

6. WASTEWATER COLLECTION SYSTEM PROPOSED UPGRADING

Officer responsible City Water & Waste	Author Eric van Toor, DDI 941 8980
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The purpose of this report is to formally endorse the works programme (refer attachment 1), as presented to the Wastewater Collection System Upgrading Seminar held on 13 August 2002.

BACKGROUND

Councillors will recall the Sustainable Transport & Utilities seminar on 13 August 2002 when the background to the future upgrading to the wastewater reticulation system was presented. A copy of this presentation is tabled and this can also be emailed to Councillors who so request.

OUTLINE OF WORK

The wastewater collection system upgrading study is an important part of the Council's Wastewater Asset Management plan 2000 that is due for revision by December 2003. The study arose from work carried out by the (then) Waste Management Unit in the mid 1990's to determine trunk system upgrading requirements for the South and Central catchments. The results of this work led to a budget provision of \$3M/year for 10 years beginning 2001/02, for 'South West Sector Trunk Expansion'. Following the in-house work, Australian Water Technologies Limited (AWT) was engaged to carry out a full system study, similar to one they did for Sydney, to expand on the work done in-house.

The purpose of the AWT study was to develop the lowest cost solution that:

- Provides sufficient capacity for the population growth allowed by the City Plan
- Reduces overflows to levels permitted by proposed ECan consent conditions
- Is compatible with the upgraded capacity of the Central Wastewater Treatment Plant.

This study has now been completed and reviewed by the City Water and Waste Unit. The study initially involved analysing the system's existing performance through flow monitoring and system modelling. The lowest cost trunk main layout to meet ultimate growth for urban growth was then selected from a range of alternatives. The final stage of the project was to develop a proposal for upgrading using the least-cost combination of:

- New and upgraded sewer sizes
- Rehabilitation and replacement of existing sewers to reduce inflow from groundwater and stormwater
- Storage facilities at strategic locations to even out pumping flows and load on the treatment plant (in particularly high wet weather flows).

The extent of this work is shown on the attached map. The study confirmed that the upgrading can be carried out within the existing budget and 10-year capital works programme. Work beyond the ten year programme will be included in the next revision of the Wastewater Asset Management Plan.

Staff

Recommendation: That the works programme as indicated on the attached map be endorsed as a key element of the Wastewater Asset Management Plan.

Chairman's

Recommendation: That the above recommendation be adopted.