

**IN THE MATTER OF RESOURCE MANAGEMENT ACT 1991**

**RESOURCE CONSENT HEARING**

**CLUTHA DISTRICT COUNCIL**

**RM 15.364**

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**RIGHT OF REPLY FOR CLUTHA DISTRICT COUNCIL**

**RACHEL VAUGHAN**

**GERRY ESSENBERG**

**21 MARCH 2022**

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*Current Situation:*

1. Clutha District Council (the Applicant) requires a renewal of the existing Wastewater Discharge resource consent to service the Urban Resource Area and the Transitional Resource Area, where Council is able to provide reticulated services. Those dwellings located in the Urban Resource Area have a right to connect to Council's Wastewater Network – we cannot stop them from connecting to the Network.
2. The Applicant requires a consent that allows the Waihola Community to continue to function while committing to upgrades and improvements as the community grows through the life of the consent.
3. Questions have been raised in regards to the expected loads on the Waihola Wastewater System and the formulation of an appropriate condition for the volume of discharge. In the instance of the Waihola Wastewater System, these variables can include groundwater levels, lake levels and tidal variations. The lake levels and tidal variations do have an impact on how the Wastewater System functions. It must be noted that the Potable Water network that operates in Waihola is not an on-demand system, it is serviced by a Rural Water Supply area, restricted supply (trickle feed).
4. There are currently 223 rateable sewer connections plus an additional 42 properties that are paying a half charge. Properties that are being charged a half charge are connected to the Wastewater System but are not currently contributing to the treatment plant load. In addition, subdivision will add an additional 10 to 20 new sewer connections for the foreseeable future. With the development of the Transitional Resource Area it is estimated that a further 50 to 60 Lots (at least) will required connection to the Wastewater System. The proposed maximum discharge allowable under this resource consent as set by the Otago Regional Council of 160m<sup>3</sup>/day. The attached graph indicates that at the present state of the Wastewater System this is unachievable.

It is anticipated that the minimum dry flow will be 312 m<sup>3</sup>/day.

5. The proposed maximum discharge allowable as proposed by the Otago Regional Council will have the following adverse effects on the Community of Waihola
  - a. Any future urban growth in the existing Urban Resource Area will be curtailed

- b. The ability of the community to contribute to the alleviating of the current national housing crisis is curtailed
- c. A further increase in the costs of development of housing in the Urban Resource Area due to property owners having to install Onsite Wastewater systems, on substandard sized properties
- d. The accumulative effect of having a large number of Onsite Wastewater systems operating within close proximity of each other
- e. Repeated non-compliances with the proposed maximum discharge allowable as proposed by the Otago Regional Council, resulting in Council failing to achieve the outcome of the resource consent, consistently

*Clutha District Council Long Term Plan:*

6. The 2021/2031 Long Term Plan states in the key issues:
  - *Facilitating More Quality Housing*
  - *Clutha District's housing market is under pressure, with the availability of quality housing for both ownership and rental an issue. Demand for social housing is also growing.*
7. While CDC acknowledges there is a requirement to meet the intention of Te Mana o Te Wai, more importantly there is a requirement to provide for people and Communities of Clutha District, and to do that, meet the purposes of the Local Government.
8. Mr Viel mis-understood the statement given in the Applicant's evidence where **cost** was discussed. Mr Viel stated that he did not consider it is appropriate to discount the cultural effects of the discharge based on avoiding additional financial costs to the applicant.
9. This point requires clarification, as the cost of any upgrades is not met by the Applicant. Clutha District Council is acting on behalf of the Community and is fully funded by their ratepayers. Any upgrades will be done through either loans or cash reserves, both fall to the ratepayers to repay these funds. For 217 houses to fund a \$4.6 Million upgrade equates to a rate increase of \$1300 per year per property for the next 25 years. This is the cost just for sewer upgrades, and does not factor in the future roading, water supply or reserves nor the operational costs to supply these services.
10. Capital upgrades are directly met by households and pose a cost to families living in these Communities and must be realistically considered by CDC. This includes whanau of Mana Whenua living in the area. The CDC is committed to upgrades, with their associated costs, but

wishes the submitters to understand the impact of these upgrades to people and communities. CDC must meet their obligations under both the Local Government Act and the Resource Management Act. Balancing these obligations is not always easy, and CDC is seeking the Commissioner to be mindful of the dual role of the CDC, and that one of the main goals of this consent is to ensure that the next consent is well thought through. Given the purpose of the RMA is to provide for people and Communities, while giving regard to relevant national and regional policies such as Te Mana o Te Wai.

