

Takapau Wastewater Project and Discharge Consent Application

Introduction

Kia ora Takapau residents, we wanted to take the opportunity to provide an update on the wastewater upgrade project that we have been working on for some time, the consent has been lodged and is currently out for a public notification – please read on for more detail, and feel free to reach out to Council if you have any queries on 06 857 8060.

Background

Central Hawke's Bay District Council (CHBDC) are in the process of renewing and replacing our resource consent for the discharge of wastewater from the Takapau Wastewater Treatment Plant (WWTP). Currently, wastewater is treated at the Takapau WWTP along Burnside Road and is discharged to the Makaretu River. This consent expires at the end of October 2021 and a replacement is being sought. Under the Resource Management Act (RMA), the existing consent can continue to operate until the approval of the replacement consent.

Consent Application

The consent has been received by Hawkes's Bay Regional Council (HBRC) on the 26th of April 2021.

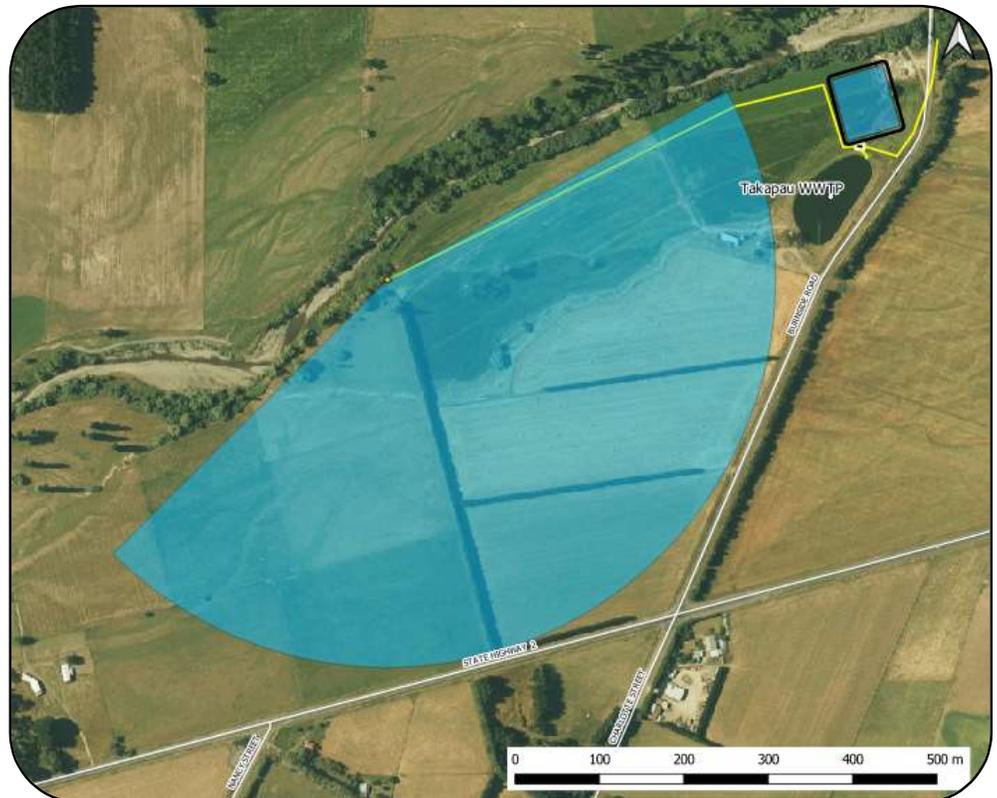
The application will be publicly notified on **Thursday 7th October 2021** in the Hawke's Bay Today and the Central Hawke's Bay (CHB) Mail. Submissions will close at **5.00 pm on Friday 5th November 2021**.

CHBDC have opted to have the consent publicly notified. This allows members of the public to give feedback on a consent application. Depending on the type and number of submissions, a hearing may take place.

Option Selection

Over the past two years CHBDC has engaged with the Takapau community and interested parties. This has involved listening to concerns with the existing discharge and discussing alternatives to the current discharge to the Makaretu River.

Continuation of a full-time river discharge was not an option for the community. CHBDC listened and are proposing a combined land and water discharge system. This will see a maximum of 30 ha of farmland irrigated and the river discharge only used when it is very wet, storage is full and the river has high flows.



Proposed System

Resource consent is being sought to irrigate land adjacent to the Takapau WWTP via a centre pivot irrigator. Treated wastewater will be applied in a way that allows nutrients to be beneficially reused. A new 18,000 m³ storage pond will be constructed to carry over water for later irrigation. Should the pond be filled, then the overflow can be discharged via an overland flow system to the river. Wastewater will continue to be treated at the WWTP but there will be the addition of UV treatment. The layout of the proposed system is shown in the figure above.

