



Wastewater

Some 150,000,000 litres of wastewater is removed from Christchurch homes, shops and business premises

every day through 1,346 km of sewer mains. It is pumped through 78 pumping stations and assisted by 1,600 flush tanks to be treated at minor treatment plants in Templeton and Belfast or at the major treatment plant in Bromley.

Of the average annual bill for each Christchurch ratepayer, which is around \$750, \$132, or just under 18 per cent, is currently spent collecting and treating the City's wastewater.

Service Options

There are three areas of service to consider in determining what standard of wastewater management Christchurch people wish to pay for. These are:—

Treatment plant

Wastewater at the main treatment plant is currently given a three-stage treatment and discharged to the Avon-Heathcote estuary over a period of five hours each high tide. Currently odour is noticeable once every ten days one km from the Bromley treatment plant. Sewage treatment accounts for \$33 of the average individual rates bill. Eliminating the final stage of treatment, allowing a continuous 24 hour discharge and stopping use of the soil filter would cut the amount spent by the average individual ratepayer on this component of the rates bill to \$30 every year. However with these changes odours would be noticed twice as often and a large proportion of effluent would not be flushed out of the estuary. Constructing a larger outfall to enable a shorter discharge time would flush more of the effluent out to sea, increasing the amount spent by the average ratepayer to improve the quality of wastewater effluent to \$32.50 every year. More thorough treatment would

improve water standards for recreation use, and reduce the occurrence of odours to once every 100 days. This would increase this component of the average individual annual rates bill to between \$52 and \$90. Council advocates this option as the *Minimum Acceptable Service Standard*. An offshore outfall would move the discharge out of the estuary, increasing this component of the average rates bill to between \$84 and \$119 every year. Yet more sophisticated treatment enabling effluent to be drunk or reused for irrigation would increase the average contribution of ratepayers to improving the quality of Wastewater effluent to \$230 every year.

Overflows

Christchurch’s wastewater system currently overflows onto private property and into streets and rivers at between 40 and 100 locations in an average annual storm. Controlling overflows to this level accounts for \$98 of the average individual annual rates bill. Reducing the stormwater flow into the system would cut these overflows to one third of their present level increasing this component of the average rates bill to \$99 every year. Overflows could be reduced to one tenth of their present level by sealing 15 per cent of the sewerage network, which would increase the annual amount spent by each ratepayer on minimising wastewater overflows to \$109. To virtually eliminate overflows — cutting them to an estimated one location every two years — by sealing 40 per cent of the network, would increase the amount spent by the average ratepayer on this service to \$124 every year.

Reticulation Odours

Odours from the sewerage system are currently noticeable at approximately ten Christchurch locations once every two or three weeks. Controlling them at this level accounts for \$1 of the average rates

Service: Treatment plant

Lowest possible:	\$30
Current Spend:	\$33
Premium:	\$230
Minimum acceptable:	\$52

Service: Overflows

Lowest possible:	\$98
Current Spend:	\$98
Premium:	\$124
Minimum acceptable:	\$99

Service: Reticulation Odours

Lowest possible:	\$1
Current Spend:	\$1
Premium:	\$2
Minimum acceptable:	\$2



bill. These reticulation odours could be better controlled with new soil filters. Stopping use of existing soil filters would result in odours at about 20 locations every day, reducing this part of the average annual rates bill by a few cents. Installing soil filters at the ten most troublesome spots would reduce the incidence of localised odours to once every 100 days, which would increase this component of the average rates bill to \$2 every year.

Summary

Collecting and treating the wastewater of Christchurch currently costs the average ratepayer around **\$132** every year.

To provide a service at a lower standard, with all the possible savings identified, would cut this amount back to **\$129**.

To make all the improvements suggested would raise this amount to **\$356**.

To provide a service consistent with Council's *Minimum Acceptable Service Standard* would cost **\$153**.

Summary of the costs of Wastewater Management

Lowest Possible...	\$129
Current...	\$132
Premium...	\$356
Minimum acceptable service...	\$153

What do you think?

If you wish to make a submission on the 1998 Annual Plan, these are some of the questions you might like to consider:

- What do you regard as most important in collecting and treating the wastewater of Christchurch: quality of effluent, outflows caused by groundwater and stormwater, treatment plant odours or reticulation odours?
- Are you prepared to pay higher rates to improve the service in any of these areas? If so, which areas should have the highest priority?
- Would you rather pay less in rates for a lower standard of service?
- Are you content that the present service at the present cost is about right?

Please fill in and return the submission form at the rear of this book to make your views known on the maintenance and development of the City's wastewater.

Te Huinga Manu, the Christchurch oxidation ponds, are designated as a wildlife refuge by the

Department of Internal Affairs.

Further environmental sensitivity was demonstrated recently when the Bromley treatment plant became a net provider rather than a consumer of electricity. Methane produced at the plant is now used to generate power for the plant and also to return to the national grid as surplus power.

Contact

If you would like further information on the service options and the cost implications facing Christchurch in relation to wastewater, please contact

Walter Lewthwaite on

371 1367.