

**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Julie-Ann & David Beattie
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/2/2017 4:08:11 PM
Would you like to attend the hearings for this consultation?	Yes
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Disposal via a new outfall pipeline to the mid-harbour
If Other, please describe and state reasons	
Option 1	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	Disposal via Land irrigation to Trees and Pasture places an unfair burden on landowners.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	No - Please refer to our submission in regards to Pond 9 and the impact on Takamatua Valley.

Do you have location preference? Why:	Pond 10
Should Council add aspirational projects to the Akaroa wastewater scheme?	Aspirational projects all have pros/cons, further evaluation is necessary
Any other comments?	Please refer to our submission.

# **Submission to the Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options**

**Submission from:**

**David and Julie-Ann Beattie**

**Email:**

**1 May 2017**

We wish to be heard in support of our submission

## **Summary**

We chose to live at 25 Takamatua Valley Road because of the Community, Natural Environment and Quality of Life it offers.

We find Option 3 being the irrigation of trees or pasture at Takamatua offensive to us and a poorly considered option.

Option 3 has a high opportunity cost to the residents of Takamatua Valley and unfairly forces upon them the burden of disposal of waste disposal from the Akaroa Township, whilst Takamatua residents remain on septic tanks.

We strongly object to Option 3, the irrigation of trees or pasture at Takamatua Valley for the following reasons:

### **1. Pond 9 Concerns**

As adjoining landowners to Pond 9 in Takamatua Valley and proposed tree irrigation zones we would not be compensated for the burden or stigma associated within our property adjoining midge laden ponds or tree stands, we are the most affected, in that within 100 metres of our tranquil property we would be exposed to:

### **i. Uncontrolled Midge Population**

Any pond, let alone a waste water treatment pond will attract a midge population. The Council's own Waste Water Manager, Mr John Mackie recently admitted in an interview on their management of the Aranui waste water ponds that there is *'There is no silver bullet to control midges'* and admits they have been *'unsuccessful in controlling midges in populated areas'*, forcing residents indoors to avoid the plague of midges.

What right does council have to introduce a midge population on our property boundary destroying our quality of outdoor living? Pond 9 is not a rural location, residents in Takamatua Valley and the Takamatua Foreshore residents will have their quality of life directly affected by plagues of midges.

Council have provided no Management plan for residents to review; not only of the control of midges but the bird populations which they inevitable will attract, in the absence of management plan one can only assume that their failed attempts have involved a chemical regime resulting in the insects building a resistance to chemical warfare. Bird droppings from new bird populations feeding on midges, will pose an additional health hazard to nearby residents; again no management plan has been provided or tested in Takamatua Valley.

The following extract from Stuff NZ quotes the following failed management controls from Christchurch City, the proposed operator of Pond 9:

*"The council has approached a number of pest control companies throughout New Zealand and was using an insect hormone called S-Methoprene to limit midge numbers.*

*"Any chemicals used for midges control must comply with the treatment plant's resource consents and not affect bird life."*

*The council was unable to do a bulk application of airborne insecticides over the entire ponds, but was experimenting with point spraying, Hoven said.*

*It was clearing vegetation around the oxidation ponds to reduce breeding habitats. It had started a project to monitor midge populations and help test future midge control measures.*

*Midges breed in freshwater and improved treatment at the plant meant cleaner water was entering the oxidation ponds. This had contributed to a midge population increase in the past 10 years, Hoven said."*

The irony of Mr Hovens comments is that the treated waste water and the tree irrigation in the Valley will only exasperate the midge population in Takamatua Valley should Pond 9 proceed.

### **ii. Traffic Hazards from Midge Population**

It is well documented that Midges present traffic hazards through swarming, the location of Pond 9 with water glare and midge populations will create additional traffic hazard for users of State Highway 75, and as this stretch of road already has had a road fatality due to visibility issues, midge swarms will just add to the traffic risk. As a minimum Pond 9 must be covered at all times.



iii. **Pond 9 -High Ground water and the Risk of Breaching in Tsunami and Earthquakes**

The location of Pond 9 on a known flood plane is bewildering. During winter this site remains bogged for many months of the year, acting as a natural 'soak pit' for run-off from the upper Takamatua Valley catchment.

By removing this land from the natural soak zone that Pond 9 will be constructed will transfer the Valley water to Takamatua foreshore residential properties.

The cost of constructing an above ground pond will require extensive geotechnical engineering solutions with no certainty that the pond would not breach during an earthquake or natural disaster. The site is within identified Tsunami evacuation zones in Takamatua, and barely above sea level.

Because of the existing groundwater level, the location is not without risk of failure, should the structure fail because of ground settlement in an earthquake it could result in a catastrophic failure of the structure and discharge to the Takamatua Stream and Harbour.

Such a pond failure could also take out the main road access to Akaroa if the roading networks and bridge infrastructure were destroyed by a flash flood event from a pond failure.

No pond structure can be 'future-proofed' against failure in an earthquake.

iv. **Pond 9 – Odour Control**

Waste Water ponds are notorious for offensive odours and the Councils current management of the Bromley Sewerage ponds provide no guarantee that the ponds will not emit offensive odours. No management plan has been provided to convince ourselves as adjoining landowners that Council are committed to an odour management plan.

v. **Pond Management during wet weather – Impact on local fisheries and Takamatua Bay**

The Council consultation document makes comment of the discharge of the waste water ponds via a slipway to the nearest stream in an adverse weather event.

Does Ngai Tahu support the discharge of Pond 9 waste water to the adjoining Takamatua Stream? with its native eel population and whitebait spawning areas.

Furthermore the Takamatua Stream discharges directly into Takamatua Bay an amenity enjoyed by fishermen, swimmers and recreational boaties. Has the impact of waste water discharges been considered on the fish population and the amenity of Takamatua Bay?

No detail has been provided on the management of such adverse flows into the adjoining Takamatua Stream. With regular Storms in the Akaroa basin, this would be not a 'one-off' event the document suggests and the discharge could be pro-longed until the soils were sufficiently dry enough to take irrigation.

**vi. High Groundwater – Septic Tank System Failures in Takamatua – ECAN comment**

As Takamatua Valley and foreshore residents will still be operating in-ground waste water septic tank systems, we have real concerns that increased ground water conditions may cause these systems to fail, placing a financial burden on residents for their systems to comply with ECAN discharge requirements. No information has been provided on the impact of groundwater levels on adjoining landowners to the irrigated land and Pond 9 zone.

A guarantee is required from ECAN that they will not pursue Takamatua landowners for Septic Tank failures arising from Council artificially increasing groundwater levels. Or if they do Council will indemnify landowners for any costs associated with Ecan compliance.

## **2. Impact on Takamatua Valley from Tree or Pasture Irrigation**

**vii. Fragmented Land Holdings – The Social Consequence and Economic Loss**

The land holdings identified in the Valley are extremely fragmented in nature and do not make for an efficient tree irrigation system. The fragmented land ownership with access issues in winter will deliver a system with high annual operating costs.

The forced purchase of the Takamatua properties will see our immediate community disappear, where there were once high value lifestyle properties with vibrant contributing households, these residences will be demolished (to comply with the Councils buffer zones) and the flat pasture will be converted into a low value smelly bush stands, creating shady, midge ridden visual blockers in the Valley.

An immediate consequence will be the low loss of amenity and lifestyle from the removal of open land and pasture, which will translate into the loss of value of our property, with no compensation from Council.

We chose to live in a populated valley not in the bush, to lose this social connection through the forced sale of adjoining neighbours lifestyle properties is both cruel and unnecessary.

Council have shown a total lack of respect for the Takamatua community, who currently receive little infrastructure support. The water resource of Takamatua Stream is already siphoned off to support the high needs of Akaroa Township, returning their waste water to our community is offensive and culturally insensitive.

**viii. Valley Catchment – Inability of the Takamatua Valley soil to cope with saturated soils**

Disposal of waste water into the Takamatua Valley catchment increases the risk of erosion and potential soil structure failure in the event of a Storm event. The resulting damage from flash flood events would materialise in the bank erosion of the Takamatua Stream causing bridge and approach failures, including downstream State Highway 75.

There are many water tributaries which feed into the Takamatua Stream; in storm events they already fail to cope with water-flows from the Valley above – with visible flooding of the lower valley

properties. Saturated sub-soils in the lower valley will only exasperate the water flows forced into these streams, creating a higher risk of flooding, road closures and slips.

Higher in the Valley the slip-prone loess soil present challenges to waste water land disposal, long-term residents verify this is a fundamental concern of the waste water irrigation in the Takamatua Valley.

**ix. Nitrate Leaching**

The Takamatua Stream is an important natural resource and there has been no evidence provided that it would not be subject to the impact of Nitrate Leachate from seepage and forced spillage (impacting the native fish population, erosion (through the softening of sub-soils), which would then erode out the stream banks during Storm events.

**x. Aerosol Dispersion of Contaminated Waste Water in Winds**

As an adjoining land owner, the aerosol dispersal of contaminated waste water onto our property during winds must be mitigated.

The consultation document provides no management plan to deal with the dispersal so close to residential properties. The statement in the consultation document “low risk to public health’ is not a risk an adjoining residential property owners should be forced to accept from a commercial operation.

Zero risk from pathogens and viruses must be the minimum standard.

**xi. Tree Replacement Zones**

Takamatua Valley is a natural micro-climate and as a result trees do grow well. However we have not seen any information on replacement land required when the trees mature and require felling, if all the flat land is covered with trees, where will the replacement land come from in 10-15 years, when the trees have reached maximum growth. Native bush stands will reach maximum height and cease to grow.

Failure to provide for tree replacement zones will see the saturated soils yield the trees to fungal disease, weed infestation and an increased fire risk when the trees eventually die.

**xii. Tree Fall due to Storm Events**

With the soils continually saturated, trees will not be forced to send their roots in to deeper soils for stability; the resulting shallow roots; will make them extremely susceptible to Tree Fall in Storm events.

What planning or contingency has been given to such an event? If the irrigation infrastructure becomes damaged and no further irrigation possible for many months whilst damaged trees were removed and infrastructure replaced – what is the contingency?

**xiii. Tree Management – Fungal Disease, Weed Control, Possum Control**

The consultation document is naively deficient on the establishment costs associated with the establishment of fragmented tree/bush stands in the Takamatua Valley. Whilst we understand Native trees are to be considered, Native trees are even more susceptible to fungal disease from soil saturation, how will this risk be mitigated?

In the establishment phase there will need to be intensive weed management and grass clearing to mitigate the fire risk. This will require a 24/7 Council response including every day of the summer period, holiday periods included to reduce the fire risk.

In addition there are rampant possum and hare populations in Takamatua Valley, these will only be too happy to thrive on susceptible new plantings. In the past it has been difficult to bring these pest populations under control with chemical poisoning due to the high risk of the residential pet population succumbing to cruel unnecessary deaths from 1080 poison. What humane management controls are proposed?

In purchasing our property we did not seek to live in a heavily bushed area, instead we chose a flat open area with view of stock and open spaces.

Shading from the adjoining tree/bush population will severely diminish our amenity of the area and our ability to enjoy our property. Shading will also have a detrimental effect on plant health and productivity.

Native bush stands will increase Possum and hare infestations in our property and pose a greater risk to stock from TB, destroy gardens and increase the predator population targeting native bird populations in the Valley.

**xiv. Fire Control**

As responsible landowners we work hard to ensure the risk of Fire in the Peninsula is mitigated at all times, by ensuring grass is kept to minimal levels, and trees are well pruned and dead woods removed.

The sparse commentary in the consultation document of tree management does not take a responsible view to mitigating fire risk in the Valley and ultimately the Peninsula. Making Pond 9 available as a fire fighting resource does not make the planting of hectares of combustible material adjoining residential homes right.

Do the NZ Fire Service support the Waste Water Irrigation proposals and do they have the volunteer resources to fight fires arising from the fragmented tree/bush stands?

## **xv. Nitrate Leaching**

Council have not provided any evidence that the land disposal systems proposed will not leach nitrate into the ground water and Takamatua Stream. The irrigation zones adjoin the Takamatua Stream and fish populations within the stream include native eels and whitebait spawning zones.

Additional leachate into the ground water levels of the Takamatua Valley could be detrimental to residents' health, with nitrate build-up in the ground water affecting vegetable gardens, fruit and nut orchards

The levels of nitrate in the consultation document 20-30g/m<sup>3</sup>, is not reflective of modern removal standards. Native Trees as a medium for the removed of nitrogen are known as a poor choice to remove nitrogen, a native plant such as Kanuka could only be expected to remove 20% of applied nitrogen.

### **Summary**

Option 3 will destroy a viable and thriving community, turning fertile soil in unproductive bush.

Option 3 is an intensive ongoing Management option, Council have failed to demonstrate they understand the consequences of the ongoing management consequences and financial cost in the consultation document.

The disposal of waste -water in Takamatua Valley will bring with it extraordinary management responsibilities that Council must not only manage to the latest International best practice, but ensure the negative outcomes of the waste water irrigation do not become a lifelong burden for Takamatua Valley residents.

Midge population control, bird, pest and weed eradication are the most obvious management responsibilities. However we are merely guardians of the land and Council has in innate responsibility to protect the natural Takamatua Valley environment and not subject it to erosion, nitrate leachates and irreversible damage through failure to plan for another community's waste water disposal.

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	elizabeth foley
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/2/2017 4:24:58 PM
Would you like to attend the hearings for this consultation?	Yes
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Non-potable re-use in Akaroa along with disposal via a new outfall pipeline Beneficial use of a waste product back to Akaroa which often faces water restrictions in dry seasons.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
Option 5	Option 1 - Irrigation of trees or pasture in Robinsons Bay
Option 6	Please select
Other	
State reasons for ranking	Option 4: the community and council is looking to the future at beneficial reuse of a waste product- non-potable water would be useful and communities would not be disadvantaged by the council's decision. Akaroa community issue would be partially solved by the Akaroa community rather than piping it away out of sight where it is not necessarily wanted.  Option 5: use in conjunction with option 4 with support from RMA if found to not adversely affect marine environment.

	Other options are least supported as land-based irrigation seems to be seen as adversely affecting the most individuals and communities.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Drip irrigation to trees. Increase plantings of native trees.
Do you have location preference? Why:	Pond site 10. Close to Akaroa, can be covered to reduce smell, less distance to pump so cheaper.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Yes. I support suggestions above as wastewater needs to be put to as much beneficial reuse as possible, rather than pumped away to be another community's issue.
Any other comments?	The Council has a good opportunity to show they are looking to the future of wastewater management and are able to work alongside communities.

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Christine Shearer
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/2/2017 5:06:50 PM
Would you like to attend the hearings for this consultation?	Yes
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Disposal via a new outfall pipeline to the mid-harbour
If Other, please describe and state reasons	Cannot go to land due to soil types , loss of amenity value , Flies , excess rainfall area , lack of confidence in council for landscaping areas and dealing to the maintenance of the plants .. to extend on this at hearing
Option 1	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 2	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	Although I think to reuse would be sensible I'm in sure as to the visibility of this idea Don't think it should go to the valleys
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	



Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	James Fraser
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/3/2017 11:39:24 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Complete re-use of recycled wastewater in Akaroa Households As a community we must consider the issue of household water and wastewater in the same solution
Option 1	Other (please describe)
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	Complete or partial re-use of recycled wastewater in Akaroa households with the remainder being discharged via a mid-harbour outfall
State reasons for ranking	While we are planning for an increase of population under this proposal in order to cater for the increase, there has been no satisfactory solution given to the impacts of unregulated extraction of water from the Takamatua stream for use in the akaroa water scheme.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	

Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

I am writing this document in conjunction with the online submission.

I am a landowner in Takamatua Valley, and some of my land has been identified as suitable for land irrigation of wastewater.

The land identified is part of a low intensity cattle farming operation that provides income, enjoyment and security for my family. One of my reasons for returning to the Peninsula and farm was to be a sensitive guardian of the land that I own, and where possible enhance the ecosystems contained within the boundaries.

I do not consider the irrigation of wastewater onto my land as enhancement to either the natural ecosystems contained within, or as enhancement of the farming system.

I view the irrigation of particular parts of my land (as has been identified) as an impediment, with areas of high stock passage (lead-in to cattleyards) and a vehicle and stock access way to one of my blocks having been deemed suitable for irrigation.

I also have concerns that an area directly up-slope of my house and garden, which is already negatively effected by culvert fed road run-off, has been identified as being suitable for irrigation.

I feel that that the freshwater ecosystem running through my land has been hugely impacted by the non-regulated extraction of water from the Takamatua Stream for the Akaroa and Takamatua water scheme. It is my strong view that wastewater and house water must be considered in unison and that instead of considering the use of non-potable water as an aspirational goal, that the re-use of recycled potable wastewater must become a reality.

To summarise; I am opposed to all proposed land irrigation options presented by the document. I would only support a proposal that includes the re-use of recycled potable wastewater within households.

James Fraser

Bsc, PostGradDip WLM, Msc (Zoology).

# Submission form continued

1203

## Contact details

Contact name Rodney Innes

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature] Date 01/05/17

fold

fold

### Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

Yes - I/We would like to be heard

No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178



tape here

Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

RECEIVED  
02 MAY 2017  
BY: Emily Clark  
X-SDJ

tape here



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

### How to give us your feedback

You can use this submission form or you can provide your feedback in a number of ways:

- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons why:** Provided the water is treated to the highest possible standard, I can see no reason why it cannot be disposed to the harbour

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).**

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
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- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons for this ranking:** As above. This option is one of the cheaper options, and no additional land is required. Low maintenance costs. This option would not affect many people.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

We do not support this option as the land is prone to slipping in very wet weather and is therefore unsuitable for irrigation. Both Robinsons Bay Valley and Takamatua Valley are prone to flooding. There would be ongoing costs with any of the irrigation options.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

It would be a shame to use all the flat areas in the Akaroa, Robinsons Bay and Takamatua areas for storage ponds, especially those in full view of the highway. No amount of camouflage would be able to hide Pond 7 at Takamatua.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley)? If so, which ones do you support and why?

I would not.

Do you have any other comments? (Please use additional paper if required):

I agree that the pond 10 site is the best of the potential pond sites as it has the lowest overall impact. The non-potable reuse of reclaimed water to irrigate parks and public toilets in Akaroa has potential, but it is not a standalone solution.

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1204

## Contact details

Contact name Shireen May Helps

Organisation name (if representative) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature  Date 29-4-2017

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.



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Attention: Hearings Team  
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 Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

Please state your reasons why:

*Recycling and fire prevention  
more extensive irrigation system in Misty Peaks reserve should be considered to prevent fires, not just dumping in a small area*

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 6 Option 1 - Irrigation of trees or pasture in Robinsons Bay  
 3 Option 2 - Irrigation of trees or pasture at Pompeys Pillar  
 5 Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area  
 1 Option 4 - Non-potable reuse in Akaroa, in combination with another option  
 4 Option 5 - Disposal via a new outfall pipeline to the mid-harbour  
 2 Other (please describe) *fire fighting ponds & irrigation of council misty Peaks*

Please state your reasons for this ranking:

*Recycling wastewater is the way of the future  
This must be understood by council and a way to do it right found*

Continued overleaf

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Not really because I still think council is dumping with how they are considering going about it. The only site I would happily go along with it is option 2. In the right places it does have merit. Option 1 and option 3 are not an option!!

Do you have a preference for the location of reclaimed water storage pond(s)?

Please state your reasons why:

On ridges. Ponds should not be in valleys where they need to be built up. Ponds should look natural ground level with sensitive planting at the verges to give them a natural look. Some floating garden islands could be used to soften as in Organics & reed systems overseas.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Yes to fire storage ponds. This is a must!! In the future Takamātua may need a scheme but not until Akaroa is sorted.

Do you have any other comments? (Please use additional paper if required):

Akaroa needs a good recycling system for the future and also, the heightening fire risk problem may need to be considered as we have all seen in the port hills fires. Just dumping a valuable natural resource is not an option.

Please read the sheets

Thank you for taking the time to respond. Please include your contact details over the page.



I am concerned with options 1 & 3 not only because of the impact the scheme might have on locals but also although Council have taken 40 years of rainfall into account I do wonder if actual flood data has been taken into account or is in fact available. Robinsons Bay valley is pretty much all flood plain and the possible location of a pond in Takamatua doesn't seem to take into account the bend in the creek where future severe weather conditions may drastically change the creek bed <sup>of direction</sup> & damage the ponding area. The fact the ponds would be raised would also ruin the look of two beautiful valleys. Also any odour there might be would be more obvious in valleys where air layers could keep down and <sup>prevent</sup> accumulation of odour.

Ridges would be safer by far for any ponds. Ponds could be done well with land scaping & a lower profile and any odour problems well dispersed. Ridge ponds are also more useful in fire situations especially Misty Peaks and Hinewai. The most likely areas to be seriously damaged by fire.

Misty Peaks is in such risk I would like to see some serious preventative measures maybe bulldozing lines with drip or spray irrigation feeding fire retardant native vegetation in gorse areas to aid native vegetation to win the war against gorse before fire does the damage as on the Port Hills & as happened on Hinewai. Such events put back regrowth decades and the danger of more fires happening before any further wins of natives. With climate change council must be pro active otherwise council may as well forget about having reserves. Gone are the days when you can simply sit back and let nature take its course. Nature needs help. This is what Francis & I have learned over the years, why we would never simply close up our property. It would be a sure way to lose it all to fire. Grass fires can be controlled easily but Gorse or Kanuka you had better get out of the way.

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Duncan & Christine McMillan
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/3/2017 4:36:50 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Recycle in Akaroa No harm to our environment
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
Option 4	Option 1 - Irrigation of trees or pasture in Robinsons Bay
Option 5	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Drip - more accurate disposal

Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Tricia Hewlett
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/3/2017 7:36:09 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	NA
Group/Organisation Names	NA
How many people do you represent?	NA
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	There is technology available to treat water for reuse which could be used alongside an open sea disposal. This would reduce summertime water use within the Akaroa catchment and with the disposal beyond the Akaroa heads the dilution reduces impact on kai moana within the harbour.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Other (please describe)
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	Disposal via a new outlet pipe beyond the Akaroa heads.
State reasons for ranking	Reuse reduces the strain on water availability in the summertime and disposal beyond the Akaroa heads reduces the risk of contamination of kia moana.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	The amount of water that would be sprayed or dripped onto any landform within the Banks Peninsula area is likely to have a negative impact in terms of run off, swamping and potential land movement due to the steepness of the hills and the winter dampness already present in the valley flats.

Do you have location preference? Why:	As far from homes as it is possible to locate them.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Fire storage ponds are a useful precaution for many landowners.
Any other comments?	Financial limiting now is likely to cost our mokopuna a lot more in a few years.



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Graham David & Nicola Anne Shanks
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/3/2017 7:49:37 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	Graham David Shanks
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Disposal via a new outfall pipeline to the mid-harbour
If Other, please describe and state reasons	
Option 1	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	Soil types are not suitable to sustained irrigation and lack of suitable land make land discharge not feasible. Further leaching into the inner harbour is unacceptable. Our weather patterns are becoming more extreme, and associated disasters more common. Harbour outfall of clean treated water with new longer pipe is the only way forward
Would you be more supportive of spray irrigation of treated	Neither



wastewater to pasture? Why	
Do you have location preference? Why:	"The Christchurch Press" - Midges and treated water in Bromley. The midge problem has increased since the water was treated to a higher standard and the locals are devastated. The CCC has spent \$800,000.00 with no success. Should reclaimed water storage ponds be built - we would have similar issues - be a disaster waiting to happen
Should Council add aspirational projects to the Akaroa wastewater scheme?	No
Any other comments?	

**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -  
Submissions close 5pm, 30 April 2017**

Full Name*:	Rachelle Connolly
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/3/2017 10:38:05 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	
Option 1	Other (please describe)
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	

Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**  
***Submissions close 5pm, 30 April 2017***

Full Name*:	Cynthia Muir
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/3/2017 10:44:34 PM 4/24/2017 2:45:32 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Reuse in Akaroa and irrigation @ pompeii pillar Reuse it as it is a resource. Irrigate if necessary AWAY from dwellings  I think we should look to the future and go with Option 4, and if additional support then also Option 2. We should NOT be having sewage ponds or spraying of potentially toxic water near residential areas (like Takamatua or Robinsons Bay) JUST NO!!! It is not safe nor healthy for residents. It is also NOT suitable for an area that is trying to attract tourism to survive. :(
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	

State reasons for ranking	Use the resource but make sure the cleaning system WORKS.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Drip on trees. Less energy required  Drip irrigation to trees, because it will not be good to spray potentially toxic water into the air :(
Do you have location preference? Why:	Away from dwellings. NOT in Takamatua.  Away from residential areas...NOT in Takamatua nor in Robinsons Bay!!!
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Georgiana Osborne
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 6:52:01 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	On behalf of a group or organisation
Role within Organisation	Head of family
Group/Organisation Names	Family members of Kingstons 12 Bells Road Takamatua
How many people do you represent?	19
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	<p>We consider it is vital that the water is treated to the highest possible standard and then reused in Akaroa</p> <p>A short term disposal to the harbour would be acceptable</p> <p>Water is an increasingly scarce resource that should be reused where it is needed. Water restrictions could be eased and less water drawn from the Takamatua stream which has many threatened long fin eels.</p>
Option 1	Please select
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	As above
State reasons for ranking	As above
Would you be more supportive of spray irrigation of treated	

wastewater to pasture? Why	
Do you have location preference? Why:	10 would be acceptable if landowners and adjacent landowners are agreeable
Should Council add aspirational projects to the Akaroa wastewater scheme?	Obviously fire storage ponds are needed (not recent port hill fires and the Hinewai lightening strike fire)
Any other comments?	Three family members living overseas have made submissions but not received acknowledgements. I am concerned that they will not be able to resubmit and unfortunately I did nto keep a copy of their submissions which they sent to me. The so called "technical glitch" with the CCC once again leaves one totally disillusioned with the process

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Mark Milligan
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 8:47:42 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Irrigation of reclaimed water to trees or pasture
If Other, please describe and state reasons	
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 4	Option 1 - Irrigation of trees or pasture in Robinsons Bay
Option 5	Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
Option 6	Please select
Other	
State reasons for ranking	Re-use is always going to be the preferred option for the environment.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Drip, less obvious and offensive to some.



Do you have location preference? Why:	Pompeys Pillar, less risk of human sanitary issues with a much less population over there should the remote chance of storage pond flooding or earthquake damage occur.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Fire ponds are a good idea but not reticulated waste water in Takamatua as the current septic tank systems works just fine in my opinion.
Any other comments?	Listen to the people.

