River).
- 3.12 The SMP's are to be developed in consultation with Papatipu Rūnanga, the zone committees, community boards, Doc and Environment Canterbury's regional engineer and any rating district liaison committee. The conditions require that consultation includes a briefing to the Zone Committee at the early stages of SMP development and an opportunity to feedback on the draft. The SMP's are also publicly notified to receive feedback from the wider community.



Implementation Plan

- 3.13 An Implementation Plan is required to be prepared to implement the SMP's. The Plan is to include detail of the proposed stormwater mitigation methods and devices, the programme of stormwater works, and regulatory, investigation, educational and preventative activities relating to stormwater discharges and details of budgets for capital works or resourcing linked to the CCC Long Term Plan.
- 3.14 The Implementation Plan is updated to give effect to a new, reviewed or amended SMP within 12 months of the SMP being approved and is reviewed every 3 years. Engagement on the Plan occurs with Papatipu Rūnanga and Doc.

Stormwater Technical Peer Review Panel (Stormwater TPRP)

3.15 An independent Stormwater Technical Peer Review Panel is to be established. They are to provide scientific and technical review of the risk matrix, draft SMP's, scope of feasibility studies and investigations.

Contaminant Load Reductions

3.16 The consent requires the installation of stormwater mitigation facilities and devices to achieve the city-wide contaminant load reductions in Table 2 below.

	Contaminant load compared to no treatment as at 2018	5 years from 2018 compared to no treatment (as at 2023)	10 years from 2018 compared to no treatment (as at 2028)	25 years from 2018 compared to no treatment (as at 2043)
TSS	12 %	21 %	25 %	27 %
Total Zinc	10 %	15 %	18 %	20 %
Total Copper	16 %	23 %	28 %	30 %

Table 2: Reductions in stormwater contaminant load

3.17 At five yearly intervals a report is to be prepared outlining whether the reductions in Table 2 are being met.

Receiving Environment Objectives and Attribute Target Levels

- 3.18 Schedules 6 to 10 set out the Receiving Environment Objectives and Attribute Target Levels for surface water, groundwater, springs, coastal waters and water quantity.
- 3.19 The water quality attributes include QMCI, fine sediment, zinc, copper, lead, total PAHs, macrophyte cover, and cultural health to protect ecological values, water clarity, excessive growth of macrophytes/algae and cultural values. E. coli and electrical conductivity is also included for groundwater to protect drinking water quality and as a general indicator to track changes.
- 3.20 The water quantity attributes include maximum increase (mm) above baseline years for Ōtākaro/ Avon River, Pūharakekenui/ Styx River, Ōpāwaho/ Heathcote River and Huritīni/ Halswell River.



Stormwater investigations

3.21 A Stormwater Quality Investigations Programme is to be undertaken. Its purpose is to monitor performance of stormwater treatment facilities and devices, assess new technologies and management strategies and investigate models, etc.

Other Actions

3.22 Schedule 4 to the consent sets out a list of other actions for the purpose of improved stormwater management through source control, communication, education and awareness and Pūharakekenui/Styx River channel weed management. A copy of this Schedule is attached for the Committee's reference.

Erosion and Sediment Control

3.23 The conditions require that Erosion and Sediment Control Plans are prepared for development sites that discharge into the Council's stormwater network. They also require the city to develop a Sediment Discharge Management Plan (SDMP). The purpose of the SDMP is to set out processes and practices to be implemented to manage discharges from development sites.

Industrial Site Management

3.24 The conditions require the maintenance of a desk-top assessment that ranks risk for industrial sites and identifies those with the highest risks. Its purpose is to reduce the risk of contaminants becoming entrained in stormwater. 15 sites per year (10 agreed with Environment Canterbury) are then to be audited.

Monitoring and Reporting

- 3.25 An Environmental and Monitoring Programme (EMP) is to be implemented. The purpose of the EMP is to monitor whether the Receiving Environment Objectives and Attribute Target Levels are being met.
- 3.26 Where modelling shows the 'Contaminant Load Reductions' in Table 2 are not being met, an investigation into the reason they are not being met, whether best practicable options are being undertaken and what measures will be undertaken to improve quality needs to occur.
- 3.27 Where flood modelling and monitoring results shows the 'Receiving Environment Objectives and Attribute Target Levels' are not being met an investigation also needs to be carried out and a report submitted to Environment Canterbury.
- 3.28 An Annual Report also needs to be prepared by 30 June each year for the prior calendar year. The first report will be for the calendar year following commencement of the consent. The report includes a summary of outcomes from monitoring, investigations and other actions; a summary of modelling results and contaminant load reduction targets in the SMP's; records of compliance and complaints; updates on timetables for construction and activation of stormwater mitigation systems; and a summary of stormwater investigations, etc. The Annual Report is submitted to Environment Canterbury, but also provided to the Zone Committee, Papatipu Rūnanga and made available on the City Council website.





