

## SEWERAGE

### Cost of Proposed Services

Budget 1996/97		Budget 1997/98	
Net Cost	Operational Outputs	Gross Cost	Net Revenue
\$		\$	\$
188,647	Plans & Policy Statements	139,689	0
530,242	Information & Advice	340,547	0
189,476	Consents & Applications	353,137	0
11,113,274	Liquid Waste Collection	12,598,622	(556,439)
3,527,249	Liquid Waste Treatment & Disposal	5,653,967	(1,806,065)
<b>15,548,888</b>	<b>Net Cost of Service</b>	<b>19,085,546</b>	<b>(2,362,504)</b>

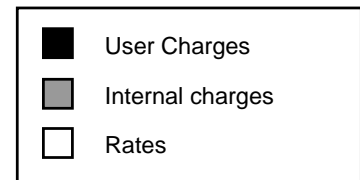
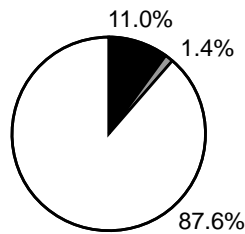
Note: The above Cost of Service Statement includes a depreciation provision for 1996/97 of \$7,647,954 and in 1997/98 of \$7,984,603. The cost of capital charge for 1996/97 is \$17,458,117 and for 1997/98 is \$18,066,901. Cost of capital is not reflected in the above figures.

Revenue for 1997/98 includes external revenue of (\$2,106,500).

Projected Net Cost 1998/99	17,261,928
Projected Net Cost 1999/00	17,913,166

1996/97	Capital Outputs	1997/98
\$		\$
3,690,538	Renewals & Replacements	3,068,340
1,682,750	Asset Improvements	3,859,000
909,675	New Assets	1,223,000
<b>6,282,963</b>		<b>8,150,340</b>

### Sources of Funding



The 1996/97 Capital Projects include a carry forward of projects from 1995/96 of \$1,675,513.

### 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 1,350km 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 to the following Council Strategic Objectives: A2, A5, B1, B2, B7, C8 and C9 (see pages 21-27)

In summary the aim is:

- 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 1997/98

- To preserve the value of the public reticulation system by adopting an asset management strategy.
- To ensure adequate system capacity to cater for present and future urban growth by continuing the flow monitoring programme and eliminating stormwater entry.
- No overflows of sewage from reticulation due to failure of Council pumping equipment.
- Provide response and control to pollution and hazardous substance spillage incidents.
- To minimise energy costs for all operating plant, by maximising biogas used for energy production.
- To comply with water right effluent discharge standards as required through achievement of target treatment levels.
- To minimise sewage treatment costs.
- Progress conversion of liquid waste reticulation plan records into digitised computer based format.

### Performance Indicators

- 2.1 Full implementation of the 1997/98 sewer capital works programme, and the Asset Management Plan adopted by the Council.
- 3.1 Complete 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.
- 4.1 Record number of sewage overflows resulting from failure of Council pumping equipment against a target of zero.
- 5.1 Record number of responses to incidents and response time against a target of 98% responses within 15 minutes.
- 6.1 Record use of waste gas flares against a target maximum of 80 hours for the year.
- 7.1 (a) 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.
- 7.1 (b) 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.
- 8.1 Measure wastewater treatment costs against the target of \$11.50 per person per year maximum.
- 9.1 Achieve 35% conversion of liquid waste plan records into electronic form by 30 June 1998.



Christchurch Wastewater Treatment Plant showing the covered Trickling Filter and Oxidation Ponds in the foreground.