# Submission form continued

1226

## Contact details

Contact name Melen Wright

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Melen Wright Date 30/4/2017

Do you wish to present your submission at the hearing? Please tick one of the boxes below:  
Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



tape here

tape here

# Submission form

### PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

#### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

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#### How to give us your feedback

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- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

### Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons why:

If the treated effluent is safe to put on land then it is fine to put out into the harbour as it has been for many years.

### Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 4 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 3 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 5 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 2 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons for this ranking:

We live at 198 Takamātua Vly rd right next to a large spray & dripper potential area. My children play in that gully for hours, hats, swims etc, property values will drop. Option 5 is the only way. Send these cruise ships back to Lyttelton!

Alkaroa does not have the infrastructure & we as rate payers are not paying for them. There are slips all thru the gully as well.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

No. It's all going to go out to sea anyway so just extend the pipe and have done. No spray & drip on planted areas will upset too many people, devalue land etc.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Keep it where it already is.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No

Do you have any other comments? (Please use additional paper if required):

Please advertise your public meetings so we know about them.

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1228

## Contact details

Contact name John or Carol Masefield

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature] Date 30/4/17

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes - ~~I~~ We would like to be heard

No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154





# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

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- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

## Please state your reasons why:

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 2 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 3 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 5 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

## Please state your reasons for this ranking:

Because if the water is as clean as stated the seabed is unaffected. Land based options to expensive.

Continued overleaf

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Do you have a preference for the location of reclaimed water storage pond(s)?

Please state your reasons why:

These ponds if required, need to be placed out of site to the public and in an area of significance.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No!

Do you have any other comments? (Please use additional paper if required):

As the landholders of site 10 pond we feel that the council has been negligent in there communication with us in regards to the use of our land in this project.

Thank you for taking the time to respond. Please include you contact details over the page.



# Submission form continued

1229

## Contact details

Contact name David & Sue Thurston

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature] Date 1/5/17

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - ~~I~~ We would like to be heard
- No - I/We do not want to be heard

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FREEPOST Authority No.178



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Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
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# Submission form

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Please make sure your full name and address is included with your submission.
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Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons why:

We believe that re-use of water in Akaroa township would be beneficial

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 2 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons for this ranking:

Re-use of water would help water shortages in Akaroa in the driest months

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

No

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Pond Site 10 - less impact on our environment.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No

Do you have any other comments? (Please use additional paper if required):

- We strongly oppose any disposal of waste water or storage ponds in Takamātua Valley. It would have an immense impact on our environment & lives.
  - An adverse economic impact on our accommodation business.
  - Devaluation of our future investment
  - Stream life potentially affected
  - Health issues - midges, odour
  - Un expected & unplanned drastic interruption into our lives.
- Of all the valleys in the inner harbour, Takamatua is a beautiful, unique & sheltered valley with various lifestyle blocks & residential areas. The landscape & properties will be changed forever if irrigation & pond 7 go ahead in the Takamatua Valley.

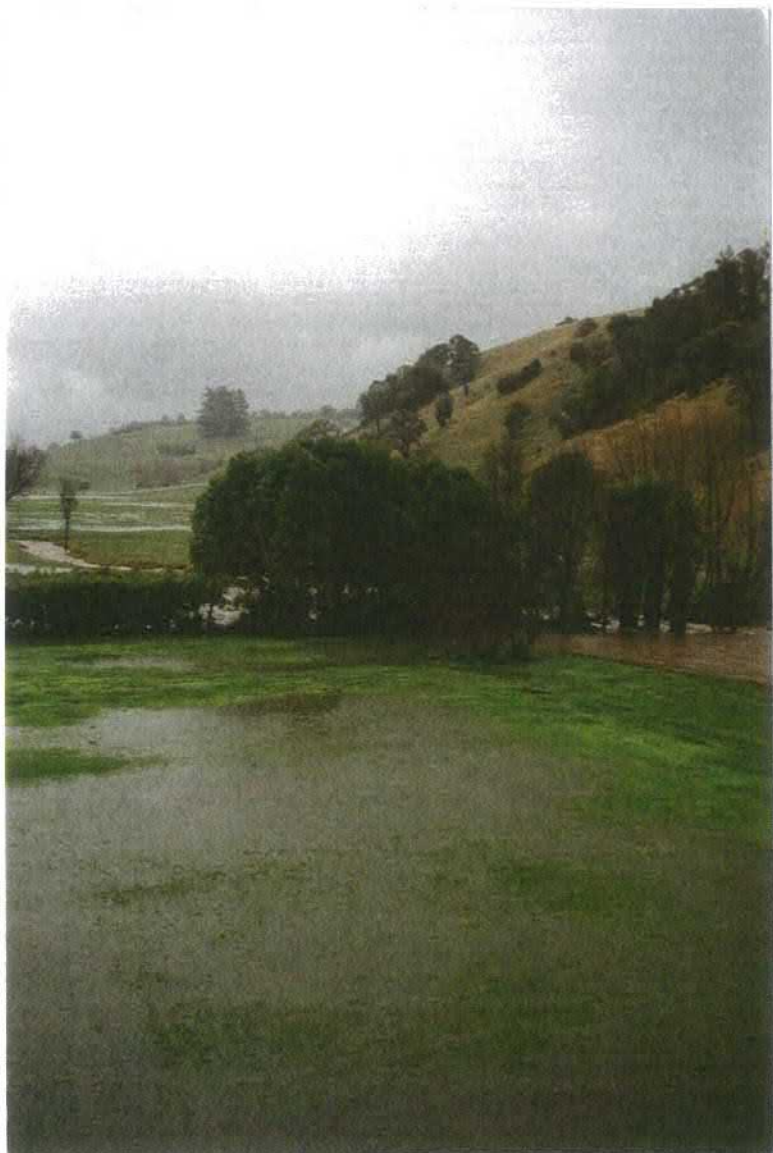
Thank you for taking the time to respond. Please include your contact details over the page.





Beautiful Rural Vista from our property  
19 Bells Rd. Takamatua. Site of Pond 7 &  
irrigation.

View of proposed pond site 7  
from State Highway 75.



Many floods over the last 29 yrs  
like this site at pond 7 & irrigation



# Submission form continued

1230

## Contact details

Contact name Brendon Woods

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature B Woods Date 30/4/2017

### Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

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Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here

tape here

# Submission form

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- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

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Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

### Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
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- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

Recycling waste water into town with water shortage over summer is good use of resource.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

No as local clay soils have very little water holding capacity and a considerable amount of waste will end up ~~up~~ in our waterways during rain events and I find it offensive that we would pollute our waterways with nitrates and other minerals killing our fish stocks & flora & fauna.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Maybe small amounts but because of volumes ~~#~~ with stormwater as well it is impractical to store all.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

NO.

Do you have any other comments? (Please use additional paper if required):

I think harbour outfall is the only practical option for unused water which will be further treated than current practice and will continue to improve in up coming years

land discharge on clay soils in this geographical landscape will only further pollute our waterways and damage our landscape - so ocean outfall is the only sensible and practical solution for the volumes that have to be dealt with

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1231

## Contact details

Contact name *Revd Michael Baker*

Organisation name (if representing)

Contact address

Postcode

Phone number (day)

Phone number (evening)

Email (if applicable)

Signature *M.P. Baker*

Date *20th April 2017*

Do you wish to present your submission at the hearing? Please tick one of the boxes below:  
Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - ~~I~~We would like to be heard
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FREEPOST Authority No.178



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# Submission form

have your say

www.ccc.govt.nz/haveyoursay

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Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

To reuse in Akaroa and ~~to~~ be available for use by local land owners for their crops.

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 1 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

We see reuse by Akaroa as prudent, while irrigation of land at Pompeys Pillar (if acceptable by the land owner) would be our second choice.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

There are concerns about the level of nitrogen building up in the soil. This makes drip irrigation of trees preferable to pasture irrigation. Nevertheless if water had nitrogen removed then the issue is what method best supports our land. We would prefer water to be processed to the highest standard. The land also must be able to hold the water and not enter streams or cause erosion.

Do you have a preference for the location of reclaimed water storage pond(s)?

Please state your reasons why:

We prefer # 10 at top of Takamatua and # 9.

Next we would consider the sites on Pompeys Pillar as suitable, because they are close to the land they would irrigate, and they are far away from houses.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley)? If so, which ones do you support and why?

We like the idea that storage ponds could be used ~~fire~~ for fire <sup>water</sup> storage. We also like the idea of reticulating wastewater via a purple-pipe scheme for Akaroa.

Do you have any other comments? (Please use additional paper if required):

See Attachment A. and 4x photos

Thank you for taking the time to respond. Please include your contact details over the page.

## Attachment A.

We are custodians of the land in Takamatua which was gifted to the Anglican Parish of Akaroa-Banks Peninsula with a specific purpose as an investment and source of revenue for the future of the church on Banks Peninsula. It is situated adjacent to state highway 75 on the valley floor and has been identified as a potential pond site #7 on the map of Takamatua in the consultation document. We very strongly feel that we should continue to honour the intention of this gift. This land is being used in a very productive and environmentally sustainable way. We doubt that an enforced sale of our land would adequately compensate the parish and would be detrimental to the current tenant as the planned pond would occupy most of the land owned by the church.

We endorse the findings of the Banks Peninsula Community Board Working Party's joint statement that states "The pond site on the valley floor next to state highway 75 (Takamatua pond site 7) is unsuitable because of high groundwater and flooding." There are already concerns raised about the stability of the soil and gaps of knowledge in the modelling done so far around the peninsula, the fear being that in an extreme weather event the pond would not be able to contain the water and it would overflow and seep into the harbour. The proximity to the road and the impact that such a pond would have on the Takamatua community with an influx of insects, Canadian geese and the stigma of such a pond devaluing properties in the area are all valid arguments for this site being unsuitable for a wastewater storage pond.

We appreciate the council commitment to not using a bypass overflow system in the event of extreme weather conditions and the upgrading of the plant to produce water of the highest standard giving the community a confidence in the quality of the water.

We emphatically endorse Option # 4 for as much of this water as possible being reused in Akaroa to alleviate the chronic summer water shortages the town experiences. It is a valuable resource which must not be wasted. It must certainly include nitrogen removal, and if possible cleaning to a drinkable state. With water brought to this level of purity, then it should be reused. It could be used by local farmers the most suitable being Pompeys Pillar for irrigation, and in Akaroa via a purple pipe system that would service public toilets and residential and public gardens. If the water is truly safe to drink why not add a proportion of it to our drinking water?





Our land in Taka māhira  
some of the last available flat  
land. Quite productive,  
possible land for sub-division.



Our land is very visible from  
the main road coming into  
Akaroa.



Our land gets quite muddy  
in winter time.






Our land is bordered by a stream, which is eroding into the bank of the paddock. Risk of runoff and pollution.

## SUBMISSION FROM

**Chris & Annette Moore  
CAM 2002 Limited**



**In response to the Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options Document published by the Christchurch City Council**

### **Background**

1. We have been living at 36 Sawmill Road, Robinsons Bay, for over 10 years.
2. During this time, we have established a highly successful Bed & Breakfast operation, hosting several thousand guests from around the world.
3. We also have a very successful olive grove where we produce New Zealand's best olive oil as evidenced by our success in The New Zealand Extra Virgin Olive Oil Awards where we have taken out the Supreme Award on 4 occasions in the last 5 years.

And just this week, we have won GOLD at the prestigious New York International Olive Oil Awards where the world's best olive oils compete, this year over 900 oils from 26 countries.

Our brand is Robinsons Bay Extra Virgin Olive Oil which has become recognised in Canterbury and throughout New Zealand and indeed now throughout the world for outstanding quality.

### **The Consultation Document**

We make the following observations about this document

1. It does not appear to have a date
2. No introduction of the Working Party or its purpose, who the members were or who they represented.
3. The document is confusing and hard to understand and raises more questions than gives answers even after attending two Council consultation meetings
4. The final short-list of options map on page 5 does not even have Akaroa marked on it!

## The Options

### **1. We strongly support OPTION 4 – Non potable reuse in Akaroa**

- We commend the Council Staff for having the foresight to include this option. It is beneficial reuse for the Akaroa Community at its best.
- We believe this option goes hand in hand with pond site no 10 at the top of Old Coach Road, across the road from the treatment plant.
- The quality of the treated wastewater is the **Number 1** fundamental in this whole consultation process. The treated water must be to a very high standard (the salad standard) that allows people to water their vegetable gardens with confidence. Such a standard can be achieved using ultra filtration in the wastewater process and while there will be some additional cost, it pales into insignificance when spread over the life of the project. It sets the standard and demonstrates that Council are serious about beneficial reuse in Akaroa in parks, domestic and public gardens and public toilets.
- We strongly recommend that Council staff set up a demonstration vegetable garden using the treated water which will give the Akaroa Community the confidence to use such treated water in their own gardens via the purple pipe network.
- It would appear that the latest Beca report confirms that all recycled water could be taken up by Akaroa.

### **2. Until all of the recycled water can be taken up in Akaroa, we support a temporary outfall in the Akaroa harbour during this transitional period**

### **3. We strongly believe that Option 1 – Irrigation of trees or pasture in Robinsons Bay is unacceptable for the following reasons:**

- It does not make beneficial reuse of the treated water. It is a disposal mechanism.
- It is a high risk option because of the unknowns and nowhere in New Zealand has it been done successfully. We do not want our Council and the Residents of Robinsons Bay to be a part of a large experiment that will have potentially catastrophic results and wide ranging ramifications for our Community and our city.
- This is underpinned by the following quote from Andrew Daker's Memorandum of the 27<sup>th</sup> March 2017 which says "I know of no other similar year-round large scale wastewater land application system in NZ on similar soils and topography that has been operating successfully for a substantive period at design load. This proposal is essentially a first for NZ"
- We are concerned at the close proximity of all of the proposed ponds in Robinsons Bay to resident's homes. In particular, we are very concerned about the proposed pond site no 4 which is located within the 100 metre setback from our home and very very visible. This



pond site appears to straddle 2 properties and is very close to steep slopes all the way to the Robinsons Bay stream. We are concerned at the odour and midge infestation that will occur as well as the influx of Canadian geese and other pests. We note the problems experienced by Bromley residents over the years with midges and the large investment by council to eradicate the problem.....without success.

- We are very concerned at the likely leaching of nitrates into the Robinsons Bay stream from the proposed ponds, a stream that contains whitebait and eels and is a very popular whitebaiting spot for Akaroa residents. The latest Government report on the state of New Zealand's rivers and lakes reveals many fresh water fish and plants are at risk of dying out due to contamination, increasing nitrate levels being the number 1 problem.
- We are also concerned that our property has been singled out for potential irrigation, in particular a steep gully area adjacent to the house and also in the olive grove. Olive trees in this area, just like natives, do not need irrigation. What they get in the way of rainfall is what they get and the quality and flavour of our Robinsons Bay Extra Virgin Olive Oil coming from our olives is outstanding and underpinned by the "Best in Show" awards at the NZ Olive Oil Awards in 2012, 2013, 2015 and 2016 and the GOLD medal at the prestigious New York International Olive Oil Competition in April 2017.
- We are hugely concerned that should council go ahead with the Robinsons Bay ponds and irrigation, our ability to sell our property will be severely compromised as will the value of the property. We urge council to recognise that this is a reality and not just mere perception, in fact something that was recommended in the Working Party's final Joint Statement.

This "perception" has already turned into reality for one Robinsons Bay resident who recently thought she had a sale of her property only for it to fall through at the last minute when the prospective buyer became aware of the wastewater issues in Robinsons Bay.

**In conclusion, we urge Council to take the lead and initially produce water to a sufficiently high standard so that it can be successfully used on Akaroa gardens and public toilets but with the ultimate goal of producing potable drinking water when the time is right to counter the predicted severe drinking water shortages in the future.**

**We urge Council to do something we can be proud of rather than something we will come to regret in the years ahead, something that will future proof water supply in Akaroa forever.**

**Thank you for this opportunity of presenting our submission and we would like to be heard at the hearing.**



**Chris & Annette Moore**  
27<sup>th</sup> April 2017.

# Submission form continued

1233

## Contact details

Contact name Rob Evans

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Signature] Date 28/4/17

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**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
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Attention: Hearings Team  
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### Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

#### Please state your reasons why:

If the water is treated to the high standard as claimed, should not be a problem. No ongoing costs ~~as~~ as with all other proposals

### Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 3  Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 4  Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 2  Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 5  Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1  Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

#### Please state your reasons for this ranking:

① Cost ~~is~~ should be not a problem, if the water is treated as good as you say  
⑤ High cost and ongoing cost to instal a purple pipe and cost to cut cut ratepayers with the ability to levy

Continued overleaf



further rates.

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Neither .. Like Ngau Tahu I find it offensive to spray or drip treated sewerage over our land

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

No preferred storage as I would like to see the water returned to the harbor.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No - as above

Do you have any other comments? (Please use additional paper if required):

If the treated water is as good as you claim, it should be returned to the harbor as trying to reuse it ect will just be an ongoing expense on ratepayers and there is no guarantee that it will be successful.  
as.

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1234

## Contact details

Contact name Doug Archbold

Organisation name (if representing) n/a

Contact address \_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature] Date 30-4-2017

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## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

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Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 5 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 3 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

There is no way either Robinsons Bay or Takamātua should be used for any sewage use. Too close to road & other residents. No reason at all why harbour discharge should not be used. When did Maori sewage go 200 years ago — into waterways & ocean!!

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**Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:**

*[Faint handwritten notes in blue ink, including "drip", "pasture", "trees", "supportive"]*

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**Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:**

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**Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?**

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**Do you have any other comments? (Please use additional paper if required):**

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Thank you for taking the time to respond. Please include you contact details over the page.



# Submission form continued

1235

## Contact details

Contact name Jason Wright

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Jason Wright

Date 24/4/17

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**  
*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



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tape here



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

### How to give us your feedback

You can use this submission form or you can provide your feedback in a number of ways:

- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

*any thing you put on the land in the harbour will eventually end up in it any way.*

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 5  Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 3  Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4  Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 2  Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1  Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

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Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

No

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

No

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No

Do you have any other comments? (Please use additional paper if required):

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1237

## Contact details

Contact name Lee Robinson

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone number (day) \_\_\_\_\_ Postcode \_\_\_\_\_

Phone number (evening) -

Email (if applicable) \_\_\_\_\_

Signature [Signature] Date 26/4/2017

fold done (RBRRA) fold

Do you wish to present your submission at the hearing? Please tick one of the boxes below:  
Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here

tape here





# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

Please note: Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

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- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
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Preepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

*Best sea water solution*

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

*See attached document*

Continued overleaf



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Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

See attached submissions

Do you have a preference for the location of reclaimed water storage pond(s)?

Please state your reasons why:

See attached submission

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

See attached submission

Do you have any other comments? (Please use additional paper if required):

See attached submission

Thank you for taking the time to respond. Please include your contact details over the page.

**SUBMISSION IN RESPONSE**  
**TO THE DRAFT CHRISTCHURCH CITY COUNCIL**  
**AKAROA RECLAIMED WATER BENEFICIAL REUSE, TREATMENT AND DISPOSAL OPTIONS**  
**FROM**  
**ROBINSONS BAY RATEPAYERS' AND RESIDENTS' ASSOCIATION**

1. The Robinsons Bay Ratepayers' and Residents' Association (RBRRRA) was formed in 2014.
2. The RBRRRA was set up amongst other things to "conserve, promote and encourage the retention, maintenance and upkeep of amenities in Robinsons Bay (the Bay) including, but not limited to the areas of public use owned and maintained by the Territorial Authority.....". (Object 2.2 of the Rules).
3. The RBRRRA has been supporting the Friends of Banks Peninsula Inc (FOBP) working through the issues in relation to the Akaroa Wastewater proposals.
4. The RBRRRA has been fully engaged with the FOBP and is aware of the technical aspects of the submission that has been made to the Council in respect of the wastewater proposal.
5. The RBRRRA supports the submission lodged by FOBP and in particular its proposal for:
  - 5.1 Re-use
  - 5.2 Ponds at the top of Old Coach Road and away from Robinsons Bay and Takamatua
  - 5.3 Pompey's Pillar option
  - 5.4 Temporary discharge to the Harbour in the interim
  - 5.5 Other options could be considered but only after an appropriate process
6. The RBRRRA has grave concerns over the proposal to place Akaroa wastewater in Robinsons Bay. There are a number of reasons for this:
  - 6.1 The Bay has no need for further water supply and the proposal is simply one of disposal. There is no community benefit from placing Akaroa wastewater in the Bay.
  - 6.2 The RBRRRA believes it is a retrograde and short-sighted view to dump wastewater in Robinsons Bay. There is no need for it. There is no demand for it. It will serve no useful purpose.
  - 6.3 Suggestions have been made that it would be used to irrigate native trees and plants. It is not required to establish native trees and plants as is evidenced by many plantings in the Bay and in the Peninsula generally and the proposal to transfer wastewater to Robinsons Bay is simply a mechanism for disposal.



- 6.4 The Bays in the Harbour are occupied and used by people for their own residence and in some cases are small horticultural and agricultural holdings. They are the built up areas of the Peninsula outside of the main town of Akaroa. Ngai Tahu has objected to the outfall of wastewater to the Harbour for cultural reasons; similar views are taken by the residents of the valleys of Robinsons Bay, and for that matter, Takamatua, in respect of the wastewater proposal now being debated.
- 6.5 It is acknowledged that the use of wastewater needs to be a long term plan. This is a 50 year decision that will impact the generations beyond us. It is important to get it right. Quite simply a proposal to place the wastewater up the Harbour rather than down the Harbour towards sea boundaries is baffling, short sighted, and we believe simply driven by cost and convenience.
- 6.6 There is concern that a wastewater irrigation scheme built now may prove inadequate in size, either due to design flaws, or to a growth in wastewater produced by Akaroa, and that once a disposal field has been built in Akaroa it will continue to grow and blight the Bay for many years into the future.
- 6.7 Our research has shown there is an inherent risk to the community and environment at the "end of the pipe". Sewage disposal systems breach consent conditions on a regular basis. The Council has given no indication on how it would address the impact of consent breaches on the neighbouring population.
7. The proposal in part may include storage ponds in the areas where the wastewater is to be disposed. This has grave ramifications. It is acknowledged that such ponds may on occasions be subject to oversupply and that in itself would lead to excess water in areas which are prone to flooding on occasions and erosion. Nitrogen leaching and excess water would only be a detrimental disposal to the Bay and have no beneficial effects.
8. Local knowledge forms a strong base for the community's position on this matter. People who have lived here for a number of years are well versed in the experiences of flooding, slips etc in situations of extreme and heavy rainfalls. Many have personal experience and are wary of further water being provided to the area.
9. In particular, spray irrigation is totally unacceptable to residents who reside in the area. The thought of this to the nearby residential community is gravely concerning.
10. As well as having residential properties in the Bay (there are approximately 80 families who reside in Robinsons Bay), the Bay is known for its large whitebait source in season from the Robinsons Bay stream.
11. The Bay is also well known and very well used for other recreational pursuits. It is probably the most frequently used Bay for water skiing and water sports. It is sheltered from the southerly and the easterly more so than many other bays in the Harbour. The picnic area is a very popular spot for day visitors as well as local inhabitants. High tide at that area sees numerous people at any one time utilising the beach and the very friendly gradient for swimming, boating and the like.
12. The RBRRA is concerned that any disposal of wastewater will affect all these amenities in the Bay that have significant community and public benefit.

13. The Robinsons Bay community itself will gain no benefit from the system. All homes in Robinsons Bay have paid for and provide their own septic tanks and it would not be feasible to connect rural properties to the reticulated system.
14. Members of the RBRRA have actively been involved now for seven years in promoting the restoration of the Wharf. In excess of 70 families signed a submission seeking its retention. The RBRRA is actively involved in getting together plans and funding for the Wharf's repair.
15. The area is inhabited by many houses, families and the valley is an intricate part of some of the more attractive and aesthetic aspects of the Peninsula. Wastewater disposal to the valleys, Robinsons Bay and Takamatua included, is a retrograde step and does nothing install the confidence that the Council is looking at a 50 year plan for this proposal.
16. The Bay has significant cultural and historical value. Reference to such publications as Gordon Ogilvie's history of Banks Peninsula is but one summary of many that highlights these cultural and historical matters. The Bay was a source of significant milling in the 19<sup>th</sup> century in particular, and Pavitt's Cottage has been restored and remains as a symbol of this history, the sawmilling that took place in the area and the contribution the Bay made to the Peninsula during those years. Any wastewater disposal also needs to consider these issues in significant detail.
17. There are a number of unknown risks in respect of a wastewater disposal to Robinsons Bay and little if any, beneficial use can be seen for any disposal. We have all read and heard about the issues and risks to soil types in the Peninsula and issues with other systems that have been constructed in Methven, Rakaia, Ashburton, Rotorua and so on. We are aware of the problem with midgets from the ponds at Bromley in Christchurch. All these risks need considering, managing and assessing before any wastewater disposal to the Bay can be considered by the community. It seems, unless there is evidence of the contrary, that it is simply a disposal mechanism rather than a mechanism providing beneficial use to the community.
18. The RBRRA takes the view that how could we support a system at Robinsons Bay when what has been considered by Council proposes various and numerous options for residents of the area. There is too much uncertainty to support this in any way.
19. Re-use in Akaroa is an obvious solution to this proposal. Excess water that would not be utilised should be outflowed to the sea or outer Harbour at least in the interim and until full reuse in Akaroa has been implemented.

