
Workshop - Banks Peninsula Water Management Zone Committee AGENDA

Notice of Meeting:

A Workshop - Banks Peninsula Water Management Zone Committee will be held on:

Date: Tuesday 10 September 2024
Time: 6:00 pm
Venue: To be held on Zoom -
<https://us02web.zoom.us/j/6439418430?omn=84454451076>

Membership

Chairperson	Gina Waibl - Community Representative
Deputy Chairperson	Trudi Bishop - Community Representative
Members	Andrea Davis - Community Representative
	George Howden - Community Representative
	Elisa Knight - Community Representative
	Ben Manson - Community Representative
	Tyrone Fields - Councillor Christchurch City Council
	Paul Dietsche - Councillor Environment Canterbury
	Amber Moke - Te Hapū o Ngāti Wheke/Rapaki
	Rik Tainui - Te Rūnanga o Ōnuku
	Jaleesa Panirau - Te Rūnanga o Wairewa
	Vacancy - Te Rūnanga o Koukourārata
	Tori Peden - Advisory Member

29 August 2024

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Please Note:
This forum has no decision-making powers and is purely for information sharing.

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The time allocated for this briefing is 60 minutes.

Karakia Whakamutunga

Karakia Tīmatanga

Whakataka te hau ki te uru	<i>English translation</i>
Whakataka te hau ki te tonga	Cease the winds from the west
Kia mākinakina ki uta	Cease the winds from the south
Kia mātaratara ki tai	Let the breeze blow over the land
E hī ake ana te atakura	Let the breeze blow over the ocean
He tio, he huka, he hau hū	Let the red-tipped dawn come with a sharpened air.
Tihei mauri ora!	A touch of frost, a promise of a glorious day.

1. Apologies Ngā Whakapāha

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

2. Stormwater Management Plan for Settlements of Te Pātaka o Rākaihautū Banks Peninsula

Reference Te Tohutoro: 24/1500673

Presenter(s) Te Kaipāhō: Paul Dickson, Drainage Engineer, Christchurch City Council

1. Detail Te Whakamahuki

Timing	This workshop is expected to last for 60 minutes
Purpose / Origin of this Workshop	The purpose of this report is to provide the Workshop - Banks Peninsula Water Management Zone Committee with information on the Stormwater Management Plan for the settlements of Te Pātaka o Rākaihautū Banks Peninsula and discuss proposed consultation.
Confidentiality	The workshop and any shared information is not confidential.
Background	<p>The Christchurch City Council is developing a stormwater management plan (SMP) for the settlements of Te Pātaka o Rākaihautū/Banks Peninsula. A SMP is defined by conditions in the Council’s consent CRC231955 to discharge stormwater. One of the conditions (#4) is that the Consent Holder shall develop SMPs in consultation with the relevant Zone Committee, (as well as other organisations including community boards).</p> <p>SMPs are among several responses by the Council (including environmental strategies) toward improving a degraded environment. A SMP should demonstrate that the Council is developing targets and planning works to mitigate urban contaminants as required by the consent. The major activity is expected to be construction of treatment devices. The SMP will give effect to a programme of work for this area in the 2024-34 Long Term Plan.</p> <p>Flooding on the Peninsula has rural origins outside of the Council’s control. The consent does not specify flooding targets for Banks Peninsula settlements and flooding is not within the scope of the SMP. Flood mitigation is not currently being considered but the SMP will summarise known flooding risks to settlements to inform the Council.</p> <p>Contaminants and Treatment</p> <p>There is limited environmental monitoring information from the Peninsula due to a relatively small number of monitoring sites and short records. Environmental effects appear more related to rural sediment than to urban sources. Provisionally the priority urban contaminants are copper and zinc, which are showing small guideline exceedances in stream monitoring. Measured exceedances in streams are linked to steep hills and braking zones but the cause might be metals in turbid rural water after rainfall.</p>

Sediment is a priority contaminant in Whakaraupō – Lyttelton Harbour but most sediment discharged into the harbour has rural origins and is outside the scope of the SMP. The majority source of TSS, copper and zinc is rural runoff.

The SMP team is considering means of reducing sediment discharges from within settlements. Sources include road cuttings and under-runners. However, both sources are difficult to treat.

