

Effect of groundwater infiltration on water quality in sewers – Næstved case study



Infiltration of groundwater in sewer is a well-known phenomenon. In catchments with high infiltration rate, where the infiltration flow is significantly higher than the wastewater, the dilution could be so important to justify the implementation of water quality control of the drainage network, i.e. water could be discharged to the environment instead of being sent to the treatment plant if the impact on the environment is judged as negligible. The project could develop in different directions, ranging from modelling projects to monitoring campaigns in the field by using traditional sampling techniques and/or on-line water quality sensors. A potential study area will be located in Næstved and the project will be in collaboration with Krüger A/S. A similar project could also be developed in the area south of Milan (Italy) in collaboration with the local water utility.

Tool: Tools for statistical analysis of data, simple water quality modelling tools.

Project type

Topic is suitable for MSc project

Pre-requisite

General understanding of water quality processes, interest in modelling

Group size

1-2 students (separate projects)

Department of supervisors

Main supervisor: DTU Environment

Co-supervisor: DTU Environment/Krüger A/S

Contact person

Assistant professor Luca Vezzaro, DTU Environment (luve@env.dtu.dk)