Dated at *Christchurch 26<sup>th</sup> April*

2017

**Robinsons Bay Resident's and Ratepayers Association**

Per:

*[Signature]*  
*Chair*



**CHRISTCHURCH CITY COUNCIL**  
**Akaroa Wastewater Scheme**  
**3-30 April 2017**

- Received via Email -

<b>Name:</b>	Thelma Britt Email:
<b>cc:</b>	
<b>Sent:</b>	Sunday, 16 April 2017 3:31 p.m.
<b>Subject:</b>	Submission re Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options
<b>Your Submission:</b>	<p>Environment I prefer Akaroa wastewater to be discharged into?</p> <p><i>Irrigation of reclaimed water to trees or pasture</i></p> <p>State reasons why</p> <p><i>Prevents pastures from drying out in hit summer months - water is a precious resource and should be put to good use</i></p> <p>Please rate options listed below with number according to preference</p> <p><i>1 Irrigation of trees or pasture at Pompeys Pillar</i></p> <p><i>2 Non-potable reuse in Akaroa, in combination with another option</i></p> <p><i>3 Irrigation of trees and pastures at Robinsons Bay (upper Southern slopes)</i></p> <p><i>4 Irrigation of trees and pasture in Takamatua (well away from any housing)</i></p> <p><i>5 Disposal via a new outfall pipeline to the mid-harbour - DEFINITELY not an option - Akaroa Harbour is a Marine Reserve and Ecan have therefore not given resource consent. It is offensive to local Maori people. Ngai Tahu will take legal action to ensure that this destruction of the seabed and traditional fish stocks will not be allowed. There is a faultline off the East Coast and any undersea earthquake would rupture the pipeline. People don't have confidence from past experience in Akaroa that the Council are capable to creating a pipeline to the mid-harbour without causing an ecological disaster. The Community Board stated in their last report, that none of the requests they made to the Council have been acted on. So its time for the Council to repair its relationship of trust with residents of Akaroa who are still angry at the lack of support given to the township as it deals with thousands of visitors from liners each week in the season.</i></p>

<b>Name:</b>	Thelma Britt	Submission No. 1242
	<p>           Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why.  <i>Local farmers should be consulted as to their requirements.</i> </p> <p>           Preference for the location of reclaimed water storage ponds  <i>Over the road from the treatment or nearby makes good sense and far away from housing.</i> </p> <p>           Council should add aspirational projects to the Akaroa wastewater scheme (e.g fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley.) If so, which ones do you support and why.  <i>Fire storage ponds would be useful after the Port Hills fire - location would need to be negotiated with local people.</i> </p> <p>           Other comments  <i>Whatever option is taken should not be budget influenced but as the best option for the environment of Akaroa. People are already victims of target driven policies from Wellington in Health and Education, we would appreciate something that is the best for the people of Akaroa.</i> </p> <p> <i>Thelma Britt</i> </p>	

**CHRISTCHURCH CITY COUNCIL**  
**Akaroa Wastewater Scheme**  
**3-30 April 2017**

- Received via Email -

<b>Name:</b>	Stuart McLean Email:
<b>cc:</b>	
<b>Sent:</b>	Saturday, 15 April 2017 9:10 p.m.
<b>Subject:</b>	Consultation
<b>Your Submission:</b>	I prefer option 5 , with preference to leaving it on the present site and upgrading water quality before discharge and putting it further out into the harbour 1000meters Best regards Stuart Mclean Cnr Rujolie and Almers valley road

**CHRISTCHURCH CITY COUNCIL**  
**Akaroa Wastewater Scheme**  
**3-30 April 2017**

- Received via Email -

<b>Name:</b>	Marie Haley Email:
<b>cc:</b>	
<b>Sent:</b>	Sunday, 16 April 2017 6:13 p.m.
<b>Subject:</b>	Pompeys Pillar Objection - Akaroa Waste Water Submission
<b>Your Submission:</b>	<p>Submission from:</p> <p>Marie Haley</p> <p>Phone:</p> <p style="text-align: center;">Pompeys Pillars Option 2.</p> <p>This is a submission on the Akaroa Waste Water consultation document <b>against</b> Option 2 - Irrigation at Pompeys Pillar. Quite simply Pompeys Pillar is a landscape of outstanding natural beauty, see photos attached. Whilst few people live in this area, which in itself is part of the charm, an area of intensified industrial irrigation to pasture or trees would be out of character with the area and would be visible not only from Otanerito but also from other areas including Stony Bay and the Banks Peninsula Track. This area is also of high natural value with covenants, reserves most notably Hinewai Reserve and special biodiversity all part of the Wildside Project of which CCC is a key partner see <a href="http://bpct.org.nz/our-projects/wildside-project.asp">http://bpct.org.nz/our-projects/wildside-project.asp</a> for more information, see photo from within the titi/sooty shearwater colony.</p> <p>The pipeline route is not included, but I presumed that it would follow the Long Bay Road, a narrow shingle one lane road, the disruption by laying this pipe would be enormous to the local residents and if the pipe was to be exposed would be absolutely intrusive into the outstanding natural beauty, wildlife and habitats of this area.</p> <p>The option also does not include ongoing maintenance and pumping costs or environmental costs of sending the water such a long way. As a ratepayer to the CCC I object to the ridiculous cost involved in Option 2.</p>



Name:

Marie Haley

Submission No.1244

The impact on the sensitive landscape is a concern, the Pompeys headland is naturally very dry with much less rainfall that the summit at Hinewai. The cliffs are dry crumbly rock and are only a short distance from where irrigation and pond storage is indicated.

Marie Haley



[Wildside Project - Banks Peninsula Conservation Trust](http://www.bpct.org.nz)

[bpct.org.nz](http://bpct.org.nz)

The Wildside Project is a large scale collaboration of landowners, Christchurch City Council, Department of Conservation, Environment Canterbury, and BPCT for the ...



Name:

Marie Haley

Submission No. 1244



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Mike Harding
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 11:28:12 AM
Would you like to attend the hearings for this consultation?	Yes
I am completing this submission:	On behalf of a group or organisation
Role within Organisation	Secretary
Group/Organisation Names	Akaroa Harbour Recreational Fishing Club (Inc)
How many people do you represent?	100+
Preferred environment for Akaroa wastewater discharge:	Irrigation of reclaimed water to trees or pasture
If Other, please describe and state reasons	This option is the most satisfactory for the environment. It has the potential to benefit the environment, whereas discharge into the harbour is detrimental to the environment.
Option 1	Other (please describe)
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
Option 4	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 5	Option 1 - Irrigation of trees or pasture in Robinsons Bay
Option 6	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Other	The council should as a matter of urgency investigate land disposal on the west side of the harbour via an undersea pipeline. There is much more land without housing and has suitable ponding and irrigation areas. The distance involved is less than Option 2 and similar to Option 3. Pipeline costings have already been made and could be extended for this option.
State reasons for ranking	The rankings are made on the best long term option for land disposal with least disruption to existing land uses and people's homes.
Would you be more supportive of spray irrigation of treated	Drip irrigation to trees preferred and would help with re-forestation of the landscape. Pasture irrigation is also good.

wastewater to pasture? Why	
Do you have location preference? Why:	Location of storage ponds - Preference should be decided by those most directly affected.
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	The council has the opportunity to do something good for the environment and the community. Don't waste it.



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Victoria Osborne
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 1:50:16 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	
If Other, please describe and state reasons	I believe that the waste water should be reused in Akaroa where it is generated or elsewhere where land owners are agreeable to its discharge While the necessary infrastructure is put in place as short term consent for a harbour outfall should be obtaine It is unfair to pressure landowners to accept Akaroa's waste water but it should be reused in Akaroa with possibly a short term outfall into the harbour
Option 1	Please select
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	Waste water should be treated to the highest overseas standards and re used in Akaroa.
State reasons for ranking	I believe that the water should be treated as in overseas countries to a potable standard. With climate change water is an increasingly valuable resource
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Should landowners wish to have wastewater on their properties I have no objection subject to adjacent landowners agreement

Do you have location preference? Why:	Site 10 would be acceptable subject to landowners and adjacent land owners agreement
Should Council add aspirational projects to the Akaroa wastewater scheme?	Obviously given recently reported fires in the port hills this would be excellent. My family and I believe most Takamatua residents have expensive systems
Any other comments?	<p>Since purchasing my family have arranged for historic and cultural heritage trees to be included, first on the Banks Peninsula D. Council protected trees and now on the Christchurch City Council list of protected trees. There has been extensive planting to enhance the park like landscape on this property. Already the Takamatua stream is supplying water to Akaroa leading to quite low levels in summer and it would be grossly unfair to insist on returning waste water to this property.</p> <p>This is my second attempt at making a submission and I trust that your "technical glitch" is now sorted</p>

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Karen Bennett
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 3:27:49 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Irrigation of reclaimed water to trees or pasture
If Other, please describe and state reasons	
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 5	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 6	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	

Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	tony muir
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 6:05:55 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	number 4 and irrigation of water to trees if necessary in conjunction. Tanks/ponds to be AWAY from settlements: NOT in Takamatua ...close to Akaroa rural, fine use the resource and make sure the treatment WORKS
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	

Do you have location preference? Why:	NOT in Takamatua. Away from dwellings etc. over to Akaroa rural areas fine. No brainer. We don't want stinky poo pools as you enter Akaroa or near our homes. Take it to the other side (rural Akaroa)
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	I sure hope you are listening and do this correctly. It is an investment in the future of Akaroa as infrastructure to support the town in years to come. Don't stuff it up. People can use the water to wash their boats off or water their lawns etc. Invest in the best system .

**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Frank Saxton
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 7:11:33 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	<p>Store and &amp; reuse treated waste water in Akaroa. A treated non-potable water supply would benefit the town and seems to be pretty economic to set up over time, and furthermore put Akaroa on the moral high ground..</p> <p>I am a of descendant of one of the owners of the restored Pavitt cottage and am a "friend" of the cottage. It would be a bad thing to have to live with the affects on the cottage of seeping the waster water around the Robinson Valley.</p>
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated	

wastewater to pasture? Why	
Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Helen Bartlett
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/4/2017 8:47:59 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	Helen Bartlett
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	<p>Waste water should be treated to an international potable standard and re used in Akaroa. Akaroa should be encouraged if necessary by paying for excess water usage to limit the amount of waste water generated</p> <p>Water is already short in Akaroa, with annual water restrictions. Water is already taken from the Takamatua stream</p> <p>and it is obviously unfair to then return it to an area which does not want it. Internationally re using waste water is the norm and Christchurch City Council should follow best environmental practices.</p>
Option 1	Please select
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	As above I feel that the water should be treated to a drinkable standard and reintroduced into the Akaroa aquifers to fill the reservoirs.
State reasons for ranking	As above

<p>Would you be more supportive of spray irrigation of treated wastewater to pasture? Why</p>	
<p>Do you have location preference? Why:</p>	<p>10 is possible but only if the land owner and adjacent landowners are agreeable</p>
<p>Should Council add aspirational projects to the Akaroa wastewater scheme?</p>	<p>Fire storage ponds are an obvious way of protecting Akaroa and would be a way of recycling in a beneficial way.</p>
<p>Any other comments?</p>	<p>My family has land in Takamatua and would be horrified if the waste from Akaroa was sent there rather than being reused where it is generated. Takamatua has a particular landscape character with historic trees, lavender farm, organic fruit and nuts and should be left as it is.</p> <p>Also I have had great difficulty in making this submission as today I was timed out on my mother's computer and my first attempt does not appear to have gone through either. I trust that the so called "technical glitches" have not totally compromised the validity of the consultation period.</p>

1314

# Submission form continued

SCANNED

## Contact details

Contact name Graeme Curry

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature G. J. Curry Date \_\_\_\_\_

Do you wish to present your submission at the hearing? Please tick one of the boxes below:  
Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



Attention: Hearings Team  
 Akaroa Wastewater Scheme  
 Christchurch City Council  
 PO Box 73016  
 Christchurch Mail Centre  
 Christchurch 8154

RECEIVED  
 - 2 MAY 2017  
 Akaroa Service Centre  
 Chch City Council

tape here

tape here



# Submission form

haveyoursay

[www.ccc.govt.nz/haveyoursay](http://www.ccc.govt.nz/haveyoursay)

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

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Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

Because the water will eventually end up in the harbour.

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 3 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 2 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 \* Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

Continued overleaf

619



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Trees only.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Do you have any other comments? (Please use additional paper if required):

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1315

## Contact details

Contact name Charles de Lambert

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature]

Date 23/4/17

fold

fold

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**  
*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178



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Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

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Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons why:

If the treatment is as good as claimed then why not dispose of it to the harbour

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 5 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 3 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons for this ranking:

Treatment processes are good, irrigation to land in Robinsons Bay & Takamātua is too close to houses.

Continued overleaf

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Drip to trees as less chance of spray drift

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Not near built up areas or houses

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Fire storage ponds would be good idea if practical & not too expensive.

Do you have any other comments? (Please use additional paper if required):

Thank you for taking the time to respond. Please include your contact details over the page.



# Submission form continued

1316

## Contact details

Contact name Yvonne Dalglish

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

\_\_\_\_\_

Phone number (day) \_\_\_\_\_ Postcode \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Yvonne Dalglish Date 1-5-17

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

RECEIVED  
02 MAY 2017  
BY: Em. [Signature]  
823

# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

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Please make sure your full name and address is included with your submission.
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Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why: \_\_\_\_\_

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
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- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking: \_\_\_\_\_

Continued overleaf



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Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

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Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

I support pond site 10.

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Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

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Do you have any other comments? (Please use additional paper if required):

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THANKS

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1317

## Contact details

Contact name ANDREW DALGLISH

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Andrew R. Dalglish Date 2/5/17

### Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

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FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

RECEIVED  
02 MAY 2017  
BY: Emily Couvel  
+803



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

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Please make sure your full name and address is included with your submission.
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Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
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## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why: Primarily used for non potable reuse in Akaroa, and the balance to trees.

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
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- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Yes, 'pond 10' as a primary site, and 'pond 9' as a ancillary pond. -It is ~~the~~ not perfect, however it is far ahead of the next best or combination of options. It is close to the treatment site, and very useful for reuse back to Akaroa. It is relatively neutral in terms of visual Landscape effects.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley)? If so, which ones do you support and why?

'Aspirational' to me, means as much energy as possible put into reusing the water in Akaroa (and Takamatua if requested). Fire storage ponds, and a reticulated scheme for Takamatua are 'addons' for further down the track.

Do you have any other comments? (Please use additional paper if required):

Please see extra sheet.

Thank you for taking the time to respond. Please include you contact details over the page.



## Akaroa Reclaimed Water Submission.

I commend the submission made by Friends of Banks Peninsula; and in particular, endorse points 1-4 made in their executive summary, promoting the beneficial reuse of reclaimed water, back into Akaroa.

Having been a member of the Reuse Options Working Party, I believe that the Pompeys Pillar option will not be approved due to its high cost. As more ways are found to reuse the treated wastewater within Akaroa; then the ~~capital~~<sup>relaxing</sup> cost of this option becomes higher.

Irrigation to Takamatua appears to have ruled itself out by a number of reasons - small area, flood prone, multiple titles, etc.

This leads me to believe ~~me~~ that the likely outcome would be: having a primary storage pond at site 10, and an ancillary pond at site 9.

- Reusing as much treated wastewater in Akaroa as is possible. This implies developing the 'purple pipe' options right from the outset.

- The balance of the treated wastewater could be irrigated to trees on the upper suitable slopes of the Thacker land in Robinsons Bay, without a storage pond. This would be away from the sensitive areas raised by Robinsons Bay residents.

To mitigate the effects in Robinsons Bay, I would <sup>further</sup> recommend using as low application rates as possible; and I would engage Hugh Wilson from Hinewai to design the planting as an Inner Harbour Restoration Project right from the outset, with the mindset of creating as many <sup>community</sup> benefits as possible from the project.

A further key component would be continuing the programme to identify infiltration and stormwater entering the water system, with a view to reducing the amount of water needing treatment; as well as educating residents about reducing water use - e.g. front loading washing machines.



1318

# Submission form continued

SCANNED

## Contact details

Contact name Roa & Stacey Nash

Organisation name (if representing) Akaroa Ltd,

Contact address

Postcode \_\_\_\_\_

Phone number (day)  Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature *CR Nash* Date May 2, 2017

Do you wish to present your submission at the hearing? Please tick one of the boxes below:  
*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

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FREEPOST Authority No.178



Attention: Hearings Team  
 Akaroa Wastewater Scheme  
 Christchurch City Council  
 PO Box 73016  
 Christchurch Mail Centre  
 Christchurch 8154





# Submission form

haveyoursay

www.ccc.govt.nz/haveyoursay

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- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

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### How to give us your feedback

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- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour *out to heads*
- Other (please describe)

Please state your reasons why:

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 3 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- X Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- X Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 2 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 2 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

Continued overleaf

632

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Both. Use self compensating drippers  
but up on the hills

Do you have a preference for the location of reclaimed water storage pond(s)?  
Please state your reasons why:

Not Takamatua.

leave them where they are  
extend the out pipe down the harbour

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No nothing in Takamatua it is too  
beautiful and the bay too shallow.

Do you have any other comments? (Please use additional paper if required):

I think the existing treatment station  
should be upgraded and a pipe  
taken out further down the harbour.  
Water could also be sent up to  
agriculture on Purple Peak Ltd Farm  
and the reserve and other agriculture  
up on the hillsides using compensating  
drippers

Thank you for taking the time to respond. Please include your contact details over the page.



# Submission form continued

1319

## Contact details

Contact name Gail Woods

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature G. Woods Date 1.5.2017

fold

fold

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes - I/We would like to be heard

No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



tape here

tape here

# Submission form

haveyoursay

[www.ccc.govt.nz/haveyoursay](http://www.ccc.govt.nz/haveyoursay)

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

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### How to give us your feedback

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Please make sure your full name and address is included with your submission.
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Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons why:** I don't believe that the soil type on the Peninsula is suitable for irrigation back onto the land

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).**

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons for this ranking:** As above I don't believe the soil type is suitable for land based distribution. The water holding capacity in the clay based soil is minimal so in the event of a major rain event it will be washed into our waterways which risks our fish & also our drinking water

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

I do not support either of these options as I don't believe ecologically that they are the best options, they pose a risk to our streams & our drinking water.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

I do not think we should be building storage ponds in any of the bays. Robinsons Bay & Takamatua are both settlements that people have chosen & it will alter these areas & have a major impact on residents.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No I don't support any of this.

Do you have any other comments? (Please use additional paper if required):

I think the council has put too much emphasis on storage ponds & irrigating back on the land & been not showing enough concerns regarding the environment. Culturally the Runanga find it offensive to discharge into the harbour, culturally I find it offensive to discharge onto the land & I feel the council should look at improving the treatment of the waste & look at using the purple pipe system.

Thank you for taking the time to respond. Please include your contact details over the page.

# CHRISTCHURCH CITY COUNCIL

## Akaroa Wastewater Scheme 2017

- Received via Email -

<b>Name:</b>	Robin Garth Tiffen Email:
<b>cc:</b>	
<b>Sent:</b>	Wed 3/05/2017 5:23 p.m.
<b>Subject:</b>	Akaroa Waste Water
<b>Your Submission:</b>	<p>Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?</p> <p><input type="checkbox"/> Irrigation of reclaimed water to trees or pasture for non-potable reuse and/or irrigation to land</p> <p><input type="checkbox"/> Disposal via a new outfall pipeline to the mid-harbour</p> <p><input checked="" type="checkbox"/> Other (please describe)</p> <p>Please state your reasons why: It needs to be returned to Akaroa for reuse to reduce/avoid future water shortages, which prevail</p> <p>Please rate the options listed below with a numerical number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).</p> <p>Option 1 – Irrigation of trees or pasture in Robinsons Bay</p> <p>2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar</p> <p>Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area</p> <p>1 Option 4 – Non-potable re-use in Akaroa, in combination with another option</p> <p>3 Option 5 – Disposal via a new outfall pipeline to the mid-harbour.</p> <p>Other (please describe)</p> <p>Please state your reasons for this ranking:</p> <p>Reuse in Akaroa is the most beneficial use given prevailing water shortages. Pompeys Pillar would enhance pasture productivity, but support for this option is conditional upon agreed acceptance by the landowner ie no compulsory acquisition.</p>

Options 1 and 3 should not be seriously considered due to imposition on the populace and inappropriate soil types for effective absorption

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Spray to pasture, as more likely to be absorbed effectively (maybe) and taken up by the pasture for increased growth. Native trees are unlikely to effectively absorb the required level of waste water, particularly as they prefer 'dry feet' rather than wetter soils.

Do you have a preference for the location of a reclaimed water storage pond(s)? Please state your reasons why:

Pond 10 preferred, provided it is landscaped, odour free, free of increased insect life and contains fully processed water. There must also be provision for pond coverage if the above conditions are not met.

Pond 9 should be rejected because it cannot be adequately screened or incorporated into the landscape. Old French Road is a popular route for walkers and cyclists and a pond would be detrimental to the landscape and character of the area

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme for Takamātua Valley)? If so, which ones do you support and why?

No to fire ponds. They would simply create problems as above regarding visibility, odour, insect life and be blots on our lovely Banks Peninsula landscape.

Reticulated waste water for Takamatua should be considered, given the increasing dwellings and poor soil absorption in the area, but this would require full technical assessment as to implications of such a move.

Do you have any other comments? (Please use additional paper if required):

It is unreasonable for CCC to impose unwanted waste water from Akaroa on to other communities. This is particularly so given the limited absorption qualities of the soils per the Beca report. It also impractical to contemplate imposing this on to Takamatua Valley and Robinsons Bay given the soil qualities, proximity to streams, the scattered properties under consideration in Takamatua, and impact on the lives of the residents – many of whom are already greatly stressed by the prospects of quality of life being adversely affected.

Reuse in Akaroa must be the primary target for CCC, followed by beneficial useage on farmland if agreeable to the farmer(s) concerned. Local residents have rights as well as Ngai Tahu, who have expressed opposition to harbor discharge, based on food gathering etc, despite their willingness to eat fish from the harbor in the past.

Thank you for taking the time to respond. Please include your contact details over the page.

Contact name Garth Tiffen

Date 2 May 2017

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes - I/We would like to be heard by the hearings panel

No - I/We do not want to be heard by the hearings panel

No anonymous submissions/feedback will be accepted.



**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Robin Tiffen
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	4/28/2017 10:42:25 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	I would like to see waste water treated to a potable standard and reused in Akaroa. There is frequently a shortage of water in Akaroa and this would address two issues at once - getting rid of waste water and providing additional water in times of shortage. This should have been the first option looked at yet there seems to have been no investigation in to feasibility or cost of such a scheme. With water such a precious commodity this should have been investigated.
Option 1	Other (please describe)
Option 2	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	Improved treatment to make potable and complete reuse in Akaroa. The additional treatment is the only cost as existing pipeworkk is used to distribute treated water.

State reasons for ranking	Anyone who has lived on the peninsula knows how unstable the land is especially in adverse weather events. The addition of more moisture can only cause more problems. It is impossible to predict the effect of long term irrigation to trees or pasture given the nature of our soil. I would like to see costs of a potable system before being convinced that irrigation is a better option in the long term. In the event this can be proven, the waste water should be reused in Akaroa as much as possible and irrigated to trees or pasture well away from residential areas such as Pompey's Pillar, providing the land owner is agreeable.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	
Do you have location preference? Why:	Any necessary storage should not impact residents so pond 10 appears to be the best option.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Any necessary ponds should also be able to be used for fire fighting.  Adding a reticulated scheme in Takamatu at this time would exacerbate the problem. There should be provision made to add on to the system in the future though.
Any other comments?	The whole process seems to have been carried out in such a way that maximises stress to residents who "may" be affected. The options should have been more thoroughly investigated in consultation with affected parties in person in the first instance.

## Submission form continued

## Contact details

Contact name Roger Beattie

Organisation name (if representing) R+N Beattie Partnership

Contact address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Signature] Date 30.4.17

fold

fold

## Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178

**Christchurch**  
City Council 

**Free** 



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here

tape here



# Submission form

haveyoursay

www.ccc.govt.nz/haveyoursay

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

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Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons why:

The technology is proven as to how we can safely dispose of treated sewage to land. The argument that it is low cost and low operation and maintenance costs sweeps the dirt under the carpet and the ship out to sea. Disposal to land keeps the treatment plant people honest!

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 2 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 5 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 3 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 6 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- 1 Other (please describe) option 6 Irrigation of trees or pasture at 'Kowhai Vale' Wainui

### Please state your reasons for this ranking:

We have a vested interest in the non disposal of treated human sewage going into Akaroa harbour – we are Commercial kelp Quota owners + harvesters, Marine Farmers, inner harbour landowners & recreational fishers.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Both are good

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

No

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Only those projects that are cost effective + viable should be considered

Do you have any other comments? (Please use additional paper if required):

Option 6 Irrigation to trees or pasture at Kowhai Vale Wairua.  
Summary: There is over 100ha of suitable available land. A pipeline across the harbour to Ohinepaka bay is approx 5km. There is enough area for storage ponds, power is close by, land use is farmland, forestry + commercial conservation. All the land is owned by R+I Beattie Partnership. A long term lease/use right at a low interest rate. It is strange that HNCs + ONCs are excluded - Pagan nature worshippers say it's better to have stock drinking + treated water than have it applied to existing native trees (it's ok to apply to new native trees). See map attached at 'Kowhai Vale' 360ha. I'm happy to work with whomever to make this happen.

Thank you for taking the time to respond. Please include your contact details over the page.





Duvauchelle

Robinsons Bay

French Farm

Takamatua

Akaroa

AKAROA

Wainui

Le Bons Bay

Goughs Bay

Koraha's Sale



645

Akar

Google NZ

+ -



# CHRISTCHURCH CITY COUNCIL

## Akaroa Wastewater Scheme

### 2017

- Received via Email -

<b>Name:</b>	Kit Grigg Email:
<b>cc:</b>	
<b>Sent:</b>	Friday, 5 May 2017 9:56 a.m.
<b>Subject:</b>	Akaroa Wastewater Submission
<b>Your Submission:</b>	<p>Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?</p> <p><input type="checkbox"/> Irrigation of reclaimed water to trees or pasture for non-potable reuse and/or irrigation to land</p> <p><input checked="" type="checkbox"/> Disposal via a new outfall pipeline to the mid-harbour</p> <p><input type="checkbox"/> Other (please describe)</p> <p>Please state your reasons why:</p> <p style="color: red;">Extensive studies have shown that there is very limited land area, within proximity of the proposed treatment plant, where continuing discharge of treated water could be absorbed effectively over a period of many years.</p> <p style="color: red;">As the new Treatment Plant will perform full primary and secondary treatment of all wastewater to a standard which would allow potential reuse for the Akaroa town playgrounds and residents gardens, then it is clear that treated wastewater could be safely discharged into Akaroa harbour without any ill effect on water quality or marine life.</p> <p style="color: red;">With a proposed storage pond (#10) adjacent to the treatment plant, adequate treated water can be taken off the harbour discharge pipeline for non-potable reuse in the township as the demand arises. This option is the most cost effective.</p> <p>Please rate the options listed below with a numerical number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).</p> <p style="color: red;">3      Option 1 – Irrigation of trees or pasture in Robinsons Bay</p> <p style="color: red;">5      Option 2 – Irrigation of trees or pasture at Pompeys Pillar</p> <p style="color: red;">4      Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area</p> <p style="color: red;">2      Option 4 – Non-potable re-use in Akaroa, in combination with another option</p>

1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour.

Other (please describe)

Please state your reasons for this ranking:

#1 As already stated.

#2 Ranked on the basis that any reuse in Akaroa would be in combination with mid-harbour outfall option. Any suggestion that all treated wastewater could be recycled in Akaroa township is simply not feasible, even in the long term.

#3 It has been generally accepted, following extensive technical study, that the defined 'upper' area of Robinsons Bay could satisfy the requirements for dripper or spray irrigation, but is opposed by the majority of residents in Robinsons Bay. Why should their opposition not carry as much weight as the Ngai Tahu opposition to a harbour outfall?

