Integrated planning of rehabilitation strategies for sewers

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ABSTRACT

Building measures in sewer systems are increasingly driven by rehabilitation / retrofitting and adaptation needs. Aging infrastructure together with changing boundary conditions (due to climate change, land-use change, demographic change) and also changing design standards and legislation require a prospective design to preserve the functionality of urban drainage systems not only now, but also in a long-term perspective. To improve a prospective design of urban water infrastructure, the Austrian Research Promotion Agency (FFG) funded the research project “REHAB – Integrated planning of rehabilitation strategies of urban infrastructure systems”. Therein a novel strategic planning tool which considers these external drivers of rehabilitation strategies is developed. In this study the scope of the project is described and we show first results regarding sewer pipe conditions, future development and vulnerability assessment.

KEYWORDS

Rehabilitation, deterioration, adaptation, climate change, city development, urban drainage, modelling integrated approaches,