Attachments

No.	Title	Page
A <u>J</u>	CCC Comprehensive Stormwater Consent	26





Schedule 4: Other Actions by Consent Holder

Other Actions	Activity Start Date	Activity Completion Date
Source Control		
a. Lodge a submission to central government seeking national measures and industry standards to reduce the discharge of contaminants including zinc and copper from metal roofs, car tyres and brake linings.	Within 6 months of the commencement of the resource consent	Within 1 year of the commencement of the resource consent
b. Conduct a cost/benefit analysis of options for carrying out a targeted trial for contaminant reduction from increased level of selective street sweeping and sump cleaning (For consideration as part of Council Annual Planning process).	Within 6 months of the commencement of the resource consent	Within 1 year of the commencement of the resource consent
c. If the Consent Holder Determines that the cost/benefit analysis under Item (b) shows that it is warranted, carry out trials for increased targeted/selective street sweeping and sump cleaning.	Within 1 year of the commencement of the resource consent	Within 3 years of the commencement of the resource consent
d. Conduct a cost/benefit analysis of options of alternate methods of stormwater treatment and discharge including consideration of redirection to sewer and Managed Aquifer Recharge/Discharge (For consideration as part of Council Annual Planning process).	Within 6 months of the commencement of the resource consent	Within 18 months of the commencement of the resource consent
e. If the Consent Holder determines that the cost/benefit analysis under Item (d) shows that it is warranted, carry out trials for alternate methods of stormwater treatment and discharge.	Within 2 years of the commencement of the resource consent	Within 4 years of the commencement of the resource consent
f. Apply the results of trials on street sweeping, sump cleaning and alternate methods of stormwater treatment (actions b and c above), along with results from other stormwater modelling and monitoring data being gathered, to the planning and design of stormwater systems and facilities, including in the development and review of SMPs, IDS and WWDG.		
g. If the Consent Holder determines it warranted as a result of the trials in Item (c) above, increased frequency of street sweeping of selected areas.	Within 2 years of the commencement of the resource consent	Ongoing
 h. If the Consent Holder determines it warranted as a result of the trials in Item (c) above, increased frequency of sump cleaning at selected locations. 	Within 2 years of the commencement of the resource	Ongoing
 Instigate, in the building consent approval and inspection process, a requirement for and process for approval and inspection of erosion and sediment control measures prior to site clearances 	Within 6 months of the commencement of	Ongoing



	commencing and throughout the construction process.	the resource consent	
j.	Develop a programme for operational inspection of a sample of private stormwater treatment and/or retention devices on non-industrial sites for the purposes of ensuring proper function and maintenance.	Within 2 years of the commencement of the resource consent	Ongoing
k.	 Conduct a cost/benefit analysis of options to further improve source control that considers: (i) allocation of staff/resources to undertake industrial site audits; (ii) expected contamination risk and possible risk reduction of industrial sites; and (iii) other source control measures in Schedule 3 as required by Condition 39. 	Within 6 months of the commencement of the resource consent	Within 18 months of the commencement of the resource consent
L	Apply, through agreement between the Consent Holder and Canterbury Regional Council, the results of the cost/benefit analysis under Item (k) above to prioritise source control measures in SMPs and the Implementation Plan and to determine the number of audits conducted under Condition 47(b).	Within 2 years of the commencement of the resource consent	Ongoing
Co	mmunication, Education and Awareness		
m.	Make reasonable endeavours to establish a community water engagement programme involving Council, Canterbury Regional Council, Ngai Tahu, DoC, MfE, Universities, industry representatives and Community Groups with the objective of encouraging awareness and community actions to reduce stormwater contaminant discharges and improve waterways through source control and behavior change.	Within 6 months of the commencement of the resource consent	Ongoing
	Possible initiatives of the community water engagement programme are:		
	(i) Providing information for property owners on quick actions that they can undertake around the home to stop contaminants from entering stormwater (based on 2017 Community Waterway Survey findings conducted by Christchurch City Council).		
	 Implement a sustainable behavior change programme. Actions aimed at stopping contaminants getting into the stormwater network, such as: sediment, litter, bacterial contaminants. 		
	(iii) Undertaking a wider educational programme for schools.		
	(iv) Educating dog owners about effects of fecal matter.		
	(v) Seeking industry behavior change.		
n.	The Consent Holder shall convene the River Care Liaison Group meeting at least once annually. At	Within 1 year of the	Ongoing



