

# WASTEWATER UPDATE:

## BACKGROUND:

Wastewater from Featherston, Martinborough and Greytown are currently treated in oxidation pond systems built in the early 1970s. These pond systems cannot effectively remove nutrients such as nitrogen and phosphorus which when released into waterways, can promote algae and plankton growth, contributing to algal blooms which are possibly toxic to humans and fish.

SWDC has been implementing a long-term strategy of 100% wastewater disposal to land. Lake Ferry has been operating to this strategy since 2008 and in 2015 SWDC applied for 35 year consents for Martinborough and Greytown from the Greater Wellington Regional Council (GWRC). These consents were granted to divert the treated wastewater from the water ways and irrigate instead to land in 2016.

The consents that we have been granted will ensure that we can better manage our impact on the environment. Land and crops can more effectively absorb the nitrates and phosphates, with the added benefit of being able to sell crops produced, instead of discharging to our waterways. We will be protecting freshwater and at the same time being smarter about how we utilise this land by using it for more than one purpose – cropping, irrigation, gliding and providing access to rivers.

## FEATHERSTON:

In February 2017 the SWDC lodged a consent application to the GWRC to better manage the wastewater in Featherston. Issues in Featherston are that the current discharge contains phosphorus and nitrogen, these encourage algal growth, which may be toxic and reduce oxygen in waterways, ammonia is also an issue.

The proposed solution is to receive wastewater into very large settling ponds, solids settle to the bottom, discharge is passed through UV treatment system which eliminates 99+% living matter and discharge via irrigation to land.

The GWRC is now considering this application. When it is formally accepted they will publicly notify the application, enabling people to make submissions. The GWRC will hold public submissions, at which anyone can submit and speak over which three commissioners will deliberate. The public submission phase will be advertised in media and on our website.

The property we purchased in Featherston has an irrigation system covering approximately 70 Ha. Indications are this equipment is suitable for the distribution of treated wastewater, meaning as soon as we get the consent we can utilise this equipment. We will make an immediate positive impact on the environment by diverting a significant proportion of the discharge to land.

## MARTINBOROUGH:

Since the granting of the consent the council has continued upgrading the plant, completing such work as a new inlet flowmeter installation (a flowmeter measures the amount of waste water entering the plant).

As part of compliance existing outlet flows are being sent daily to the GWRC Data System, this data demonstrates to GWRC how much water is being discharged.



Water clarity in Donald Creek on 11 October 2016, from left to right, Donald Creek upstream, Donald Creek downstream, and the far right sample is after treatment and before discharged to water (this is what will be going to land, no living matter, no odour).

Management Plans have been produced for the Operations Manual, Odour, Discharge to Water, Discharge to Land, and Environmental Monitoring Plan, all within the required time. Annual and quarterly reports were also completed.

We are continuing consultation discussions with Iwi for the production of the Tangata Whenua Values Monitoring Plan, to work with Iwi on monitoring the impact of the discharge on the Ruamahunga.

A community liaison group has been formed and we are meeting quarterly. The group will have a planned visit to the plant when the irrigator is operational, expected July or August this year.

A site visit with the GWRC and operators was held in May 2016 as required in the consent to explain to operators what the changes will be and familiarise GWRC with both sites.

Monthly monitoring of the discharge within the river as well as ecological river surveys have been completed, the ecological river surveys provide more detailed monitoring of effects on the environment over the season and demonstrate the improvements.

The consent monitoring programme also was implemented ahead of time.

Submitters during the consent process were supportive of the overall strategy, however did observe that the implementation plan was too long. The plan was based around rates affordability. Council has considered this feedback and has agreed to accelerate the programme. We have purchased automated irrigation equipment, which is currently being constructed on site, for Martinborough and anticipate commissioning this late May / early June

## GREYTOWN:

As with Martinborough, a new inlet flowmeter has been installed and the existing outlet flows are being sent quarterly to the GWRC Data System.

Management Plans have been produced for Operations Manual, Odour, Discharge to Water, Discharge to Land, Environmental Monitoring Plan, and Site Flooding, all within the required time. Annual and quarterly reports were completed on time and we are continuing consultation discussions with Iwi for the production of the Tangata Whenua Values Monitoring Plan for the Papawai area.

A community liaison group has been formed and we are meeting quarterly.

We are also in on-going discussions with the Greytown Soaring Centre for the management of the irrigation that will cross any runways and maintaining fields. This planning is progressing and hopefully the system will be operational for summer 2018.



Monthly monitoring of the discharge and within the river, as well as ecological river surveys has been completed.

As noted in the Martinborough commentary, Council has agreed to accelerate the programme outlined in our resource consent application, whereby we aim to bring forward stage 1B from 2022 to the 2018 year. To achieve this goal, we need to construct pump sheds, purchase and install UV treatment plant, and purchase and install irrigation equipment.

We are excited to finally be able to deliver the strategy, which we started developing in 2008.