#4 Option discarded

#5 Option discarded

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Dripper to trees is more economical to install and maintain.

Do you have a preference for the location of a reclaimed water storage pond(s)? Please state your reasons why:

Site # 10 adjacent to the Treatment Plant should give adequate storage for the gravity reticulation of wastewater for Akaroa reuse. This could be extended to include Takamatua if the demand arose.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme for Takamātua Valley)? If so, which ones do you support and why?

A fire storage pond could be sited on the Takamatua headland site #8; this could be discharged periodically via the harbour outfall pipeline and then recharged, both by gravity feed.

Do you have any other comments? (Please use additional paper if required):

I have avoided making comments on any of the 'alternative' options put by other groups and individuals. They lack adequate research, detail and general credibility.

Contact name Christopher (Kit) Grigg

Organisation name (if representing)

Contact address

Postcode

Phone number (day)

Phone number (evening)

Email (if applicable)

Date 5.05.17

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes - I/We would like to be heard by the hearings panel

No - I/We do not want to be heard by the hearings panel



You can make your views known at the consultation meeting and drop-in sessions.

1323

Map location



Your details

First name (required)

Ken and Carol

Last name (required)

Reese

Street name and number (required)

Suburb (required)

Town / City

Postcode

Email address (required)

I am completing this submission:

- For myself
- On behalf of a group or organisation

Contact number (required)

If you are representing a group or organisation, how many people do you represent?

Name of organisation

Role within organisation

## Hearings

Public hearings will be held.

I wish to present my submission at the hearing

## Comments

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other

If other, please describe

Please state your reasons why

No suitable land for irrigation near treatment plant. Fragmented attempts at irrigation or reuse of treated effluent in Akaroa will require the construction of huge treated effluent ponds. These effluent ponds in close proximity to Akaroa, Takamatua and Robinsons Bay will create an ideal breeding ground for millions of mosquitoes and midges. Covering these ponds is problematic and expensive. CCC spends huge amounts trying to control midges at Bromley and Aranui with no success. Increased incidence of erosion, contamination of fresh water sources and creeks along with unavoidable bad smelling air are other serious consequences. The deep mid harbour outfall will still need to be constructed for use in prolonged wet seasons when the ponds become full and the erosion prone soils are at saturation point. For the reasons above the sea remains the best option.

## Options

Please indicate your preferred option in order of 1 to 6, with "preferred option 1" being your most preferred option and "preferred option 6" your least preferred option. Option 6 would be an alternative option outside of options 1 to 5 (please note the options below are in no particular order).

Preferred option 1

Preferred option 2

Preferred option 3

Preferred option 4

Preferred option 5

Please select

Preferred option 6

Please select

If other, please describe

Please state your reasons for this ranking

We haven't ranked options 1,3 and 4 as we consider them to be unsuitable as they all require large unsightly effluent retention ponds and singularly or any combination of these options will still require the backup of ocean outfall during prolonged wet spells, mechanical failure or natural disaster events. In our opinion the majority of the affected residents would find all of these options unacceptable. Option 2 is a possibility although an expensive one. Providing the landowner wants this we would support this option only if 100% of the treated waste water was pumped directly over the hill therefore no requirement for effluent storage ponds anywhere in the harbour basin or the requirement for any harbour discharge.

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why

We do not support any form of irrigation of treated wastewater on or above the hills and valleys of the harbour basin. If option 2 is preferred - Irrigation of trees or pasture at Pompeys Pillar, both forms would be preferable. Spraying to pasture should only occur during times of calmness or light winds to prevent possible spray drift.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why

Nowhere in the harbour basin. If option 2 is the preferred option, one large dam could be constructed close to the irrigation site.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Yes all small settlements should be connected to the new system where practicable. Treated effluent shouldn't be contained in ~~the~~ ponds for fire fighting. Spring fed or rain water retention ponds can just as easily be created in reserve and bush areas close to the Summit Road, these could be used for fire fighting.

Do you have any other comments?

The deep harbour with its large opening to the massive Pacific Ocean with tidal flows and strong ocean currents will quickly dilute the well treated wastewater by a factor of millions. The mid-harbour outfall option makes the most sense economically with very low running costs and eliminates all the problems and risks associated with spraying or trickling this treated effluent in such close proximity to our homes, gardens and fresh water sources. Another fact to consider is that any sample of sea water already contains minute traces of wastewater from other ocean outfalls both near and far. The new high tech plant and a deep mid-harbour outfall will be a vast improvement on the current situation without the risk of degrading, devaluing and detracting from the unique beauty of Akaroa and its neighbouring small settlements. Any hint of effluent pollution either physical or sensory will threaten the attractiveness of Akaroa for both residents and tourists alike.

## Supporting information

Attach any supporting documents (if applicable).

Note: When uploading multiple files please multi select and upload all at once.

The combined file size must not be larger than 10MB.

Choose Files No file chosen

# Submission form continued

1324

## Contact details

Contact name Shane Ansell

Organisation name (if representing)

Contact address

Postcode 8044

Phone number (day) Phone number (evening)

Email (if applicable)

Signature S Ansell Date 18/4/17

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

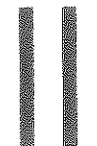
*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes – I/We would like to be heard

No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

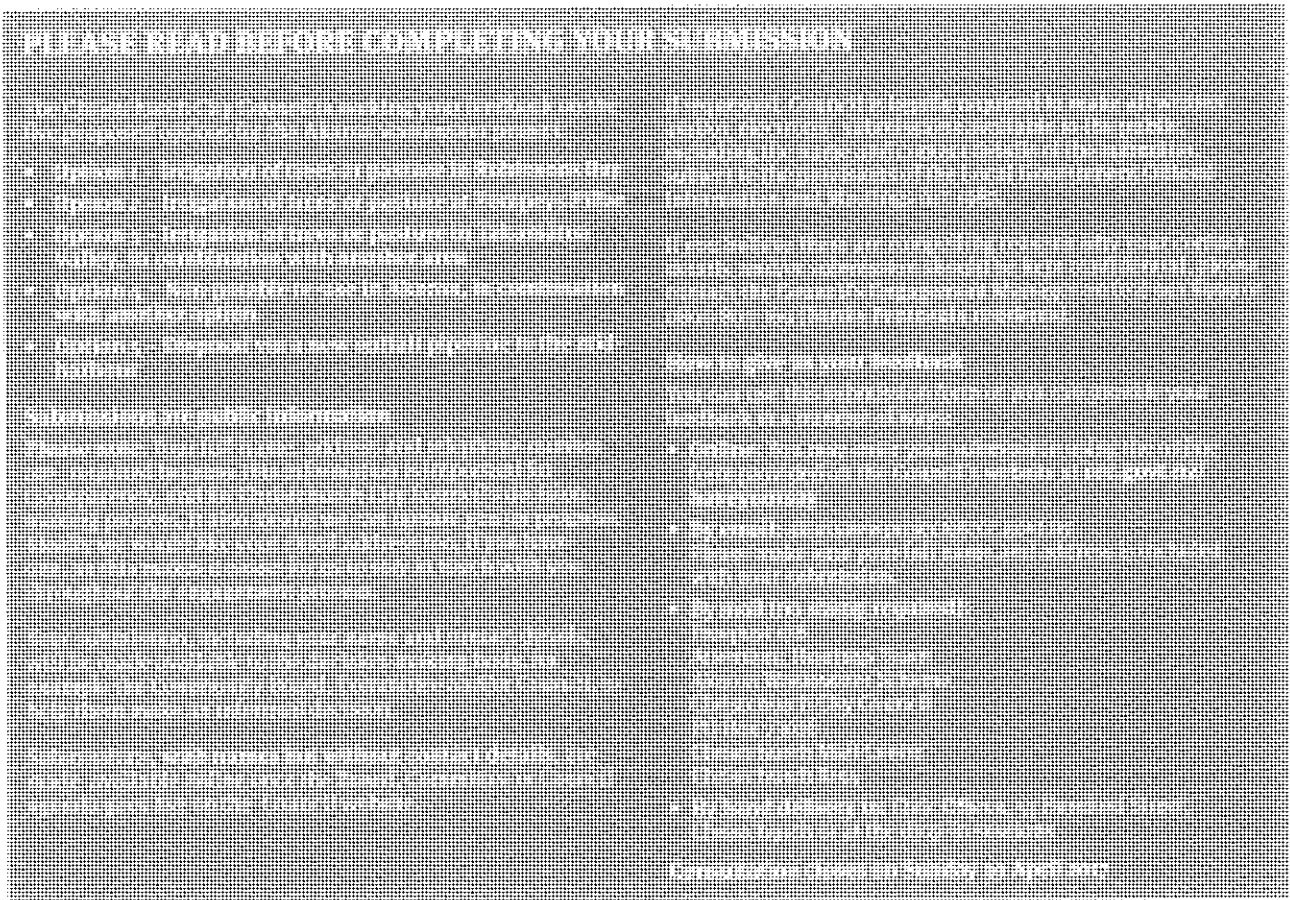
FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



# Submission form



Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why: I believe option 4 with option 5 is the best solution

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 5 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 3 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 1 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 2 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking: less impact on environment, helps akaroa with water shortages over summer. House values would not be affected.

Continued overleaf



# Submission form continued

## Contact details

Contact name Adam & Sarah Pollard.

Organisation name (if representing)

Contact address

Postcode

Phone number (day)

Phone number (evening)

Email (if applicable)

Signature

Date 2/5/17

fold

fold

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

Yes – I/We would like to be heard

No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178

**Christchurch**  
City Council 

**Free** 



tape here

Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here

# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
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Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

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- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

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- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

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- 1 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 2 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

The soil around the bays is so clay based that the sediments run into the sea destroying the eco system.

The type of soils are not designed for large amounts of water - risk for slips, visually awful to look at.

Continued overleaf

Plus the council has limited resources - all other options put more stress on them to cover more jobs.





1 May 2017

Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch 8154

Emailed to: akaroawwproject@ccc.govt.nz

Tēnā koutou

**RE: Ngāi Tahu positions on the options details in Christchurch City Council's consultation booklet 'Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options' dated 30 April 2017.**

This statement is made on behalf of the Ngāi Tahu parties (Onuku Rūnanga, Wairewa Rūnanga, Te Rūnanga o Koukourārata, the Akaroa Taiāpure Management Committee and Te Rūnanga o Ngāi Tahu) involved in the pending Environment Court appeal in relation to the Akaroa wastewater harbour outfall. The Ngāi Tahu parties have been heavily involved with the Council in considering options for beneficial reuse of wastewater, consistent with their role as a partners to the Council.

The purpose of this statement is to summarise the Ngāi Tahu parties' positions on the options detailed in the Christchurch City Council (CCC) consultation booklet titled 'Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options', dated 30 April 2017. In order to obtain a full understanding of these positions, and the processes and engagement that has led to their adoption, reference should be had to all of the information provided by the Ngāi Tahu parties in the course of this process.

This statement takes as a given that the Ngāi Tahu opposition to any form of harbour outfall on cultural grounds is well-understood and does not need to reiterated or justified at this point.

### **General positions**

- The use of reclaimed water for irrigation is strongly supported by the Ngāi Tahu parties, as it avoids direct discharge to streams or into Akaroa Harbour.

Te Rūnanga o Ngāi Tahu

- The Ngāi Tahu parties are pleased that several irrigation to land options have been investigated and have been confirmed to be technically feasible. The Ngāi Tahu parties note that these land-based options provide beneficial and sustainable outcomes.
- Ngāi Tahu are pleased that the latest community working party in their Joint Statement dated April 2017 are wanting “*the solution to deliver tangible community, environmental and biodiversity benefits through sustainable wastewater reuse practices and aspired for it to provide an exemplar for other wastewater solutions in the future*”.

#### ***Option 1 – Irrigation of trees or pasture at Robinsons Bay***

- The Ngāi Tahu parties support the use of “Upper” Robinsons Bay land for the irrigation to trees and would seek the planting of a variety of native tree species to maximise biodiversity benefits from this option.
- The Ngāi Tahu parties do not support the use of the “Lower” Robinsons Bay land for social and technical reasons.

#### ***Option 2 – Irrigation of trees or pasture at Pompeys Pillar***

- The Ngāi Tahu parties note that a Cultural Impact Assessment (CIA) in relation to this option is still being prepared and that this may raise issues. The parties will need to wait for this CIA to be completed before they can confirm their position.
- At this stage, the Ngāi Tahu parties are supportive of this option being ‘kept on the table’, but note that it appears less favourable than other options particularly due to risk, costs and limited ability to provide innovative, future-proof solutions for beneficial reuse of wastewater.
- In addition, the Ngāi Tahu parties wish to see the retention of the option for irrigation to native trees on this site, as well as irrigation to pasture, due to the potential biodiversity benefits of the former.

#### ***Option 3 – Irrigation of trees or pasture at Takamātua Valley, in combination with another area***

- The Ngāi Tahu parties are aware that this option is less favourable to the community than other options but still wants the option ‘left on the table’ and are supportive of combined irrigation options (e.g. at Takamātua and Robinsons Bay), if necessary.

#### ***Option 4 – Non-potable reuse in Akaroa***

- The Ngāi Tahu parties strongly support this option, in combination with a land irrigation option. The parties are pleased to see that additional technical work has been done to determine the volume of reclaimed water that could be reused each year.
- The Ngāi Tahu parties are supportive of this element being part of the system design from the start e.g. irrigation to public parks and for the use of flushing public toilets etc.



**Option 5 – Disposal via a new outfall pipeline to the mid-harbour**

- The Ngāi Tahu parties remain firmly opposed to this option. The reasons for this opposition have been well articulated by the parties in numerous forums.
- 

**Additional positions**

- The Ngāi Tahu parties are very supportive of measures that will reduce stormwater infiltration into the wastewater system, and believe these should form part of the system design.
- The Ngāi Tahu parties also support the view that the Council should use its best efforts to find a willing vendor of any land necessary for the upgrade before considering compulsory acquisition, but do not believe that compulsory acquisition should be 'taken off the table'. Nor should the potential need for compulsory acquisition be regarded as making any option unviable.

The Ngāi Tahu parties would like to be heard at the LGA process hearing.

Nāhaku noa, nā



Kara Edwards  
General Manager Te Ao Tūroa  
Te Rūnanga o Ngāi Tahu

**Address for service:**

Onuku Rūnanga, Wairewa Rūnanga, Te Rūnanga o Koukourārata, the Akaroa Taiāpure Management Committee and Te Rūnanga o Ngāi Tahu

C/- Philippa Lynch

**AKAROA WASTEWATER SCHEME  
LGA CONSULTATION  
SUBMISSION ON BEHALF OF THE CHURCH PROPERTY  
TRUSTEES**

**Contact details**

Contact name Matthew Kerr  
 Organisation name (if representing) Church Property Trustees  
 Contact address Anglican Centre,  
 Postcode  
 Phone number (day)  
 Phone number (evening)  
 Email (if applicable)

Signature



Date

2 May 2017

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes – I/We would like to be heard and present at the hearing  
 No – I/We do not want to be heard

**Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?**

- Irrigation of reclaimed water to trees or pasture  
 Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

**Please state your reasons why:**

The Church Property Trustees (**CPT**) prefers that wastewater be discharged via irrigation of reclaimed water to trees or pasture instead of disposal to the mid-harbour. CPT considers that there are more social, cultural and economic benefits (and less adverse social, cultural,



environmental and economic effects) associated with a land based discharge compared to a discharge of treated wastewater to the mid-harbour. Discharge via irrigation would ensure a land-based discharge and beneficial reuse of the water, with less adverse effects to public health compared to disposal to the mid-harbour.

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).**

<b>Preferred ranking</b>	<b>Options</b>
[No ranking]	Option 1 – Irrigation of trees or pasture in Robinsons Bay
[1=]	Option 2 – Irrigation of trees or pasture at Pompeys Pillar
[5]	Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
[1=]	Option 4 – Non-potable reuse in Akaroa, in combination with another option
[No ranking]	Option 5 – Disposal via a new outfall pipeline to the mid-harbour
	Other (please describe)

**Please state your reasons for this ranking:**

#### CPT views on Option 2 (Pompeys Pillar)

Option 2 is one of CPT's two preferred options. Option 2 retains a land-based discharge option and has plenty of land available for either a spray or drip irrigation, and a number of locations for pond sites. There are no flooding and groundwater issues with Option 2 and no surrounding residential areas and will not result in the same issues as Option 3 or Option 1 which affect a number of landowners. Irrigation of pasture would benefit ongoing farming activities. Option 2 also has a number of advantages, including options for a fire storage pond and stock drinking water, and potential hydroelectricity generation. Overall, CPT considers that Option 2 has more advantages and less disadvantages when compared to the other irrigation options (being Option 3 Takamātua Valley, which is CPT's least preferred option).

#### CPT views on Option 4 (Non-potable re-use)

CPT considers that non-potable re-use in Akaroa is the other preferred option provided that sufficient other land is available in a suitable location to address the shortfall in this option. This would allow for many benefits including use for parks and gardens and public toilet facilities. While this is not currently a standalone option, it would have many benefits for the community, including since Akaroa is 'water short' particularly in the summer months.

#### CPT views on Option 3 (Takamātua Valley)

Option 3 is CPT's least preferred option. CPT owns the land where potential pond site 7 is shown on page 13 of the Consultation Document (being Lot 1DP 62383 CT CB37B/88 and Pt RS 765 CT CB37B/91). CPT holds that land on trust for Parish of Akaroa-Banks Peninsula. The land was gifted with a specific purpose as an investment and a source of revenue for the future of the church on Banks Peninsula.

CPT is currently investigating potential development for that site (which would form a potential source of revenue for the church in the future). Locating the pond on the site would require CCC to acquire CPT's land and remove this economic benefit for CPT and its parish. It is for this reason, as a directly affected landowner, that CPT opposes this option.

However, it is not simply because of CPT's land interests that it opposes this option. CPT also considers that discharge via irrigation in Takamātua Valley is the least efficient, effective and appropriate option of those available. This option does not provide enough land to be a feasible option by itself and is not a stand-alone option. For this reason it would be inefficient to proceed with this area as it is not appropriate for both present and anticipated future circumstances, which could include additional wastewater capacity being required.

The area is more densely populated compared to Options 1 and 2, with a large number of properties, and many residential exclusion buffer areas located within the potential irrigation areas and the highest risk of nutrient leaching to groundwater. Option 3 is also one of the more expensive options. Takamātua Valley only contains one potential pond site. There are issues with this potential location for the pond including a high groundwater table and risks of flooding. There are no other options for a potential pond site should this pond site ultimately prove unfeasible. CPT considers that these aspects of the Takamātua Valley option make it inefficient and inappropriate.

#### CPT views on Option 1 (Robinsons Bay)

CPT has not specifically ranked Option 1 but makes the following comments. Compared to Option 3, Option 1 has plenty of land suitable for irrigation and could accommodate either spray irrigation to pasture or drip irrigation to trees. There are also a number of potential pond locations. This means Option 1 has a lot of flexibility for the ultimate design of the discharge compared to Option 3. While Option 1 is preferred over Option 3, CPT still has a number of concerns with this option, including the number of landowners that would be affected by the option. It is for this reason that CPT has not ranked this option.

#### CPT views on Option 5 (Outfall to mid-harbour)

CPT recognises that discharge via a new outfall is the least expensive option, with low ongoing costs, and no additional land being required. However, CPT also recognises the potential cultural and public health effects associated with discharge view a new outfall. For these reasons CPT has not specifically ranked Option 5.

#### **Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:**

CPT does not have a preference for spray irrigation of treated wastewater to pasture or drip irrigation to trees.

#### **Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:**

CPT does not support locating a pond at pond site 7, for the reasons set out above, including that the existing surrounding area is densely residentially populated; the land has a high groundwater table; an above ground pond is required at this site; flood risks; potential for the pond to overflow in extreme weather events next to the road and residential areas; visual effects of the pond and loss of development potential of CPT's land.

Other than not supporting pond site 7, CPT does not have a preference for the location of the reclaimed water storage ponds.

**Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?**

CPT is supportive of aspirational projects that would contribute to the wellbeing of the community, for example the opportunity to provide additional native biodiversity areas with public access, and provision for fire storage ponds.

**Do you have any other comments? (Please use additional paper if required):**

## Submission form continued

## Contact details

Contact name

K. F. &amp; B. L. AUBRY

Organisation name (if representing)

Contact address

Postcode

Phone number (day)

Phone number (evening)

Email (if applicable)

Signature



Date

2nd may 2017

## Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

Yes - I/We would like to be heard

No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178

**Christchurch**  
 City Council 
**Free** 

 Attention: Hearings Team  
 Akaroa Wastewater Scheme  
 Christchurch City Council  
 PO Box 73016  
 Christchurch Mail Centre  
 Christchurch 8154



## Submission form

### PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
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- Option 4 – Non-potable re-use in Akaroa, in combination with another option
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#### Submissions are public information

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Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
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Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

\* Please state your reasons why: BECAUSE THE SOIL TYPE & WATER RETENTION ABILITY OF THE SOIL IS NOT CONDUCIVE TO IRRIGATION ON A YEAR ROUND BASIS AND THE SIZE OF THE AREA IS NOT BIG ENOUGH!

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 3 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 4 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 5 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 1 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

\* AS ABOVE

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

\* AS ABOVE,  
NOT IN ROBINSON'S BAY AREA AS MOST OF US  
RELY ON SPRING WATER FOR DOMESTIC &  
STOCK USE.

Do you have a preference for the location of reclaimed water storage pond(s)?  
Please state your reasons why:

AKAROA - BECAUSE IN CONDITIONS NOT  
SUITABLE FOR IRRIGATION IT MAY HAVE TO BE  
SENT BY HARBOUR OUTFALL PIPE.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

YES, SURELY IT MUST BE MORE COST  
EFFECTIVE TO BE CLOSE TO AKAROA

Do you have any other comments? (Please use additional paper if required):

3

1329

# Submission form continued

### Contact details

Contact name Barry Hopping

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Signature] Date 2.5.17

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

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FREEPOST Authority No.178



Attention: Hearings Team  
 Akaroa Wastewater Scheme  
 Christchurch City Council  
 PO Box 73016  
 Christchurch Mail Centre  
 Christchurch 8154



# Submission form

have your say

www.ccc.govt.nz/haveyoursay

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• **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.

- **By mail (no stamp required):**

Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

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Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture  
 Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

Please state your reasons why: *The 'purified' water needs to be regarded as a potential resource and not something objectionable that needs to be disposed of.*

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay  
 Option 2 – Irrigation of trees or pasture at Pompeys Pillar  
 Option 3 – Irrigation of trees or pasture in Takamatua Valley, in combination with another area  
 Option 4 – Non-potable reuse in Akaroa, in combination with another option  
 Option 5 – Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

Please state your reasons for this ranking: *as above.*  
*Options 1, 3, 5 are not acceptable and therefore not ranked.*

Continued overleaf



2

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Either would be practical I believe but in my preferred location (Pompey), to pasture is the better option

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Pond site 10 being away from public viewing seems ideal  
A second pond at Pompey would be sensible.  
The access to such water for fire fighting is a big plus.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

The 'purple pipe' scheme for Akaroa has great merit.  
Future generations will benefit from forwarding thinking and planning done now.

Do you have any other comments? (Please use additional paper if required):

Whilst the costs associated with Pompey Pylon are approx \$5m greater than other options the obvious advantages of this site make such an investment worthwhile

The submission by the Takamātua Ratepayers Assn (of which I am a member) explains in detail the technical and community reasons for this site to be chosen. The additional cost is comparatively small spread over the life of the scheme and its importance to the residents in the greater Akaroa area.

Thank you for taking the time to respond. Please include your contact details over the page.

# Canterbury

District Health Board

Te Poari Hauora o Waitaha

## Submission on Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options

**To:** Christchurch City Council

**Submitter:** Canterbury District Health Board

Attn: Angela Sheat  
Community and Public Health  
C/- Canterbury District Health Board

**Proposal:** Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options

## **SUBMISSION ON AKAROA RECLAIMED WATER BENEFICIAL REUSE, TREATMENT AND DISPOSAL OPTIONS**

### **Details of submitter**

1. Canterbury District Health Board (CDHB).

### **Details of submission**

2. The submitter is responsible for promoting the reduction of adverse environmental effects on the health of people and communities and to improve, promote and protect their health pursuant to the New Zealand Public Health and Disability Act 2000 and the Health Act 1956. These statutory obligations are the responsibility of the Ministry of Health and, in the Canterbury District, are carried out under contract by Community and Public Health under Crown funding agreements on behalf of the Canterbury District Health Board.
3. The Ministry of Health requires the submitter to reduce potential health risks by such means as submissions to ensure the public health significance of potential adverse effects are adequately considered during policy development.
4. We welcome the opportunity to comment on the Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options.

### **Comments**

5. CDHB supported the granting of the Akaroa wastewater consents in our submission dated 11<sup>th</sup> December 2014, provided conditions were adequate to protect the health of people and communities. We also noted that the new treatment plant would be designed to produce a high quality wastewater suitable for land application and that this disposal method is preferred by the local rūnanga who felt that discharge to Akaroa Harbour was culturally unacceptable. There are also very good reasons why a land-based option could be a preferred option purely from a public health perspective, so the CDHB supported the continued investigation into land based irrigation trials with an aim for this becoming a viable option in the future.
6. Health and wellbeing (overall quality of life) is influenced by a wide range of factors. These influences can be described as the conditions in which people are born, grow, live, work and age, and are impacted by environmental, social and

behavioural factors. They are often referred to as the 'social determinants of health', the various influences on health are complex and interlinked. Respect for, and adherence to, a community's cultural values are an important determinant of health.

7. As a division of CDHB, Community and Public Health (CPH) is committed to ensuring positive Māori health outcomes and reducing inequalities.

### **Recommendation**

8. CDHB support the proposal to irrigate the reclaimed wastewater to trees or pasture. The stated reclaimed water quality will not pose a risk to the health of the public. CDHB has no preferred site (Options 1-3) and recognise that the Christchurch City Council has carefully considered the advantages and disadvantages of each in terms of the social determinants of health.
9. CDHB support option 4, Non-potable Reuse in Akaroa. This would appear to be a viable option for a portion of the reclaimed water volume as the evidence provided about microbiological water quality, indicates that treatment will produce a discharge which is safe from a public health perspective. If the proposed option proceeds then adequate monitoring of the microbiological quality of the reclaimed water for non-potable reuse should be carried out.

### **Conclusion**

10. Thank you for the opportunity to comment on the Akaroa Reclaimed Water and Beneficial Reuse, Treatment and Disposal Options.
11. The submitter does not wish to be heard in support of this submission.