 each meeting the Consent Holder shall update the River Care Liaison Group and receive feedback on matters relating to the exercise of this resource consent, including but not limited to: (i) Relevant capital and maintenance works completed in the past year and currently programmed by the Consent Holder; (ii) Development and refinement of the C-CLM and flood modelling; (iii) Any new technologies in stormwater contaminant reduction or preventative measures; and (iv) Compliance and monitoring results as reported under Condition 61. 	commencement of the resource consent	
 Minutes of the River Care Liaison Group Meeting shall be circulated by the Consent Holder to the River Care Liaison Group within four weeks of the meeting. 		
 p. The Consent Holder shall convene the Industry Liaison Group meeting at least once annually. At each meeting the Consent Holder shall update the Industry Liaison Group and receive feedback on matters relating to the exercise of this resource consent, including but not limited to: (i) development of the risk matrix required under Condition 3(b) (ii); (ii) implementation of the industrial site audit process under Condition 47; (iii) any new technologies in stormwater contaminant reduction or preventative measures; and (iv) Compliance and monitoring results as reported under Condition 61. 	Within 1 year of the commencement of the resource consent	Ongoing
q. Minutes of the Industry Liaison Group Meeting shall be circulated by the Consent Holder to the Industry Liaison Group within four weeks of the meeting.		
Puharakekenui/Styx River Weed Management		
 r. Investigate the degree to which various options in river channel weed (macrophyte) management practices mitigate flood effects on the Püharakekenui/Styx River under a range of river flow scenarios. Factors to be considered shall include: (i) International weed management practices in similar settings; and (ii) the factors which promote or suppress growth of the specific prolific weed species in the Püharakekenui/Styx River, including sediments, dry weather flows, stormwater discharges covered by the resource consent, other discharges, shading and climatic factors. 	Within 6 months of the commencement of the resource consent	Within 18 months of the commencement of the resource consent
s. Based on the results of the investigation under Condition 39(r), and through engagement with Canterbury Regional Council, the Consent Holder	Within 2 years of the commencement of	Within 3 years of the commencement of





shall identify the best practicable options for	the resource	the resource
mitigating flooding through river channel weed	consent	consent
management. Factors to be considered shall	Consent	oonsent
include:		
(i) A range of river flow scenarios including dry		
weather (spring-fed) flows and storm flows		
where operational/maintenance management		
will be beneficial:		
(ii) A range of river channel		
operational/maintenance management		
scenarios:		
(iii) Flooding effects including level, extent and		
duration:		
(iv) Available technical knowledge:		
(v) Potential for practical implementation of		
options:		
(vi) Costs for implementing options;		
(vii) Available regulatory mechanisms;		
(vii) Consideration of ecological effects; and		
(ix) Consideration of overlapping powers and		
responsibilities between Canterbury Regional		
Council and Christchurch City Council under		
other legislation.		
t. Conduct a cost/benefit analysis of the identified	Within 3 years of	Within 4 years of
best practicable options for carrying out a targeted	the	the
trial for achieving reduced flooding from changes in	commencement of	commencement of
the weed management of the Püharakekenui/Styx	the resource	the resource
River.	consent	consent
u. Determine the best approach to incorporating the	Within 3 years of	Within 4 years of
	the	the
variable weed condition within the		
variable weed condition within the Pūharakekenui/Stvx River hydraulic model and	commencement of	commencement of
Püharakekenui/Styx River hydraulic model and	commencement of the resource	commencement of the resource
	commencement of the resource consent	commencement of the resource consent
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios.	commencement of the resource consent Within 3 years of	commencement of the resource consent Within 4 years of
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model	commencement of the resource consent Within 3 years of the	commencement of the resource consent Within 4 years of the
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they	commencement of the resource consent Within 3 years of the commencement of	commencement of the resource consent Within 4 years of the commencement of
Püharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Püharakekenui/Styx River model	commencement of the resource consent Within 3 years of the commencement of the resource	commencement of the resource consent Within 4 years of the commencement of the resource
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to	commencement of the resource consent Within 3 years of the commencement of the resource consent	commencement of the resource consent Within 4 years of the commencement of the resource consent
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions.	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of
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 Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit analysis in a targeted trial for the selected best 	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of the resource	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of the resource
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of
 Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit analysis in a targeted trial for the selected best practicable options for weed management of the 	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of the resource consent	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of the resource consent
Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit analysis in a targeted trial for the selected best practicable options for weed management of the	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5.5 years of	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of the resource
 Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit analysis in a targeted trial for the selected best practicable options for weed management of the Pūharakekenui/Styx River river channel. x. If the Consent Holder determines it warranted as a 	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5.5 years of the	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of the resource consent
 Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit analysis in a targeted trial for the selected best practicable options for weed management of the Pūharakekenui/Styx River river channel. x. If the Consent Holder determines it warranted as a result of the trials in Item 39(u) above, implement 	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5.5 years of the commencement of	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of the resource consent
 Pūharakekenui/Styx River hydraulic model and resulting design flood scenarios. v. Test the Pūharakekenui/Styx River model calibration against other storm events, as they arise, to calibrate/validate model sensitivity to varying weed conditions. w. Apply, through engagement with the Canterbury Regional Council, the results of the cost/benefit analysis in a targeted trial for the selected best practicable options for weed management of the Pūharakekenui/Styx River river channel. x. If the Consent Holder determines it warranted as a 	commencement of the resource consent Within 3 years of the commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5.5 years of the	commencement of the resource consent Within 4 years of the commencement of the resource consent Within 5 years of the commencement of the resource consent



11. Zone Team Update - 22 August 2019

Reference:19/932852Presenter(s):Lauren Hamilton, Zone Team Leader

1. Purpose of Report

1.1 The purpose of this report is to present Environment Canterbury's Zone delivery end of year report to the Committee.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Notes the end of year report from the Zone Delivery Team.

