



Draft Submission to Christchurch City Council Long Term Plan 2021-2031

From: Friends of Banks Peninsula

Date: April 18, 2021

We wish to be heard in support of our submission.

Our submission covers the following issues:

- Three Waters infrastructure – the Akaroa Wastewater system project and its relationship to drinking water supplies.
- Proposed closure of the Akaroa Service Centre

Three Waters Infrastructure – the Akaroa Wastewater system

In its consultation document for the Draft Long Term Plan the Council states:

page 44 *“One of our core responsibilities is to provide and maintain the wells, pipes, reservoirs, treatment plants and pump stations for drinking water, and manage the collection, treatment and disposal of wastewater and stormwater.”*

page 49 *“Our main focus will be on replacing poor condition water pipes. Much of our wastewater network is old and leaky and lets large amounts of groundwater and stormwater into the wastewater system.”*

The Christchurch City Council Draft Climate Change Strategy states (emphasis ours):

- On Banks Peninsula, **increased drought conditions will place the surface and drinking water supply under increasing strain**, increase the risk of wildfires, and increase the erosion of soils, making revegetation more difficult.
- Identify the infrastructure that is most vulnerable to sea level rise and other climate change impacts, **including water supply on Banks Peninsula**, to inform community discussions and infrastructure planning.
- Work with communities on Banks Peninsula to develop responses to localised climate issues such as **threats to water supply**, increased wildfire risk, and erosion.
- **Promote sustainable water** use as part of a response to reduced surface water supply
- Show leadership and support innovation in the Christchurch **waste and resource recovery** sector.

The Akaroa and Duvauchelle water supplies increasingly fail to meet demand every summer. Stream flows in these catchments are reduced to critically low levels as a result, and restrictions are in place for long periods. This year Level 4 water restrictions have been in place for several months over the summer and there is still no end in sight for the current drought. Management of the infrastructure is so poor that this summer Akaroa’s water supply has been polluted by feral animals and the town was placed on a boil water notice for weeks, with great impacts on residents and businesses.

At the same time, the Akaroa wastewater network is failing badly, with stormwater leaking in and raw sewage almost certainly leaking out and polluting the harbour. The public has become aware over the past year that over 60% of the total wastewater volume is in fact storm and ground water infiltrating into the sewer network (I&I).

The Akaroa wastewater system is being renewed through LTP projects ID 62349 and 596.

This provides a once-in-a-generation opportunity to address the issues identified in the Climate Change Strategy. This is the opportunity to apply holistic thinking to the sustainability of Akaroa's water supply by upgrading the water and wastewater network in tandem to achieve maximum efficiency and resilience, while at the same time maximising reuse of this precious water resource.

Currently these projects do not achieve either of these aims.

The proposed I&I renewal work under project 62349 has not been given any additional funding above the original \$3million costed as needed to reduce infiltration by 20%. Therefore this is very unlikely to achieve the 80% reduction sought by the Hearing Panel to meet best practice and to meaningfully reduce the size, the community impacts and the costs (both capital and operational) of the new wastewater treatment plant.

Project 596, the planned wastewater replacement, is a very large, complex and expensive system, designed to dispose of the treated wastewater by piping it out of the Akaroa catchment, and disposing of it through irrigation to neighbouring communities on land planted with native trees for this purpose. The proposal involves storing the wastewater in large, expensive dams, and irrigating native vegetation at a rate well beyond what is desirable for healthy tree growth. As currently defined, although this project addresses Ngāi Tahu cultural issues, it fails to address the issues subsequently identified in the Council's Climate Change Strategy. Instead of promoting sustainable water use and waste and resource recovery this project **wastes a valuable resource, does nothing to improve Akaroa's water supply or its stream health and has major ongoing impacts on communities and the environment.** The statement in the draft LTP consultation document that *Investing in using highly treated wastewater from Akaroa to irrigate new areas of native trees at Robinson Bay, Takamātua and Hammond Point* is a form of climate change mitigation is disingenuous.

We urge the Council to re-purpose the spending proposed for these two projects with the aim to achieve a renewed and resilient wastewater network that, as far as possible, conveys *only wastewater*, and is therefore more resilient to increasingly extreme weather events, as well as minimising the risk of untreated sewage polluting Akaroa Harbour.

In addition, the Akaroa wastewater project should direct all efforts towards sustainable water use, by returning the water to the catchment from which it came to mitigate the impacts of taking water from the environment in the face of reduced future rainfall.

Less than 1/3 of submitters in the Akaroa Wastewater public consultation supported any land-based solution, with the vast submitters speaking the Hearing Panel seeking a genuine re-use system to address the very issues the Council identifies in its Climate Change Strategy. The Akaroa community is already feeling the effects of climate change induced prolonged and severe drought and gave the

the Council a clear message that the expensive new wastewater system needed to not only resolve the cultural issues but also to recycle the water back into the town to future-proof its water supply.

