Inflow/Infiltration Problems and Related Losses and Damages

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Abstract

The types of defects commonly identified during I/I (Inflow/infiltration), SSES (Sewer System Evaluation Survey) and SSO (Sanitary Sewer Overflow) studies and the resulting impact they can have on wastewater collection systems will be discussed. Visual examples of losses and damages will be presented and their relationship to regulatory programs past present, and future will be explored. An evaluation of study and rehabilitation techniques and their relationship to the losses and damages will be addressed.

A brief history of the I/I and SSES programs from the regulatory agency and private sector perspectives will also be discussed. Their evolution into the CSO/SSO programs and the present development toward a CMOM (Capacity Management Operation and Management) approach will be presented. The evolution of equipment procedures and software development touching on the present trend toward hydraulic modeling, GPS surveying and GIS applications will be reviewed.

Specific examples of defects and problems typically identified during study phases and mitigated in design and rehabilitation construction will be presented. Examples of wet and dry weather overflows, structural defects and hydraulic capacity problems will be presented and discussed.

Finally a brief discussion of the evolution of rehabilitation techniques and materials will be presented and related to the specific defects previously addressed.

If you have any questions, please contact Dr. C.Vipulanandan
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