Staging of New System

Changes proposed will be in two stages:

- **Stage 1** – Completed within 3 years. Will involve setting up at least 5 ha. This will allow 60 % of Takapau's wastewater flows to be applied to land. The remaining 40 % will be discharged to the Makaretu River.
- **Stage 2** – Completed within 5 years. A further 15 ha of irrigation will be established and possibly up to 25 ha. There will be construction of an 18,000 m³ storage pond to store wastewater that will allow most of the wastewater to be stored and not irrigated. It is estimated that only 10 % will be discharged to the Makaretu River when the river is in high flow (i.e. in flood). This partial discharge to the Makaretu River is required when soils are wet and irrigation is not possible and storage is at or near capacity.

System Design

The operation of a land and water discharge system will have buffers where no wastewater irrigation will occur. These will be from the Makaretu River, the property boundary and from surrounding houses. The visual appearance of the wastewater system will be no different from typical freshwater irrigation which is common in the area. Wastewater irrigation is to pose no risk to public health and will be designed to manage factors of common concern such as spray drift and odour.



Feedback to CHBDC

This is a long term project committed to by CHBDC, one of which we hope meets community aspirations.

Feel free to let us know your feedback on the proposal, we'd love to hear from you!

Please contact Council on 06 857 8060 or via email darren.deklerk@chbdc.govt.nz

Visit our website for more information: <https://www.chbdc.govt.nz/our-district/projects/the-big-wastewater-story/takapau-wastewater-system-upgrades/>

Making a Formal Submission to HBRC

Any person may make a submission on the application can do so by going online to www.hbrc.govt.nz, search: **#notified** and completing the online submission form (Form 13).

Hard copy submission forms can also be obtained from Hawke's Bay Regional Council reception or upon request.

Hawke's Bay Regional Council must receive your submission no later than **5 pm on Friday 5th November 2021**.

A direct link can be found here: <https://www.hbrc.govt.nz/services/resource-consents/notified-consents/takapau-wastewater-treatment-plant/>

Project Staging

In our Long Term Plan 2021 – we set out the following staging.

Stage	Asset	Date range	Budget
1	Build Pipeline to Land Irrigation site	2020-2022	1.3m
	Build phase 1 Land Irrigation site for dry weather flows		
	Minor Treatment Plant Improvements		
2022 Milestone	Irrigate to land in the dry low flow river months by 2022		
2	Build wet weather storage	2024-2025	\$1.7m
	Increase land irrigation size – Phase 2		

Frequently Asked Questions

What is land treatment?

Land treatment and discharge is where treated wastewater from a wastewater treatment plant is applied to the land at a rate which plants can take up nutrients and use this for plant growth. This allows nutrients to be beneficially returned to the land, rather than through an alternative discharge system such as surface water.

Will irrigation spray drift be an issue?

The aim of the irrigation system will be to ensure there are no affects beyond the irrigation property boundary. Buffers/setbacks will be used and the system will be designed to limit spray drift. Additionally, a wind shut off system will be used where irrigation will be stopped when wind speed exceeds a set limit from a certain direction to minimise any drift.

Will there be odour from the irrigation system?

Odour is a result of a lack of oxygen within wastewater. These conditions typically occur at the bottom of the treatment plant pond or in pipelines where water can sit for an extended period of time. Odour will be managed by making sure the treatment pond is working properly. If oxygen levels are too low then more treatment will be needed prior to irrigation. If there is water sitting in the irrigation system for some time it can be smelly. This being the case the irrigator will only be started on the lower terrace away from the main road.

What will the system look like?

The irrigator will appear no different to a typical centre pivot irrigator. Unless one was told, there will be no indication it is wastewater being irrigated. Wastewater will appear clear and be indistinguishable from freshwater irrigation.

What will be grown on the land?

We are expecting the wastewater will be used to grow a range of crops including annual ryegrass, barley, oats, and maize. This may vary on a seasonal basis. No crops will be grown for human consumption.

Is there a risk to public health?

Like any other environment containing wastewater, care should always be taken when around such locations. All wastewater flows leaving the wastewater treatment plant and irrigated to land will be UV treated, killing bugs that can live in wastewater, reducing the risks to public health.

Will irrigation occur right up to the road?

No. There will be a section of the irrigated area close to the road where no wastewater irrigation will occur. The irrigator will be set up with nozzles that can be automatically turned on and off, meaning although the pivot may pass in proximity to the road, sections of the centre pivot will not be discharging.

What will the discharge to the Makaretu River look like?

The existing discharge to the Makaretu River will be via what is referred to as an overland flow path. This allows the water to pass over land before it reaches the river.

What is the purpose of storage?

Storage allows wastewater flows to be captured at periods where the soil may be too wet and cannot receive irrigation. This capturing of wastewater avoids a surface water discharge as flows can be held until a more suitable time for irrigation.

What other towns or systems are there like this around the North Island?

There are numerous land treatment sites in operation. Communities like Levin, Foxton, Feilding, Shannon, Masterton, Carterton, Greytown, Martinborough and Taupo all currently discharge their treated wastewater to land via similar systems with many others in the process of developing land treatment systems.