3. Report

Attached is the Zone Delivery Team end of year report.

Christchurch West Melton Work Programme Summary:

- Completed the Erosion and Sediment Control Field Trail
- Supporting Immediate Steps funding and projects
- Engagement on numerous community group including Litta Trap Trail, Mobile resource, Styx living laboratory, community events
- Investigating the Ōtūkaikino stream
- Collaborating with Christchurch City Council on numerous projects
- Continued monitoring of high-risk consents
- Responding to incident responses in priority catchments
- On the spot infringement trial.

Attachments

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Christchurch West Melton - Work Programme Progress Update for FY2018/19	n - Work Programme Progress Update for FY2018/19
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Christchurch West Melton Work Programme Summary:

Completed the Erosion and Sediment Control Field TrailSupporting Immediate Steps funding and projectsEngagement on numerous community group including Litta Trap Trail, Mobile resource, Styx living laboratory, community eventsInvestigating the Otukaikino streamCollaborating with Christchurch city Council on numerous projectsContinued monitoring of high-risk consentsResponding to incident responses in priority catchmentsOn the spot infringement trialCollaborating with Christchurch city Council on numerous projects

Outcome	Status	Progress Update
CWM-O-15 Improved stormwater management Stormwater is treated to a better standard at source and the public's stormwater network's ability to treat stormwater has improved.	On Schedule	Achievements: The zone team have continued to work with consent holders and react to incidents over the year providing education, support and taking any necessary enforcement action The team have provide an effective Pollution Prevention service to internal and external stakeholders across Canterbury - Completed the Erosion and Sediment Control Field Trial and the Erosion and Sediment Control Toolbox which is found on our website. Collaboration with key organisations involved in biodiversity protection, restoration and enhancement. The team have continued to support community groups, working closer with key stakeholders such as Christchurch City Council and introduced schools to key partners.
CWM-O-16 Community commitment has increased Christchurch-West Melton public/ community understanding of the stormwater cycle has improved. Public/community understanding of what residents and businesses can do to reduce pollution of stormwater has increased and desired behaviours are increasing.	On Schedule	Achievements: The team were effective partner in the Community Water Partnership & Provide effective support to key water quality, waterway health and water use focused community groups The team continued to engage and work collaboratively with the following groups: Avon Heathcote Estuary Ihutai Trust. Cashmere Stream Care Group. Öpāwaho Heathcote River Network. Avon Ōtākaro Network. Work included: Litta Trap trial, Supporting community group events, promoting the CCC cycle and walk way project, & continued work with the Styx Living Laboratory
CWM-O-17 Biodiversity has improved.	On Schedule	Achievements: The Zone team have focused on biodiversity protection, restoration and enhancement throughout the year through our Immediate Steps Program, five of the projects have been completed and two are

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Attachment A

Community committed to improving biodiversity and projects are protecting and enhancing biodiversity.		underway:
		 Albert Stream stage 2: Around 3 hectors of weed control performed and 1000 native plants installed by community group 'Port Hills Park Trust' this was completed May 2019 Cashmere stream Stage 3 - planting took place and there will be ongoing maintenance of the stream, this work was completed by May 2019 Dry Grasslands Project- Planting is underway currently and dry land native nodes are on track to be established by May 2020 Ótukaikino Stream Enhancement -Project was on hold but now Isaac Conservation trust has agreed to take up the facilitation of the project and it is set to Commence 1st August 2019. Wairarapa Stream school enhancement - An area of stream habitat in Burnside was enhanced by the local school, Burnside Primary through Enviroschools this work has now completed Styx River, Brooklands Traps have been purchased and are being deployed with locations and maps taken and managed by ECan representatives Kowhai Sanctuary Work will commence in august 2019 with West Melton Primary School set to install 1000 native dry land plants into rabbit enclosures under the supervision of Enviroschools and ECan Field Services.
CWM-O-18 Health of priority catchments has improved Water quality and biodiversity trends are improving in the following priority sub catchments - Addington Brook and Riccarton Stream (Avon/Otakaro Catchment), Cashmere Stream/ Haytons Stream (Heathcote/Opawaho Catchment).	On Schedule	Achievements: Draft Addington Brook 'living' catchment management plan was developed in collaboration with key partners, work has been progressing on the MEDUS and Storminator project with key partners. Draft Riccarton Stream 'living' catchment management plan to be developed in collaboration with key partners - All high risk consents within this catchment are being monitored as a priority. Haytons Catchment Plan - Draft a Haytons Stream 'living' catchment management plan to be developed in collaboration with key partners - the action plan has been approved by Christchurch City Council and further work has been put on hold to other priority catchment areas. The focus for the Cashmere Stream was to reduce sediment into the stream and this was completed by working collaboratively with key players in the catchment being Christchurch City council and businesses within the catchment.
CWM-O-19 Groundwater has been safeguarded for multiple uses and water has been used efficiently The quality of untreated drinking water from aquifers is safeguarded. Water levels, quality and flows at spring- heads of spring-fed waterways are safeguarded. Use of	On Schedule	Achievements: The zone team ensured that consented discharges within the groundwater protection zone, are within acceptable environmental limits and that permitted activity limits are met. The team have monitored high risk consents and responded to incident accordingly; by work with offenders either by providing education and where necessary will take enforcement action.



