

SEWERAGE

Cost of Proposed Services

Budget 1997/98			Budget 1998/99		
Net Cost	Operational Outputs	Gross Cost	Revenue	Net Cost	
\$		\$	\$	\$	
139,389	Plans and Policy Statements	141,414	0	141,414	
215,832	Information and Advice	385,731	(126,250)	259,481	
382,721	Consents and Applications	360,095	0	360,095	
12,118,725	Liquid Waste Collection	12,417,301	(696,135)	11,721,166	
3,893,756	Liquid Waste Treatment and Disposal	6,149,875	(1,802,767)	4,347,108	
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16,750,424	Net Cost of Service	19,454,416	(2,625,152)	16,829,264	
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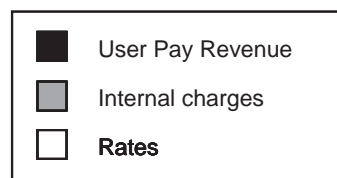
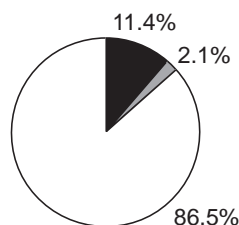
Note: The above Cost of Service Statement includes a depreciation provision for 1997/98 of \$8,134,603 and in 1998/99 of \$8,211,076. The cost of capital charge for 1997/98 is \$18,066,901 and for 1998/99 is \$18,526,336. Cost of capital is not reflected in the above figures.

Revenue for 1998/99 includes external revenue of (\$2,220,735).

Projected Net Cost 1999/00	17,675,849
Projected Net Cost 2000/01	18,131,366

Sources of Funding

1997/98	Capital Outputs	1998/99
\$		\$
3,884,267	Renewals and Replacements	3,169,611
3,775,235	Asset Improvements	4,906,500
1,502,600	New Assets	1,130,575
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9,162,102		9,206,686
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The 1997/98 Capital Outputs include carry forward projects of \$910,000.

Planned Services

- Researching the need for and planning the development of sewerage services.
- Providing information and advice on sewerage systems and services as a basis for public and private decision-making.
- Providing a scientific investigations capability to undertake wastewater testing and environmental, ecological and trade waste assessments.
- Providing and maintaining the sewerage collection system and ensuring its maintenance and renewal so as to sustain service needs.
- Treating and disposing of all liquid wastes in a safe and environmentally sound manner.

This activity has a significant impact on the maintenance of the health of the citizens of Christchurch and the quality of their environment. It is based on a comprehensive reticulation network for the collection, transport, treatment and disposal of sewage and other liquid wastes, including 1,350 km of sewer mains with 100,000 lateral connections, 78 pumping stations and three sewage treatment works. The latter treat 150 million litres per day of sewage to required standards and includes the operation of effluent disposal and sludge reuse systems.

Overall Service Objective

These services contribute towards the following Council Strategic Objectives: A1, A5, B1, B2, B7, C8 and C9 (See Volume 1).

In summary the aim is:

1. Provision of liquid waste management services for the community in a safe and environmentally responsible manner. This will include:
 - understanding and meeting customers' needs;

- planning for city growth;
- promotion and implementation of a waste strategy of reduction, reuse, recycling, recovery, safe residue disposal for liquid waste;
- maintaining appropriate information systems;
- conforming with all statutory requirements;
- promotion of sustainability;
- maintaining cultural sensitivity;
- operating on a cost accountable basis including regularly reviewing operating costs and revenue;
- a policy of continuous improvement in all areas of operation and management.

Objectives for 1998/99

2. To develop a comprehensive Liquid Waste Management Plan which conforms to the requirements of the Local Government Amendment Act No. 4. The objectives below will form elements of this plan.
3. To preserve the value of the public reticulation system by following an asset management strategy.
4. To ensure adequate system capacity to cater for present and future urban growth by continuing the flow monitoring programme and eliminating stormwater entry.
5. To minimise sewage overflows to private property, public roads and waterways.
6. Provide response and control to hazardous substance spillage incidents.
7. To minimise energy costs for all operating plant, by maximising biogas used for energy production.
8. To comply with water right effluent discharge standards as required through achievement of target treatment levels.

SEWERAGE

9. To hold sewage treatment costs to less than \$13.70 per person per year, \$35.00 per ratepayer and \$0.08/m³ per year.
- Performance Indicators**
2. Liquid Waste Management Plan completed and special consultative procedure started.
 3. Full implementation of the 1998/99 sewer capital works programme, and the Asset Management Plan adopted by the Council in September 1997.
 4. Continue major catchment flow monitoring over the whole reticulation system and identify sub-catchment flow monitoring requirements, plus inspection and remedial works on a further 15,000 properties. (1996/97: Flow monitoring commenced, 16,500 households inspected.)
 5. Record and report all overflows of sewage with a target of no overflows resulting from failure of Council pumping equipment.
 6. Record number of responses and response time against a target of 98% responses within 15 minutes. (1996/97: 290 responses, 100% within 15 minutes.)
 7. Biogas flared to waste less than 0.5% of total produced, ie maximum of 25,000m³ flared.
 - 8.1 Measure discharge pollutant levels with a target of an average of 70% and 65% reduction in BOD and suspended solids through the Christchurch Wastewater Treatment Plant. (1996/97 : Achieved 68% and 60% respectively.)
 - 8.2 Measure discharge faecal coliform levels with a target of an average 99.7% reduction in faecal coliforms throughout the Christchurch Wastewater Treatment Plant and oxidation ponds with a final effluent average less than 10,000/100ml. (1996/97: Achieved 99.9% reduction and 4,600/100ml.)
 9. Measure wastewater treatment costs against the target of \$13.70 per person per year maximum \$35.00 per ratepayer and \$0.08/m³ per year. (1996/97: \$12.19 per person.)



An aerial view of the Christchurch Sewerage Treatment Plant. The Council is planning to spend \$26.8M over the next 8 years upgrading and expanding this important facility.