### **Person making the submission**



Dr Ramon Pink  
Public Health Physician

Date: 2<sup>nd</sup> May, 2017



**Contact details**

Angela Sheat  
For and on behalf of  
Community and Public Health  
C/- Canterbury District Health Board

# Submission form continued

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## Contact details

Contact name Lee Robinson & Marian Robinson

Organisation name (if representative) PRIVATE SUBMISSION

Contact address

Postcode

Phone number (day) [ ] Phone number (evening) [ ]

Email (if applicable) [ ]

Signature [Signature] Date 2/2/2017

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No. 178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamatua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

Please note: Your full name, address and telephone number will be required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the local, Committee or Council agenda goes live on the Council Website.

Additionally, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8399 or 0800 800 160 (Tunks Point) or email residents.

### How to give us your feedback

You can use this submission form if you prefer, with your feedback in a number of ways:

- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawater@ccc.govt.nz](mailto:akaroawater@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 028  
At-Home Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
111 Box 7 6966  
Christchurch Mail Centre  
Christchurch 8152
- **By hand delivery to Civic Offices:** 111 Hoteland Street, Christchurch or at the drop-in sessions.

consultation closes on Sunday 10 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons why:

Please see attached submission

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamatua Valley, in combination with another area
- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

### Please state your reasons for this ranking:

see attached submission

Continued overleaf

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Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

See attached submission

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

See attached submission.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

See attached submission

Do you have any other comments? (Please use additional paper if required):

See attached submission.

Thank you for taking the time to respond. Please include your contact details over the page.



**SUBMISSION IN RESPONSE**  
**TO THE DRAFT CHRISTCHURCH CITY COUNCIL**  
**AKAROA RECLAIMED WATER BENEFICIAL REUSE, TREATMENT AND DISPOSAL OPTIONS**  
**FROM LEE AND MARIAN ROBINSON**  
**(6490 STATE HIGHWAY 75, ROBINSONS BAY, AKAROA)**

1. We, Lee Michael Robinson and Marian Josephine Robinson are residents of Robinsons Bay. Our family has had residence in the Bay since 1952.
2. We fully support the submission of the Friends of Banks Peninsula (**FOBP**) and the Robinsons Bay Ratepayers' and Residents' Association (**RBRRA**) in response to the draft Christchurch City Council (**CCC**) Akaroa Reclaimed Water Beneficial Re-use Treatment and Disposal Options.
3. We have grave concerns if the waste water is located in the slopes of the Robinsons Bay Valley.
4. We have been actively involved in the community meetings. Lee Robinson has been member of the steering committee for the FOBP and is Chair of the RBRRA.
5. We are familiar with the working party's joint statement and have met on numerous occasions with experts in this area including Andrew Dakers (Engineer and Waste Water expert), Kevin Simcock (Engineer) and Pru Stephen QC (Barrister).
6. We believe there are numerous issues that need to be addressed before any waste water can be considered beneficial to the Robinsons Bay environment.
7. These issues are adequately covered in the submission by the FOBP and the RBRRA, but in summary:
  - 7.1 The area in part adjoins residential property, downhill from the proposed site.
  - 7.2 We are aware of many other waste water systems to land where there have been ongoing issues with nitrates, flooding, odour, over supply, midgets and so on. This area sits above a valley catchment with a small stream and the bay has a shallow catchment and does not offer quick disbursement of water in the event of overflow.
  - 7.3 Slips and erosion have always been an issue in the peninsula with the soils readily eroding once saturated. We are all aware of many slips that have occurred in Robinsons Bay over the last 20 – 30 years.
  - 7.4 The argument is that the water can be used to irrigate native trees is misplaced; we have planted some 10,000 native plants on our small 2ha property without any irrigation. In general irrigation is not required to sustain native plants.

- 7.5 The water engineering and engineering advice received by FOBP and RBRRRA makes it clear that there are significant risks in disposing the waste water system to Robinsons Bay is being muted by CCC.
- 7.6 We believe that consideration of any land based waste water disposal system is considered four primary objectives must be satisfied:
- 7.6.1 The waste water must be of a sufficient high quality.
  - 7.6.2 The waste water must be provided to an appropriate and beneficial location.
  - 7.6.3 There is an ongoing management and supervisory process in place that remains active.
  - 7.6.4 That a risk management process is in place and able to be implemented to ensure compliance in every respect.
- 7.7 We believe the waste water disposal for Robinsons Bay will adversely affect the environment, the current ecological systems that exist in the Bay and we fully support the reuse option for Akaroa that has been supported in respect of the submissions from the FOBP and the RBRRRA. A negotiated outfall to the Harbour pending the installation of reuse in Akaroa should be negotiated as a way forward in respect of this matter.

Dated at *Christchurch on 1<sup>st</sup> May* 2017



Lee Michael Robinson



Marian Josephine Robinson

# Submission form continued

1332

## Contact Details

Contact name KEVIN SIBLEY

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Postcode \_\_\_\_\_  
Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature K. Sibley Date 1-5-2017

*Please note that deputations will not be permitted at the meeting when the Council makes its decision.*

*Please note that deputations will not be permitted at the meeting when the Council makes its decision.*

- Yes - (We would like to be heard)
- No - (We do not want to be heard)

No anonymous submissions/feedback will be accepted.

FREEPOST Author's No 177



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8155

# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 - Irrigation of trees or pasture in Robbersons Bay
- Option 2 - Irrigation of trees or pasture at Pompeys Pillar
- Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 - Non-potable re-use in Akaroa, in combination with another option
- Option 5 - Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

Please note: Your full name, address and telephone number will be required because this information is important for independence, and for Christchurch City Council's ongoing public reporting periods. It also enables us to make any on-profile media. Ideally we would like your contact details too, if you have one, as this makes it easier for us to reach to speak with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council officially goes on to the final decision.

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### How to give us your feedback

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- Online: You can enter your submission using the online form provided on the Council's website at [cc.govt.nz/haveyoursay](http://cc.govt.nz/haveyoursay)
- By email: [346@cc.govt.nz](mailto:346@cc.govt.nz) (please note you must include your full name, contact address and contact with your submission)
- By mail (by email request):  
Present to:  
Members: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
1111111111  
Christchurch Mail Centre  
Christchurch 8011
- By hand delivery to: Civil Offices, 50 Beckett Street, Christchurch 8011 (on the day of submission)

Consultation closes on Sunday 30 April 2012

Preferentially, what environments would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why:

IF THE WASTEWATER IS SO CLEAN THAT IT CAN BE SPRAYED ONTO LAND THEN THE HARBOUR PSES THE LEAST LONG TERM RISKS AND LOWER ONGOING COSTS.

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order)

- Option 1 - Irrigation of trees or pasture in Robbersons Bay
- Option 2 - Irrigation of trees or pasture at Pompeys Pillar
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- Option 4 - Non-potable reuse in Akaroa, in combination with another option
- Option 5 - Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking:

AS AKAROA IS SHORT OF WATER THEN IT MAKES GOOD SENSE TO REUSE AS MUCH AS POSSIBLE FOR GARDEN WATERING, CAR AND BOAT WASHING AND TOILET FLUSHING

Continued overleaf

\*



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation (irrigation)? Please state your reasons why:

NEITHER

Do you have a preference for the location of reclaimed water storage ponds(s)?

Please state your reasons why:

LOCATION CLOSE TO TREATMENT PLANT BUT IT MUST BE COVERED TO MINIMISE BREEDING OF MIDGES. WE DONT WANT THE PROBLEM WITH MIDGES THAT IS HAPPENING IN BROMLEY AND ARANUI AT PRESENT.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley)? If so, which ones do you support and why?

No.

Do you have any other comments? (Please use additional paper if required):

Thank you for taking the time to respond. Please include your contact details over the page.

## **Submission on the Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options**

Bronwyn Hayward and Andrew Ashby

### **Introduction**

We have owned a family bach in Takamatua Valley for 12 years and before that Andrew's parents owned a property above Takamatua Valley on the corner of Long Bay road and Morgans road for 30 years, where we were married, so we have a long attachment to the area that is very personal. On a professional level, Bronwyn Hayward's PhD was in public consultation and one of the cases was for Waste Water Treatment for Christchurch City.

### **Summary of our Position**

- We advocate for re-use of the water by the Akaroa town through a purple pipe system, supported by incentives for Akaroa residents to reduce fresh water use, and incentives to use treated waste water. (Option 4).
- We do not support discharge of the wastewater into the harbour. This is a waste of a scarce resource. (Option 5).
- We do support irrigation of pasture or trees at Pompey's Pillar, if the land owner is willing. (Option 2.)
- We do not support the option proposed for the irrigation scheme in Takamatua Valley (option 3)
- We do not support the option proposed for the irrigation in the lower Robinsons Bay area, but we do support an irrigation scheme in the upper Robinsons Bay valley, if the land owner is willing. (option 4)
- We submit that the CCC must consider the significant basic inequity of Akaroa town externalising the cost of treating its wastewater to the surrounding area and the Marae, with no tangible benefits to those individuals or communities.

We would like Akaroa to have a progressive, even cutting edge, solution to managing waste water, both technically and socially.

### **Basic Inequity of the Waste Water Problem**

We support the concern of the community that it is important that the Christchurch City Council makes any decision in a way that does not exacerbate inequity for the community receiving the advantage of this project (Akaroa) while other communities (Takamatua Robinsons Bay or the local Marae) bear the impacts of the project, with no significant benefits. The beneficiary (Akaroa) does not pay any extra cost, including financial, which is born by the whole of Christchurch city. The current sewerage system has caused hurt in the community for half a century or more because of its location, and its harbour discharge, for historical and cultural reasons. We should not make a similar mistake of inequity now. We submit that this basic inequity must be a significant consideration influencing any final decision on what is the most appropriate option selected by the council.

#### **Re-Use through Purple Pipes system (option 4)**

We believe that the treated waste water is a valuable resource, and should be reused as much as possible, with provision for full reuse in the near future when the availability of water will reduce as demand increases and as Banks Peninsula becomes drier due to climate change. Akaroa has for many years faced water shortages during the summer months. We strongly advocate that as much treated waste water as possible is returned via Purple Pipe networks to Akaroa and is not merely used for demonstration or education purposes in two sites but planning is proactive to reuse it widely in the community. The effective reuse of wastewater in Akaroa will mitigate or reduce the load on the water supply, which includes Takamatua stream. We do support the location of pond 10 as this location supports Akaroa re-use of water. We advocate the council consider investing in treating the water to a level higher than proposed, so that the uses for purple pipe water are maximised, and the reasons for Akaroa community to accept it are maximised.

The pond must be suitably landscaped, and properly engineered to minimise odour, insect infestation, including the use of bladders or covers.

The current proposal for the new water treatment system does not include any requirements on Akaroa residents to seriously limit water use, and no plans for significant incentives for Akaroa residents to reuse their treated wastewater through a purple pipe system. An effective incentive would be to introduce charges for fresh water based on volume above a basic household minimum allocation. This would discourage waste and encourage the use of “free” purple pipe water. Other options are building regulations, social “nudge” factors such as regularly reporting in the weekly newspaper or on a sign in town, how much water various streets or areas in Akaroa have used, and so on. It will require proactive effort to get effective reuse of treated wastewater in Akaroa, especially when there is a free supply of fresh water with minimal restrictions, and the council should be planning to make this effort, rather than a “let’s see what the uptake is like” approach.

#### **Harbour Discharge (Option 5).**

We strongly advocate against discharging the waste water into the harbour. We accept that continued harbour discharge is likely to be necessary in the short term during the transition to a new scheme. However, harbour discharge is a simply a waste of a scarce resource and should be eliminated as quickly as practical.

#### **Irrigation of trees or pasture at Pompeys Pillar (Option 2)**

We support this proposal. There is plenty of land area available, it is reportedly technically sound, and there is a tangible commercial benefit for the land owner. We would not support compulsory acquisition of the land however. The visual impact of an area of green pasture during a dry summer in a remote area is not a significant issue.

#### **Irrigation of Trees or Pasture in Takamatua Valley (Option 3)**

The location of many houses, waterways, and ephemeral streams leaves a piecemeal non-contiguous patchwork of possible irrigation sites, on many different property owners land. Many of these owners have developed horticultural activities including lavender, walnuts, vegetables, and flowers for example. There are also working farms, and show gardens that do not want or need extra water. Any irrigation scheme including ponds and particularly new forests at the bottom of the valley will significantly change the appearance, character, amenity values, and ecology of the relatively low lying pastoral land. There does not appear to be enough land for effective reuse by spray irrigation. In either case the whole valley

scheme cannot satisfy the needs of the wastewater system. The Beca report notes that the high water table limits the capacity for absorbing the extra water, and there is risk to stream banks.

The proposed raised artificial pond (pond 7) is unacceptable. It will significantly change the appearance of the valley, especially for travellers on State Highway 75 heading towards Akaroa – essentially on a gate way site for everyone travelling to Akaroa including tourists. The location is also very low down the valley and very close to the sea. Putting waste water ponds and other infrastructure in such locations is surely not sensible as we head to a future with higher sea levels, and higher frequency of extreme weather events, including the risk of flooding. Furthermore, the land beneath in that area may be subject to liquefaction adding to the risks associated with pond 7. We also do not support Pond 9. This will also be highly visible from SH.75 and is located at the intersection of property access, and Old French Road, which is a popular walking and cycling route from Akaroa to Takamatua.

In conclusion, Takamatua Valley is not a practical or suitable location for wastewater reuse.

#### **Irrigation of Trees or Pasture in Robinsons Bay (Option 1)**

We make our submission as land owners / residents of Takamatua valley. However, we take the view that many of the issues raised for Takamatua valley apply equally to Robinsons bay, especially the lower areas. We do not object to reuse of wastewater higher in the valley away from the more highly populated areas, if the land owner is a willing seller, or leaser, and the water engineering is correctly done to eliminate downstream risks, and the Robinsons bay community can benefit from this option.

#### **Conclusion**

The decision has significant long term impacts, and the problems Christchurch is facing for example with insect infestations at Bromley, the ongoing issues of nitrogen loading on soils which may result from wastewater irrigation, and other issues remind us that while our aim is to conserve water in a changing climate and not to direct it into the harbour, the decision must not be made in a way that creates maladaptive outcomes where we create new problems. Furthermore the current system has caused significant hurt in the community for many decades due to the culturally offensive and insensitive location of the current plant, and the harbour outfall. We must be careful not to introduce new inequities into the wastewater treatment solution being established now.

Signature:



Date:

1 May 2017

Phone number (day): Bronwyn

Andrew

Phone number (evening):

Postal:

Email:

We would like to be heard at the hearing about Akaroa Waste Water Treatment.



To: Christchurch City Council

Date: 1 May 2017

## **Akaroa Reclaimed Water - Beneficial Reuse, Treatment and Disposal Options**

Submission of: Jan Cook & David Brailsford

tel.

email. .

### **We wish to be heard in support of this submission.**

We support solutions that are sustainable long-term and that encourage residents, businesses and visitors to become more mindful of the consequences of their water use.

The need to upgrade Akaroa's sewer disposal is a very long-standing issue. Solutions must serve Akaroa well into the future, must take into account the uncertainties of climate change, and must enable future adaptation and expansion.

We support reuse in Akaroa, along with education and incentives to discourage wasteful use of water, including metered charging for water.

We support disposal to the Harbour as an interim measure.

We do not support long-term "disposal" options, especially where these are imposed on unwilling rural communities. We consider that Options 1 and 3 and the associated maps and costings are poorly presented and confusing. The listed advantages and disadvantages are incomplete and show bias. This does not enable submitters to judge the options in an informed way.

We strongly support pond site 10, as its location enables maximum flexibility for reticulation of the wastewater to other areas. While it would not create any significant landscape effects, its central, visible location, along with the treatment plant, will help to serve as a reminder to the community that we all create waste that must be dealt with. If any additional pond sites are required they should be in this same general location.

### **Option 1.**

We oppose irrigation of pasture or trees at Robinsons Bay.

#### Reasons

1. It is disposal, not beneficial reuse. Pasture in this area does not generally require irrigation, especially at the high rates being proposed. Irrigation is not required for successful establishment of indigenous vegetation and may in fact be detrimental to its long-term health.
2. Irrigation and associated storage ponds would impact substantially on residents.
3. It allows Akaroa to externalise the environmental and social costs of its wastewater disposal onto other residents who do not themselves receive the benefit of reticulated sewage and water systems.
4. The costings do not take into account the potential effects on property values or the opportunity cost of using attractive farm and lifestyle land for waste disposal.
5. It is a high risk, unproven, "all the eggs in one basket" option with limited scope for alternative areas if soils become saturated with water and/or nutrients, or other serious environmental effects emerge.
6. It is an "out of sight, out of mind" option that will not encourage the development of long-term sustainable solutions for water conservation and the beneficial disposal of wastewater.

### **Option 2.**

We would support irrigation at Pompeys Pillar only as a last resort, and subject to the agreement of the landowner.

#### Reasons

1. May be a beneficial use, but at a very high cost. This will likely mean that funding will not be available for water conservation and re-use initiatives in Akaroa.
2. Is an "out of sight, out of mind!" approach.
3. Does not return the water to the catchment it came from.

### **Option 3.**

We do not support irrigation to trees or pasture at Takamatua Valley, except potentially as part of a "purple pipe" network.

#### Reasons

1. Same as those given under Option 1 above. However proximity to the treatment plant may give scope for voluntary re-use.

### **Option 4. & Option 5.**

We support re-use in Akaroa.

This should be in combination with an upgraded or new harbour pipeline, for interim and emergency disposal.

The Council must make a strong commitment to ultimately re-using 100% of the wastewater via purple pipes and recharge to the Akaroa catchment.

#### Reasons

1. We consider that disposal to the harbour of appropriately treated wastewater is environmentally safe, but acknowledge the concerns of Ngai Tahu in this regard.
2. Along with the immediate introduction of water conservation measures (less water used means less down the drain) and re-use in Akaroa (for public parks and toilets and potentially for private use via purple pipe), the Council needs to properly investigate the option of returning the wastewater to the catchment that it was taken from.
3. It would appear that the Misty Peaks Reserve, and other surrounding reserve areas, have been discounted because they are too steep. The Council does not appear to have asked the question *"What slope gradient would be geo-technically safe for disposal if the water was applied to a larger area at a lower rate?"*
4. Akaroa experiences water shortages and restrictions every summer, with water extraction reducing local streams to minimum flows. Using wastewater to irrigate reserves and gardens in Akaroa and to recharge the catchment is a sustainable solution, that benefits the community and the environment.
5. If, as is proposed, the water is to be treated to a very high standard then there should be no risk to public health. The water would simply find its way back to the streams and reservoirs, along with normal rainfall, and be treated for potable use. If the wastewater is considered to be safe for disposal into areas such as Takamatua and Robinsons Bay where residents draw their domestic (untreated) water supplies, then it must also be safe for disposal to the Akaroa water catchment.
6. There are substantial areas of established trees and vegetation in this area so disposal could begin immediately. Established trees also increase the capacity for disposal to continue during wet weather, thus reducing water storage requirements.
7. The impact of climate change is likely to bring weather that is drier, wetter and more stormy, along with sea level rise. Water will become an increasingly valuable resource, and Akaroa should seize the opportunity to "future proof" both its water supply and wastewater treatment.
8. If significant funds are sunk into capital projects for disposal, whether to land or the Harbour, there will be little incentive to pursue beneficial re-use options.

# Submission form continued

1335

## Contact details

Contact name David Armstrong

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature David Armstrong Date 25/4/2014

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**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes – I/We would like to be heard *only if required*
- No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

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FREEPOST Authority No.178



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Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

Please note: Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

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If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

### How to give us your feedback

You can use this submission form or you can provide your feedback in a number of ways:

- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture  
 Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

Please state your reasons why:

See Copenburg Report.

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay  
 Option 2 – Irrigation of trees or pasture at Pompeys Pillar  
 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area  
 Option 4 – Non-potable reuse in Akaroa, in combination with another option  
 Option 5 – Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

Please state your reasons for this ranking:

See Copenburg Report relating to suggestions for at-tanker! PASTURE, irrigation AWAY from small holdings and residential areas

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

See covering letter

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

See covering letter

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Do you have any other comments? (Please use additional paper if required):

See covering letter

Thank you for taking the time to respond. Please include your contact details over the page.

30 April 2017

The Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council

#### SUBMISSION RE AKAROA WASTE WATER SCHEME

Thank you for the opportunity of reviewing the proposals that you have submitted in relation to the Treatment Disposal Options circulated to us in your consultation document. I have read the document with interest but have been unable to attend any of the consultations over the period referred 3-30 April 2017.

I have in the course of my specialist work as a Farm Consultant and Valuer had the benefit of inspecting and analysing a number of properties owned by the Crown and Local Authorities where disposal of treated waste is applied to pasture and forested areas throughout New Zealand.

I am concerned that the spray irrigation proposals set out for Robinsons Bay and Takamatua appear to be constrained by criteria for spray irrigation which limits those systems to drip irrigation or the use of K-Line equipment. To work within those constraints it would appear that the matters discussed in the Spray Irrigation Disposal Options are limited to the valley floor areas, most of which are occupied for residential or small holding use. Inevitably this will lead to considerable rebuttal from the owners (which is understandable) and create an adverse response to spray irrigation systems which in other locations works successfully. I have reviewed on a number of occasions the systems operating on steeper hill country where the treated waste water is sprayed on forested land and in some instances steeper pastoral areas.

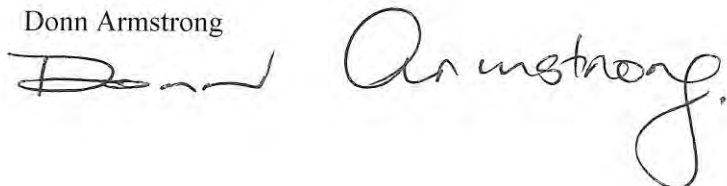
It occurs to me that the restrictions in terms of the application of the waste water to relatively flat to easy contour land close to the urban or peri urban areas as set out in the plan, has overlooked the potential to develop the higher altitude areas away from the more intensively developed locations. The exception being taking the waste water a considerable distance out towards Pompeys Pillar which incurs very substantial cost in main line construction.

I would be interested to know whether the experts involved have given consideration to applying the waste water on the more extensive farm land above Robinsons Bay and Takamatua well away from the more closely subdivided areas of these locations.

I could not find any reference in the Submission Document to the benefits that would accrue to the application of the treated waste water to more extensive pastoral areas on the steeper country. From my experience both as a Farmer, Consultant and Specialist Rural Valuer, I would have expected some of the progressive farmers on the Peninsula to welcome the opportunity of having some form of irrigation available to them and the benefit that would arise not only from the strategic irrigation benefits but also from any nutrients contained therein.

It may be that work has been done which identifies the increase in dry mater production (grass growth) and the potential for improving production on adjoining larger scale farm businesses. If so I would be interested to understand why the approach I am suggesting has not been promoted in the Consultation Document.

Donn Armstrong



# Submission form continued

1336

## Contact details

Contact name Ronald Birch

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Signature] Date 27/4/17

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Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

Yes – I/We would like to be heard

No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

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FREEPOST Authority No.178



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Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

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# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

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- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe) *Non-potable re-use in Akaroa*

Please state your reasons why:

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- 4 Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- 3 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 1 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 5 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking: *Given the shortage of water in summer months in Akaroa, using wastewater to reduce or eliminate this shortage would be preferable to the other options.*

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Not in longer term. It should be limited to being a temporary measure prior to establishing potable use throughout Akaroa. Longer term continuation of spray irrigation would raise concerns about under-estimated leaching issues similar to dairying.

Do you have a preference for the location of reclaimed water storage pond(s)?

Please state your reasons why:

Reclaimed water storage ponds should be located in areas that have the least impact for established communities and values of residential land. Where necessary the ponds should be screened and capped to prevent visual and smell pollution.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

While an added cost for householders, re-used water could also be used to flush toilets, just as Hong Kong uses sea-water to conserve fresh water reserves.

Do you have any other comments? (Please use additional paper if required):

We need a well staged long term solution, not a short term low cost expedient solution which may have long term hidden additional costs and adverse environmental issues.

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

1337

## Contact details

Contact name Mary Farnels

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

\_\_\_\_\_

Postcode

Phone number (day)

Phone number (evening)

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature] Date 27/4/17

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Do you wish to present your submission at the hearing? Please tick one of the boxes below:

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes - I/We would like to be heard

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FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

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tape here

# Submission form

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PO Box 73016  
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Christchurch 8154
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Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

Irrigation of reclaimed water to trees or pasture

Disposal via a new outfall pipeline to the mid-harbour

Other (please describe) *Non-potable reuse in Akaroa.*

Please state your reasons why:

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

4 Option 1 – Irrigation of trees or pasture in Robinsons Bay

2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar

3 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area

1 Option 4 – Non-potable reuse in Akaroa, in combination with another option

5 Option 5 – Disposal via a new outfall pipeline to the mid-harbour

Other (please describe)

Please state your reasons for this ranking:

*There is a shortage of water at times in Akaroa, so wastewater should be seen as a resource to address this shortage*

Continued overleaf

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Yes - As an interim measure prior to establishing potable reuse throughout Akaroa. Longer term use would bring concerns about leaching & similar problems to what is being experienced through dairying.

Do you have a preference for the location of reclaimed water storage pond(s)?

Please state your reasons why:

Pompeys Pillar - this has least impact for established communities and least negative impact on valuable residential land.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Do you have any other comments? (Please use additional paper if required):

I would like to see a well staged, long term solution chosen, rather than a short term low cost solution which may have longer term costs/impacts.

Thank you for taking the time to respond. Please include your contact details over the page.



**SUBMISSION OF TAKAMATUA RATEPAYERS ASSOCIATION INCORPORATED ON THE AKAROA RECLAIMED WATER BENEFICIAL REUSE, TREATMENT AND DISPOSAL OPTIONS PAPER**

**Introduction**

The Christchurch City Council has put forward five options for consideration relating to the beneficial reuse, treatment or disposal of reclaimed land from a new wastewater treatment plant planned for Akaroa. The identified options are:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

The Takamatua Ratepayers Association (Association) has a key interest in this project and the options put forward for consideration. The Takamatua Community and the environments of concern extend from the Valley to the Bay.

A number of the options under consideration could have an impact on the Takamatua community and the environment. It is essential that any decisions of the Council be made having the best available information so that informed and robust decisions are made. It is also important that the Christchurch City Council makes any decision in a fair manner. In this situation this means that any inequity of one community receiving the advantage of this project (Akaroa) while a separate community (such as Takamatua) bears the impacts of the project must form an important part in the consideration of the possible options and be a significant consideration influencing any final decision on what is the most appropriate option.