water both rural and urban areas is targeted and efficient.		
CWM-O-20 Waterways better provide for multiple recreation, relaxation and amenity uses Aquatic and adjacent land recreational values in selected locations are maintained / or improved.	On Schedule	Achievements: Protect and enhance biodiversity in the Styx River - staff are working to protect the ecological health of the Styx River and are Looking for a student research topic for the river for next Summer. Ecan continue to have representation on the Styx Living Laboratory Trust and are supporting 3 interns in the Styx River Trust.
CWM-O-22 Improved internal and external capability in Urban Waterways Improvement Programmes A better connected network of individuals through a range of organisations and community groups with access to up to date knowledge and learnings on effective Urban Waterways Improvement Programmes.	On Schedule	 Achievements: The zone team have ensured that consented air discharges within the groundwater protection zone, are within acceptable environmental limits and that permitted activity limits are met. High risk consent continued to be monitored regularly and the incident response team continue to address any breached of rules. An internal and external capability has been developed across Canterbury in Urban Catchment Improvement programmes sharing lessons learnt from Addington Brook, Cashmere Stream, Haytons Stream and Riccarton Stream. Staff have developed the following over the past 12 months Erosion and Sediment Control Training Workshops Roimata Commons Trust stormwater behaviour change pilot project Stormwater Superhero Mobile Community Resource Household Stormwater Treatment Exemplar and Education





12. Facilitator's Update - 22 August 2019

Reference:19/933125Presenter(s):Tami Woods, Zone Facilitator

1. Purpose of Report

1.1 The purpose of this report is to inform the Christchurch West Melton Water Management Zone Committee of upcoming events and relevant updates.

2. Staff Recommendations

That the Christchurch West Melton Water Management Zone Committee:

1. Note the upcoming events and updates.

2. Report

a) Recent Events

Event	Who	Comment
Mahoe-nui Winter Planting Days -	Public	Planting 300 trees
Lower Site		
Date: 27 July		
Time: 9:15 am - 11:30 am		
Venue: Evans Pass Road		
Halswell Quarry Park planting day	/ Public	Halswell Quarry Park planting day to
Date: 27 July		restore native wetland swales into the
Time: 10am – 12pm		park
Venue: Halswell Quarry Park,		
Kennedys Bush Road		

b) Upcoming Events – Visit www.ecocanterbury.org.nz

Event	Who	Comment
Ōtukaikino River Reserve -	Public	'Planting Event', with the goal of
Community Planting		establishing additional native trees and
Date: 25 August		shrubs. This is a key event in the ongoing
Time: 10:30 am - 12:30 pm (followed		development of the Ōtukaikino River
by BBQ sausage)		Reserve.
Venue: Otukaikino River Reserve		
2019 Stormwater Conference	Council staff	8 speakers giving condensed 10 minute
presentations - local stormwater	and Zone	versions of their 2019 Stormwater
management improvement works	Committee	Conference presentations that focus on
Date: Tuesday 3 September		local stormwater management
Time: 12-2pm		improvement works. This is a chance to
Venue: CCC Function Room - Level 1 Te		get along to hear about some of the
Hononga - Civic Offices 53 Hereford		wonderful work the City Council and wider
Street		Christchurch stormwater professionals are
		working on to reduce flooding and
		improve water quality within the city.

Christchurch West Melton Water Management Zone Committee 22 August 2019



Travis Wetland – Community Planting Date: 21 September Time: 10.00am and 12.30pm Venue: Travis Wetland, 280 Beach Road	Public	Join Trees for Canterbury, to participate in a 'planting day', with the Travis Wetland Trust and the Regional Park Rangers of the Christchurch City Council
Ōpāwaho Heathcote River Network Annual Worlds River Day Date: 22 of September Time: Venue:	Public	Opportunity to have a Stormwater Superheroes presence at Ōpāwaho Heathcote River Network Annual Worlds River Day event
Meet in the Middle Date: 12th of October Time: 12-3pm Venue: Kerrs Reach	Public	At workshop on 25 July the Committee confirmed wish to attend this year's event.
A&P Show Date: Wednesday 13 to Friday 15 November Time: 8.00am to 5.30pm Venue: Canterbury Agricultural Park	Public	At workshop on 25 July the Committee confirmed wish to attend this year's AMP show.

c) Updates

Litta-Trap[™]monitoring Programme

The Environment Canterbury Youth Engagement and Education team (YEET), in partnership with Clive Appleton CCC & City Care, have been working to roll out a Litta-Trap[™] monitoring programme to schools who have engaged with our Waitaha Wai or Stormwater education programmes. The Litta-Trap[™] was design by Auckland-based stormwater infrastructure company Stormwater360. It is a basket type contraption that gets installed into a roadside drain. It is designed to capture solid pollutants getting into the stormwater system and prevent them from reaching waterways. Using the Litta-Trap[™] will help schools/community group better understand the pollution problem on their streets and inspire them to influence a change in behaviour/habits.

