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INCREASING FINANCIAL PERFORMANCE OF WASTE WATER UTILITIES BY COST EFFICIENT STRATEGIC ASSET MAINTENANCE PLANNING

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ABSTRACT: As waste water system get older, their performance tends to decline. Breaks, cracks, corrosion and other types of failures causing leakage, hydraulic bottlenecks etc. up to collapsing sewers and mains. In order to overcome this deterioration of the network and to keep or reach a certain service level continuous network maintenance is needed. Due to the fact, that the network assets represent the major part of the market value of a waste water utility, maintaining these assets the right way has a very strong impact on the market value of the company itself.

By using a service forecast based framework for sustainable maintenance planning like “STATUS Sewer”, the long-term effects of postponed or premature maintenance action can be analysed by a cost benefit analysis in order to develop stabile and cost efficient maintenance solutions for the network. Condition and substance assessment of the network assets are the basis for maintenance planning. By projecting the analysis results into the future using widely accepted forecasting models it is possible to determine the network deterioration processes and to develop long-term maintenance strategies.

These strategies can be evaluated especially from the economical point of view, giving a feedback for finding the most suitable strategy, which is the basement for the short-term, the operational planning. “STATUS Sewer” supports the operational planning by integrating the economical key figures of the utility into the engineering process.