11. It is noted that the Waitangi Tribunal has recommended changes to the RMA to give better effect to the Treaty, which CDC agree with the intent. In this instance, CDC are stating that to be equitable to the Waihola Community, providing for to Te Mana o Te Wai and acknowledging the concerns of mana moana, will take some time. Whilst acknowledging past grievances and surrounding land uses.

### **COMMISSIONED WORKS AND PLANNED UPGRADES**

12. Attached is the finalised brief from Fluent Solutions for investigation of long-term disposal options for wastewater from existing and future East Coast discharges from CDC treatment plants.
13. The intent is that investigation and confirmation of future options be completed in time for the results to feed into the next Activity Management Plan which will form the basis for the next Infrastructure Strategy and the next Long-Term Plan commencing on 1 July 2024. The 2024-34 Long Term Plan will establish budgets for the first three years. This budget will allow for project selection, land purchase, design and initiation of the consenting process required for any upgrade to the Waihola Sewage Treatment Plant or alternative solution. The following three-year budget in the 2027-32 Long Term Plan will allow for the completion of consenting and construction of treatment plants that will supersede the existing Waihola Treatment Plant. As the Waihola Treatment Plant Renewal and Upgrade is part of a whole of East Coast of Clutha package the outcome of the investigation should not be preempted. Mana Moana and Mana Whenua will be part of the decision making with Clutha District Council.
14. It is to be noted that the Long-Term Plan is open to consultation. This allows for input from the public, mana whenua and the Regional Council. The Three Waters reform may change the processes from 2024 onwards, meeting future consent requirements and the replacement of the Resource Management Act will still be mandatory.

15. Below is an extract from CDC Infrastructure Strategy showing projects included in The Long-Term Plan for design and construction. It identifies the New Treatment Plant planned for Milburn and the upgrades anticipated for the next consent to Waihola Discharge (Total \$31M).

## WASTEWATER

Table 3 Major Wastewater Capital Expenditure

Period	Item	Value \$	Category
2022/30	Balclutha Sewer Network Renewals	2.5M	Renewal
2024/28	New Treatment Plant for Milburn industry	26.5M	Growth
2026/28	Waihola Consent Renewal and Upgrade	4.5M	Level of service

Figure 1: Table 3 Major Wastewater Capital Expenditure from Long Term Plan 2021-31 03 Infrastructure Strategy<sup>1</sup>

## CONDITIONS

16. The CDC have agreed to conditions to ensure that the Council completes robust planning and follows its processes to optimize the operation of its infrastructure.
17. There is risk that the resource consent parameters are too complex. Interpretation issues by those responsible for the day-to-day work and operation of the plant, may mean non-compliances will not be reported or understood.
18. CDC are seeking that consent parameters be established based on the average of 12 months records after the plant has been commissioned and that thereafter all parameters should show an improvement when based on a 12-month trend. Should the trend not be down, then further investigations and revision of the Operations and Maintenance Manual or the relevant section in the Activity Management Plan and the Long-Term Plan is required to the satisfaction of the consent authority.
19. CDC believe that it would be appropriate to require an upgrade of the Waihola Wastewater Treatment Plant as detailed in the Marshall projects proposal, attached.