A number of schools have expressed interest with both Our Lady of Assumption and Ilam School getting to the stage of deciding on a sump to focus on only to find that most of the sumps in Christchurch city are too small to fit the current stock of Litta-Trap[™] Stormwater 360 supply. At this stage we are encouraging Stormwater 360 to re-engineer some so we can roll out an education programme similar to that run by Mountain to Sea in Wellington. A school group in Petone wanted to problem-solve the issue of litter in the ocean after being involved in the Experiencing Marine Reserves programme. From the monitoring of the Litta-Trap[™] grew an in-depth learning programme that was a great vehicle for integrated inquiry learning, incorporating Science, Maths, English, and Technology concepts and capabilities. Student action projects also came from the new knowledge and understandings they had gained. Our YEET is keen to see that type of integrated learning occur here in Canterbury. We await a response from Stormwater 360 as to whether they can adapt their design to fit Christchurch needs. Our team meanwhile continues to work with schools on stormwater education & encouraging students to become Stormwater heroes!

Next quarterly update to Christchurch City Council

Christchurch West Melton Water Management Zone Committee 22 August 2019



The next quarterly update to Christchurch City Council by the Committee is due shortly. Attachment 1 includes the written material provided to the Council from all three Zone Committees.

Zone Committee DRAFT Work Program through to the end of the year

At the Zone Committee workshop on 25 July, members discussed priorities for the rest of the year. Attachment 2 records the workshop outcomes. The ideas identified have been incorporated into a Draft Work Program through to the end of the year. Attachment 3 includes the draft program. Feedback is sought from the Committee on the draft program. Once confirmed this program will also inform an updated Communications Plan.

Engagement with Community Groups

At the workshop on 25 July engagement with Community Group and Community Boards was discussed. Idea's to date have included inviting them to meetings or attending their meetings. Feedback is sought from the Committee around ideas to further progress engagement.

Next steps Stormwater Superhero's Campaign

The Stormwater Superhero's campaign gained significant momentum last and early this year. There are several events in the next few months where a Stormwater Superhero's presence can be made. Several ideas about the evolution of the Stormwater Superhero's campaign was discussed at the workshop on 25 July. Feedback is sought from the Committee to confirm how you would like the campaign to evolve and tools you would like to support the Committee with discussions about stormwater.

Attachments

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City Council

Water Management Committees¹ Update Christchurch-West Melton, Banks Peninsula, Selwyn Waihora

Reference:

Contact:		Enter email address	Enter phone.
	Lesley Woudberg	lesley.woudberg@ecan.govt.nz	027 706 4273
	Tami Woods	tami.woods@ecan.govt.nz	027 529 7761
	Miria Goodwin	miria.goodwin@ecan.govt.nz	027 809 6991
	Diane Shelander	diane.shelander@ccc.govt.nz	03 941 8304
	Peter Kingsbury	peter.kingsbury@ccc.govt.nz	03 941 8487

1. Purpose of Report

This report updates the Christchurch City Council on the work of the three water management committees operating within the greater Christchurch City area for the period June – August 2019.

2. Recommendations

That the Council;

- a) Receives the report
- b) Notes the work of each water management committee.

3. Christchurch West Melton Water Management Committee

Nitrate in Drinking Water

During the past three months the Zone Committee has working to encourage the Ministry of Health to undertake New Zealand based research to investigate any correlation between nitrate levels in drinking water and the incidence of colorectal cancer. We were encouraged by the Christchurch City Council remit to the recent Local Government conference that received support from councils from around the country. Environment Canterbury has also written to the Minister of Heath with a similar request for research.

Addington Brook - Living Catchment Management Plan

In June we received the Addington Brook - Living Catchment Management Plan. Addington Brook has been a focus for the Zone Committee because it is one of the most polluted streams in the zone and it flows directly into the Ōtākaro/Avon river.

¹ Water management committees are joint committees of Environment Canterbury and territorial local authorities. They are established under the Local Government Act 2002. Their purpose is to facilitate community involvement to give effect to the Canterbury Water Management Strategy.







