

EXECUTIVE DIGEST

SEWAGE FUNDING NEEDS

INTRODUCTION

This report, issued in May 2002, contains the results of our performance audit* of Sewage Funding Needs.

AUDIT PURPOSE

This performance audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Performance audits are conducted on a priority basis related to the potential for improving effectiveness* and efficiency*.

BACKGROUND

Michigan municipalities operate approximately 840 sanitary sewer collection systems* and 435 wastewater treatment plants* (WWTPs). The first sanitary sewer collection system was installed in 1836 and the first WWTP began operation in 1940. Many of the sanitary sewer collection systems and WWTPs in use were constructed during the 1960's, 1970's, or before and are nearing the end of their useful lives.

During the 1970's, large federal grants supported the construction of a very significant amount of sewer infrastructure. These federal grant programs have been phased out and were replaced in 1988 with a state revolving fund (SRF) program. Since the SRF program began in Michigan, requests for loans have exceeded the amount of funds available. The gap between funds

available and loan requests has widened significantly in recent years. Loan requests for 2001 totaled \$436 million, with approximately \$274 million being available for loans. The amount of federal funds contributed to SRF has diminished from a high of \$92 million in 1993 to \$57 million in 2001.

AUDIT OBJECTIVES
AND CONCLUSIONS

Audit Objective: To determine how much annual funding, on the premise of a 20-year funding plan, will be needed for Michigan municipal sewage treatment systems to upgrade and expand to meet their residents' needs.

Conclusion: We estimate that the annual funding needed for 20 years ranges from \$334 million to \$530 million a year.

Audit Objective: To determine how much funding will be needed for Michigan municipalities whose residents currently rely on septic systems but are likely to need to convert to a municipal sewage treatment system.

Conclusion: Because the municipalities that we contacted did not have any firm plans to convert areas served by septic systems to a centralized sewage system, we did not project a cost for this type of conversion. The municipalities recognized that there might be a large number of areas with failing septic systems that would need to be converted. However, they currently do not know the extent of the problem.

AUDIT SCOPE AND
METHODOLOGY

Our audit scope was to examine the Department of Environmental Quality's program and other records related to sewage needs and sewage discharges; sewer infrastructure needs studies that the Southeast Michigan Council of Governments and the Michigan Municipal League/Public Sector Consultants, Inc., compiled; and plans that selected municipalities had prepared regarding

future sewer infrastructure needs and estimated expenditures. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Our audit methodology included review of data that the Department of Environmental Quality maintains regarding SRF loan activity and sewage discharges; review of the sewer infrastructure needs studies that other groups have compiled; and discussions with local municipalities regarding their plans for sewer related repairs, refurbishing, and expansion.