The Takamatua community will have to live closely with the consequence of a number of the options under consideration. This is a project which will have long term consequences for community. As such it is essential that the Takamatua Ratepayers Association Inc (Association) can have confidence that the best outcome is achieved for the immediate community, as well as addressing the specific needs for the Akaroa wastewater project.

These general matters must remain a key consideration for any person charged with assessing the available options and for decision makers when determining the preferred option.

Having addressed this important general matter the remainder of the submission addresses the specific matters in the Christchurch City Council Document “Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options” of relevance to the Association. The submission of the Association does not address all of the questions in the consultation document, only those of particular interest to the Association.

### Detailed Submission Matters:

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 being your least preferred option (please note the options below are in no particular order).

- |   |   |
|---|---|
| 5 | Option 1 - Irrigation of trees or pasture in Robinsons Bay                                      |
| 2 | Option 2 – Irrigation of trees or pasture at Pompeys Pillar (pasture only)                      |
| 5 | Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area |
| 1 | Option 4 – Non-potable reuse in Akaroa, in combination with another option                      |
|   | Option 5 – Disposal via a new outfall pipeline to the mid-harbour                               |
|   | Other (please describe)   |

The Association has not provided an overall preferential ranking of 1-5 for all of the options.

The option ranked as 1 (Akaroa reuse) is considered to be an essential part of this project moving forward. For the option ranked as 2 (Pompeys Pillar) it is considered that subject to certain conditions being met this could provide a good outcome. The distribution is only to be to pasture for this option.

The Association has identified two options (Option 1 Robinsons Bay and Option 3 Takamātua Valley) as having a ranking number of 5, which it considers are unacceptable locations for irrigation.

In addition to addressing a number of the specific options the Association has also addressed the treatment standards that should apply to any option.

### **Please state your reasons for this ranking:**

#### Option 1 – Robinsons Bay

The Association strongly objects to the option of irrigating trees or pasture, or disposing of the discharge on land in Robinsons Bay (Option 1). Further, this opposition extends to any use of wastewater originating from Akaroa within Robinsons Bay. The Association considers this option should be excluded for any further consideration for wastewater irrigation.

The Association has considered the two areas of land the first being the Robinsons Bay Valley and the second the Robinsons Bay Thacker Land. Having considered all of the available and relevant information the Association is clear that neither is a suitable location for the application of wastewater.

The key reasons for this in relation to Robinsons Bay Valley are:

- Robinsons Bay is populated by many landowners with relatively small landholdings. To affect so many different landowners in the valley is not acceptable. Further there are some significant heritage locations and structures within the valley floor. These may be negatively affected by

the proposal. Purchasing land from and compensating the land owners affected will be difficult and expensive. Irrigation and any discharge of wastewater in this area is not appropriate.

- There are technical difficulties highlighted in the BECA advice to Christchurch City Council with the Lower Robinsons Bay Valley. These include the high water table, the increased risk of stream bank erosion, the increased risk of waterway pollution and the increased risk of slips. These impacts are not acceptable.
- Ponds 3 and 8 will be highly visible, adjacent to the main highway and are not appropriate locations for these ponds. The Christchurch City Council's own advisors have said that it will be difficult to obtain a Resource Consent for these ponds.
- The recommendations within the information provided by Christchurch City Council notes that the valley is only suitable for tree irrigation. To fill the irrigated areas with trees will be a major change to the character, look and ecology of the Valley that will make it difficult to obtain a Resource Consent.

The key reasons for this in relation to Robinsons Bay Thacker Land are:

- The residents of Robinsons Bay have made it clear that they do not want Akaroa Wastewater in their valley. To dispose of Akaroa wastewater in this location is a major encroachment on the lives of many people.
- This solution is a disposal of wastewater and not a reuse. This is not a good long term option. The Pompeys Pillar solution offers the opportunity to reuse the product in a positive way. As such it is a much better outcome.

### Option 3 – Takamatua Valley

The Association strongly objects to the option of irrigating trees or pasture in the Takamātua Valley (Option 4). Further, this opposition extends to any use of wastewater originating from Akaroa within the Takamātua Valley. The Association considers this option should be excluded for any further consideration for wastewater irrigation.

Having considered all of the available and relevant information the Association is clear that the Takamātua Valley is not a suitable location for the application of wastewater. The key reasons for this are:

- The Takamātua Valley is populated by many landowners with relatively small landholdings. This limits the overall land that would be available for irrigation of wastewater. To affect so many different landowners in the valley who are using their land for horticultural activities including walnuts, lavender, organic farms, sheep and beef farming is not acceptable. Purchasing land from and compensating the land owners affected will be difficult and expensive. The combination of the number of landowners and the small size of many plots means any irrigation would be piecemeal, disjointed and not efficient. Irrigation in this area is not appropriate.
- There are technical difficulties highlighted in the BECA advice to Christchurch City Council with the Takamatua Valley. These include the high water table, the increased risk of stream bank erosion, the increased risk of waterway pollution and the increased risk of slips. These impacts are not acceptable within the Valley.

- The location of Pond 7 will be highly visible, having to be built above the ground. It would sit on liquefiable soils that increase the risk of damage to the system in future seismic events. The Christchurch City Council's own advisors have noted that its effect on the character of the land would make it difficult to obtain a resource consent for.
- Many of the larger areas of the lower Takamātua Valley towards the sea identified in the consultation document (Takamatua Study Area) as having irrigation potential are wet all year round. These areas will not be suitable for irrigation at any time. This reduces the effectiveness of the Takamātua Valley as a suitable location for irrigation of wastewater. The areas identified will not be able to infiltrate the treated water to the levels expected in the BECA design.
- The recommendations within the information provided by Christchurch City Council notes that this location is only suitable for tree irrigation. To fill the irrigated areas with trees will be a major change to the character, look and ecology of the Valley that will make it difficult to obtain a Resource Consent.
- Even with tree irrigation, the available area in Takamatua is too small to accommodate the whole discharge. This option also requires additional land in one of the other locations. This increases the cost of the solution. With the increased infrastructure required it also increases the risk of future damage and maintenance costs associated with the scheme.
- There is insufficient information available within this area on the viability of tree planting solutions to confirm effective uptake of nutrients and wastewater. It would constitute a community experiment with any negative consequences exported from the source of the wastewater, Akaroa onto the Takamātua Valley residents. The uncertainty, risk and impact of this option are not acceptable. The Takamātua Valley area is not suitable for irrigation.

#### Option 2 – Pompeys Pillar

The Association is of the view that Pompeys Pillar could provide great outcome provided that:

- The irrigation is to pasture
- There is no compulsory acquisition of that land at this site.
- There must be a contract between the Christchurch City Council and the landowners that protects the future generation from losing their land, and any loss of production or value of the product from that land.

On the basis of the above three points being achieved the Association supports this option. The reasons for this are that:

- The Pompeys Pillar reuse would be a productive outcome.
- With a willing landowner and an excellent reuse this location offers the opportunity for the wastewater to be treated as an asset rather than a problem. It will be used to enhance agricultural production.
- This site offers the opportunity to establish fire-fighting ponds along the Long Bay Road, and at the top. Once full the pond levels can be maintained with the treated wastewater.
- Pompeys Pillar can accommodate a spray irrigation solution. This is the cheapest operating and maintenance solution for the wastewater distribution.



#### Option 4 - Akaroa Reuse

The option of reusing non-potable water in Akaroa must be a key part of any final option. The Association strongly supports this option. Akaroa must be part of its own solution in reusing its wastewater. Conditions relating to this option should be:

- The reuse is to start as soon as the treatment plant is operational.
- The initial reuse be in those areas listed in the Joint Working Party recommendations. These include the recreation ground, reserves, boat wash and in the public toilets of Akaroa.
- A purple pipe system is to be developed and implemented in Akaroa as other infra structure renewal projects occur in the Akaroa streets over the next 25 years.

The reasons the Association supports this option are:

- Akaroa must be a part of its own solution in reusing the wastewater. It underpins the safe reuse of waste water in our community. It also supports future uptake of wastewater reuse as a beneficial resource.
- Reuse of the wastewater will reduce the fresh water needs of the village. This will lessen the need for restrictions, particularly in summer, and will help the ecology of the streams from which water is drawn. The Takamatua Stream is one of those streams under pressure.
- This option can have a positive benefit in increasing the resilience of water availability and use within the Akaroa Community.
- Reuse of water in Akaroa is consistent with a fair and equitable approach that the community where the discharge arises must take some responsibility for any discharge and re-use of that water.

#### Treatment Standard

For any valid option it is an essential pre-requisite that the wastewater be treated to a high standard. The Association considers that Reverse Osmosis supplementing Ultra filtration should be the level of treatment.

The treatment of Akaroa wastewater is an opportunity to establish an exemplar project. It does not make sense to settle for less than the best technology available.

The top end treatment offers the opportunity for more reuses of the wastewater. In particular it could be recycled through the water treatment plant and used as drinking water or to irrigate gardens in Akaroa.

**Do you have a preference for the location of reclaimed water storage ponds(s)? Please state your reasons why:**

In this section of its submission the Association has addressed the locations of Ponds 9 and 10. Ponds 3, 7 and 8 have been addressed earlier in this submission.

Pond 9

The Association does not support the location of Pond 9. This location should be rejected from further consideration. The key reasons this site is not appropriate are:

- This pond is highly visible meaning that it cannot be appropriately screened or incorporated into the landscape. The pond would become an obvious feature that does not fit into the character or amenity of the surrounding environment. We are advised that this will make it very difficult, if it is at all possible, to obtain a resource consent for this pond.
- This pond site will affect access up and down Old French Road. This is a track used by walkers, bikers and vehicles.
- This pond site affects access to a property to the point where an alternative access is difficult to provide.

Pond 10

The Association considers that the location of Pond Site 10 is acceptable provided that a number of conditions are met. These are:

- This pond site be landscaped. The landscaping must be to a level where the pond and any site works are invisible from the Main Highway and Old French Road, even when viewed from high vehicles.
- There must be no odour associated with this pond.
- There is no increase or growth of insects in or around the pond. If necessary or required to negate odours or insects the pond is to be covered.
- There is a guaranteed full treatment of all the wastewater in providing this pond.

The reasons the Association supports the location of Pond 10 are:

- This pond facilitates the full treatment of all the wastewater preventing any lesser treated bypass product.
- This pond facilitates the reuse of the treated wastewater in Akaroa.
- The BECA report has highlighted that this pond will be below ground and that it can be fully screened to be invisible from the Main Highway and Old French Road.

**Do you have any other comments? (Please use additional paper if required):**

The Association has taken and will continue to take an active role in the Akaroa Wastewater Project. The Association seeks that it continues to be recognised as a key stakeholder in this project.

## Contact Details

Contact name:

Organisation name (if representing):

Contact address:

Phone number (day):

Phone number (evening):

Email (if applicable):

Signature:



Date: 28 April 2017

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**  
**Please note that deputations will not be permitted at the meeting where the Council makes its decision.**

Yes – I/We would like to be heard

No – I/We do not want to be heard

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FREEPOST Authority No.178

Christchurch  
City Council 

Free 



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

# CHRISTCHURCH CITY COUNCIL

## Akaroa Wastewater Scheme

### 2017

- Received via Email -

<b>Name:</b>	Gavin Shepherd Email:
<b>cc:</b>	
<b>Sent:</b>	Mon 1/05/2017 11:21 a.m.
<b>Subject:</b>	Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options - Private Submission
<b>Your Submission:</b>	<p>Good Morning</p> <p>Below is my submission in relation to the consultation process for the treatment and disposal options</p> <p><b>Name : Gavin James Shepherd</b> <b>Address :</b> <b>Property owned in</b></p> <p><b>Option Choice</b> <b>I am in favour of a mixture of Option 4 and Option 5</b></p> <p><b>Submission</b></p> <ol style="list-style-type: none"> <li>1. It is wholly unacceptable to discharge Akaroa township waste in an area where no sewage, water or services are supplied to the current property owners of Robinson Bay. It is as equal an affront to the property owners of Robinson Bay as the current system is an affront to the local iwi.</li> <li>2. To suggest the Pompeys Pillar option would have a negative effect on the landscape but consider there to be none to the property owners of Robinsons Bay is totally disrespectful to the property owners of Robinsons Bay</li> <li>3. To clearly zero in in on Robinson's Bay because it is the cheapest and there is a potential seller, is no reason to propose the idea. Any plan needs to be able to cope with 50 plus years of use and as such needs to be the very best option not the cheapest.</li> <li>4. The proposed discharge into the upper harbour makes no sense at all. Robinsons Bay has a very slow refresh rate and little or no current with the tides. Any excess discharge due to flooding would not flush away at an acceptable rate at all leaving a very high level of risk to the environment and health of the residents</li> <li>5. The Robinsons Bay proposal appears to have had little or no objective research conducted around the soils ability to cope with the proposed discharge volumes for 365 days per year and how the increased saturation may decrease the capacity of the soil to absorb excess water during the wetter winter months or in a period of very high rainfall. An average of 4 litres per second on an annual basis is an immense amount of water day in, ,day out. In addition, there appears to be little regard for the increase in risk of erosion or slips.</li> </ol> <p>Gavin Shepherd</p>



**CHRISTCHURCH CITY COUNCIL**  
**Akaroa Wastewater Scheme**  
**2017**

- Received via Email -

<b>Name:</b>	Doig & Andrea Smith Email:
<b>cc:</b>	
<b>Sent:</b>	Wed 3/05/2017 11:01 a.m.
<b>Subject:</b>	Akaroa Reclaimed Water Beneficial Reuse, Treatment and Disposal Options - Private Submission
<b>Your Submission:</b>	<p><b>Name : Doig and Andrea Smith</b>  <b>Address :</b>  <b>Property owned in Robinson Bay at</b></p> <p><b>Option Choice</b>  <b>We are in favour of a mixture of Option 4 and Option 5</b></p> <p><b>Submission</b></p> <ol style="list-style-type: none"> <li>1. Our family have owned a property in Robinsons Bay for 50 years It is wholly unacceptable to discharge Akaroa township waste in an area where no sewage, water or services are supplied to the current property owners of Robinson Bay. It is as equal an affront to the property owners of Robinson Bay as the current system is an affront to the local iwi.</li> <li>2. To suggest the Pompeys Pillar option would have a negative effect on the landscape but consider there to be none to the property owners of Robinsons Bay is totally disrespectful to the property owners of Robinsons Bay</li> <li>3. To clearly zero in in on Robinson's Bay because it is the cheapest and there is a potential seller, is no reason to propose the idea. Any plan needs to be able to cope with 50 plus years of use and as such needs to be the very best option not the cheapest.</li> <li>4. The proposed discharge into the upper harbour makes no sense at all. Robinsons Bay has a very slow refresh rate and little or no current with the tides. Any excess discharge due to flooding would not flush away at an acceptable rate at all leaving a very high level of risk to the environment and health of the residents also the whitebait and eel population would be destroyed. We are sure the local iwi would also be unhappy about this happening.</li> <li>5. The Robinsons Bay proposal appears to have had little or no objective research conducted around the soils ability to cope with the proposed discharge volumes for 365 days per year and how the increased saturation may decrease the capacity of the soil to absorb excess water during the wetter winter months or in a period of very high rainfall. An average of 4 litres per second on an annual basis is an immense amount of water day in, ,day out. In addition, there appears to be little regard for the increase in risk of erosion or slips.</li> </ol> <p>Doig and Andrea Smith</p>

# CHRISTCHURCH CITY COUNCIL

## Akaroa Wastewater Scheme

### 2017

- Received via Email -

<b>Name:</b>	Tracy Foley Email:
<b>cc:</b>	
<b>Sent:</b>	Wed 3/05/2017 11:25 a.m.
<b>Subject:</b>	Tracy Foley re: online submission not received.
<b>Your Submission:</b>	<p><b>Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?</b></p> <p>Other</p> <p><b>Reasons why:</b> Recycle via purple pipe. Any extra disposal via harbour outfall. Water is a scarce resource and should not be wasted.</p> <p><b>Please rate the options listed below with a number according to your preference.</b></p> <ol style="list-style-type: none"> <li>1 Non-potable reuse in Akaroa, in combination with another option.</li> <li>2 Irrigation of trees or pasture at Pompeys Pillar</li> <li>3 Disposal via new outfall pipeline to the mid-harbour</li> <li>4 Irrigation of trees or pasture in Takamatua Valley, in combination with another option</li> <li>5 Irrigation of trees or pasture in Robinsons Bay</li> </ol> <p><b>Please state your reasons for this ranking:</b> Water is a scarce resource, it should be cleaned to the highest standard and reused. Akaroa is going to need more water to grow. Waste water ponds de-value land having a financial and emotional effect on residents in populated areas.</p> <p><b>Would you be more supportive of spray irrigation to treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:</b> Depends where it is. Pasture on Pompeys Pillar. Trees in inner harbour.</p> <p><b>Do you have a preference for the location of reclaimed water storage pond(s)?</b></p> <p><b>Please state your reasons why:</b> Yes, above Akaroa, closest for reuse via purple pipe.</p> <p><b>Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamatua valley)? If so, which ones do you support and why?</b> Yes, reuse in Akaroa because water is a scarce resource that should not be wasted.</p> <p><b>Do you have any other comments?</b></p> <p>I find it culturally insensitive that partially treated wastewater be dumped where I live.</p> <p>The cheapest option isn't necessarily the right or best option. We need a scheme that can be expanded and is environmentally prudent, i.e. reuse of water, non-pollution of streams and land e.g. Nitrates.</p>

I would like to the opprtunity to read my submission.

Tracy Foley

**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme  
2017**

- Received via Email -

<b>Name:</b>	Bill and Joan Adair Email:
<b>cc:</b>	
<b>Sent:</b>	Wed 3/05/2017 12:21 p.m.
<b>Subject:</b>	Wast water Robinsons Bay
<b>Your Submission:</b>	We are a property owners at Archdalls Road and strongly object to the current proposal for all reasons sited in the friends of Banks Peninsula Ass objections. William,Joan,Anna,Tim and James Adair



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Penny Carnaby
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/6/2017 1:18:16 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	My submission summarises the Joint Statement of the Akaroa Wastewater Reuse Working Party.
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Irrigation to trees or pasture and for reuse and reusing Wastewater for parks etc within Akaroa at times when water is short. There is an opportunity for the AW scheme to be a exempla for other wastewter schemes in NZ
Option 1	Please select
Option 2	Please select
Option 3	Please select
Option 4	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	As independent Chair of the Working Party I was aware that the community, council and Experts Group had spent a great deal of time and effort investigating sustainable options which were acceptable to the community. Non potable Reuse in Akaroa was seen to be an important outcome regardless of the option finally supported. The Working Party favoured a pond adjacent to the Treatment plant with a smaller pond in the upper Robinson Bay area.
Would you be more supportive of spray irrigation of treated	My personal view supports the irrigation of native trees surrounding the irrigation ponds. I think there is potential to develop a native habitat which encourages bird life and greater biodiversity.

wastewater to pasture? Why	
Do you have location preference? Why:	Larger Pond near the Treatment plant with a smaller pond in the upper Robinsons Bay area (This was the preferred outcome of the Working Party)
Should Council add aspirational projects to the Akaroa wastewater scheme?	Yes there is potential for the Akaroa Wastewater scheme to be an exempla for other schemes particularly in relation to reuse.
Any other comments?	

**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -  
Submissions close 5pm, 30 April 2017**

Full Name*:	Alice Riddell-Webster
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/6/2017 8:05:34 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	
If Other, please describe and state reasons	I prefer that the water be treated to a potable standard and re used in Akaroa To alleviate the cronic water shortages in Akaroa and follow international common practices
Option 1	Please select
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	See above - as a short term measure an outfall into the harbour would be acceptable but only while ifrastructure is being developed to reuse water treated to internationally acceptable standards for drinking
State reasons for ranking	Christchurch City Council should follow the rest of the world in reusing water which will become an increasingly scarce resource. Water is already drawn from the Takamatua Stream and with the eel population now at threatened status the low level of Takamatua stream in summer is of concern. It is unfair to taske weater from a community and return it as waste water

<p>Would you be more supportive of spray irrigation of treated wastewater to pasture? Why</p>	<p>Either but only with the landowner and neighbouring landowners full agreement</p>
<p>Do you have location preference? Why:</p>	<p>Pond 10 appears acceptable if the landowner and other adjacent landowners are agreeable</p>
<p>Should Council add aspirational projects to the Akaroa wastewater scheme?</p>	<p>Fire storage ponds are necessary and should be considered in connection with reusing water treated to potable standard to the Akaroa catchment</p>
<p>Any other comments?</p>	<p>My family have land in Takamatua which is blatantly unsuitable for any form of irrigation, beint flood pone yet it is still marked for potential irrigation.</p> <p>Takamatua Valley has a distinctive atmosphere with trees listed and protected by the Christchurch City Council as having cultural, landscape and heritage values. Please respect the wishes of Takamatua Valley residents.</p> <p>I am disappointed that due to a so called "technical hitch" my first attempt at submitting appears lost. Therefore I have no faith in the validity of the consultation process.</p>



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Richard & Wendy Doak
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/6/2017 9:39:01 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	<p>Install a waste treatment plant which has the technology to purify the waste water to such an extent that the water can enter the drinking water treatment plant in Akaroa for reuse within the town.</p> <p>Lets be bold and spend the money now for current a Future proof the issue now rather than piece meal options currently being considered.</p>
Option 1	Other (please describe)
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 4	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 5	Option 1 - Irrigation of trees or pasture in Robinsons Bay
Option 6	Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
Other	<p>Install a waste treatment plant which has the technology to purify the waste water to such an extent that the water can enter the drinking water treatment plant in Akaroa for reuse within the town.</p> <p>Lets be bold and spend the money now for current and future generations and avoid the unnecessary impact of the other proposals on the residents of other Bays and the harbour ecology.</p>
State reasons for ranking	Future proof the issue now rather than piece meal options currently being considered.

<p>Would you be more supportive of spray irrigation of treated wastewater to pasture? Why</p>	<p>Neither appeals however drip irrigation is preferable to spray given the easterly wind impact on the spray option. We are not convinced that the proposed distances between spray and residential property would negate spray impacting on residents in the Bays (moisture, smell)</p>
<p>Do you have location preference? Why:</p>	<p>Top of Old French Road. Least number of residential properties impacted.</p>
<p>Should Council add aspirational projects to the Akaroa wastewater scheme?</p>	<p>Yes</p> <ul style="list-style-type: none"> <li>- complete recycling of fully treated water back into the Akaroa domestic supply</li> <li>- purple water pipes installed back to Akaroa</li> <li>- fire fighting ponds</li> <li>- reduce storm water in Akaroa from entering waste system</li> <li>- residential purple water tanks</li> </ul>
<p>Any other comments?</p>	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**  
***Submissions close 5pm, 30 April 2017***

Full Name*:	Elizabeth Mars
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/6/2017 6:52:28 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Irrigation of reclaimed water to trees or pasture
If Other, please describe and state reasons	
Option 1	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 2	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 3	Option 1 - Irrigation of trees or pasture in Robinsons Bay
Option 4	Option 3 - Irrigation of trees or pasture in Takamātua Valley, in combination with another area
Option 5	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 6	Please select
Other	
State reasons for ranking	Pompeys Pillar has enough suitable land for irrigation and is away from housing and streams. Importantly it has the lowest ground water level. If other land disposal options are used, piping some of the treated water to Akaroa will relieve some pressure on ground water levels during wet seasons and on tank storage.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	I have no preference other than to say the most suitable system for the disposal on the land in question should be used.

Do you have location preference? Why:	No.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Yes. Fire storage ponds are a wise investment (think of the Port Hills fire). If Takamatua is to be part of the scheme then I think Takamatua should have a reticulated wastewater scheme.
Any other comments?	Wastewater should be treated to the highest possible level. I would support a discharge pipe into the harbour were it not for my concern about the effects of nitrogen levels which are still too high for the proposed Akaroa Plant. Nitrogen levels need to be lower than the level proposed.



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Stephen Horton
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 8:30:28 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Recycled water that is treated to a higher level The current treatment techniques presented appear to be attempting to use old and basic technology to cheaply solve a problem. A greater investment now would show that the city clearly cares for the environment.
Option 1	Other (please describe)
Option 2	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	Treatment to a higher level to enable recycling of water within Akaroa, with only the lower quality material being reused. A "purple pipe" on the road out front would allow homes to use it for black water toilet flushing.
State reasons for ranking	The city can use this as a clear example of how water can be highly treated in such a way to actually reduce our impact on the environment.
Would you be more supportive of spray irrigation of treated	Neither of these are needed if the city makes the environment a priority and treats water to a level where it can be reused within Akaroa.

wastewater to pasture? Why	
Do you have location preference? Why:	It would be a huge shame if this were to be done. If it is then locations 2 and 7 would not let the city hide this embarrassment from the thousands of users of State Highway 75.
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	Show leadership and appreciation for the environment. Build something that will make the world better for our grandchildren, not something that will just not make our environment worse.

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Erin Neufeld
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 8:42:12 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	I would prefer all wastewater to be treated, cleaned and reused within Akaroa Environmentally and socially responsible, this is also the most sustainable over the long term as it helps with the water shortages we suffer in summer
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Other (please describe)
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	Treat the water to a high level and allow private homeowners to reuse greywater in toilets and to drip irrigate gardens
State reasons for ranking	Environmental and social responsibility, aid in the higher water usage levels in the summer
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Much prefer drip irrigation to trees as this allows water to be distributed throughout the year

Do you have location preference? Why:	Top of Old Coach Road, closest to Akaroa and treatment plant and is right in plain sight meaning it should be well maintained and there will be many people keeping an eye on it
Should Council add aspirational projects to the Akaroa wastewater scheme?	I would support a reticulated water system to be set up in Takamatua. This would also allow them to hook up to the greywater recycling system I suggested earlier.
Any other comments?	There are examples of greywater recycling around the world in water scarce places (ie., <a href="http://arava.org/arava-research-centers/center-for-transboundary-water-management/decentralized-wastewater-treatment-and-reuse-for-rural-communities/">http://arava.org/arava-research-centers/center-for-transboundary-water-management/decentralized-wastewater-treatment-and-reuse-for-rural-communities/</a> & <a href="https://link.springer.com/article/10.1007%2Fs11269-010-9580-5?LI=true">https://link.springer.com/article/10.1007%2Fs11269-010-9580-5?LI=true</a> ), we need to look to these places and follow their example. Just because we have enough water doesn't mean we can't use it responsibly.