The Catchment Plan is a non-statutory plan that provides a road map for work to address issues over the next three years and to help to achieve the vision of a waterway that thrives with life and in turn, positively contributes to the health of the Ōtākaro/Avon river. It was developed by the Zone Committee to address previously agreed priority aspects for the catchment and ensure a coordinated approach between agencies, individuals and the community to improving the health of the brook. Christchurch City Council and Environment Canterbury staff were central to the development of the Plan and the Zone Committee is grateful for their contribution and looks forward to working together on the Plans implementation.

Focus through to the end of the year

At our July meeting we focused on planning our work programme for the remainder of the year. The next six months will see us focus on opportunities to continue community engagement through field trips, presentations to the committee, workshops and attending community events. The Committee also wants to better reward the good work that goes on within the business community in making decisions that have good environmental impacts on water in our catchment. Another key area of interest is gaining a greater understanding of the responsibilities, accountabilities and actions as a result of new stormwater consents for the city and how the Committee can support deliver of these.





4. Banks Peninsula Water Management Committee

In June the committee received a deputation from a Birdlings Flat resident concered about the the safety, noise and potential effects on wildlife such as the crested grebe of power boat racing on Te Roto o Wairewa (Lake Forsyth). The committee agreed that it would continue to promote Te Roto o Wairewa as a low speed recreation area and ask agencies what they could do to help bring this about.

In July Rūnanga representatives lead discussions on the Treaty of Waitangi, the structure of Te Rūnanga o Ngāi Tahu and mahinga kai. Pere Tainui (Onuku) shared with the committee his practice of mahinga. Pere was supported by two recent participants of a youth hui held at Onuku who talked about what they had learnt from Uncle Pere. Practicing mahinga kai requires knowledge of the sea and waterways. It means getting out, experiencing the environment, gathering food for yourself and sharing with others and that is what Pere did.

Pere passed away 28 July.

Kua hinga te tōtora a Te Waonui Tāne



5. Selwyn Waihora Water Management Committee



The Committee were sad to lose their cherished long-term member and rūnanga representative from Ōnuku, George Waitai Tikao (Uncle Waitai), who passed away on 27 July 2019. Uncle Waitai will be sadly missed.

The committee acknowledge that the loss of Uncle Waitai will be felt throughout the iwi. He was well-known as a man of great mana, who worked tirelessly to advance the interests of the iwi and held an encyclopaedic knowledge of the history of Ngāi Tahu in Te Pātaka o Rakaihautū (Banks Peninsula).



The Selwyn-Waihora Zone Committee has arranged it's 2019 meetings to ensure they focus on all of the CWMS targets at some point in the year, and on important themes for the committee. They have also decided to meet in locations throughout the zone to ensure strong community engagement.

In June the Committee met in Glentunnel to discuss the Waikirikiri/Selwyn River with the zone committee's temporary working group (the Selwyn River/Waikiriri Plan Working Group). The working group has been working hard on their roadmap for the Selwyn Waikirikiri River. In September the working group will propose to the zone committee a roadmap to achieve a healthy Waikiriri/Selwyn River with healthy people. The working group is made up of a range of interests including zone committee members, rūnanga, farmers, researchers, non-government organisations, community groups and local government, and has to date focused on identifying what a healthy Selwyn/Waikirikiri River was and could be.



Members of the Selwyn Waihora Zone Committee meeting with the Waikirikiri/Selwyn Working Group to discuss a roadmap for the Waikirikiri/Selwyn River

In July the committee celebrated progress to preserve and enhance biodiversity in the zone. It was heartening for the committee to hear from many groups about progress, and to agree that the committee remain totally committed to its work. The committee have now approved funding for 127 projects since 2011 via the Immediate Steps programme. The committee worked with meeting attendees to identify things that are working well, and things that could be better. The Water and Wildlife Trust provided a sobering assessment of how much money is needed to make the step change in biodiversity everyone is looking for.







Workshopping biodiversity with the community: what is working well and what could be improved?

In August the committee were pleased to welcome the Selwyn District Council and members of the Christchurch West Melton Zone Committee to discuss urban water management.

The launch of several practical projects have been a highlight for the committee in recent months. The zone committee were pleased to celebrate the implementation of their ground-breaking Canterbury mudfish (kōwaro) protection project at Haldon Pastures in June, a real feat of collaboration in coordination and funding.



Canterbury mudfish project launch

The project is a Southern Hemisphere first and uses electromagnetic barrier technology designin in the US. This allows the mudfish to expand into the lower reaches of the site and stop predation by trought.

On the first of July the committee and Taumutu rūnanga hosted the site blessing of another innovative project they support – the Waikirikiri/Selwyn Near River Recharge project. The project is funded by the Government's Freshwater Improvement Fund and Environment Canterbury, with in-kind support from Central Plains Water.



The project works by putting up to 3.5 cumecs of water from the Rakaia River into a basin when groundwater levels are low. This water will percolate into the groundwater system beneath, recharging the aquifer and feeding springs that are the source of streams where mudfish live. Construction is now underway at the Waikirikiri / Selwyn Near River Recharge site. The current completion date is early November.