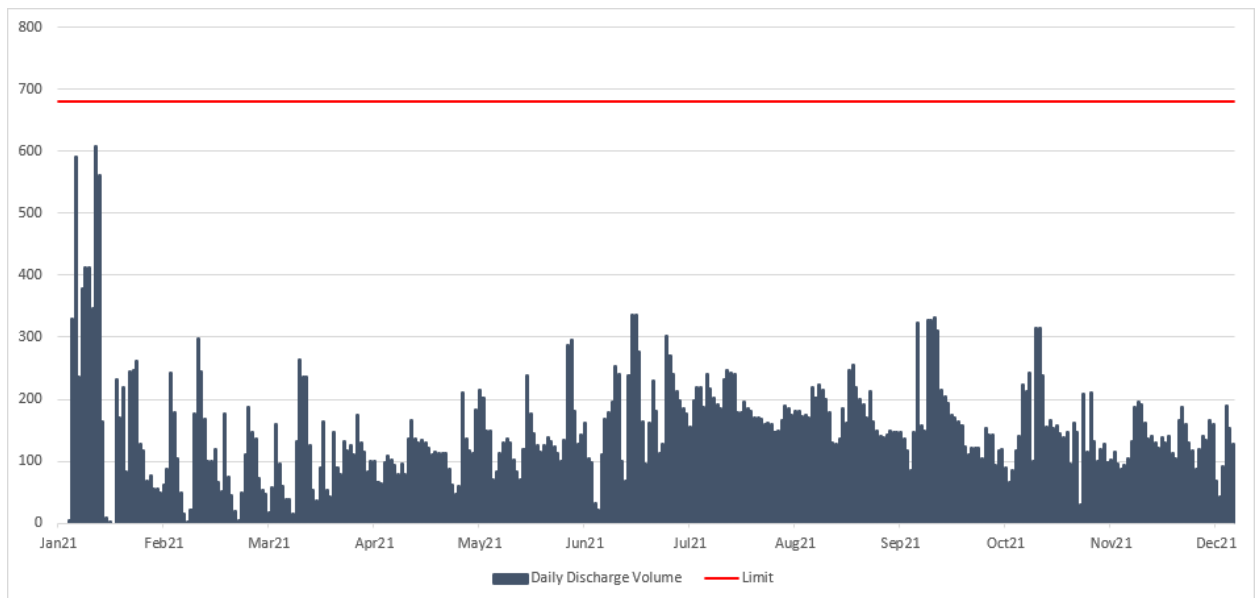
<sup>1</sup> See Clutha District Council website at

[https://www.cluthadc.govt.nz/repository/libraries/id:2c0gik8bh17q9s5atec4/hierarchy/publications/plans/LTP\\_curent-sections/Long%20Term%20Plan%202021-31%2003%20Infrastructure%20Strategy](https://www.cluthadc.govt.nz/repository/libraries/id:2c0gik8bh17q9s5atec4/hierarchy/publications/plans/LTP_curent-sections/Long%20Term%20Plan%202021-31%2003%20Infrastructure%20Strategy)

**PROPOSED DAILY LIMIT OF M<sup>3</sup>/DAY.**

20. The proposed limits of 160 m<sup>3</sup>/day are not possible under the current scenario with even minor wet weather events. The volumes under normal flow conditions with no Inflow and Infiltration can be expected to be greater than this. Waihola has been identified as one of the growth areas within Clutha District. Currently CDC have approximately 217 properties and expect to add 50 additional connections will be made in the next 2-3 years. Even if CDC consider 80% of the 217 properties to go to sewer, this will mean a dry weather flow of 208m<sup>3</sup>/day without I&I. At the time of the application there were far fewer houses. Now Waihola has seen substantial growth (infill housing and permanent residents). The graph for the current year shows us breaching the proposed limit of 160 m<sup>3</sup>/day on a regular basis.

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22. There is no room for growth with the proposed limit. In next 5 years it is predicted in the AMP that there will be up to 368 connections. CDC consider 250 m<sup>3</sup>/day will limit the planned growth in Waihola. There are existing properties vacant allotments not yet connected, with the new Milton to Waihola water pipeline coming, there will be more houses that will wish to connect. Limiting growth or ability to connect to the sewer will expose the Council to legal action. There has been no previous indication that the ORC or the Iwi intend to limit the growth of Waihola by limiting access to services rather than the Council Planning Process.