Time: 1 – 4pm

Venue: Gaiety Hall, Rue Jolie, Akaroa

1359

OR

Date: Tuesday 11 April 2017

Time: 5.30 – 7.30pm

Venue: Civic Offices, Function Room, 53 Hereford St, Christchurch

You can make your views known at the consultation meeting and drop-in sessions.

### Map location



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### Your details

First name (required)

Richard

Last name (required)

Troughton

Street name and number (required)

Suburb (required)

Town / City

Postcode

Email address (required)

I am completing this submission:

- For myself
- On behalf of a group or organisation

Contact number (required)

If you are representing a group or organisation, how many people do you represent?

Not applicable

Name of organisation

Not applicable

Role within organisation

Not applicable

---

## Hearings

Public hearings will be held.

I wish to present my submission at the hearing

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## Comments

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other

If other, please describe

Re-use of treated waste water for non-potable use within Akaroa  
Some use of harbour

Please state your reasons why

Re-use of treated waste water will help to solve water shortages that occur in Akaroa during

---

## Options

Please indicate your preferred option in order of 1 to 6, with "preferred option 1" being your most preferred option and "preferred option 6" your least preferred option . Option 6 would be an alternative option outside of options 1 to 5 (please note the options below are in no particular order).

Preferred option 1

Option 4 - Non-potable reuse in Akaroa, in combination with another option

Preferred option 2

Option 5 - Disposal via a new outfall pipeline to the mid-harbour

Preferred option 3

Option 2 - Irrigation of trees or pasture at Pompeys Pillar

Preferred option 4

Please select

Preferred option 5

Please select

Preferred option 6

Please select

If other, please describe

Please state your reasons for this ranking

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Do you have any other comments?

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### Supporting information

Attach any supporting documents (if applicable).

Note: When uploading multiple files please multi select and upload all at once.



## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Shaun Huddleston
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 3:57:47 PM
Would you like to attend the hearings for this consultation?	Yes
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Reuse in and around akaroa This will benefit already existing assets in the area rather than inventing new and untried (successfully in the long term) methods of discharge. This will also take a lot of pressure off the already stressed summer fresh water supply to Akaroa town.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	Treated wastewater should be used to improve already existing assets rather than inventing new projects to "Dispose" of the water.
Would you be more supportive of spray irrigation of treated	Pasture. It has been shown (Selwyn district and Rotorua) that irrigation of treated wastewater to trees only works in the short term. After a few years trees begin to sicken and die due to too much nitrogen etc build-up in the soil.

wastewater to pasture? Why	
Do you have location preference? Why:	Pond site 10 next to the new treatment station on Old Coach Road is best because of it's proximity to the treatment station and Akaroa town itself for reuse.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Absolutely. The treated wastewater is there and available and should be used for many different aspirational projects. The more projects it is used for the greater the amount of wastewater that can be used beneficially without "dumping" it on
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Lorraine Owen
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 5:14:06 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	Open sea outside of harbour For protection of recreational users of harbour and marine wild life. In support of Ngai Tahu objections to harbour discharge.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Other (please describe)
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Other (please describe)
Other	(as described above)
State reasons for ranking	Water is a precious resource and waste should be avoided as far as possible. Re-use of treated wastewater would help address the water shortage in Akaroa and is a good alternative to using valuable drinking supply for other purposes such as flushing toilets; washing cars/boats and garden irrigation
Would you be more supportive of spray irrigation of treated	I would prefer drip irrigation to avoid spray drift. However, it is uncertain that the ground and vegetation would tolerate this and the levels of nitrogen that would be released with potential contamination of neighbouring waterways.

wastewater to pasture? Why	
Do you have location preference? Why:	<p>Pond 10, provided it is covered to prevent:</p> <ul style="list-style-type: none"> <li>- an environment for the breeding of unwanted pests e.g midges</li> <li>- potential fouling by other wildlife</li> <li>- any odour</li> </ul>
Should Council add aspirational projects to the Akaroa wastewater scheme?	<p>Fire storage ponds would be a good idea (particularly in view of the recent Port Hills fires) to avoid the use of salt water.</p> <p>Treatment of wastewater to a standard for potable use.</p>
Any other comments?	<p>To me the Banks Peninsula is an area of outstanding natural beauty which should be preserved and protected for generations to come. New Zealand needs to demonstrate commitment to it's 'clean green' image and be among world leaders in protecting its natural environment</p>



**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -  
Submissions close 5pm, 30 April 2017**

Full Name*:	Joshua Harris
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 7:19:34 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	treated to high standard and reused for useful purposes. Reduce demand for potable water and discharge of potentially poor quality to environment.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Drip to trees, less likelihood of drift

Do you have location preference? Why:	no
Should Council add aspirational projects to the Akaroa wastewater scheme?	yes, both fire storage and reticulated scheme. As have added value and resilience
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Kathleen Liberty
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 7:32:51 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Irrigation of reclaimed water to trees or pasture
If Other, please describe and state reasons	I agree with Nga Tahu that discharge into the harbour is unsustainable and the oceans are already ill. At least some filtering through treatment and then through trees and pasture would improve the water entering the harbour to a somewhat better extent. However, I feel that the cost of treating the water to a drinkable level is the only real option. The money spent on a stadium or conference centre should be used to help us sustain our water quality and improve our treatment. Over time, the quality of our water is far more important than building a stadium or a conference centre (or both) for the people of all of the Christchurch. We are going to be asked to make this decision over and over, not just for Akaroa. We can't keep treating the ocean as a sewer.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Other (please describe)
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	A public education programme in Akaroa and Banks Peninsula about water use and conservation. Re-lay the storm, wastewater and sewage pipe systems (instead of paying for the stadium, for example). Stormwater can discharge into the harbour during a huge storm. Treat wastewater separately from sewage, but all to the highest possible treatment level. Even if the cost is 5 times higher. However, the current plan to put the treated water at Takamatua, Pompey's Pillar or

	Robinson's Bay is silly. Why not use it to water the upper reaches of the parks in Akaroa? The Garden of Tane, for example.
State reasons for ranking	The first reason is that reusing water is the only sensible option. I understand that this is a problem with removing viruses and other elements from the water at a price that some people think is reasonable. However, even the highest prices for treatment to a higher standard will be less costly than what is likely to occur as the ocean continues to be degraded. New Zealand and Canterbury/Akaroa/Banks Peninsula depend on fishing and tourism, and swimming with sewage and dead fish is not an attractive option. I have swum with sewage at Church Bay. Akaroa already has days with water restriction, so reusing treated water make sense as a first step. The reason I picked Pompey's Pillar as the site as it is the site with the fewest number of affected residents. The additional cost is so small as to not be worth considering.
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	Drip irrigation to trees. The tree plan will result in better filtering of the semi-treated wastewater and potentially contribute to bush regrowth (as least I believe that some native bush responded well to the treated wastewater in a trial). The drip irrigation is less likely to become windborne and cause the spray to be dispersed or other unwanted side effects, such as odour. I believe the drip system at Wainui is working well.
Do you have location preference? Why:	I do not want storage ponds. I don't understand why they are needed. If there are storage ponds, they should be a Children's Bay near to the treatment plant, not piped somewhere else. Or, perhaps storage ponds should be near the cricket pitch and mini-golf in Akaroa.
Should Council add aspirational projects to the Akaroa wastewater scheme?	The aspiration should be to treat the water to a drinkable level.
Any other comments?	We have a bach on the hill between Robinsons Bay and Takamatua. We do not get water from the council. We do not get sewer hookup. We do not get rubbish pick up. We do pay quite high rates. There is no safe verge on the road to allow us to walk to the nearest picnic area. (We love the library-- good value for our rates).  I would be happy to pay even higher rates for a better solution to the sewage problems across the area. Duvachelle is next, right?



**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -  
Submissions close 5pm, 30 April 2017**

Full Name*:	jeff scandrett
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 9:56:17 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	option 4
Option 1	Please select
Option 2	Please select
Option 3	Please select
Option 4	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	

Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

### - Received via Have Your Say -

### *Submissions close 5pm, 30 April 2017*

Full Name*:	Jane, Gary Loe, Healey
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 10:34:46 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	On behalf of a group or organisation
Role within Organisation	
Group/Organisation Names	
How many people do you represent?	Two people
Preferred environment for Akaroa wastewater discharge:	Other
If Other, please describe and state reasons	<p>Primarily, we want the treated wastewater to be recycled in Akaroa through a purple pipe system. Any residual water to be piped and pumped to Pompeys Pillar to irrigate trees or pasture. We feel that any discharge of wastewater, raw or treated, direct or to land is no longer environmentally or culturally acceptable if it is to flow ultimately into the inner harbour. Treated wastewater is a precious resource that should not be wasted or squandered.</p> <p>Akaroa suffers from water shortages over the summer months so it makes sense to set up a purple pipe network, in the township, and recycle the water for flushing toilets and irrigation etc. The system can be expanded in the future and may with advancements in technology lead to the recycling of the wastewater as drinking water (already a common practice in parts of Europe).</p> <p>Any excess wastewater to be piped/pumped to Pompeys Pillar as a source of irrigation because the water will eventually make it's way to the sea, oceanside.</p>
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 3	Other (please describe)
Option 4	Please select
Option 5	Please select
Option 6	Please select

Other	For us, options 4 (recycling within Akaroa) in conjunction with option 2 (irrigation at Pompeys Pillar) are the only acceptable options with regard to our local habitat.
State reasons for ranking	<p>It is common sense to recycle the treated water to a place where water shortage is a problem. Why squander a precious resource, especially one that will become even more precious for future generations. This option also provides the opportunity for future growth of the system and who knows what other possibilities in times to come.</p> <p>Although piping and pumping to Pompeys Pillar is the most expensive option, money should not be an issue when dealing with two of the major issues to face us in the future - water usage and environmental pollution. This option only affects one landowner instead of many and it seems that this party is happy to offer up their land to the runoff. The water does not make it's way into the inner harbour and provides a beneficial use to the farmer. This option also provides room for increased population growth and the associated higher effluent flows.</p> <p>We are aware that the local Runanga are currently investigating the possible cultural significance of the Pillars area as historic Pa sites and probable burial sites but we hope that they will be able to come to a compromise, of sorts, and allow the dispersal of treated water to land in some area over there.</p>
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	We are happy for the Council to decide the most efficient method of dispersal at Pompeys Pillars in conjunction with the landowner. Personally, we would prefer the drip irrigation to trees method due to the slower growth rate of the trees dealing better with the toxins.
Do you have location preference? Why:	Along the Old Coach Road because it is close to the treatment plant, largely unseen and not a heavily populated area.
Should Council add aspirational projects to the Akaroa wastewater scheme?	Yes, fire storage ponds are a productive and beneficial use of the wastewater although the problem of midges is a major concern.
Any other comments?	<p>I would like to salute Te Runanga o Ngai Tahu for bringing this long overdue and unacceptable matter to the forefront of public thought. The wastewater is of our making and must and will be disposed of somewhere. Much sentiment and emotion is involved but compromise by all parties is a prerequisite. Expense should not be a restraint or a priority if we are to facilitate a robust solution that will see us well into the future. We must remember that we are guardians of this land and it's waterways. We want to be able to pass on to subsequent generations systems that enhance, not poison, their legacy.</p> <p>Hindsight can be a wonderful thing, foresight is admirable, let us not look back, in the future, with regret.</p>



**CHRISTCHURCH CITY COUNCIL  
Akaroa Wastewater Scheme**

**- Received via Have Your Say -  
Submissions close 5pm, 30 April 2017**

Full Name*:	Helen Briggs
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/7/2017 10:43:39 PM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	Helen Briggs
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Disposal via a new outfall pipeline to the mid-harbour
If Other, please describe and state reasons	My first choice would be non potable re-use in Akaroa.
Option 1	Option 4 - Non-potable reuse in Akaroa, in combination with another option
Option 2	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 3	Option 2 - Irrigation of trees or pasture at Pompeys Pillar
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated wastewater to pasture? Why	I would not support spray irrigation to pasture or drip irrigation to trees. Research has shown this has a negative effect on plant growth because nitrogen levels are too high in the soil and cause plants and trees to die or have stunted growth.

Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	If storage ponds are a necessity , I would support fire storage ponds.
Any other comments?	Under no circumstances should land in Takamatua Valley or Robinson's Bay be used for the discharge of Akaroa's wastewater. This would seriously affect landowners, property values and could potentially cause further flooding problems.

## CHRISTCHURCH CITY COUNCIL Akaroa Wastewater Scheme

**- Received via Have Your Say -**

***Submissions close 5pm, 30 April 2017***

Full Name*:	Pete Summers
Contact Address*:	
Postcode:	
Telephone number:	
Email Address:	
Date Sent:	5/8/2017 8:22:25 AM
Would you like to attend the hearings for this consultation?	No
I am completing this submission:	For myself
Role within Organisation	
Group/Organisation Names	Pete Summers
How many people do you represent?	
Preferred environment for Akaroa wastewater discharge:	Disposal via a new outfall pipeline to the mid-harbour
If Other, please describe and state reasons	As a holiday home owner in Takamatua I would prefer money to be spent on a proper sewerage system for Takamatua and other banks Peninsular communities, as opposed to the current septic tanks. As you are aware eventually the outputs from these eventually end up in the sea water much closer to residential/traditional kai gathering areas than a new outfall would. To my way of thinking this is substantially less environmentally and culturally friendly as well as higher risk given our change in climatic conditions. This also does not rule out other technologies, including reuse, in periods to come.
Option 1	Option 5 - Disposal via a new outfall pipeline to the mid-harbour
Option 2	Please select
Option 3	Please select
Option 4	Please select
Option 5	Please select
Option 6	Please select
Other	
State reasons for ranking	
Would you be more supportive of spray irrigation of treated	

wastewater to pasture? Why	
Do you have location preference? Why:	
Should Council add aspirational projects to the Akaroa wastewater scheme?	
Any other comments?	

# Submission form continued

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## Contact details

Contact name VIRGINIA SIMCOCK

Organisation name (if representing) \_\_\_\_\_

Contact address 37 \_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Virginia Simcock Date 3/5/17

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

- Yes - I/We would like to be heard
- No - I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

FREEPOST Authority No.178



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**Free**    
>>> GOT A QUESTION? VISIT WWW.NZPOST.CO.NZ/HELP <<<

Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here

tape here



# Submission form

haveyoursay

www.ccc.govt.nz/haveyoursay

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

### How to give us your feedback

You can use this submission form or you can provide your feedback in a number of ways:

- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture  
 Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

**Please state your reasons why:** Water shortage & a shortage of high quality potable water is a worldwide problems due to climate change & high populations. This is a great opportunity for CCC to be a NZ leader & reuse highly treated waste water onto dry pasture land for immediate & future use & care of our lands.

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).**

- 3 Option 1 – Irrigation of trees or pasture in Robinsons Bay  
 1 Option 2 – Irrigation of trees or pasture at Pompeys Pillar  
 Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area  
 2 Option 4 – Non-potable reuse in Akaroa, in combination with another option  
 Option 5 – Disposal via a new outfall pipeline to the mid-harbour  
 Other (please describe)

**Please state your reasons for this ranking:** Portable level treated wastewater is a resource that should not be wasted. Spraying onto land or under trees is a good use for this water. Pompeys Pillar is a great location; some of <sup>the</sup> water should be reused in "Purple Pipes" for use in public toilets & irrigating public lands in Akaroa.



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Drip irrigation because there is no spray drift, and it would be quieter and visually less intrusive compared to spray irrigation.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Pond Site 10. It is well sited close to Akaroa to store <sup>the</sup> treated water and to be ultimately pumped <sup>from there</sup> up the hills to Pompey's Pillar. However the pond(s) must be carefully landscaped & have a cover to mitigate bird waste / swimming in the pond(s), and stop insects such as midges & mosquitos from breeding in them.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

I think fire storage ponds would be a good idea as it is important to have easily accessible water in time of need. Sea water ultimately would cause acidity problems if dropped onto land. However the land would need to be considered carefully.  
A siting of this pond onto the

Do you have any other comments? (Please use additional paper if required):

The Council must not discharge treated waste water into the harbour or further out the Heads. It would be a backward step to continue discharging into the harbour and ~~to~~ an "Out of sight, out of mind" use of pipes to discharge the water has the potential to lead onto other ~~to~~ issues - damage to pipes, <sup>going unnoticed,</sup> monitoring of the potable quality of the discharged water. A continual outflow of water whether at the Heads or a further 10kms<sup>out</sup> would damage the sea bed. Therefore the discharge into the harbour should not be an option!

Thank you for taking the time to respond. Please include your contact details over the page.

# Submission form continued

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## Contact details

Contact name JAMES + BARBARA BELL

Organisation name (if representing) \_\_\_\_\_

\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature [Handwritten Signature] Date 8/3/17

fold

fold

### Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

- Yes – I/We would like to be heard
- No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



tape here

tape here



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

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**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

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If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

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- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why: OPEN OCEAN OUTFALL PIPELINE

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe) OPEN OCEAN PIPELINE

Please state your reasons for this ranking: AKAROA RESIDENTS PERMANENT & PART TIME SHOULD BE MADE RESPONSIBLE FOR RESPONSIBLE DISPOSAL OF THEIR WASTE.

Continued overleaf

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Surely this depends on the land situation?

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

Yes where are they?

Do you have any other comments? (Please use additional paper if required):

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10 MAY 2010  
B7

Thank you for taking the time to respond. Please include your contact details over the page.



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You can make your views known at the consultation meeting and drop-in sessions.

### Map location



### Your details

First names (required)

David and Donna

Last name (required)

Kingan

Street name and number (required)

Suburb (required)

Town / City

Postcode

Email address (required)

I am completing this submission:

- For myself
- On behalf of a group or organisation

Contact number (required)

If you are representing a group or organisation, how many people do you represent?

2

Name of organisation

Role within organisation

---

### Hearings

Public hearings will be held.

- I wish to present my submission at the hearing

---

### Comments

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other

If other, please describe

Please state your reasons why

Cost effective option.  
Least effect on  
geologically unsuitable  
and unstable ground.

*less disruptive effects on surrounding properties.*

### Options

Please indicate your preferred option in order of 1 to 6, with "preferred option 1" being your most preferred option and "preferred option 6" your least preferred option . Option 6 would be an alternative option outside of options 1 to 5 (please note the options below are in no particular order).

Preferred option 1

Option 5 - Disposal via a new outfall pipeline to the mid-harbour ▼

Preferred option 2

Please select ▼

Preferred option 3

Please select ▼

Preferred option 4

Please select ▼

Preferred option 5

Please select ▼

Preferred option 6

Please select ▼

If other, please describe

Please state your reasons for this ranking

No other viable logical option feasible

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why

No, Neither. Land in this proposed area is not suitable for the

additional disposal of wastewater, due to type of terrain and various risks of ground and water contamination.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why

These should not be in a position of significance such as the main gateway to this town.

The required distance from surrounding houses is insufficient to mitigate many possible and very serious detrimental effects on these properties such as increased noise and, air pollution, as well as planned open ponds providing a breeding ground for insects and diseases detrimental to health.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No

Do you have any other comments?

As affected close residential property owners any other options would increase the

potential harm and detrimental effects on our current peaceful country lifestyle, and our general health and well-being as has already been felt by the lengthy and incompetent processes already undergone over years with still no satisfactory result. The impending outcome will inevitably result in great loss of value to our three properties which we have developed over thirty-five years, as an investment for the future benefit of our family.

### Supporting information

Attach any supporting documents (if applicable).

Note: When uploading multiple files please multi select and upload all at once.

The combined file size must not be larger than 10MB.

Browse...

We cannot understand the decision of the Council and

town-planners, to site the wastewater treatment plant at the entrance to a tourist town with a beautiful harbour vista. This major detrimental visual impact on this prominent site would not be contemplated or tolerated by any other such situated town in New Zealand.



## Akaroa Wastewater Submission, May 2016

This is my submission after attempting to do an online submission twice and it failing both times.

**Natasha Coad**

I do not wish to present my submission at the hearing.

### **Fundamentally...OTHER**

Reason being: I support the reuse of wastewater as the potable water supply for Akaroa.

The wastewater and water supply issues are interlinked and should be treated as such.

The current taking of water from streams for Akaroa is not sustainable and we need to look to the future. A huge amount of water is used for the wastewater system and the use of water needs to be more sustainably managed.

The Akaroa township needs to be more responsible for their water and wastewater usage and to encourage this it would also need a user pays system.

### **Ranking of Options:**

I do not support the Options put forward for the submission, and therefore support **Option 6: other** – as per the above given reasons.

My second option is Option 5: discharge of treated wastewater to sea

I would only support this as a temporary measure to be put in place until the infrastructure for the reuse of wastewater to potable state for Township supply is undertaken with a timeline say 2025.

All sewage must be treated before discharge – so no storm event emergency discharge of untreated sewage (as per the irrigation options, there should be holding tanks so sewage can be stored for later treatment). Level of treatment must also be of high quality.

### **Spray to pasture or drip to trees**

I don't support either. I consider both have issues.

Also as an affected landowner both options would mean that we would not be able to use our land as we have and would lose an important source of income for the household.

I would question for *pasture irrigation* the benefits suggested would have problems eg with cutting hay over kline or other irrigation; the selling of the hay whether it can be sold for animal consumption; if stock can be grazed on waste water irrigated land – size restrictions of stock & how they work in with the irrigation. Also the maintenance of the irrigation I imagine would be problematic. I would also greatly question whether the soils could sustain such irrigation and the short period available for irrigation when conditions are dry enough therefore may require large storage facilities.

*Drip irrigation to trees* would be an artificial environment– not a restoration project. Again I would question how the soils, even with trees, would cope with the water flow, the land is very unstable.

**Location of storage pond**

Where it would be most efficient and effective - would have thought next to the treatment plant?; also placement with thought as to the forward proposal to reuse the water into the Akaroa town. Also need to consider earthquake risk.

**Aspirational (!) projects**

Yes I support the reuse of water. (I question the use of the word aspirational).

Fire storage

Boat wash storage & public toilets (link the two together off the same system)

Does Takamatua Valley need a reticulated wastewater scheme – we are on a septic tank system?

**CHRISTCHURCH CITY COUNCIL**  
**Akaroa Wastewater Scheme**  
 2017

- Received via Email -

<b>Name:</b>	Asif Hussain Email:
<b>cc:</b>	
<b>Sent:</b>	Sat 6/05/2017 8:44 p.m.
<b>Subject:</b>	Submission_Akaroa Reclaimed water beneficial reuse, treatment and disposal
<b>Your Submission:</b>	<p><b><u>To whom it may concern</u></b></p> <p>I am writing in response to Christchurch City Council (CCC) Circular regarding Akaroa Reclaimed water beneficial reuse, treatment and disposal.</p> <p>I reviewed all the options presented to the council with interest and here is my submission.</p> <p>Having an Environmental Economics background I am not convinced that choosing ONE of these FOUR options would solve the water treatment issue in Akaroa. As per my understanding, Option 1, 2 and 3 will have some severe social (short-term) and environmental (long-term) costs associated. Option 3 is going to cost the council a lot to treat and transport the brown matter to Pompeys Piller along with some long-term environmental issues that the council must consider to have a look at.</p> <p>The only possible solution that I can see at the moment is combining Option 1, 2 and 4 along with some percentage disposal of treated water into the harbour (towards Akaroa heads).</p> <p>I am happy to discuss the environmental, social and economic costs in detail if you wish.</p> <p>Thank you for your time.</p> <p>Kind Regards</p> <p>Asif Hussain  <a href="#">PhD Candidate</a></p> <p><i>Department of Tourism, Sport and Society, Faculty of Environment, Society &amp; Design</i>  <i>Website: <a href="http://www.lincoln.ac.nz">www.lincoln.ac.nz</a></i></p>

**CHRISTCHURCH CITY COUNCIL**  
**Akaroa Wastewater Scheme**  
**2017**

- Received via Email -

<b>Name:</b>	Murray Smith Email:
<b>cc:</b>	
<b>Sent:</b>	Sunday, 7 May 2017 9:15 p.m.
<b>Subject:</b>	Submission On Akaroa Waste Water
<b>Your Submission:</b>	<p>Dear Sir / Madam</p> <p>I wish to make a submission on the Akaroa Wastewater Scheme.</p> <p>Could I please be given an opportunity to be heard at the hearing.</p> <p>When considering a project that hopefully will last for the next 50 years, I think this is a wonderful opportunity to spend a little extra money and do it right. While I don't have the exact latest costing, whatever it is divided by 50 years is very small amount per annum. In return we remove the potential risks to our beautiful harbour, while the increasing the environmental benefits.</p> <p>The risks that deeply concern me;</p> <p><b>Akaroa Population increases</b> Once the sewage system is upgraded, I believe in time this will lead to more development in the township which will increase the impact and risks to the harbour.</p> <p><b>Land Slides</b> With what seems to be an ever increasing number of large rain events, the clay around the harbour regularly gives way. (This was made very clear after the Easter rain). I just can't see how it is a good idea to put a lot more water on the landscape. More water = more land erosion.</p> <p><b>Leakage into the Harbour.</b> It just doesn't make sense to me, that options such as piping it over to Robinsons Bay for land based disposal. Bays at the head of the harbour are so shallow, any leakage, or worse an accidental leakage would not get flushed away quickly. This could lead to a whole season of the public being unable to use the water. This would not be great press.</p> <p><b>Smell</b> Why store waste water in open ponds on the east side of the harbour, when the prevailing wind is the easterly? Smell is not good for the tourist trade.</p> <p>I favour; 1/ Piping over to Pompeys Pillar, where I understand the water would be welcomed. Sounds like a real win-win. 2/ Reusing what is possible around the Akaroa township.</p>



I firmly oppose the irrigation of the waste water and associated storage ponds in Robinsons Bay and Takamatua.

I don't fully understand the harbour pipeline option, I hoping it would be designed so that the prevailing current would take it out to sea. I would be against it, if all it did was wash the waste up the harbour.

Thank you for the opportunity to have my say.

Yours  
Murray Smith

# Submission form continued

1385

## Contact details

Contact name Jeremy Buchanan

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_

Phone number (day) \_\_\_\_\_ Postcode \_\_\_\_\_  
Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature JR Buchanan Date 7.5.17

fold

fold

## Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

Yes – I/We would like to be heard

No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

fold

fold

FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



9am

tape here

tape here

# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

**Please note:** Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

### How to give us your feedback

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- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons why:** *A combination of irrigation to trees and outfall to harbour. Banks Peninsula - Akaroa Harbour does not have enough land to be put to this use. - Our land is too valuable to have irrigation ponds on it.*

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).**

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
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- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- 2 Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons for this ranking:** *This reuse option is a future proof option. The council should be looking to manage the water resource as sustainably as possible.*

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Yes, either. This would be a good use of the water as long as it can be applied knowing the volume that the soil structures can sustain.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Within the harbour area would be a waste of valuable land so the Pompeii Pillar option would be the only acceptable place to release it on the land to me.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

If water can be stored without upsetting locals it would be good to have projects that relieve pressure on usage and restrictions ~~that~~ by reusing the waste water.

