CAPITAL IMPROVEMENT AND REPLACEMENT PROGRAM SUMMARY

The identification and prioritization of projects to be included in the Capital Improvement and Replacement Program is a multi-step process, requiring monitoring and updating to ensure that the highest priority problems within the District are addressed in a timely manner, given funding limitations. These stages include: project identification, conceptual solution, preliminary study, final design, and construction.

At each step in the process, the project scope is reevaluated to verify that it continues to meet regulatory requirements and customers' needs. The project cost is updated based on available information, and the project's priority is assessed with the goal that the highest priority projects are funded first.

Project cost estimates used in the budget preparation process and shown in the Budget Supplement are usually based on the preliminary study stage of the process. At this stage there is typically a minimal amount of detailed information available regarding geotechnical conditions, utility relocation requirements, easement requirements, and other site-specific issues that have the potential to significantly affect the project's construction cost. Preliminary study cost estimates are designed to be within thirty percent of the design engineer's final estimates. Individual projects may vary to a greater degree than the average, due to unanticipated site-specific conditions that impact the project cost.

New projects are identified on an ongoing basis to ensure that the District is in compliance with the regulatory requirements of the United States Environmental

Protection Agency and Missouri Department of Natural Resources, to address customer stormwater or wastewater problems, remedy deficiencies identified through planning studies and hydraulic analysis of the system, and implement required collection system and wastewater treatment plant maintenance and upgrades.

Upon the initial identification of regulatory issues, localized problems, or system deficiencies, a conceptual solution is developed, which includes a project scope, cost estimate, and priority ranking of the project relative to similar projects. This solution and associated cost estimate are general, based on a single site visit and a "table-top" analysis of the problem. The project may then be incorporated into the Capital Improvement and Replacement Program in a specific fiscal year, based on the availability of funds and priority of the project.

Before the year in which funding of the project is anticipated, a preliminary study is performed. In this study, scope is reevaluated in greater detail to ensure that the conceptual solution is still viable, given current conditions, regulatory requirements, and updated project cost estimate and priority ranking. In performing this preliminary study, the District may make multiple site visits to inspect the problem area and estimate alignment of the sewer or channel to be constructed. Preliminary survey information may be obtained and a more detailed hydraulic analysis performed than was done at the conceptual solution level. Preliminary studies are typically performed by the Engineering Department. However, the District may use engineering consultant services to perform

preliminary studies during periods of heavy workload, or for large, complex projects such as new treatment plants, upgrades to existing treatment plants, or major outfall sewer upgrades.

Upon completion of a preliminary study, the project's priority ranking is reevaluated relative to other, similar projects. A project may be rescheduled to a later fiscal year within the Capital Improvement and Replacement Program, should its priority ranking be reduced due to increased project cost estimate or modification of its scope.

The final design of a project is performed by either the District's Engineering Department staff or engineering consultant services. As part of the final design process, topographic and geotechnical information is collected, utility conflicts are identified, construction plans and specifications are prepared, and easement and temporary construction license plats are drafted.

For projects of significant scope and impact, coordination with property owners who will benefit or who will be affected by the construction of the project is achieved at "open-line" meetings hosted by the District. For smaller projects, property owners are individually contacted during the design of the project.

Many projects require that new easements be acquired to enable the project to be constructed. The time required to acquire these easements is lengthy and may result in delays in the planned construction schedule. When necessary, the District may condemn for easements in order to ensure that a project is constructed. Any required

condemnation proceedings are performed in full compliance with state and federal law. Some projects may additionally require specific permitting from other government agencies, such as the Missouri Department of Natural Resources, prior to bidding.

A project is advertised for public bidding a minimum of three weeks, followed by a formal bid opening. Bids are evaluated to determine the lowest responsive, responsible bidder. Appropriation and contract ordinances are submitted to the Board of Trustees for their approval. Upon ordinance passage, contracts are executed and notices to proceed are issued.

In addition to wastewater and stormwater projects, the District may construct sanitary sewer sub-district projects at the request of property owners currently served by private systems or individual septic tank systems. These sub-districts are financed by the benefiting property owners, using special benefit assessments. The affected property owners initiate the projects by submitting a petition to the District, which provides design and construction management assistance. Because of the uncertainty of the viability and/or schedule of sub-district projects, they are not always listed in the Budget Supplement.

CAPITAL IMPROVEMENT AND REPLACEMENT
PROGRAM SUMMARY

Type of Project	Number of Individual Projects	Project Cost
Wastewater Construction	26	$121,685,000
Wastewater Engineering	21	$ 21,220,000
Stormwater Construction	12	$ 5,510,000
Stormwater Engineering	0	$ 0
Proposed Projects Subtotal:	**59**	**$148,415,000**
Continued Wastewater Projects	2	$ 2,860,000
Continued Stormwater Projects	7	$ 2,115,000
Continued Projects Subtotal:	**9**	**$ 4,975,000**
FISCAL YEAR 2012 PROJECT TOTALS	**68**	**$153,390,000**