23. Most buildings will connect to a town or city sewerage system – where a sewerage system is available, connecting to it is compulsory under the Building Code clause G13 Foul water for new houses.
24. As stated in the hearing evidence from CDC, connection to the reticulated system gives a better environmental outcome than on site systems. It is also the opinion of the CDC wastewater engineers that the effect of inflow and infiltration does not result in an increase in concentration in terms of the discharge of contaminants
25. The practicality of sampling at this site is an issue for CDC contract staff. The site poses a health and safety liability due to the inaccessibility and topography. Taking the sample at the discharge point, upstream and downstream is not practical and will become a health and safety concern as there is no formed track to the discharge location. This must be undertaken by drone or jet boat and by a suitably qualified person.
26. The work is contracted to Citycare who will use Eurofins. Citycare consistently raise health and safety issues. They will require a marine certified jetboat to take samples. Citycare is not willing to renegotiate conditions and are unwilling to deliver cost effective solutions. CDC are concerned that this will add to the compliance costs of the consent.
27. Measuring the flow rate of the Waihola stream will require a depth measuring gauge to be installed. CDC are concerned that this will add to the compliance costs of the consent.
28. Total phosphorus and ammoniacal nitrogen remain a concern. These concentrations will also be present with the upgrade and there will not be an immediate change to the discharge concentrations. Compliance with consent conditions could be met if there is a limit before and after the upgrade. The alternative will be continued non-compliance with consent conditions and may result in abatement notices being issued until the upgrades are completed.
29. The evidence from CDC and verified by Dr Greer, shows that the Waihola sewage treatment plant is contributing less than 1% Total Nitrogen and 2% Phosphorus to Lake Waihola, under worst case scenarios which have not been demonstrated. Other studies suggest that the contribution of nutrients may be from the complex meteorological and hydraulic systems present in the lake complex (ie, Lakes Waipori and Waihola), such as in Marc Schallenberg & Carolyn W. Burns (2003)<sup>2</sup>: *The main riverine sources of nutrients to the lakes appear to be the Taieri and the*

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<sup>2</sup> Marc Schallenberg & Carolyn W. Burns (2003) A temperate, tidal lake-wetland complex 2. Water quality and implications for zooplankton community structure, *New Zealand Journal of Marine and Freshwater Research*, 37:2, 429-447, DOI: 10.1080/00288330.2003.9517178

*Waipori Rivers. The high concentrations of nutrients in the Taieri Main Drain that enter Lake Waipori were rapidly diluted or flushed out of the lake, as is expected based on the 1.9-day hydraulic residence time.*

30. Marc Schallenberg & Carolyn W. Burns (2003)<sup>2</sup> further states: *A water balance for the lake-wetland complex suggests that groundwater inputs to the lake-wetland complex may be similar in magnitude to the Waipori River inflow (Schallenberg et al. 2003b). As groundwater sampled from bores near the lakewetland complex contains high concentrations of nutrients (e.g., 2.2-3.3 mg litre L ammoniacal-N; Otago Regional Council 2000), groundwater input may be important in this system.*
31. Marc Schallenberg & Carolyn W. Burns (2003)<sup>2</sup> also suggests up to 5% nutrient resuspension from sediment stores during some meteorologic conditions. Given this information, it is difficult to conclude that the Waihola Sewerage Treatment Plant would significantly increase the risk of NPS-FM national bottom lines being exceeded. CDC consider that there are complex hydrological processes in the lake that would need to be modelled alongside the nutrient inflows and meteorically conditions to properly assess what the contribution of the Waihola STP is on the lake nutrient concentrations. It is impossible to assume based on static sampling due to the complexity of the system.
32. Given that CDC are seeking only a short-term consent, with a commitment to significant upgrades and investigation to alternative discharge options, CDC consider that the consent may be granted pursuant to Section 104 of the RMA.

Rachel Vaughan



21 March 2022