Do you have any other comments? (Please use additional paper if required):

With all due respect to Ngai Tahu's spiritual/cultural beliefs about water a quick look at other NZ schemes and international schemes ~~at~~ show it is scientifically proven that water can be retreated and reused a number of times. Many Ngai Tahu, let alone other humans, live with this knowledge and drink the water from these systems. Those spiritual/cultural beliefs are invalid in a world where we must find ~~ways~~ new ways to live and manage precious resources sustainably.

Thank you for taking the time to respond. Please include your contact details over the page.



JOHN THOMSON

75 TIZZARDS RD BANKS PENINSULA

[Redacted]

*John Thomson* 03 MAY 1.23 PM.

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Please tick to add your support to our submission

\*I endorse the FRIENDS of Banks Peninsula submission on Akaroa Wastewater and would like my name to be included in the endorsement list.

---

Additional Comments

# Submission form continued

1388

## Contact details

Contact name Barbara, Michael, Edward, & Nicholas Harrington

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Bar Harrington  
M. Harrington

Date 1/5/2017

## Do you wish to present your submission at the hearing? Please tick one of the boxes below:

Please note that deputations will not be permitted at the meeting where the Council makes its decision.

Yes - ~~I~~We would like to be heard

No - I/We do not want to be heard

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FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



tape here

tape here



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Please make sure your full name and address is included with your submission.
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Christchurch City Council  
PO Box 73016  
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### Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons why:** This is the most logical place for the Waste Water to go. Mid-harbour or heads <sup>out to</sup> open sea on an outgoing tide <sup>This</sup> would be the Best and Cheapest Option in the long run.

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).**

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
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- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

**Please state your reasons for this ranking:** Its the only Option that makes Sense.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

NO and NO

Council Cannot say how pure this water will be  
We do not want to see our Valley and Good Pasture for grazing  
Covered in Trees which would alter the character of the land  
and our Valleys in General

Do you have a preference for the location of reclaimed water storage pond(s)?  
Please state your reasons why:

As far away as possible from any dwellings these impact  
on the land and bring their own problems of smell, insects water  
spills. They also run the risk of damage in any future seismic  
event

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

NO because no one knows where a fire will start do they.  
So a Pond could be no where near a fire so of no use.  
We do not want reticulated wastewater in the Takamatua Valley

Do you have any other comments? (Please use additional paper if required):

See Attached.

Thank you for taking the time to respond. Please include your contact details over the page.



**Akaroa Wastewater Scheme,  
Christchurch City Council,  
P.O. Box 73013,  
Christchurch Mail Centre 8154**

**3<sup>rd</sup> May 2017**

**Attention: Tara King, Senior Engagement Advisor**

**This Submission is from the Harrington Family Barbara, Michael Edward, and Nicholas of**

**We have just read the Takamatua Rate Payers Meeting Report in which it states that Maori are not in favour of using waste water for washing boats etc in Akaroa. This water is supposed to be good water, is it not, so what is the difference water being run on to Boat then on to the ground and from there finding its way out to sea isn't this exactly the same as running the water on to pasture it too runs out to sea but in process ruins our pasture. Gee thanks.**

**We think this says it all really.**

**1. We are a Farming Family of a small holding in the Takamatua Valley who are NOT in Favour of any Waste Water being put on our land or Ponds put in our valley. Harringtons have been farming the land since the Monach first came to Akaroa over 152yrs ago.**

**The Areas you have painted purple on our land are in areas that are prone to ponding in wet weather. We also do not want it on our front lawn as marked in purple. The amount of Water you are proposing would make the areas wet in summer and winter. Our land is not as flat as you seem to think.**



**2. You have not given any indication of what we would do with our stock while the area is being watered. There is a stand down period of 30 days as this water contains Viruses, Bacteria and all sorts of nasty things, where are our stock going to graze during this period ? on our small acreage, if you use all the areas you have marked on our land. We are trying to make some money off the land we own.**

**3. Watering by drip feed. Who is going to look after the field lines. Stock would scatter them everywhere, and we do not want our good farmland covered in trees. This would alter the Character of our land and make it useless for farming, it would also change our valley in general.**

**4. Storage Ponds We are not in favour of any storage Ponds in Takamatua or Robinsons Bay as they bring their own problems of Sight, Smell, insects water spills etc. They also run the risk of damage to the system in any future seismic events.**

**5. Land value - Our land value has dropped, every where else land values are on the rise, is this because of this waste water issue? We all brought our land in good faith never dreaming someone would come along and think it is okay to put this water in our valleys. Would you like it at your place? I think not.**

**6. Takamatua soil is all Hard Clay with very little top soil, so drainage is Very Poor and this land is prone to slips something we all have to deal with in our valley. The amount of water you are proposing along with the average rainfall would not be good for our valley.**

**7. Akaroa reuse -- Not sure if this is a good idea or not as this would bring it's own problems. Council can not guarantee the water quality also having to lay purple pipes in Akaroa creates more issues which could break down and cause more problems and also cost a lot of money to maintain. Do you have the man power to fix any leaks quickly ? we think not after seeing water running in the streets of Akaroa for days before being fixed.**

**8. The way we see it, the best and cheapest option in the long run would be to send the Waste Water further up the Harbour and out to the open sea. This could and should be done on an out going tide it**

**could also include Duvauchelle and Wainui in this pipe. Also leave the storage ponds where they are, they have been there for years and a lot of the cost could be saved.**

**By the way have you been past the Duvauchelle Quarry and smelt their sewage system lately, it stinks, is this what Akaroa would be like, lovely for a Tourist Town.**

# Submission form continued

## Contact details

Contact name BRETT LEA

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_

Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature B. Lea Date 08-05-17

Do you wish to present your submission at the hearing? Please tick one of the boxes below:

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes - I/We would like to be heard

No - I/We do not want to be heard

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FREEPOST Authority No.178

**Christchurch**  
City Council 

**Free** 



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154



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Please make sure your full name and address is included with your submission.
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Freepost 178  
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Consultation closes on Sunday 30 April 2017

Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe) – RE-USE IN AKAROA - BALANCE TO POMPEYS PILLAR

Please state your reasons why:

- 1, TURNS WASTE TO A RESOURCE.
- 2, REMOVES ISSUES OF SUITABILITY AND SUSTAINABILITY TO AREAS BETTER SUITED TO COPE WITH IT.

Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- 2 Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- 1 Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking: 1, WE HAVE A PROPERTY IN TAKAMATUA, 2, MOST OF THE REASONS GIVEN BY OTHERS IN THIS PROCESS — SEE OTHER 200 SUBMISSIONS (AGAINST) 3, AKAROA'S PROBLEM — SOLUTION SHOULD BE DEALT WITH LOCALLY I.E. AKAROA.

Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

I AM NOT SUPPORTIVE OF EITHER IRRIGATION SYSTEMS AS THEY ARE NOT PARTICULARLY GOOD / SOUND - ENGINEERING.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

1. WHY WOULD YOU PUT THEM WHERE <sup>THEY</sup> YOU CAN BE SEEN BY EVERY SINGLE TOURIST / PERSON ENTERING OR LEAVING AKAROA - AND HAVE TO BE SCREENED -
2. IF PLACED ON TOP OF A HILL - THEY WILL HAVE TO BE VERY CONSERVATIVELY ENGINEERED TO WITHSTAND A SEISMIC EVENT OR RISK DAMAGE TO DOWNHILL PROPERTIES.

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley)? If so, which ones do you support and why?

ANY SCHEME THAT RE-USES THE WASTEWATER FROM AKAROA SHOULD BE CONSIDERED - AND IMPORTANTLY - THAT CONSIDERATION SHOULD NOT BE LIMITED TO HERE + NOW - AS TIME GOES BY IT MAY WELL BECOME APPARENT THAT THERE ARE OTHER USES FOR THIS RESOURCE.

Do you have any other comments? (Please use additional paper if required):

1. AS A MEMBER OF THE TRA I WOULD LIKE TO SUPPORT BOTH THE TRAs SUBMISSION AND THE THAT OF (FOBP) FRIENDS OF BANKS PENINSULA
2. IT IS MORALLY VERY WRONG OF THE COUNCIL TO EXERT THIS SUSTAINED PRESSURE ONTO THE RESIDENTS OF TAKAMATUA AND ROBINSONS BAY. THE PROPERTY OWNERS OF THESE TWO BAYS ARE THERE FOR A LOT OF DIFFERENT REASONS. THESE PROPOSALS THREATEN THESE VALUES ETC THAT MAKE THESE TWO VALLEYS SO SPECIAL. - ALL OF THIS IS A PROBLEM NOT OF OUR MAKING IN AKAROA -  
I AM SURELY NOT ALONE IN SAYING THAT THE COUNCIL CAN EXPECT A LARGE AMOUNT OF RESISTANCE TO THESE PROPOSALS FROM THE PEOPLE - IT IS THERE <sup>SOME</sup> ~~SUBJECTS~~ <sup>SOME</sup> 'SUPPOSEDLY' TO SOLVE.

Thank you for taking the time to respond. Please include your contact details over the page.

**Contact Details**

Contact name: ANTHONY WALTENBERG

Organisation name (if representing):

Contact address:

Postcode:

Phone number (day):

Phone number (evening):

Email (if applicable):

Signature: 

Date: 4-5-17

**Do you wish to present your submission at the hearing? Please tick one of the boxes below:*****Please note that deputations will not be permitted at the meeting where the Council makes its decision.***

Yes – I/We would like to be heard

No – I/We do not want to be heard 

No anonymous submissions feedback will be accepted

## SUBMISSION ON THE AKAROA RECLAIMED WATER BENEFICIAL REUSE, TREATMENT AND DISPOSAL OPTIONS PAPER

*(Note this submission is based on the CCC submission template – you can just use the CCC template if you prefer)*

PLEASE READ BEFORE COMPLETING YOUR SUBMISSION	
<p>The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:</p> <ul style="list-style-type: none"> <li>• Option 1 – Irrigation of trees or pasture in Robinsons Bay</li> <li>• Option 2 – Irrigation of trees or pasture at Pompeys Pillar</li> <li>• Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area</li> <li>• Option 4 – Non-potable re-use in Akaroa, in combination with another option</li> <li>• Option 5 – Disposal via a new outfall pipeline to the mid-harbour</li> </ul> <p>Submissions are public information</p> <p>Please note: Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process. Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.</p> <p>Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website</p>	<p>If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.</p> <p>If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).</p> <p>How to give us your feedback</p> <p>You can use this submission form or you can provide your feedback in a number of ways:</p> <ul style="list-style-type: none"> <li>• Online: You may enter your submission using the online form provided on the Council's website at <a href="http://ccc.govt.nz/haveyoursay">ccc.govt.nz/haveyoursay</a></li> <li>• By email: <a href="mailto:akaroawwproject@ccc.govt.nz">akaroawwproject@ccc.govt.nz</a></li> <li>• Please make sure your full name and address is included with your submission.</li> <li>• By mail (no stamp required): Freepost 178 Attention: Hearings Team Akaroa Wastewater Scheme Christchurch City Council PO Box 73016 Christchurch Mail Centre Christchurch 8154</li> <li>• By hand delivery to: Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions</li> </ul> <p>Consultation closes on Sunday 30 April 2017</p>

### SUBMISSION

#### Introduction

The Christchurch City Council has put forward five options for consideration relating to the beneficial reuse, treatment or disposal of reclaimed land from a new wastewater treatment plant planned for Akaroa.

As a resident of the Takamatua area I have a key interest in this project and the options put forward for consideration.

A number of the options under consideration could have an impact on residents of the Takamatua community and the surrounding environment. It is important that the Christchurch City Council makes any decision in a fair manner. In this situation this means that any inequity of one community receiving the advantage of this project (Akaroa) while a separate community (Takamatua) bears the



impacts of the project must be a significant consideration influencing any final decision on what is the most appropriate option.

As a resident of the Takamatua Community I/we will have to live closely with the consequence of a number of the options under consideration. This is a project which will have long term consequences for my/our community.

**Detailed Submission Matters:**

**Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?**

- Irrigation of reclaimed water to trees or pasture ✓
- ~~Disposal via a new outfall pipeline to the mid-harbour~~
- Other (please describe)  
PLUS NON POTABLE REUSE

**Please state your reasons why:**

I DONT THINK OUTFALL INTO HARBOUR IS THE BEST METHOD AS AKAROA GROWS AND WASTE WATER WILL GROW. THE HARBOUR NEEDS TO BE KEPT AS PRISTINE AS POSSIBLE

**Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 being your least preferred option (please note the options below are in no particular order).**

- ~~Option 1 - Irrigation of trees or pasture in Robinsons Bay.~~
- ① — Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- ~~Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area~~
- ② — Option 4 – Non-potable reuse in Akaroa, in combination with another option
- ~~Option 5 – Disposal via a new outfall pipeline to the mid-harbour~~
- Other (please describe)

**Please state your reasons for this ranking:**

I BELIEVE THESE ARE THE OPTIONS TO SUSTAIN GROWTH AND WILL AFFECT THE LEAST AMOUNT OF PEOPLE

**Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:**

IM NO EXPERT BUT EITHER OPTION SOUNDS OK WIND MAY BE A PROBLEM FOR SPRAY IRRIGATION.

**Do you have a preference for the location of reclaimed water storage ponds(s)? Please state your reasons why:**

WHERE IT WONT EFFECT RESIDENTIAL PROPERTIES

**Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, provision a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?**

**Do you have any other comments? (Please use additional paper if required):**

# Submission form continued

**Contact details**

Contact name Ruby Milestone

Organisation name (if representing) \_\_\_\_\_

Contact address \_\_\_\_\_  
\_\_\_\_\_

Postcode \_\_\_\_\_

Phone number (day) \_\_\_\_\_ Phone number (evening) \_\_\_\_\_

Email (if applicable) \_\_\_\_\_

Signature Ruby Milestone Date 15-4-17

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**Do you wish to present your submission at the hearing? Please tick one of the boxes below:**

*Please note that deputations will not be permitted at the meeting where the Council makes its decision.*

Yes – I/We would like to be heard

No – I/We do not want to be heard

No anonymous submissions/feedback will be accepted.

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FREEPOST Authority No.178



Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154

tape here



# Submission form

## PLEASE READ BEFORE COMPLETING YOUR SUBMISSION

The Christchurch City Council is seeking your feedback on the five proposed options for the Akaroa wastewater project:

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable re-use in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour

### Submissions are public information

Please note: Your full name, address and telephone number are required because this information is important for transparency, and for Christchurch City Council's decision-making process. It also means we can update you on progress. Ideally we would like your email address too, if you have one, as this makes it easier for us to stay in touch with you throughout the engagement process.

Your submission, including your name and contact details, will be made available to the decision-making body, for example the Community Board, Committee and/or Council, to help them make an informed decision.

Submissions, with names but without contact details, are made available online once the Board, Committee or Council agenda goes live on the Council website.

If requested, Council is legally required to make all written and/or electronic submissions available to the public, including the name and contact details of the submitter, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you believe there are compelling reasons why your contact details and/or submission should be kept confidential, please contact the Council's Engagement Manager on (03) 941 8999 or 0800 800 169 (Banks Peninsula residents).

### How to give us your feedback

You can use this submission form or you can provide your feedback in a number of ways:

- **Online:** You may enter your submission using the online form provided on the Council's website at [ccc.govt.nz/haveyoursay](http://ccc.govt.nz/haveyoursay)
- **By email:** [akaroawwproject@ccc.govt.nz](mailto:akaroawwproject@ccc.govt.nz)  
Please make sure your full name and address is included with your submission.
- **By mail (no stamp required):**  
Freepost 178  
Attention: Hearings Team  
Akaroa Wastewater Scheme  
Christchurch City Council  
PO Box 73016  
Christchurch Mail Centre  
Christchurch 8154
- **By hand delivery to:** Civic Offices, 53 Hereford Street, Christchurch or at the drop-in sessions

Consultation closes on Sunday 30 April 2017

## Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?

- Irrigation of reclaimed water to trees or pasture
- Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons why: \_\_\_\_\_

## Please rate the options listed below with a number according to your preference, with 1 being your most preferred option and 5 your least preferred option (please note the options below are in no particular order).

- Option 1 – Irrigation of trees or pasture in Robinsons Bay
- Option 2 – Irrigation of trees or pasture at Pompeys Pillar
- Option 3 – Irrigation of trees or pasture in Takamātua Valley, in combination with another area
- Option 4 – Non-potable reuse in Akaroa, in combination with another option
- Option 5 – Disposal via a new outfall pipeline to the mid-harbour
- Other (please describe)

Please state your reasons for this ranking: We live in Robinsons Bay. I do not want irrigated trees/pasture at this location. I do not support irrigation from human waste.

Continued overleaf



Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees? Please state your reasons why:

Nil please.

Do you have a preference for the location of reclaimed water storage pond(s)? Please state your reasons why:

Out of site of all main roads + houses.

In their current location

Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (e.g. fire storage ponds, providing a reticulated wastewater scheme in Takamātua Valley)? If so, which ones do you support and why?

No.

Do you have any other comments? (Please use additional paper if required):

On Robinsons Bay we are not on the main sewage city system. It is disappointing to think this is being considered as a location for another town's sewage.

Thank you for taking the time to respond. Please include your contact details over the page.

# CHRISTCHURCH CITY COUNCIL

## Akaroa Wastewater Scheme

- Received via Email -

<b>Name:</b>	Denise Wren Email:
<b>cc:</b>	
<b>Sent:</b>	22/05/2017 7:21 AM
<b>Subject:</b>	Akaroa Wastewater
<b>Your Submission:</b>	<p>1. Contact details (name, address, day time and evening telephone numbers)</p> <p style="padding-left: 40px;">Denise Wren</p> <p>2. Indicate if you would like to speak at the hearing</p> <p style="padding-left: 40px;"><u>ANSWER - Yes</u></p> <p>3. Fundamentally, what environment would you prefer Akaroa wastewater is discharged into?</p> <p style="padding-left: 40px;">-Either Irrigation of reclaimed water to trees or pasture, -disposal via the new outfall to mid-harbour - other.</p> <p style="padding-left: 40px;"><u>ANSWER -DISPOSAL VIA A NEW OUTFALL PIPELINE TO MID-HARBOUR</u></p> <p style="padding-left: 40px;">Why - all the reports that had been brought up from the working party have said that the harm to the environment is minimal and also to shellfish gathering and swimming. People can choose not to gather shellfish or swim but is the effluent is sprayed on my land (we are land owners that are directly affected) then I cant very well not be on my land as I live here. Discharging to the harbour allows for greater filtering down of contaminates in the water should any get through the treatment plant. This is also the most cost effective option til such time as the technology is put in place for Akaroa to re-use the water in all areas including drinking, just like they do in cities like London and Singapore. Each summer Akaroa has water restrictions and this is a long term solution to solve this problem. Also each year we have the added strain on the facilities caused by the influx of people during cruise ship season.</p> <p>3. Include your reasons why and a description of the "other" option if you have chosen this.</p> <p style="padding-left: 40px;">N/A</p> <p>4. Rate with a preference from 1 - 5 the options being considered (with 1 being most preferred and 5 being least preferred)</p> <p style="padding-left: 40px;">Option 1 - irrigation of trees or pasture in Robinsons Bay</p> <p style="padding-left: 40px;">Option 2 - Irrigation of trees or pasture at Pompeys Pillar (THIS IS NOT AN OPTION AS I UNDERSTAND AS LAND OWNERS HAVE NOT FOUND IT VIABLE)</p>

Option 3 - Irrigation of trees or pasture in Takamatua Valley, in combination with another option

Option 4 - non potable reuse in Akaroa, in combination with another option

Option 5 - disposal via a new outfall pipeline to the mid-harbour  
Other (please describe)

ANSWER - RANKING  
TOP OPTION IS - OPTION 5

6. Please state reason for ranking

ANSWER - For all the reason in question 1 and this should not be imposed on another community who have no use for the water and we don't want it. We all have our own septic systems that deal with our waste. The land in Takamatua is unsuitable for Akaroa's waste as we have flooding and erosion issue with our land already and loading up the soil with extra water is not going to help but will make it worse. The soil is a clay base and reports from the working party have raised concerns with nitrate levels which have to be taken into consideration with build up and drainage. Most cost effective.

7. Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees (please state your reasons why)

ANSWER - Not supportive of either option.  
Refer to no 6. Drainage, build up in soil, erosion issues, also if to pasture is changes the way the owner (Mark and I) use our land. The trees in our case are nut trees and in the future when we want to go Organic spray human effluent onto them could be a threat to certification and be a problem.

8. Do you have a preference for the location of reclaimed storage pond(s)? (Please state your reasons why)

ANSWER - Top of coach road seems a logical place but also there should be more smaller ponds surrounding the Akaroa town ship. They need to own the problem and have some of the negative impact that is will have on other communities who,s waste it is NOT.

9. Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (eg. Fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley) If so, which ones do you support and why?

ANSWER - Fire ponds around the township of Akaroa, work towards the technology of cities like London and Singapore to use waste water back into Akaroa for all services including for drinking in the future to help with ongoing water shortages.  
NO to Takamatua going on waste water scheme in particular for us as stated above we have our own system for dealing with waste and also rain water for drinking so we don't have any use for it. We have storage tanks within that system for such events like fire on our property. Other members of the community also have their own septic systems.

10. Do you have any other comments.

Mark and I have worked very hard on our property to enhance the land. We are a working farm with livestock and have fenced off our streams to exclude stock and plant natives for the health of streams and encourage bird life. I feel the lack of evidence (being how safe it is) the working party has revealed on the long term health issues from dumping of waste water onto land is a real problem in my view. You cannot guarantee that what comes out onto the land is 100% safe as far as pharmaceuticals, viruses, bacteria etc and I don't want to be the experiment. Also Bromley has had huge press and those residents have had major issues with smell and insects for years. If this scheme is put onto our land and in the future problems arise then we are the ones who have to deal with it be land, health etc and I am grieved that the council and the local iwi feel this is OK, It is NOT OK. I/we have rights too just as much as the Maori people and for them to say no to the harbour where the water will be fine with the new system and yes to placing that onto another community is terrible. The stress this has caused the elderly people in our valley has been a problem. Akaroa need to step up to plate and take responsibility and not push it to us. There is also a real issue globally about resistance to bacteria so disposal to land could be another cog in that catastrophe long term.



# CHRISTCHURCH CITY COUNCIL

## Akaroa Wastewater Scheme

- Received via Email -

<b>Name:</b>	Mark Wren Email:
<b>cc:</b>	
<b>Sent:</b>	Monday, 22 May 2017 7:39 p.m.
<b>Subject:</b>	Akaroa
<b>Your Submission:</b>	<p>1. Contact details (name, address, day time and evening telephone numbers)</p> <p>Mark Wren</p> <p>2. Indicate if you would like to speak at the hearing</p> <p>Yes</p> <p>3. Fundamentally, what environment would you prefer Akaroa wastewater is discharged into? Either Irrigation of reclaimed water to trees or pasture, disposal via the new outfall to mid-harbour or other.</p> <p>Other. Reuse of wastewater into Akaroa. Surplus to harbour outfall.</p> <p>4. Include your reasons why and a description of the "other" option if you have chosen this.</p> <p>The origin of the waste needs to be part of the solution. Otherwise it is an end of pipe solution imposed on other communities without responsibility at the point of source. Additionally it allows the CCC to demonstrate beneficial use over time and expand the uptake as required.</p> <p>The science is incomplete regarding the impact on irrigation of these wastes to land and the impact on the long-term viability of these projects. Examples of wastewater systems in NZ where environmental outcomes have been poor have been documented and discussed through the Working Party. Proceeding with application to land in the Banks Peninsula on the areas of limited viable land amounts to an experiment with potential long term negative consequences for the receiving communities.</p> <p>5. Rate with a preference from 1 - 5 the options being considered (with 1 being most preferred and 5 being least preferred)</p> <p>Option 1 - irrigation of trees or pasture in Robinsons Bay <b>5</b>  Option 2 - Irrigation of trees or pasture at Pompeys Pillar <b>2</b>  Option 3 - Irrigation of trees or pasture in Takamatua Valley, in combination with another option <b>5</b>  Option 4 - non potable reuse in Akaroa, in combination with another option <b>1</b>  Option 5 - disposal via a new outfall pipeline to the mid-harbour <b>3</b>  Other (please describe)</p>

	<p>6. Please state reason for ranking</p> <p>Pompeys Pillar doesn't have a willing land owner recipient of the waste water. I do not support compulsory land acquisition. Application to farming land is the best outcome where risks or environmental hazards have been mitigated or controlled resulting in economic agricultural benefit.</p> <p>7. Would you be more supportive of spray irrigation of treated wastewater to pasture or drip irrigation to trees (please state your reasons why)</p> <p>Spray irrigation to pasture where beneficial use has been welcomed through agricultural use.</p> <p>8. Do you have a preference for the location of reclaimed storage pond(s)? (Please state your reasons why)</p> <p>Pond 9. Allows for reuse options in Akaroa. Potentially minimal visual impact. Must be covered to prevent midge problems. Would support smaller sealed containers similar to available dairy effluent receptacles around Akaroa to provide additional storage.</p> <p>9. Do you think the Council should add aspirational projects to the Akaroa wastewater scheme (eg. Fire storage ponds, providing a reticulated wastewater scheme in Takamatua Valley) If so, which ones do you support and why?</p> <p>I would support fire storage ponds and reserves for wildlife like Zealandia in Wellington. Community project where wastes have been used to the wider benefit of the Akaroa region.</p> <p>10. Do you have any other comments.</p> <p>As a member of the Working Party we sought an outcome of an exemplar system which Akaroa and the surrounding communities could be proud of. Reuse of the wastewater in Akaroa is a pivot where safe and beneficial use can be demonstrated. It seats the recycling of the waste in the community which generates it rather than it being imposed on another community. Mid-Harbour outfall presents no human health or environmental consequences as submitted by BECA for the CCC in 2014. If the wastewater is treated to the highest standard (Reverse osmosis) I can not align with the cultural position of it being offensive. Extreme dilution and tidal flow does not compare with the risks posed by irrigating the wastewater in close proximity to residents and communities. There is a paucity of quality study on the chemical and hormonal residues in community wastewater and the potential long-term health issues. The information conveyed by CCC to the working party was impossible to comprehend and analyse as a risk. Therefore, transferring the waste from one objecting community (NgaiTahu) to another objecting community (Akaroas neighbouring valleys) with no tangible benefit is against natural justice.</p>
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