1. Akaroa Inflow and Infiltration (I&I) Renewals - Project ID 62349

We request that *the LTP budget for this project is substantially increased* to ensure that repairs to the broken wastewater pipe network can be fully completed – in line with recent Council resolution recommending that an 80% reduction in I&I be achieved. The current budget does not reflect this decision, with the money previously budgeted to achieve a 20% reduction now being expected to produce an 80% reduction. With over 60% of the wastewater quantity in an average year currently due to I&I (and more in wet years), a full repair of the broken pipe network will enable a much smaller scheme to be designed, resulting in a more cost-effective overall project. *We suggest that the funding to cover this work is transferred to Project ID 62349 from the budget allocated to Project 596.*

Reduced wastewater quantity will allow for a more efficient performance from the current wastewater treatment plant, which, under the proposed scheme is not due to be closed until 2028. This will dramatically reduce the raw sewage overflows into the Akaroa harbour that currently occur when the system is inundated during storm events. Failing to fix the sewer pipe network leaves it highly vulnerable to raw sewage overflows, now and in the future under the more intense storms predicted due to climate change.

Further, it may reduce or eliminate the excessive levels of coliforms that are routinely observed in the harbour near Akaroa, by preventing raw sewage leaking out of the wastewater network and infiltrating the stormwater system. This must surely be the top priority for maximising the health and mauri of Akaroa Harbour.

2. Akaroa Reclaimed Water Treatment and Reuse Scheme – Project 596

We request that the Christchurch City Council *defer further funding on Project 596* until the inflow and infiltration pipework repairs in Akaroa are fully completed. Only then can the quantity of wastewater be accurately calculated. This figure is crucial to enabling the new treatment system to be designed to the correct size. The more I&I is reduced, the more money the Council will save on Project 596. In particular, the amount of expensive wastewater storage required falls dramatically with reduced I&I, resulting in both cost savings and reduced social and environmental effects. Storage requirements and costs cannot therefore be accurately carried out until the I&I work has been completed, and the network monitored for a suitable period to establish the true anticipated volumes.

During this time, we request that the Council use remaining budget in project 596 to advance the investigation of both potable and/or non-potable re-use of wastewater in Akaroa itself, including stream replenishment. This summer, Akaroa's water supply was again under extreme stress, with all outdoor water use banned, and Akaroa's streams severely depleted. Community consultation has shown overwhelming support for reuse of wastewater to augment Akaroa's failing water supply. *With the Water Services Bill currently passing through parliament, and water supply an increasing issue for Council's throughout NZ, the need for a legal framework*

to facilitate the re-use of treated wastewater is being recognised at a national level. Holistic, “three waters” solutions must be found for our climate, water and wastewater crises, in ways that are mindful of Maori cultural issues. We ask the Council to revisit this project with re-use in mind.

3. Akaroa Water Supply Improvements

We cannot see where the LTP budget allocates funds for the substantial upgrades needed to secure the Akaroa potable water supply. We understand that the L’Aube Hill reservoir needs to be replaced and that the Aylmer’s Valley reservoir is to be recommissioned as a backup – as recently communicated at a community hui. We are aware a report summarising the design and construction of the latest water treatment plant in Akaroa states that there are substantial leaks in the Akaroa water supply network. Given the water crisis the town faces every summer, fixing the leaks, providing adequate reservoirs and eliminating single points of failure are essential improvements to guarantee safety and security of the Akaroa water supply and should therefore be the top priority for Three Waters spending.

4. Water charging

We support charging for water use. However if the purpose of this is to reduce water consumption, we consider that the proposal to charge only those with the highest level of water use does not go far enough. We do not think that the modest level of charging proposed will be sufficient incentive for many high users to reduce consumption. We believe that, with a little more care to avoid wasteful use and the right education and financial incentives, most households and businesses could easily reduce their water use. We support a much lower daily allowance, so as to encourage water conservation by all properties.

Akaroa and Duvauchelle water supplies have reached a point of crisis and we urge the Council to introduce charges for all water use above a small daily allowance for these areas before next summer.

Three Waters Summary

Currently \$70 million over the next 7 years is budgeted for I&I and wastewater treatment, but Akaroa could still be left with a leaking pipe network that pollutes the Harbour and is highly vulnerable to climate change and extreme weather events, a treatment plant and complex infrastructure of pipes, pumps, storage ponds, plantings and irrigation fields that is unnecessarily large and costly to build, operate and maintain, and an increasingly inadequate town water supply. By re-prioritising spending on I&I reduction, water reuse and other improvements to the water supply, the same budgeted expenditure could address these all issues and achieve a sustainable, resilient, future-proof and ultimately less expensive outcome.

Akaroa Service Centre closure

We do not support the Council's recent announcement to close the Akaroa Service Centre and request that this essential service be maintained. Residents in the Akaroa area deserve the same level of service that is provided to the Christchurch Wards.

We request that the Christchurch City Council **reinstate the Akaroa Service Centre in the old Post Office Building**. This beautiful historic building also provides the perfect opportunity for the Council to **create a community hub** that can centralise a range of facilities and be a focal point for both locals and tourists. This should include:

- Relocating the **postal service** back to this building where it logically belongs.
- Relocating the **Information Centre** back into this building.
- Reinstate the **post office boxes** to the back of the building, which was specifically designed for that purpose with disabled access and parking. Currently box holders are in the position where they have to go to three different locations around the township if they want to collect their mail, post a letter and collect a courier delivery from the Post Shop.
- Locate an **ATM machine** to the side of the building once the BNZ closes in May of 2021.
- Encourage greater community use of the building as an active **Citizens Hub** for Akaroa and the Bays.

Note that in 2015 the consultation resulted in 93% of respondents stating they wanted the Service Centre reinstated in the Post Office building. The Council paid nearly \$1million to refurbish the historic building in 2018 for this purpose.

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