Provisionally, urban contaminants are likely to be captured in filters (which will be pictured in a powerpoint presentation). Filters can be used in settlements where sparse stormwater networks and hilly topography preclude the use of basins and wetlands. Treatment is likely to be targeted to the five largest settlements Lyttelton, Governors Bay, Diamond Harbour, Little River and Akaroa. Smaller settlements discharge considerably fewer contaminants, as estimated by a contaminant load model. Treatment is likely to target commercial centres and braking zones on busier roads.

Contaminant discharges can potentially be addressed in various ways. Submitters to SMPs frequently suggest regulating to eliminate contaminant sources and educating and incentivising to encourage contaminant mitigation by others. However, there is significant uncertainty about how to bring such controls into effect because the Council’s powers to regulate are limited. The CSNDC requires ongoing work by the Council on alternative methods, and such work is happening.

Comparing Common Mitigation Options – a reference

Colours indicate effectiveness:

Green = likely to be effective, yellow = sometimes effective, red = difficult or slow getting effects.

Mitigation Option	Contaminants Treated	Assessment as a Best Practicable Option
First flush basins	TSS, Cu, Zn	Combines TSS removal with essential flow detention. Some metals removal. Traditional treatment approach.
First flush basins and wetlands	TSS, Cu, Zn, hydrocarbons	Good removal of TSS, metals and other contaminants. Combines treatment with essential flow detention. Most widely used current method.
Methods above this line more suitable for developments where flat land is readily available. Methods below this line have smaller footprints and are more suitable for use within settlements.		
Rain Garden or biofilter	TSS, Cu, Zn, hydrocarbons	Good TSS and metals removal. Appears to be a more expensive means of removing metals than basin + wetland
Cartridge filters (e.g. Stormfilter by Stormwater 360)	TSS, Cu, Zn, hydrocarbons	Good TSS removal. Appears to be a more expensive means of removing metals than basin + wetland Higher metals removal cost than rain garden
Filtterra (proprietary in-ground bio-filter)	TSS, Cu, Zn, hydrocarbons	Good TSS and metals removal. Better suited to new or re-development.

	Catchpit filter (e.g. Litta Trap)	TSS, some Cu & Zn, litter, organic material	Good removal of particles larger than 100 µm (sand size). Some particulate metals removal. Better suited to new or re-development
	Street sweeping	TSS, particulate Cu & Zn	Good removal of particles larger than 100 µm (sand size). Some metals removal.
	Downpipe filters (e.g. Storminator™ by University of Canterbury)	Zn, roof-sourced TSS	Very good zinc removal. Council can require downpipe treatment in some cases. Must be voluntary.
	Roof painting	Zn	Very good barrier to zinc discharge. Council does not have powers to require roof painting.
	Low-copper brake pads	Cu	Potentially the most effective and efficient copper mitigation. Government support needed.
ELT Consideration	This report has not been considered by ELT.		
Key Issues	To be discussed in workshop.		
Next Steps	Feedback from Zone Committee.		
Useful Links	N/A		

Attachments Ngā Tāpirihanga

There are no attachments to this coversheet.

Signatories Ngā Kaiwaitohu

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Approved By	Natasha McDonnell - Democratic Services Advisor

Karakia Whakamutunga

Karakia Whakamutunga

Unuhia, unuhia Unuhia ki te uru tapu nui Kia wātea, kia māmā te ngākau, te tīnana, te wairua i te ara tangata Koia rā e Rongo, whakairia ake ki runga Kia tina! TINA! Hui ē! TĀIKI Ē!	<i>English translation</i> Draw on, draw on, Draw on the supreme sacredness To clear, to free the heart, the body and the spirit of mankind Rongo, suspended high above us (in ‘heaven’) Draw together! Affirm!
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Karakia mō te kai for food

Nau mai e ngā hua O te wao O te ngakina O te wai tai O te wai Māori Nā Tāne Nā Rongo Nā Tangaroa Nā Maru Ko Ranginui e tū iho nei Ko Papatūānuku e takoto nei Tūturu whakamaui ki a tina Tina, haumi ē, hui ē Tāiki ē E Rongo, e Rongo Hōmai ngā tipu Hei whakakī i te tīnana Hei oranga Au eke, au eke Hui ē, tāiki ē!	<i>English translation</i> Welcome the gifts of food From the sacred forests From the cultivated gardens From the sea From the fresh water The food of Tāne Of Rongo Of Tangaroa Of Maru I acknowledge Ranginui above me Papatūānuku who lies beneath me Let this be my commitment to all Draw together Affirm! Rongo, Rongo Give us the foods, with which to fill the body, and have health That I may ascend Affirm!
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