



**To:** Environment Canterbury Head of Resource Consenting & Christchurch City Council Head of Resource Consenting  
**From:** Friends of Banks Peninsula  
**Date:** 29 May 2023  
**Re:** Public notification of Resource Consent Applications by Christchurch City Council for the Akaroa Treated Wastewater Irrigation Scheme

**Friends of Banks Peninsula requests that the Akaroa Treated Wastewater Irrigation Scheme Resource Consent Applications to both Environment Canterbury and Christchurch City Council are assessed concurrently and are publicly notified.**

Friends of Banks Peninsula was established in 1990 to protect and enhance the environmental heritage of Banks Peninsula and safe-guard the environment for future generations. Objectives include working to link individuals and small groups concerned with local environmental issues and to work with local authorities and central Government to promote sound environmental practices. The Society has taken a close interest in wastewater issues around Akaroa Harbour for three decades and has been involved with the Akaroa Wastewater project since the first Working Group convened in 2008 to look into wastewater options.

We have recently obtained, via the LGOIMA process, a copy of the Akaroa Treated Wastewater Irrigation Scheme application dated May 2023, and an email dated 1 May 2023 from Kylie Hills the Senior Planner at Christchurch City Council overseeing the project indicating that the Council's preference may be for limited notification.

We submit that there are compelling reasons for public notification including special circumstances relevant to this application, and that the adverse effects of the proposal are likely to be more than minor. This requires public scrutiny and further input.

**1. The special circumstances that are unusual or exceptional and require the need for notification are:**

- a. A new wastewater system requires a very substantial investment of funds and must be safe, efficient and sustainable well into the future. It must be as risk free as possible because the need for sewage treatment cannot be 'switched off' if a system fails.
- b. Designing a land based wastewater irrigation system for the steep topography of Banks Peninsula with its slip-prone loess soils has proved extremely difficult. The Council has been trying to find a solution for 15 years. In 2015 it applied to continue discharge to the harbour, considering it the most feasible option. Since consent for this was declined, the Council has held three rounds of consultation with the community, putting forward different proposals each time.
- c. There has been extensive public interest and concern about each of the different proposals as evidenced by the media attention and the large number and quality of submissions to each consultation.
- d. The input from public consultation processes has revealed substantive issues with previous proposals.

- In 2016 public submissions identified the geological instability of the Takamatua headland irrigation site as a flaw in the proposal.
  - In 2017, the Friends of Banks Peninsula analysis of potable water supply versus wastewater flows led to the discovery of a faulty flow meter, which meant that the storage capacity and irrigation areas had been substantially underestimated and that the proposed scheme was unfeasible.
  - In 2020, the Friends of Banks Peninsula and many other submitters raised awareness that over 60% of the wastewater volume was storm and groundwater infiltration. They identified the sensitivity of the irrigation field and storage capacity to rainfall patterns and therefore the importance of repairing the sewer network.
- e. The proposal that now forms the Application has substantial differences from any of the previous proposals put forward for consultation. These include reductions to the irrigation field size and storage capacity and new information regarding the planting and irrigation method. Continued public input will enable local knowledge, expert advice and peer review which can only improve the likelihood of a successful scheme.
- f. The application sites are spread over a large area and require extensive works in Akaroa, Takamatua hill, Robinsons Bay and along the main highway and therefore affect the general public. We submit that correctly identifying affected parties in relation to limited notification would be difficult and open to challenge.
- g. There is a range of community organisations with a rightful interest in this matter and a proven record of responsible involvement and representation.

**2. The Applicant's assessment that adverse effects of the activity on receiving environments will be generally less than minor lacks certainty and must be subject to public scrutiny and comment.**

- a. The Council had also stated in relation to previous proposals that effects would be minor, but as noted above, public submission processes have revealed substantial flaws in these proposals.
- b. As stated in the application, the proposed scheme relies on both:
- reducing the storm and ground water I&I in the wastewater by 20%, and retentate derived from the Akaroa potable water plant by 75%, but no evidence has been provided as to whether these critical reductions have been achieved.
  - wastewater treatment resulting in a mean total nitrogen of 10 g/m<sup>3</sup>, but the treatment process is yet to be determined.
- c. The application itself indicates uncertainty as to whether the modelling is correct and states that *"if the scheme does need to be adapted in response to monitoring outcomes, it may involve adjusting the treatment process, changing the irrigation rate/regime or irrigation over a wider area"*. Should more land be needed, it is unlikely this will be found within the Inner Harbour given the years it has taken to find the current sites. Furthermore, the technical reports indicate that such land would need to be in a different catchment than Robinsons Bay if nitrogen levels in the freshwater environment are too high.
- d. Irrigation of wastewater to native trees on this scale is novel and untried anywhere else in the country. There is uncertainty around the science regarding the uptake of nutrients by native trees,

and the effect of their canopy on soil moisture. Additional public input and expert advice could prove critical to matters related to the native trees including nutrient uptake, species selection, fire safety, pest control, and to setting appropriate conditions.

- e. Since the 2020 consultation, the impacts of climate change through cyclones and atmospheric rivers have become increasingly apparent across New Zealand, including on Banks Peninsula, underlying the importance of critical infrastructure resilience.
- f. If the scheme fails to perform as described in the Application the adverse effects could include the build-up of nitrogen and contaminants in the soil, freshwater and estuarine environments, and the release of wastewater to the freshwater or coastal area of the Harbour. Finding and implementing solutions will take time, leading to prolonged adverse effects on the freshwater and marine ecosystems and a large number of people including the communities of Akaroa, Robinsons Bay, visitors and users of the Harbour.

The Application proposes to dispose of a large volume of treated wastewater using a novel and untried method, sized on theoretical modelling and without a fall-back position if it fails to perform. It is a major, costly and high-risk infrastructure project that needs to safely serve the community for decades to come. Sustainability and resilience must be paramount.

The details of the scheme are yet to be put before the public and the treatment method not yet decided. Given the public interest in this project and the demonstrable value of public input so far, the uncertainty around critical assumptions, and the wide ranging and long term impacts it is important that these Applications are considered in a holistic manner and with public scrutiny.

We believe that our local community will be knowledgeable, constructive and genuinely motivated in this matter.

Therefore:

- 1. We request full Public Notification of all the Akaroa Wastewater Irrigation Scheme Resource Consent Applications.**
- 2. We ask that the Christchurch City Council, as the Applicant, requests public notification.**

Yours sincerely,



Sue Church  
Secretary Friends of Banks Peninsula  
[info@friendsofbp.org.nz](mailto:info@friendsofbp.org.nz)

cc: Kylie Hills