Site blessing for the Near River Recharge project

To engage with the community, the committee has also written a Chairs column for Selwyn media, and produced their first community newsletter on the Swimmable Selwyn @ Coes Ford project. In August and September, the committee intend to join Selwyn Enviroschools in their Kids Discovery planting days with Te Ara Kakariki.





CHRISTCHURCH WEST MELTON ZONE COMMITTEE – 25 July Workshop: Priorities for Implementing the Zone Committee's DRAFT Action Plan through to end of 2019.

<u>Table 1</u>

1. Global Stormwater Consent

How:

Understanding consents
 Community involvement/whose responsibility?

Stormwater management plans

- 2. <u>Tracking progress</u> of 2015 annual water quality reports i.e. Cashmere Hills sediment issues/Port Hills fire
- 3. Need stability on Port Hills
 - i.e. billion trees natives
 - How? Banks Peninsula Trust move fire retarded plants
 - Greening Banks Peninsula presentation from groups
 - Can we assist with funding?
 - How:
 - expanding water quality reports/monitoring
 - City Council giving an update
 - Maintaining Christchurch's water quality and improving
- 4. Visit Isaac ponds to understand work undertaken to improve water quality and if there are any issues
- 5. Variation to waste water consent update



<u>Table 2</u>

What is missing?

nothing – already very full

Specific Actions

Rewarding businesses for doing well – stormwater focus What is this defined as?

- big
- small
- educational/innovative
- communities?
- Framed certificate starts a discussion
- Get it into The Press to get message out
- How would this be awarded some sort of framework (90's video on what they have done)
- If not completed in 2019 then build something for 2020
- Give these out in <u>December</u>
- Recognise community groups/volunteers

What are the businesses doing for the community?

Attend community group events so zone committee is seen supporting communities

- need to find a way to know about events
- get one community group at every/every other meeting 2020 goal: Presentation to community boards on what we do and with a stormwater focus

'Mother' of all clean ups:

- are the Council litter booms working?
- is there any data on this?

Meet in the middle - October

AMP Show

Stand – Super Hero's

• Shopping bags?; dog poo bags?; fridge magnet?; lucky draw to have an announcement – eco hamper?.

Easy way to talk to a lot of people in a short amount of time

- Invite Ministers/Local Government to come and talk about stormwater
- Tack on to ECan??? an official ask
- Enviro Schools potential to link in with them
- Kids to give presentation/be part of the stand?
- Will show farmers that urban population is trying to make improvements. Help reduce rural/urban divide.





Copper Free Brake Pads

- Communicate with mechanics/distributors to make changes on domestic vehicles. Contact AA?
- US environmental standard eventually we will all be doing this??
- Some auto stores are doing this and we should acknowledge
- Please ask for our copper free brake pads
- List of stores on ECan looking for copper free look here
- Recognition so public awareness is raised



Christchurch West Melton – Draft Indicative Work Program to end of 2019

Month/Meeting	August	September	October	November	February 2020
Location	ECan 200 Tuam Street (WhareKotuia Room)	Tannery, or alt (TBC)	Adventure Park, or alt (TBC)	Industry Site (TBC)	
Theme	3 Waters & Stormwater	Water Quality Monitoring	Port Hill	Industry Stormwater Mgmt	Otukaikino Stream – Focus Catchment for 2020
Agenda Items	3 Waters Update (CCC) Community Waterways Partnership Charter CCC Global Stormwater Consent Nature Agents (EOS and Ilam School) Zone delivery work program update	CCC Water Quality Report Estuary WQ Update Community water quality monitoring	CCC update on Port Hills Conservation Trust Site Visit to restoration area	Stormwater Superhero's Business Forum Event/Awards Zone delivery work program update	Otukaikino Stream workshop Visit Issacs ponds
Facilitators Update	Next steps Stormwater Superhero's	Litter booms update	Stormwater Superhero's Business	Copper Free Brake pads follow-up findings	



	Engaging with community groups & Community Boards in 2020.	Update on variation to waste water consent	Forum Event/Awards: Form and function		
Regular Updates/reports relating to water management activities in the zone.	Zone Delivery Team Report			Zone Delivery Team Report	
Community engagement	Selwyn Waihora ZC meeting 6 August	Stormwater Superhero's @ Ōpāwaho Heathcote River Network Annual Worlds River: 22 nd September	Stormwater Superhero's @ Meet in the Middle: 12th October	Stormwater Superhero's @ AMP Show	
Field trips			Port Hill's	CCC and ECan Councillors What's Happening under our feet? Groundwater story	Otukaikino Stream catchment & Issac ponds
Zone Committee communications	Chairs Column	Chairs Column	Chairs Column	Chairs Column	Chairs Column
Other	CCC quarterly update	Urban contaminants Working Group: Addington Brook Catchment Mgmt Plan Implementation	Urban contaminants Working Group: Consider Stormwater Superhero's Business Forum Event/Awards nominees	Urban contaminants Working Group: Copper Free Brake pads follow-up findings	