

DATE ISSUED: February 26, 2003

REPORT NO. 03-037

ATTENTION: Natural Resources and Culture Committee
Agenda of March 5, 2003

SUBJECT: Update on Sewer System Municipal Construction Program

REFERENCE: City Manager's Report No. 01-209 dated October 10, 2001

SUMMARY

This is an informational item only. No action is required on the part of the Committee.

BACKGROUND:

In October, 2001, City Council approved increasing all sewer service charges by 7.5% on March 1, 2002; 7.5% on March 1, 2003; 7.5% on March 4, 2004; and 7.5% on March 1, 2005, to ensure continued compliance with the requirements of the Clean Water Act, the Ocean Pollution Reduction Act (OPRA), the State Ocean Plan, the National Pollutant Discharge Elimination System (NPDES) Permit, and the Stipulated Order. A portion of these increases were required to fund the Accelerated Municipal Program. The following are the rate increases that were considered in October, 2001:

Approved	Projected							
FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
7.5%	7.5%	7.5%	7.5%	6.5%	5.0%	5.0%	5.0%	5.0%

The Accelerated Municipal Program's objective is to achieve the goal of reducing sewer spills from 10.3 to 6.6 spills per 100 miles of sewer pipeline by the end of calendar year 2006. 2.5% of each 7.5% increase was required to fund the Capital Improvement portion of the Accelerated Municipal Program. The Accelerated Municipal Capital Improvement Program is a 10 year program that provides for ramping up the rehabilitation and replacement of deteriorated pipelines from the previous rate of 15 to 20 miles per year to 60 miles per year by calendar year 2004.

For initial work load and financial planning, an average annual expenditure level of \$100 million dollars per year was utilized for the rehabilitation and replacement of the Municipal System. This initial funding level was based on the Optimization Consultant's preliminary estimate of

annual capital expenditures required to bring the Municipal System up to a sustainable condition. This preliminary estimate was based on national industry standards for construction cost and life expectancy for sewer pipelines and pump stations, and resulted in a range of \$109 million to \$137 million each year over a 10 year period. A focused system condition assessment utilizing closed circuit television and other diagnostic data was also recommended by the consultant.

The funding level of \$100 million per year for ten years was used, even though it was somewhat below the lower end of the consultant's estimated range, because it was felt that while the sewer spills record and ongoing televising of pipelines indicated that a significant amount of the system was in a deteriorated state, it was anticipated that some pipelines to be assessed would be in adequate condition (revised life expectancy will exceed preliminary estimated life expectancy) and would not require near-term replacement. The \$100 million funding level will be revisited as the focused assessment of the Municipal System is executed over the next year. It is felt unlikely that the revised level can be lower without increased risk of not attaining benchmarked reductions in sanitary sewer overflows. However, such factors as constructibility and neighborhood disruption may argue against it being significantly higher.

DISCUSSION

As previously stated, the Optimization Consultant's preliminary estimate of \$109 million to \$137 million per year was based on national industry standards for construction costs and life expectancy for sewer pipelines and pump stations. For pipelines, the estimate included \$506,000/mile to \$634,000/mile. This estimate included both rehabilitation and replacement of pipelines with an average diameter of 8 inches.

Currently, the cost of replacing pipelines significantly exceeds the estimated range. Recent construction bids for replacement of pipelines (group jobs) are averaging \$1.5 million per mile with total project cost estimated at \$2.0 million per mile. These costs are significantly higher than what the Optimization Consultant estimated for pipelines; however the Optimization Consultant's estimate included rehabilitation as well as replacement of pipelines. Unfortunately, the cost to rehabilitate pipelines has also increased significantly. The real impact of these increases in cost on sewer service charges will not be known until sufficient data is obtained from the ongoing system condition assessment. It is estimated that the necessary data will be available in approximately one year. This will provide a comprehensive assessment of the portion of the Municipal System over 40 years old and a more detailed estimate of the cost to bring the System to an acceptable condition. The Metropolitan Wastewater Department (MWWD) and the Engineering and Capital Projects Department (E&CP) are working together to review the entire program with the goal of reducing costs. This effort includes doing a value engineering review and looking for additional opportunities to use rehabilitation rather than pipeline replacement.

Based on the data currently available, it is believed that the four 7.5% rate increases previously approved by City Council will not have to be adjusted; however, the amount of future rate increases that will be required after Fiscal Year 2005 is likely to need to be higher than those projected in October 2001 in order to accommodate the significant increase in pipeline construction costs in the past two years.

Respectfully submitted,

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Approved: Richard Mendes
Utilities General Manager

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