

Memorandum

To: Central Otago District Council Hearings Panel

From: Three Waters Director

Subject: PC19 Response to Hearings Evidence

The panel has requested that Councils Three Waters Director, Ms Muir, provide a review and written response to the following;

- a. Infrastructure evidence received from Mr Mark Cruden Rowan and John Kletsvel (#163).
- b. Infrastructure evidence received from Mr Andrew Ford on behalf of S Davies (#147).

General Comment

Staff advice is given in the context of the need to supply the wider network and customers and maintain required levels of service while servicing growth needs. When considering individual submissions for extending the PC19 zoning, we are interested in how this will impact on treatment capacity, capacity of reticulation mains, and reservoir and main pumpstation requirements. This largely relates to the potential for increased demand from additional zoned land, and not how the individual development will be connected to the existing network. It is the additional demand that will cause the issue rather than how the connection is provided.

The following is the hierarchy of servicing need:

1. the existing network and customers (including land already zoned for development)
2. the proposed zoning in PC19,
3. extensions to the PC19 zoning changes to meet the requests of individual submitters

Some submissions propose increased development at the fringes of the network that will have more expensive ongoing costs to service. These could potentially be connected following the proposed infrastructure upgrades that have been identified in our advice. They will however be less operationally cost effective and will result in increased average costs to customers across the networks. Development contributions do not meet the increased ongoing operational costs, these are met by the ratepayers. While development results in increased ratepayers, for some developments the operational costs are disproportionately high. This occurs where there are higher pumping costs, and/or low connection densities.

A. Infrastructure evidence received from Mr Mark Cruden Rowan and John Kletsvel

This submission proposes developing a 7.37 ha site to 35 residential lots ranging from 1000 to 5000m² in area, arranged in a park like setting. Lots will have a main residential dwelling and the potential to accommodate a second residential unit.

The submitters evidence focusses on the servicing of this individual development. The staff response considers the constraints that exist within the wider network, and the potential impacts of this development on levels of service within the wider Bannockburn and Cromwell networks.

Wastewater

1. Capacity constraints for wastewater relate to the Cromwell wastewater treatment plant. This means that information provided by the submitter regarding wastewater reticulation to the site does not change the capacity constraints that exist at the Cromwell wastewater treatment plant. Capacity upgrades are planned for the Cromwell wastewater treatment plant, including extension of the treatment plant building and membranes, and additional processes to remove nitrogen treatment. These will be required to provide for the full expected growth from the Cromwell Masterplan and PC19.

Staff strongly advise against a communal onsite wastewater system. This would require a land disposal consent from the Regional Council and does not align with the policy direction being taken on the Regional Land and Water Plan.

Water

The water constraint for Bannockburn relates to the reticulation network and reservoir storage, and hydraulic modelling is relevant to this.

A new hydraulic model which models the land densities proposed in PC19 is now well advanced. The final report is expected by mid-September 2023. A verbal presentation has been provided to council Three Waters staff. This confirms the advice previously given by council staff regarding capacity constraints that exist within main water pipeline between Cromwell and Bannockburn and reservoir storage at Bannockburn.

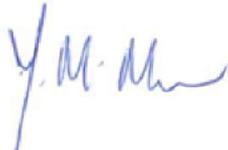
While the submitter can construct reticulation which can service this development, the increased demand is going to exacerbate pressure and flow issues within the wider Bannockburn network. This will result in further reduction in level of service for other customers.

For this reason, staff confirm their previous advice that development in Bannockburn outside the proposed PC19 provisions should not be considered until after the main Bannockburn pipeline is upgraded. Design of an upgraded main pipeline for Bannockburn is currently underway. The timing of this will be determined by Council when it adopts its 2024 Long Term Plan.

B. Infrastructure evidence received from Mr Andrew Ford on behalf of S Davies (#147).

Our interpretation is that this submission proposes exchanging the large lot residential zoning that has been applied to a block of land that has a working vineyard on it to a nearby undeveloped rural block.

If this proposal does not result in any net increases to the number of connections to the council water and wastewater networks than has currently been consented then this is able to be accommodated.



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Julie Muir

Three Waters Director

25 August
2023

Date